

# Corporate Responsibility Report 2022



**LIFE IS FOR SHARING.**

# Contents

This PDF document contains all information on accountability (“Management & facts”) from Deutsche Telekom’s 2022 CR Report.

The themed pages “Green future”, “Digital life”, “New ways of working”, and “Good stewardship” may be downloaded individually using the “Print this page” function or as one document using the “Info basket” function.

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# Foreword

**Dear Readers,**

These are turbulent and unsettling times. Between war in Europe, inflation, the consequences of the pandemic, and the devastating earthquake in Turkey and Syria, the list of events putting us out of kilter is long indeed. At the same time, we are desperately seeking solutions to the urgent issues relating to climate change. It is also concerning to see the spread of hate speech and fake news on the internet. These crises all overlap, and they are all challenges we must face together as a society.

Deutsche Telekom is not untouched by such developments, either. As a company, we are duty-bound to continue to provide reliable services. It is precisely this type of reliability that also provides an anchor of stability in socially challenging times. We believe in the future and we create solutions.

On our Sustainability Day in October 2022, we showed how deeply embedded sustainability is in our organization and the goals we have set ourselves. Deutsche Telekom is the leading European telecommunications company – but we also want to be a leader when it comes to sustainability.

The Deutsche Telekom share is already listed in key sustainability indexes. For example, 2022 saw us qualify for the renowned “Dow Jones Sustainability Index World” and “Dow Jones Sustainability Index Europe” for the eighth time, taking top spot in both indexes for the first time. For the seventh time in a row, we were awarded a “Climate Change A List” rating by CDP in recognition of our pioneering work in relation to climate protection.

We will achieve our goal of becoming climate-neutral within the company by 2025 at the latest. In addition to our green network, our decision to switch the entire company fleet in Germany to electric vehicles, for example, is playing a major part in this. We are aiming to be completely climate-neutral by 2040 at the latest. In March 2023, we set ourselves a new, ambitious interim goal – by 2030, we want to have cut our CO<sub>2</sub> emissions by 55 percent compared to 2020.

We are constantly on the lookout for opportunities to manage energy more efficiently. After all, the demand for data increases by around 25 percent every year, which brings with it the risk that energy consumption in our networks will rise, too. Replacing old technology with newer versions is one of the ways in which we are aiming to double energy efficiency in our European networks by 2024. Switching our network infrastructure to IP technology, for example, is helping us achieve this goal.



Timotheus Höttges, Chairman of the Board of Management, Bonn, Germany

At the same time, our priorities are digitalize, digitalize, digitalize. After all, without digitalization, we will never manage to meet the sustainability goals of the future. According to a Bitkom study, 50 percent of the CO<sub>2</sub> reductions necessary in Germany by 2030 can be enabled by digital technology. For example, our customers can cut their CO<sub>2</sub> emissions by switching from a decentralized data storage system to the Telekom Cloud. Further examples include IoT solutions that are helping farmers build up sustainable water management systems or enabling doctors to improve care for their patients.

A circular economy also has a wide range of positive effects. It conserves valuable resources, prevents waste, and makes a significant contribution to cutting CO<sub>2</sub> emissions. By 2030, we are aiming to create a completely circular economy for our network technology and devices in Europe. This also means that we take back all the products we put into circulation and feed them back into the cycle. In this way, we reduce electronic waste and also avoid the environmental impact associated with producing new devices.

We are happy to be judged by our progress. Energy consumption and CO<sub>2</sub> emissions have been a factor in the Board of Management's remuneration since 2021. Achieving these KPIs has also been a factor in the remuneration of executives in Germany and Europe and employees not covered by collective agreements in Germany since 2022. After all, we can only achieve our ambitious goals by working together.

We also consider it our duty to help people in difficult situations. We have been called upon to provide emergency assistance both in 2022 at the outbreak of the war in Ukraine and currently to help the victims of the earthquake. We provide free telephone calls, donations, and technology. For example, we gave employees paid time off in spring 2022 to enable them to help refugees from Ukraine on a voluntary basis.

Especially in uncertain times, fake news and conspiracy theories spread even faster on the internet. People are subjected to hate and marginalization. Our democracy is called into question. However, when people are connected and communicate, they can also understand and get along with each other. That's why we work for digital participation, and that's why we are always building the best networks. We cannot allow the internet to become the domain of those who shout the loudest. The network is all of us. We shape it. We can make a difference. In 2022, we continued with our "No Hate Speech" campaign.

We report extensively on these and many other sustainability activities in this year's Sustainability Report.

We remain committed to the principles of the United Nations Global Compact and the German Sustainability Code. Both of these frameworks, along with the UN Sustainable Development Goals, guide us in what we do.

Dear readers,

the future is becoming more difficult rather than easier. So let's make the most of the opportunities we have to take action, and let's stay optimistic. I would like to thank all those who are helping to shape our journey as we advance into a more sustainable, value-oriented, and ethical future – our employees, customers, partners, and shareholders.

I hope you enjoy an exciting read.

Best regards,  
Tim Höttges

# CR strategy & management

## CR strategy

Sustainability and social responsibility have been firm components of our corporate activities for more than two decades. We see ourselves as a responsible company and have enshrined this in our Group strategy. As such, we are committed to implementing sustainability along our value chain – and to playing an important role in meeting today’s environmental, economic, and social challenges.



You can find additional information on our Group strategy in the 2022 annual report.



Our CR (Corporate Responsibility) strategy is derived from the Group strategy.

In the year under review, we continued to hone our CR strategy and identified four key areas where we want to lead through exemplary actions:

1. Our strict commitment to climate-neutral business practices: We want to play a pioneering role on the way to a climate-neutral future and enable our customers and society as a whole to complete this journey together with us by 2040.
2. Our determined efforts to ensure our products and services are compatible with the circular economy: We want to make all of our technologies and devices compatible with a circular economy across the entire value chain by 2030.
3. Our pursuit of diversity, equity, and inclusion, as well as our investment into future skills: We want to provide a safe, supportive environment where we promote equity among people with different backgrounds.
4. Our determination to help shape a digital society that is based on our fundamental democratic values and in which all people can participate safely, competently, and with autonomy: We want to make the digital world a tolerant, safe space for everyone and enable society to bridge the digital divide.

## Maintaining

- data protection and security,
- cultivating a powerful corporate compliance and risk management system,
- engaging with the fundamental principles of digital responsibility,
- upholding human rights, shaping sustainable supply chains,
- investing capital based on ecological and social criteria, and ensuring communication about our environmental and social sustainability activities is transparent also remain additional meaningful aspects of good governance for us.

## Reporting against standards

### Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)

- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)
- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

### Sustainability targets in remuneration

Our investments in the network build-out make us one of the biggest investors in the industry. In 2022, we invested around EUR 21 billion Group-wide, primarily in building and operating networks to meet the growing demand for faster, full-coverage data services. However, the network build-out cannot be allowed to lead to an increase in CO<sub>2</sub> emissions and thus accelerate climate change. For this reason, we use energy from renewable sources to decouple CO<sub>2</sub> emissions from energy consumption. In Europe, we have set ourselves the goal of doubling the energy efficiency of our networks by 2024. Above and beyond this, we want to further increase energy efficiency – for instance at our data centers – and thus reduce energy consumption in the medium term despite the expected rise in data consumption (2024 against 2020, excluding T-Mobile US). The two non-financial performance indicators “energy consumption” and “CO<sub>2</sub> emissions” (Scope 1 and 2) were incorporated into the variable component of our Board of Management’s remuneration in 2021, and in 2022 were also made relevant for our executives (excluding T-Mobile US).

In the United States, we are forging ahead with the highly intensive build-out of our 5G network, in particular in rural areas. This initially drives up power consumption. T-Mobile US, like the Group as a whole, has covered 100 percent of its electricity requirements from renewable energy sources since 2021. There are strong fluctuations in T-Mobile US’ carbon footprint owing to unforeseeable natural disasters and the associated temporary use of equipment such as diesel generators to restore and back up damaged network infrastructure. Consideration must be given to the special national situation in this key market, which is why the decision was taken, in respect of short-term variable remuneration in 2023, not to include T-Mobile US in these two non-financial performance indicators. This step ensures that the right incentives are set for the Board of Management toward the sustainable development of the business, while safeguarding the stability of network operations at the same time. This applies equally to Board of Management managers and executives. The annual ambition for the performance indicators “energy consumption” and “CO<sub>2</sub> emissions” will continue to be set, managed, and reported for the entire Group as before, including a target value for T-Mobile US. In the reporting year, Group-wide energy consumption remained stable year-on-year at 13 253 GWh (prior year: 13 323 GWh). Due in particular to the Group-wide use of electricity from renewable energy sources, CO<sub>2</sub> emissions (Scope 1 and 2) are at a low level and dropped further as a result of our measures to 233 kt CO<sub>2</sub>e (prior year: 247 kt CO<sub>2</sub>e). The values given for total energy consumption and Scope 1 and Scope 2 emissions are based in part on estimates, assumptions, and extrapolations, and, in part, on data provided by our external energy service providers.

Moreover, achievement of these ESG KPIs has been embedded in the remuneration system for executives in Germany and Europe as well as for employees not covered by collective agreements in Germany since 2022.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 2–19 (General Disclosures)

### Corporate Digital Responsibility

Day in and day out, we see our world changing, at ever-faster rates. Computers and AI (artificial intelligence) now play indispensable roles in our daily lives. Most of the time, they help us without our even noticing their operation. All of this is the beginning of a development that we can no longer stop – and that we don't want to stop. All enthusiasm notwithstanding, however, we shouldn't head into the digital future blindly. As we move forward, we should seek to define a clear direction and a binding framework for that future. We at Deutsche Telekom are working to bring about digitalization oriented to people and values. “Corporate digital responsibility” (CDR) refers to efforts to manage the opportunities and risks of the digital transformation responsibly. The goals of our CDR activities are twofold: to prevent negative impacts, and to help shape the digitalization process in a positive way.

For example, we take great care to ensure that all processing of our customers’ personal data is carried out transparently and responsibly, in ways that also safeguard individual customers’ privacy and security. Further information about this area is available in our publications on data privacy, in our status report on data privacy, and in our transparency report. Also, in our Digital Ethics Guidelines on AI, we describe our responsible use of AI in connection with our products and services.

Digital participation is a core aspect of our commitment. We are working to ensure that all people have equal opportunity to be a part of the digital society. Our focuses in this regard include the technical aspects of broadband access, rates and devices that are affordable for all budgets, and users’ ability and desire to use digital media competently. For example, we carry out a variety of projects and implement measures to promote media literacy and democracy skills among the population.

Upholding of human rights is a key element of responsible digitalization. The obligation to respect human rights is enshrined in our basic rules and guidelines. This obligation applies not only to our company, but also to our business partners – and to our approximately 25 000 suppliers in over 80 countries. We expressly require our suppliers to join us in our responsibility, with a view to ensuring that human rights are also respected within the sphere of influence that we have outside of our Group.

Digital responsibility is also highly important with regard to environmental and climate-protection issues. By developing products that are innovative and sustainable, we help our customers reduce their own carbon footprints – and thereby contribute to climate protection. In addition, to help our customers find sustainable

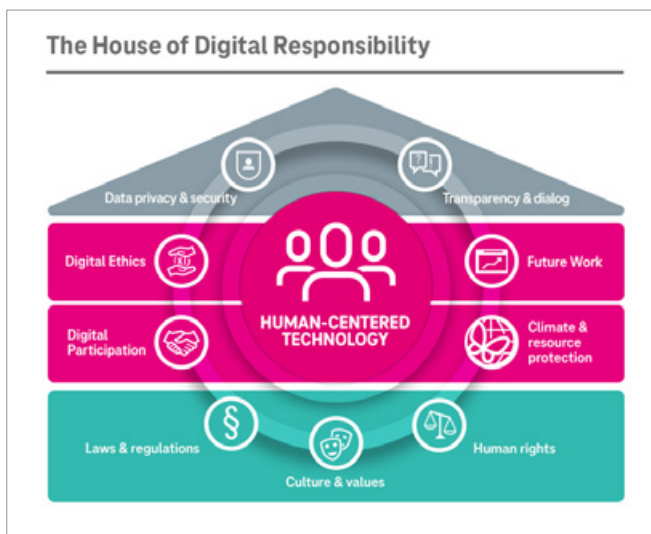
solutions, we highlight products and services that are environmentally and climate friendly. We do this with our #GreenMagenta Label (for products and services) and our Eco Rating scheme (for mobile devices). Our “Smart Innovations” also contribute to society’s efforts to improve its ecological balance.

Our networks are the foundation of our services. To ensure that the network’s energy requirements do not contribute to global warming, we draw 100 percent of the energy for our network infrastructure from renewable energy sources, and we are constantly working to improve our energy efficiency. This is just part of our pursuit of ambitious climate goals and resource conservation measures.

Digitalization is opening up new ways and possibilities for working. We are helping to shape the digital transformation in the workplace, in a responsible manner, and we are continuing to support our employees in addressing the challenges the transformation has brought. Our efforts to reinforce our employees’ digital competencies include our “youlearn” training initiative. In addition, in close consultation with our Group Works Council, we have adopted a “Manifesto on Agile Working,” a set of guidelines for the digital workplace.

**Our commitment to digital responsibility**

The technological development needs to be more value-oriented. We see ourselves as having a responsibility to implement ethics within technologies and to make technologies accessible to everyone. During the year under review, we published our Corporate Digital Responsibility@Deutsche Telekom framework, which summarizes our views of digital responsibility. People are our top priority in this framework. The centerpiece of the framework is our House of Digital Responsibility, which is all about people-centric technology.



Our CDR framework and our House of Digital Responsibility are both based on our guiding principles. The foundation of this basis is the commitment to act in accordance with laws and regulations, with human rights and with basic values such as cultural values. Conceptually, we place a number of key areas on this foundation – digital ethics, digital participation, the future of work, and climate

protection and resources conservation. These key areas serve as orientational aids for our activities. The foundation and all of these areas, in turn, are housed under the umbrella of principles that constantly guide our efforts, namely data privacy and security, and transparency and dialog.

Outside of our own corporate sphere, our efforts and commitments in this area include active involvement in various alliances and partnerships, such as the German Association for the Digital Economy (BVDW), econsense, a network of internationally operating companies, and the Digital networking charter (Charta digitale Vernetzung). In addition, we are a member of the Corporate Digital Responsibility initiative of the German Federal Ministry of Justice. In 2021, we signed the Initiative’s CDR Codex, thereby committing ourselves to observe a set of concrete principles and to regularly publish a relevant progress report. The first report was published in July 2022.

**CR controlling – measuring and managing sustainability**

Our CR controlling ensures that we can collect ESG data and KPIs transparently, and in a timely manner, and report them in the “Management & Facts” section and the interactive KPI tool of this CR report.

As part of our CR controlling and reporting activities, we record ESG data and performance indicators. We use this data primarily to calculate our ESG KPIs, which we use to measure and manage our CR performance. The non-financial performance indicators “energy consumption”, “CO<sub>2</sub> emissions” (Scope 1 and 2), and “energy intensity” are also elements of the Group’s higher-level controlling processes. Alongside the ESG KPIs, we also report other metrics with the aim of meeting all internal and external transparency requirements

In addition, we have developed an impact assessment method that allows us to measure and evaluate the environmental and social impact of selected products, solutions, and measures along the value chain. This helps us to keep our key sustainability activities results-oriented, to provide transparent reporting on them, and to make the contribution of our business activities, for example, to achieving the SDGs, visible.

We have been integrating our ESG data process incrementally in our ICS (internal control system) since 2021. This was initially comprised of specific ICS principles aimed at achieving a high level of data quality, timeliness, and transparency. They cover decentralized, system-based ESG data processes that are aggregated at the Group level. During the year under review, we have supplemented the ICS principles with more demanding transaction-level controls for the remuneration-relevant KPIs.

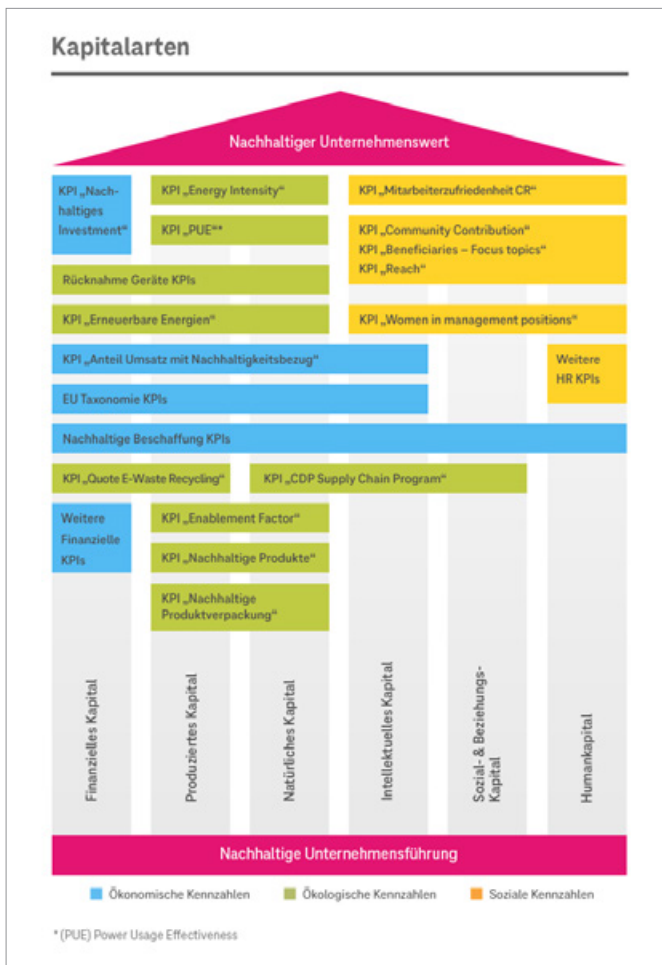
We are continuously improving our performance indicator system on the basis of internal and external requirements. We have added additional KPIs for the areas of resource conservation and circular economy since 2021, so we can coordinate and communicate our progress in this strategic area even more precisely. Trends in the ESG KPIs over the past four years can be seen here.



**Our management tools – the ESG key performance indicators**

ESG KPIs (key performance indicators) are used as management tools for our CR activities. Since they are highly relevant, we also publish them in the combined non-financial statement of our annual report. Our national companies assist in the collection of Group-wide ESG KPIs by recording CR data themselves. These national companies represent 99 percent of the Group's net revenue.

For the purpose of integrated financial and sustainability reporting, the KPIs map all six types of capital (see diagram).



**Reporting against standards**

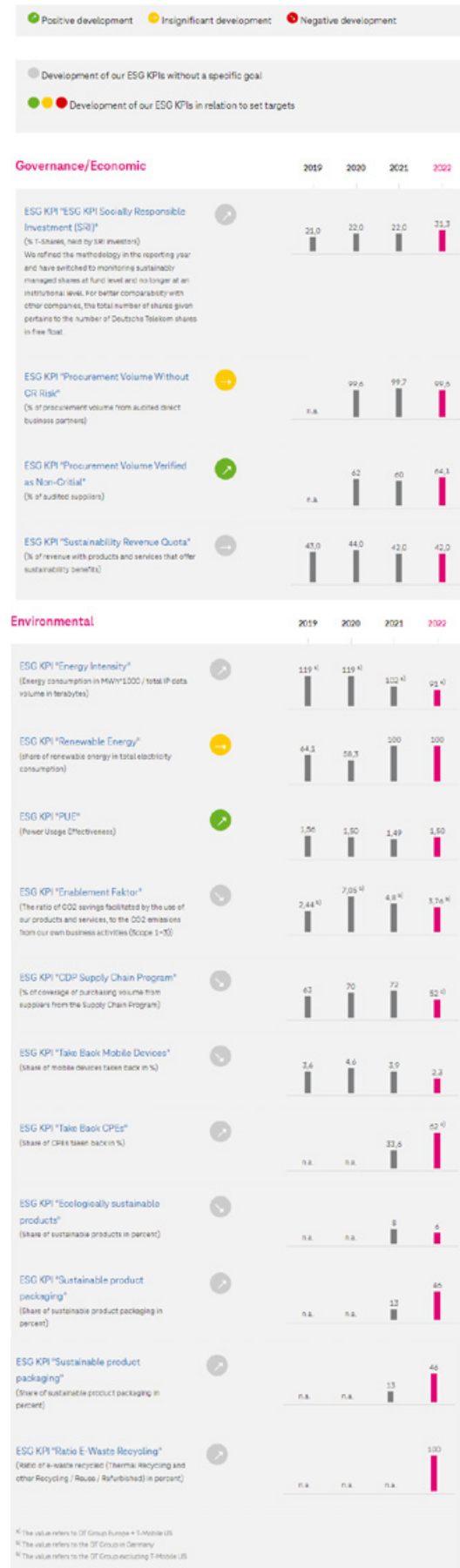
**Global Reporting Initiative (GRI)**

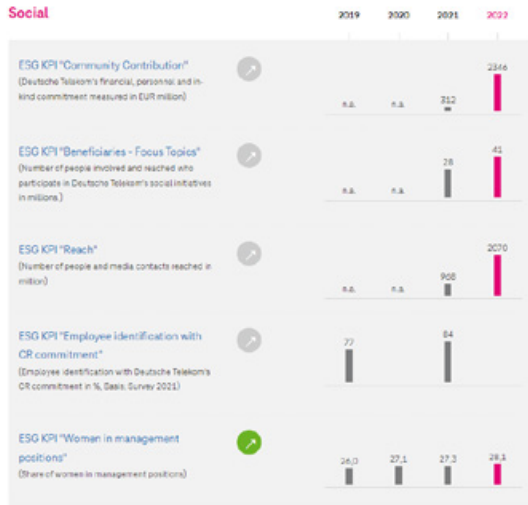
- GRI 2–23 (General Disclosures)

**Global Compact**

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
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**ESG KPIs: 4 year trend**



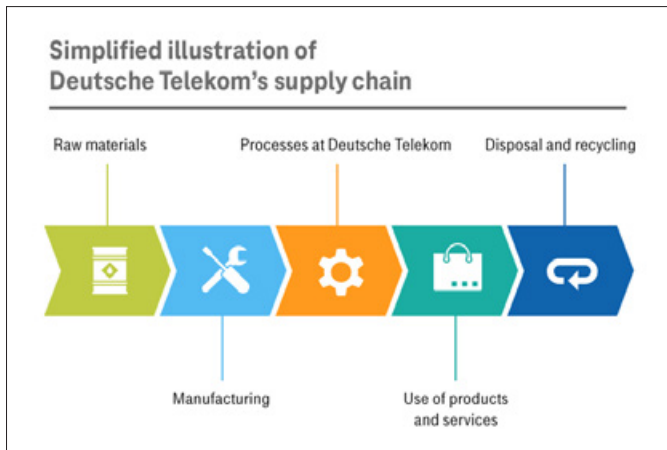


**Business activities and organization**

Our website presents a description of our business activities, and our 2022 annual report includes detailed information about the development of our business.

Our Group is divided into five operating segments plus the Group Headquarters & Group Services segment.

We are convinced that commercial, social, and ecological aspects can complement each other. We aim to make a positive contribution to sustainable development throughout our entire value chain.

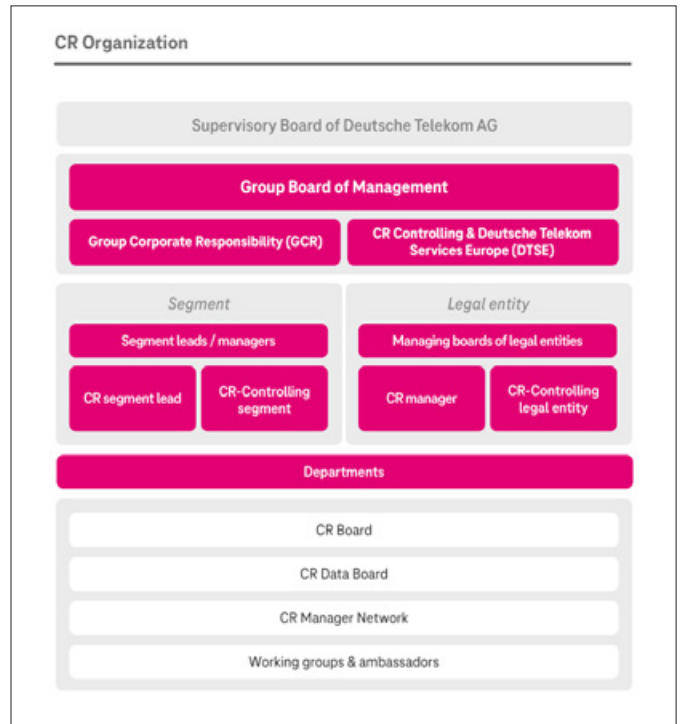


**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 2-1 (General Disclosures)
- GRI 2-6 (General Disclosures)
- GRI 2-9 (General Disclosures)
- GRI 2-13 (General Disclosures)

**Current organizational structure**



**Supervisory Board of Deutsche Telekom AG**

Is regularly informed regarding the ESG strategy, its implementation and its key performance indicators.

**Group Board of Management**

Approves Group-wide ESG regulations and strategies, and is regularly informed, by the business areas, regarding the status of such regulations and strategies, regarding progress in implementation of the overall ESG strategy, and regarding the status of individual goals and pertinent measures.

**CR-Controlling & Deutsche Telekom Services Europe (DTSE)**

CR Controlling is responsible for operational controlling with regard to quantitative targets and KPIs, throughout the various levels of the Group, and it integrates such controlling within existing processes. DTSE collects and consolidates ESG KPIs on a Group-wide basis, and it assures the quality and completeness of the pertinent data collected.

**Segment leads / managers**

Responsible for implementation of strategy, specifications, and goals within the relevant segments; report on such implementation to the Group Board of Management; and flesh out the CR strategy in keeping with business requirements.

**CR segment lead**

The central contact person, with regard to CR issues, within the relevant segment. The CR segment lead adapts the company's CR strategy to the segment's requirements and coordinates CR-related activities within the segment.

### **CR-Controlling, segment**

The area, within a segment, that is responsible for the timely provision of all of the segment's CR-related data. This includes provision of CR data of subsidiaries. To that end, this CR Controlling area communicates regularly with the CR data controllers at the subsidiaries.

### **Managing boards of legal entities**

Responsible for implementation of strategy, instructions, and targets within their own legal entities. In this connection, they report to their own segments and carry out CR governance in keeping with business requirements.

### **CR manager**

The central contact person, with regard to CR issues, within the relevant legal entity. The CR manager adapts the company's CR strategy to the legal entity's requirements and coordinates CR-related activities within the legal entity.

### **CR Controlling, legal entity**

Collects and consolidates the data required for the legal entity's quantitative KPIs, and reports the data to the legal entity's segment.

### **Departments**

Responsible for making sustainability an integral part of their own topic areas and tasks, and for reporting on sustainability in keeping with requirements pertaining to reporting, ratings, and rankings. Depending on the scope of their tasks, departments are free to define roles akin to those of a CR manager / CR controller.

### **CR Board**

Group-wide body that advises on CR-strategy development, consults with regard to Group-wide positions, and coordinates implementation of the CR strategy in the Group units.

### **CR Data Board**

A body that manages data acquisition and reporting processes involving GCR, Controlling and contracted service providers – especially service providers contracted by DTSE.

### **CR Manager Network**

Group-wide platform for all staff responsible for CR in segments, legal entities, and functions, for the purposes of sharing know-how and experience and ensuring information is passed on quickly and directly.

### **Working groups & ambassadors**

Informal platforms for promoting and coordinating sustainability-related volunteering.

The overall responsibility for Corporate Responsibility (CR) lies with our Board of Management; it deliberates and decides on important matters pertaining to CR. The Group Corporate Responsibility (GCR) department develops Group-wide policies and guidelines with the goal of steadily advancing the corporate culture with regard to sustainable innovation and social responsibility.

As of January 1, 2022, GCR has been transferred from the Board of Management department for Human Resources and Legal Affairs into the area of the Chief Executive Officer. By taking this step, and including ESG targets in Board of Management remuneration in 2021, the Supervisory Board and Board of Management highlighted the great importance that Corporate Responsibility has for our Group. In the year under review, the members of the Board of Management discussed sustainability topics and decided on the future development of individual topics in a variety of dialog formats. In addition to the Board of Management meetings, a separate meeting was held in this framework to discuss the topics in more detail. The Supervisory Board was also informed regularly about sustainability topics.

The managements of the different business units and national companies are responsible for implementing our CR strategy. To coordinate their tasks and learn from each other, CR managers and employees from CR relevant functions joined an international network under the leadership of GCR. During the year under review, this network included more than 200 employees from around 50 companies in 20 different countries. The participants have the opportunity to learn more about best practices and discuss new challenges. The agenda of the regular virtual meetings in 2022 included current developments in international climate protection and the impact of the German Supply Chain Due Diligence Act for the Group, among other topics.

Our CR Policy provides the formal, mandatory framework for the sustainability management activities at all Group units. The CR Policy has also been successfully introduced in a majority of European national companies since 2017. We updated it in 2022. The revised version will be implemented throughout the Group in 2023. The CR managers in the individual segments and legal units are involved in the ratification of the CR Policy in the Group's subsidiaries. If specific obstacles to implementation become apparent – due to local legal requirements, for example – a solution that satisfies the strategic key statements of the Policy is sought in a dialog with the responsible bodies. Should a solution not be found within the previously agreed time frame, the Deutsche Telekom Board of Management is to be consulted as the final escalation and decision-making body. The involved authorities are then called upon to state their arguments and the circumstances accordingly.

### **Reporting against standards**

#### **Global Reporting Initiative (GRI)**

- GRI 2–15 (General Disclosures)

#### **Global Compact**

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)

## 2022 CR program – targets, activities, and deadlines

In the CR program framework, we define targets and report on progress regarding their implementation. In the reporting year, we once again aligned the CR program in accordance with the four pillars of our Management & Facts section – Strategy, Economy, Environment, and Social.

### Strategy

Objectives	Target achievement	Implementation
Increase relevance of sustainability within the company	As of the year under review, responsibility for CR topics lies with the Group Board of Management	Current organizational structure
Further development of the CR strategy	Refining the CR strategy, with inclusion of four key areas in the year under review, and intensified integration of the ESG framework within CR efforts.	CR strategy
Publication of the company's "Corporate Digital Responsibility" report	Publication of the first Communication on Progress, in July 2022.	Corporate Digital Responsibility
Contribute to the Sustainable Development Goals (SDGs)	Focus on 2, 3, 4, 5, 7, 8, 9, 11, 12, 13, 15, 16	Our contribution to the Sustainable Development Goals  Measures and KPIs relevant to SDGs
Strengthening the topic of opportunities and risks	In the year under review, concrete examples of relevant emerging risks for Deutsche Telekom were integrated within the report.	Emerging risks of relevance for Deutsche Telekom
Reporting in keeping with the new 2021 GRI Standards	In the year under review, the CR Report was prepared in line with the 2021 GRI Standards. This marked the first time the CR Report had been prepared in conformance with the GRI Standards.	GRI
Reporting in accordance with the standards of the Sustainability Accounting Standards Board (SASB)	Preparation of an SASB index with links to relevant report content	SASB
Within materiality analysis, integrate impact assessment covering the entire value chain	Analysis and assessment of positive and negative impacts, relative to sustainability issues, throughout the entire value chain	Our process for identifying material CR topics
Exemplary CR reporting	First-place award in the independent, cross-industry ranking of the Institute for Ecological Economy Research (IÖW)	Awards for CR reporting

## 2022 CR program

### Economy

Objectives	Target achievement	Implementation
We aim to have 60 percent of our procurement volume be verified as “uncritical” by 2025	64.1 percent in 2022 (external procurement volume for Deutsche Telekom, excluding USA and network capacity)	ESG KPI Procurement Volume Verified as Non-Critical
95 percent of our procurement volume should be without an identified CR risk by 2025	99.6 percent of procurement volume in 2022 (external procurement volume for Deutsche Telekom, excluding USA and network capacity)	ESG KPI “Procurement Volume Without CR Risk”
99 percent 5G coverage in Germany by 2025	Since the end of 2022, 5G, the new mobile communications standard, has been available to over 94 percent of all households in Germany.	5G expansion
Increase Group-wide customer retention (measured using TRI*Minindex)	As of the end of 2022, the Group score (not including T-Mobile US) was 76.0 points (outset value in 2021: 72.6 points).	Measuring customer retention and endorsement
Obtain relevant service awards	This was achieved. The awards included the TÜV quality seal; the “Service King” distinction awarded by the trade magazine Focus Money; “best mobile-network hotline” in connect magazine’s 2022 hotline test; and “best mobile communications shop” in connect magazine’s 2022 mobile communications shop test	Awards for our service
Greater use of sustainable financial instruments	Detailed evaluation of sustainable finance instruments, and preparation of relevant documents – for a sustainability-linked bond, for example	Sustainable investment at Deutsche Telekom
Integration of requirements from EU Taxonomy	Fulfillment of the EU Taxonomy Regulation’s requirements in effect for 2021, via listing of taxonomy-eligible and taxonomy-aligned turnover, capital expenditure, and operating expenditure	EU taxonomy
Ensure inclusion in relevant sustainability indices	Listing in key sustainability indices	T-Shares in sustainability ratings and indices

## 2022 CR program

### Environment

Objectives	Target achievement	Implementation
Decrease Group-wide Scope 1 and 2 emissions by up to 95 percent, with respect to their 2017 levels, by the end of 2025. The remaining emissions are to be offset via suitable measures, to enable the company to reach climate neutrality.	A reduction of 94 percent since 2017, and of 2 percent in comparison to the previous year, to a level of about 233 kt CO <sub>2</sub> e	Our climate targets Climate target achievement Total CO <sub>2</sub> e emissions (Scopes 1 and 2)
Reduce CO2 emissions (Scopes 1–3) by 55 percent with respect to their level in 2020	New target. This new interim target is more ambitious than our previous target, which called for a 25 percent reduction of per-customer Scope-3 emissions (with respect to 2017) by 2030. It now replaces the previous interim target.	Our climate targets Climate target achievement Total CO <sub>2</sub> e emissions (Scopes 1–3) for the Deutsche Telekom Group
Achieve climate neutrality by no later than 2040 (Scopes 1, 2 and 3)	Total emissions in 2022: 12 520 kt CO <sub>2</sub> e Reduction of 10 percent since 2020. Compared with the previous year, there was an increase of 9 percent, due in particular to higher expenses for network expansion in the reporting year.	Our climate targets Climate target achievement Total CO <sub>2</sub> e emissions (Scopes 1–3) for the Deutsche Telekom Group
Improvement of the efficiency of our data centers; use of climate-neutral data centers – including both company data centers and externally operated data centers (pursuant to the Climate Neutral Data Centre Pact) – by 2030	Global power usage effectiveness (PUE) value for 2022: 1.59 (2021: 1.58) PUE value for Germany in 2022: 1.50 (2021: 1.49) Our most-efficient high-availability data center has a PUE of 1.3.	ESG KPI “PUE” – lower CO <sub>2</sub> emissions in data centers  T-Systems: Ecological sustainability (internal measures)
Raise the profile and boost the impact of the Green Pioneers community	335 Green Pioneers in 2022 (2021: 320); working at 53 sites in Germany (2021: 53); more community initiatives in our national companies	Green Pioneers Green Pioneer networks at our national companies
Reduction of CO <sub>2</sub> emissions tied to customers' use of our products and solutions; in particular, reduction of those emissions' share of our own total emissions	Reduction of our enablement factor in Germany to 3.76 (4.8 in 2021); throughout Europe to 2.6 (3.4 in 2021). The reduction in Germany with respect to the previous year results from use of a more differentiated data collection method and from a reduction in the number of users of our videoconferencing solutions.	ESG KPI Enablement Factor for DT Group in Germany Enablement Factor ESG KPI for Deutsche Telekom Group in Europe
Stabilization of our energy consumption by 2024, via doubling of our energy efficiency in Europe (the ratio of network data traffic to the electricity required to move it), in spite of continued strong data-traffic growth and our ongoing network expansion	Energy consumption in 2022: 13.3 million MWh (2021: 13.3 million MWh)	Total energy consumption
Linking of Board of Management remuneration to reductions of the company's CO <sub>2</sub> emissions and energy consumption	In the year under review, the company's energy consumption remained stable, and its CO <sub>2</sub> emissions were reduced. In addition, the two ESG KPIs were integrated within the remuneration system for executives in Germany and Europe as well as for employees not covered by collective agreements in Germany.	ESG targets in remuneration Remuneration report Our climate targets
Through 2024, our European national companies (outside of Germany) plan to collect one million used mobile devices and keep them in the circular economy by refurbishing or recycling them.	2022: About 71 000 devices	Our efforts to bring about a circular economy Used mobile device collection

## 2022 CR program

### Environment

Objectives	Target achievement	Implementation
We are aiming to ensure that, by 2024, none of the electronic waste produced by Deutsche Telekom in Europe, and no used devices the company collects, such as smartphones, routers or laptops, wind up in landfills without undergoing recycling processes.	In Germany, electronic waste and returned devices are already properly managed (refurbished or recycled). The same applies to the electronic waste produced internally at our European national companies. Implementation of this policy, with regard to devices at our other European national companies, is underway.	Waste avoidance and recycling
By 2030, we intend to ensure that all the products we bring into circulation are returned to the circular ecosystem	New target. This target also applies to the network technology we use.	Our efforts to bring about a circular economy
As of mid-2022, packaging for all new Deutsche Telekom-branded products in Europe is to be sustainable, in keeping with our "Sustainability Packaging Guideline."	Target achieved. Since mid-2022, all new Deutsche-Telekom-branded products sold or rented in Germany come in sustainable packaging, in keeping with our packaging guideline.	Sustainable product packaging
We aim to ensure that, by the end of 2024, sustainable product packaging has been adopted for over 90 percent of all of the smartphones Deutsche Telekom sells in Europe.	As of the end of 2022, nearly 90 percent of all smartphones sold by Deutsche Telekom in the EU were sold in sustainable packaging.	Sustainable product packaging
With our Paperless Office project, we aim to completely eliminate paper use wherever possible by 2025.	Implementation of this project is underway; we are carrying out various paper-reduction measures internationally – for example, we are digitalizing our correspondence with our customers. In 2022, we saved 110.94 metric tons of paper in Germany.	Paper-free and low-paper work



## 2022 CR program

### Social

Objectives	Target achievement	Implementation
Increase the proportion of women on the Supervisory Board and in top positions in middle and upper management to 30 percent by 2025	Total workforce: 35.7 percent women Middle / upper management: 20.8 percent / 24.6 percent Board of Management of DTAG: 37.5 percent Supervisory Board (in Germany): 42.4 percent Supervisory Board (international): 50 percent	Our approach to diversity and equal opportunities Percentage of women on the management board Percentage of women in middle and upper management Percentage of women on Supervisory Boards Commitment to a larger share of women
Maintain the Group-wide (national) high health rate of 95.0 percent	2022: Including persons on extended sick leave: 93.8 percent (2021: 95.3 percent) Not including persons on extended sick leave: 95.2 percent (2021: 95.3 percent)	Health rate Effectiveness of our health and safety measures
Reduce the accident rate in Germany	Accident rate for accidents leading to more than three missed days of work, in 2022: 4.4 accidents per thousand employees (2021: 3.7) (not including work-related accidents tied to the COVID-19 pandemic) 5.5 accidents per thousand employees (including work-related accidents tied to the COVID-19 pandemic)	Effectiveness of our health and safety measures
Boost digital further training	Digital learning rate (share of learning hours completed as online learning) 2022: 79 percent (2021: 89 percent) 85 percent of the training courses available on a Group-wide basis were available online (2021: 83 percent)	Our approach to training and development Skills development at Telekom Training in Germany
Increase in the proportion of digital experts	New target. 2022: 19.7 percent digital experts (groupwide without T-Mobile US)	Share of digital experts
Additional #TAKEPART stories	In 2022, no new modules were added to the #TAKEPART stories.	Promoting media literacy and democratic competence
Improve employee satisfaction	Engagement score in 2022 (pulse survey): 78 points (2021: 77 points) The employee survey is conducted at two-year intervals.	Our employee survey Twice a year: The pulse survey Satisfaction and commitment indexes
Performance of Human Rights Impact Assessment (HRIA) and Employee Relations Policy Review (ERR)	ERR and HRIA were carried out at: DTSE in Slovakia, the Czech Republic and Romania.	Employee Relations Policy Human Rights Impact Assessments Comprehensive human-rights reviews at our national companies



## Values and Guiding Principles

Corporate responsibility (CR) is based on shared values. Our fundamental values are defined in binding Guiding Principles. We have made these Principles part of the everyday work of our employees through a variety of measures, such as reviews, updates, and our annual “Living Culture Day”. And the measures have been successful. According to our pulse survey to determine employee satisfaction in November 2022, 80 percent of our employees agree that the Guiding Principles are actually being applied to our everyday work (previous year: 79 percent). The corresponding agreement figure among our executive staff was even higher, at 88 percent.

We want to ensure that everyone in our Group and with our partner companies knows how to act responsibly and respect human rights. Our Code of Conduct, our policy statement Code of Human Rights & Social Principles, and our Supplier Code of Conduct all serve to this end. The Codes also serve as the basis for our compliance management system, which guarantees that our business activities are in compliance with laws and regulations.

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 2–23 (General Disclosures)

### Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)
- Principle 2 (No complicity in human rights abuses)
- Principle 3 (Uphold freedom of association and the right to collective bargaining)
- Principle 4 (Elimination of all forms of forced and compulsory labor)
- Principle 5 (Abolition of child labor)
- Principle 6 (Elimination of discrimination in respect of employment and occupation)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

## Certified health, safety and environmental management: almost all workstations covered

Our integrated management system for Health, Safety and Environment (HSE) contributes at Group level to making sustainability a component of all our business processes and of our employees’ everyday lives.

It helps us to systematically plan, implement, and improve our processes in the areas mentioned. This promotes the health of our employees and also has a positive effect on their performance. It also helps us to bid on new projects in which potential commercial customers require their suppliers to provide HSE certificates.

Our Group-level HSE management system is covered by an umbrella certificate based on the international standards ISO 45001 (formerly OHSAS 18001) for occupational health and safety and ISO 14001 for environmental management. For some units, it also covers international standard ISO 9001 for quality management.

Some of the national companies are not covered by an umbrella certificate because they have their own certifications, some of which are even more comprehensive. This is the case in Greece, for example, where the OTE Group has its own integrated management system. In addition to the standards named above, it also covers the international standards ISO 50001 for energy management and ISO 27001 for data security.

All of our employees in Germany have ISO 14001- and ISO 45001-certified workstations. As a result of organizational changes within the Group, changes were made to the umbrella certification method. Certificate coverage remains at the same level as in the previous year, however, with international coverage of 98 percent of employees.

Several companies ceased being subsidiaries of the Deutsche Telekom Group in 2022 and are therefore no longer part of Deutsche Telekom’s umbrella certification:

- Magenta Telekom Infra GmbH, Austria
- T-Mobile Netherlands
- Limited Liability Company Deutsche Telekom GBS RUS, Russia
- Limited Liability Company Deutsche Telekom IT RUS, Russia
- Limited Liability Company T-Systems RUS, Russia
- An office in Szeged, Hungary

Certifications at the following national and international companies were added in 2022:

- Deutsche Telekom Service Europe Czech Republic s.r.o. (certification in accordance with ISO 9001). With this step, all three international business areas of DT Service Europe – Slovakia, Romania and Czech Republic – have been certified in accordance with the ISO 9001, ISO 14001, and ISO 45001 standards.
- Deutsche Telekom Global Business Solutions China (Hong Kong) Limited (certified in accordance with ISO 14001 and ISO 45001)
- Deutsche Telekom IoT GmbH (certification in accordance with ISO 14001 and ISO 45001)
- Detecon International GmbH (certification in accordance with ISO 14001 and ISO 45001)

# Risks & Opportunities

## Risk and opportunity management

For us, comprehensive risk and opportunity management also means considering the opportunities and risks arising from ecological or social aspects, or from the management of our company (environment, social and governance – ESG). We actively and systematically involve relevant stakeholders in order to identify which current and potential ESG risks and opportunities are important for Deutsche Telekom. We also participate in a number of working groups and committees. We continuously track ESG issues and systematically ascertain our stakeholders' positions on these matters.

Important tools we use for this purpose are:

- Our risk management system, which systematically identifies, evaluates, and addresses relevant risks
- Our (annual) evaluation of emerging risks, which provides an overview of new and long-term trends in external risks
- Our extensive analysis of physical and transitory risks (risks resulting from sudden adjustments to economic sectors due to climate change), which we align with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)
- Our involvement in working groups and committees, numerous national and international business associations, and social organizations (GeSI, Federation of German Industries, Bitkom, econsense, and the German National Association of Senior Citizen's Organizations, for example)
- Stakeholder dialog formats organized by us
- Our various publications, such as the media review and newsletters
- Our internal compliance evaluation, which also examines the most important sustainability risks
- We continue to develop our materiality process. Key factors for further development in 2022 included changed requirements laid down in the GRI standards in 2021, as well as requirements stipulated in the CSRD. In response, we also assessed our financial sustainability opportunities and risks, among others

In our annual report, we also provide information about the following issues, which we have identified as key aspects of our risk-and-opportunity management process:

- Climate protection
- Suppliers
- Healthcare

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 2–23 (General Disclosures)

### Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

## Emerging risks

Emerging risks are difficult to predict, because their future development is extremely uncertain. They involve events that are beyond our influence and control, such as geopolitical tension, new technologies, or macroeconomic factors. These risks are either new or become significantly more significant for our company over time. Even if they already impact our business today, their impact can grow in the long term (three to five years) and potentially impede most of our activities to a much greater extent in the future.

We need to act early and effectively to identify and assess risks like this and protect our company and our customers from them. This could even require adjustment of our strategy and/or our business models to mitigate their impact. To enable us to respond to such risks comprehensively, our risk management system must systematically identify and assess these emerging risks, to derive mitigating measures.

We describe the emerging risks that are becoming increasingly important to us here.

## Emerging risks with relevance for Deutsche Telekom

### Technological risk: Cyber attacks

Cyber attacks are increasing rapidly. The speed of digital transformation, machine learning, and computing capacity is growing exponentially. At the same time, the attacks are becoming increasingly specific and efficient. They are overtaking security fixes, with the result that the number of vulnerabilities that could be exploited by this kind of attack at our company is increasing.

The potential impacts of this risk include:

- Failure to protect our infrastructure and our customer data against cyber attacks
- A lack of knowledge among employees or excessively complex infrastructure can make it more difficult to prevent cyber attacks, such as those triggered by artificial intelligence
- Compliance with increasingly strict legal requirements for data retention and the data protection could affect our strategy or our business models.
- Financial losses can arise from new extortion techniques that are increasingly being used in attacks and demanding payments in cryptocurrencies, for example.
- Loss of reputation, because customers could lose trust in the quality of our communications services.

Our corrective measures include:

- Switching to more robust IT control environments
- Improving protection against widespread types of attacks
- Deploying machine learning technology (artificial intelligence) to identify attacks
- Improving reactivity when defending against identified attacks
- Raising awareness of cyber attacks among our customers
- Better recognition of malware and improvement of user authentication techniques

**Environmental risk: Weather extremes**

Advancing climate change will increase the intensity and frequency of extreme weather events. The related physical effects include warming oceans, higher heat and humidity, increased average temperatures, heavy storms (wind, lightning, hail, tornadoes, and hurricanes), and heat waves – which in turn can result in natural disasters like flooding and drought.

The potential impacts of this risk include:

- Flooding of river basins and coastal areas due to heavy rainfall, which can destroy or seriously damage our base stations, network nodes, and other infrastructure
- Tornadoes and hurricanes that can cause significant damage to data centers, cell towers, office buildings, and our retail outlets
- Heavy storms can also damage or destroy cell towers, particularly at higher-elevation sites.

- Forest fires and heat waves can damage or destroy nearby cell towers or locations of our network technology.
- Infrastructure that is not robust enough to withstand these tougher conditions in the long term
- Reduction in the stability of our power supply

These impacts can result in longer and more frequent network outages, which in turn have the potential to lower our revenue, increase our churn rate, and damage our reputation. In addition, additional investments will be necessary to adapt our processes and make our infrastructure more robust. The costs of insurance cover for such events will likely increase steadily over time.

Our risk mitigation measures include:

- Better methods for predicting when and where potential disasters might occur in future
- Identifying weak points in our cell towers and other infrastructure
- Eliminating identified weak points in our infrastructure to withstand higher wind speeds and temperatures Designing more robust network infrastructure in areas that are particularly susceptible to such disasters
- Installing emergency power supplies for all critical network elements, to avoid network outages and reduce downtimes
- Improving our plans for maintaining operations and for disaster recovery for scenarios in which such outages might occur

**Business risk: Infectious diseases/pandemics**

Outbreaks of disease and pandemics cannot be predicted. Nonetheless, historical data shows that regional and global pandemics have become increasingly frequent over the past decades. A new sickness or virus can spread quickly, become a pandemic, and drastically impede global economic growth. This can affect multiple industry sectors and supply chains and have significant impacts on the way we live and work.

The potential impacts of this risk include:

- Increasingly delayed deliveries and payments, as well as payment defaults among business customers and consumers, increasing our bad debts
- Restrictions in the public sphere could force our stores to close and affect sales and services for our customers
- Travel restrictions could affect our roaming traffic volumes and our revenue
- Customer growth could be curbed, because it is difficult to acquire new customers

- Companies may need to reduce their orders of IT services and devices
- Restrictions to social contacts (distance learning and working from home) could overload our networks and reduce their efficiency
- In the case of a severe pandemic, coupled with restrictions, our workforce could be reduced temporarily or permanently

Our corrective measures include:

- Monitoring of relevant developments by our Group Situation Center
- Organization of crisis management and task forces
- Issuance of pandemic guidelines
- Provision of suitable hygienic and personal protective equipment for sales outlets, offices, and network infrastructure sites
- Ramping up and hardening our networks to handle additional peak loads in voice and data traffic
- Protecting our customers and employees through mobile working, online sales, and online customer service

# Materiality

## Our process for identifying material CR topics

For some two decades now, we have determined the topics that are relevant for our sustainability strategy and for our reporting on the basis of a materiality process that we are continually refining. We review it annually to ensure that it is still up to date. In 2022, key factors influencing the refining of the process were changes to the requirements laid down in the GRI standards 2021 and the requirements stipulated in the EU Corporate Sustainability Reporting Directive (CSRD), which will be relevant for our reporting as of the 2024 reporting year. To determine the key topics, we have adapted our list of sustainability topics to the European Sustainability Reporting Standards (ESRS).

Documents were scrutinized to analyze all topics along the value chain, based on sources such as studies, research findings, internal policies, and measures – including the external stakeholder perspective. The value creation stages that were examined were: resource depletion, production by our suppliers, Deutsche Telekom's business operations – divided into “administrative processes” and “network build-out and data centers,” the usage phase of our products and services by our customers, and disposal and recycling.

In this process, we identified the negative and positive impacts of our business activities on the environment, society, and human rights along the entire value chain, as well as financial sustainability opportunities and risks. We then assessed the positive and negative impacts based on the probability of their occurrence and the scope of their impacts on the environment, society, and human rights. Based on these results, we then held interviews with internal and external experts to close gaps in the analysis and verify the assessments of the positive and negative impacts from the analysis. In addition, to determine the financial materiality, the identified sustainability opportunities and risks were assessed in the internal interviews with regard to their probability of occurrence and their financial impact on our business. Finally, the overall results were validated in an internal workshop with management and potential strategic implications were discussed.

The results of this year's materiality analysis will help us prepare for the upcoming reporting requirements from the CSRD. For reporting in our non-financial statement (NFS) pursuant to §§ 315c in conjunction with 289c 289e of the German Commercial Code (HGB), we used the results of this year's materiality analysis to review the key topics described there. In contrast, this year's analysis is the foundation for this CR report, to meet the changed requirements of the 2021 GRI standards.

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 2–12 (General Disclosures)
- GRI 2–14 (General Disclosures)
- GRI 3–1 (Material Topics)

## Results of the materiality analysis

To determine the key topics, we defined “materiality thresholds” for each of the impacts (financial as well as impacts on the environment, society, and human rights). A topic is considered material as soon as one of these thresholds is exceeded.

Topic	Materiality by impact	Financial materiality	GRI aspects	Link
Energy consumption and mix	✓	✓	Energy (GRI302)	Our approach to energy-efficient networks
Greenhouse gas emissions, scopes 1, 2, 3	✓	✓	Emissions (GRI305)	Our approach to measuring our climate-protection progress Our climate targets
Resources used & circular economy	✓	✗	Materials (GRI301)	Our approach for a circular economy
Waste, disposal, and recycling methods	✓	✗	Waste (GRI306)	Waste management and recycling
Health and safety	✓	✗	Occupational health and safety (GRI403)	Our approach to health and occupational safety
Non-discrimination and diversity	✓	✗	Diversity and equal opportunity (GRI405) Non-discrimination (GRI406)	Our approach to diversity and equal opportunity Our approach to protecting human rights
Collective bargaining, freedom of association, and social dialog	✓	✗	Freedom of association and collective bargaining (GRI407)	Our approach to shaping employee relations
Corruption and bribery	✓	✗	Anti-corruption (GRI205)	Our approach to integrity and compliance Our approach to sustainable procurement
Protecting privacy/data protection	✗	✓	Not material by GRI	Our approach to data protection
Access to the information society	✗	✓	Not material by GRI	Promoting media literacy and democratic competence

As a result of our focus on the ESRS standards, the following topics from our prior materiality analyses will no longer be considered as independent topics in the new materiality analysis:

- Network build-out
- ICT solutions to support climate protection
- Climate change mitigation
- Cyber security
- Supply chain labor standards
- Socially relevant applications of ICT products and services
- Media literacy
- Transparency and reporting
- Service quality
- Disruptive technologies

These topics have been integrated in the new topics. For example, “ICT solutions to support climate protection” have a positive impact on the topics “Energy consumption and mix” and “Greenhouse gas emissions.” The topic “Network build-out” is a focus of the value creation stages “Networks and data centers” and was consequently taken into account in all topics.

As part of the materiality analysis, we also analyzed potential scenarios for financial materiality: Sustainable products can help mitigate existing social, economic, or ecological problems, for example. On the other hand, adverse environmental impacts, such as larger quantities of produced waste, can increase costs (in this case, costs for waste management). The results show that currently, climate-related topics, data protection, access to the information society, and individual aspects in the supply chain pose a financial risk to society, the environment, and human rights, as well

as to us as a company. Harmful substances along the supply chain can impair human health, for example, and increasing legal requirements that we have to meet can increase costs. On the other hand, our products and services can help solve ecological and social challenges. For example, we offer solutions that help reduce energy consumption. Such challenges, therefore, pose opportunities for sustainable development, as well as market opportunities for us. For years now, these issues have been taken into account in Deutsche Telekom’s overarching risk-and-opportunity management process, and they are described in detail each year in our annual report.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 3–1 (Material Topics)
- GRI 3–2 (Material Topics)

### Materiality as a basis for evaluation of ESG risks and opportunities

In the year under review, we once again used our materiality analysis as a starting point for identifying and evaluating financial risks and opportunities that arise in connection with our sustainability issues. In the Group, risks and opportunities are generally assessed using a standardized risk process. As a result, many topics are covered that are also highly relevant from a sustainability perspective. The complementary consideration of financial impacts in the framework of the materiality analysis also helps us take impacts on the environment, society, and human rights into account. If new findings arise in this process, they are incorporated in the standardized risk process.

# Impact measurement

## Impact measurement and management

What impacts do our business operations have on society, the economy and the environment? To what extent are we contributing, with our products, solutions and measures, to the achievement of the UN's Sustainable Development Goals (SDGs)? These questions guide us in our impact measurement.

This is because we know that to achieve our overarching aim – to constantly increase our business operations' positive impacts and minimize their negative impacts – we must precisely measure the impacts of our activities.

With the support of experts from within and outside of the company, we have developed a four-stage impact measurement blueprint. It enables us to identify the impacts of projects, products, and measures on key ecological, social, and economic issues.

We use the results of impact measurement to continually improve our sustainability performance. In addition, they give us valuable information that helps us in transparently communicating the sustainability benefits of our products to consumers and business customers, investors, and other stakeholders.



In accordance with the blueprint, we initially examine the background of the products and projects, together with the functional owners. If significant ecological or social/societal impacts are identifiable, we determine how to proceed:

- For products and projects relating to the environment, we define the target situation we want to achieve and the current situation, along with the challenges to be solved. In the next step, we analyze the value chain of both the current and target situations and identify the affected stakeholders. The resources of the current and target situations are compared and the CO<sub>2</sub>e reduction is calculated based on this comparison.

- For products and projects with a social and/or societal impact, we identify the current and future risks and challenges. We examine negative impacts that can occur if we don't take action and describe our solution approaches that help to reverse or moderate the negative impacts.

To obtain transparent and comparable results, we describe the various impact contributions using established metrics for use of resources, and with the help of external frameworks, such as the SDGs. That allows us to also evaluate our contributions to sustainable development from a global perspective. In doing so, we always ensure that our methods are based on robust data and assumptions, and are effective for several years. We also describe the relevant starting point, or baseline, as accurately as possible so that we can reliably evaluate and account for the concrete external impact.

Each completed impact assessment adds to our understanding of the interactions involved – and does so also with respect to all subsequent analyses.

## We are continuing to refine our impact measurement

We enhance the blueprint continually, taking both internal and external requirements into account. In 2022, we developed our own impact-measurement tool for analyses in this context. The tool guides users in the Group through the four stages of the blueprint, and it takes account of the ecological, social and economic impacts of projects, products, and measures. Employees can retrieve learning videos in German and a complex handbook in English on a specific site on "YAM UNITED". In the year under review, the tool was used to determine the impacts of a total of 18 projects, products, and measures.

As of 2021, awarding of our #GreenMagenta and #GoodMagenta labels is systematically linked to the execution of impact measurement in keeping with our blueprint. Every award of a #GreenMagenta label must be preceded by impact measurement relative to environmental impacts, for example. Likewise, the social and societal impacts must be measured when a #GoodMagenta label is awarded. Our labels help us communicate the proven impact of our products, solutions, and activities on the SDGs, and on other sustainability goals transparently. In the following sections, we present examples of qualitative and quantitative impact-measurement results for products, solutions, and measures of Deutsche Telekom.



**Impact measurement: More-sustainable management of company devices, with the “Device as a Service” model**

Smartphones and tablets play an indispensable role in our everyday working lives. At the same time, companies are finding that the task of managing all of their employees’ company-owned devices is becoming more and more complex. In many cases, when devices reach the end of their useful lives within the company, they are simply put away and are no longer used. In addition, in many cases devices are replaced before they have reached the end of their useful lives, and then are neither used nor properly recycled.

In cooperation with the provider “everphone,” we offer our business customers in Germany a “Device as a Service.” In this service, we assume responsibility for device management. This responsibility includes active collection of devices from employees, exchange and proper repair of defective devices, and certified disposal and recycling of devices taken out of service. This increases the service lives of devices within companies.

Our impact measurement in this context has found that Device as a Service can reduce emissions by about 50 kilograms of CO<sub>2</sub> equivalents per company smartphone and tablet. The refurbishment rate increases to over 97 percent. Also, employees become more aware of the need to use devices sustainably, throughout the entire value chain. In addition, the high refurbishment rates and longer usage lifetimes associated with the service ease pressures on production, logistics, and disposal processes (SDG 12).

The service also contributes to the following SDGs:

- SDG 9: Systematic management of company smartphones and tablets supports the more efficient and more sustainable use of valuable resources.
- SDG 17: Deutsche Telekom and everphone plan to work together to roll out Device as a Service in additional countries, and they are seeking to share their knowledge in this context.

We have awarded our #GreenMagenta label to this service.

**Impact measurement: Remote maintenance with augmented reality cuts travel and CO<sub>2</sub>**

Complex technical systems have to undergo regular maintenance. Long drives on service visits for such maintenance cost time and money – and generate large amounts of CO<sub>2</sub> emissions. We now offer the “AR FieldAdvisor” smartphone app, which provides a means of carrying out such service calls remotely – i.e. without requiring the presence of a service technician at the service site. This is possible thanks to the use of augmented reality technology. When the app is used, a video call is made, and an employee at the service site pans over the relevant equipment with their smartphone camera.

Our impact measurement has found that use of the AR FieldAdvisor app to eliminate the need for 100 typical on-site service calls can save about 614 kilograms of CO<sub>2</sub> equivalents.

The service also contributes to the following SDGs:

- SDG 11: The calculation is based on elimination of transport-related emissions tied to an average of 2 485 kilometers of road and air travel to and from service sites (for 100 service calls).
- SDG 12: The added electricity consumption for development and use of the product (adverse impacts) was also factored into the calculation.
- SDG 8: Use of the AR FieldAdvisor app has improved service productivity, by enabling larger numbers of service calls to be made within a given period of time. Since the app eliminates travel time, and enables service personnel to work from their homes, its use also enhances the well-being of service personnel.
- SDG 17: The app’s remote-maintenance functionality makes it easy to provide competent technical support outside of major cities, and in less-developed areas.

We have awarded this solution the #GreenMagenta label.

**Impact measurement: Greater customer-service efficiency, with “Mein Telekom Techniker” (“My Deutsche Telekom Service Technician”)**

When Deutsche Telekom’s service technicians make service calls, they sometimes find that customers are not at home. Such “empty runs” are inefficient. They produce transport emissions, generate added costs, and tend to leave both customers and service staff dissatisfied.

With our web app “Mein Telekom Techniker” (“My Deutsche Telekom Service Technician”), customers simply tap on their phone in order to see when their service technician will arrive: We send an SMS text message in advance to remind them of the scheduled appointment. The SMS includes a link to real-time updates of the technician’s probable arrival time. If customers experience a sudden change of plans, they can change scheduled appointments with just a few taps. In short, the app helps prevent empty runs.

For 100 service calls, calculation shows that an average of about 14 kilograms of CO<sub>2</sub> equivalents is saved per call.

The service also contributes to the following SDGs:

- SDGs 9 and 12: The digital application saves paper, since it eliminates the need for two thirds of the “sorry we missed you” cards that previously had to be placed in a mailbox when the customer was not home. This supports resource efficiency and makes service processes greener.
- SDGs 3 and 11: Avoidance of empty runs helps reduce air pollution. It therefore has a positive impact on both air quality and human health.



### Impact measurement: Improved information exchange with Airport Collaborative Decision Making

International air traffic accounts for a large share of global fuel consumption. “Airport Collaborative Decision Making” (A-CDM) is a European concept for improving communication and coordination between airports, air traffic control, ground handling services, and airlines. T-Systems offers airport operators a software system that supports the implementation of this concept, thereby helping to make airport operations more efficient. More-efficient processes mean shorter turnaround times, and fewer delays in air-traffic management, and thus help save fuel and reduce air pollution. Also, reductions in delays benefit passengers.

On average, use of A-CDM can save up to 92 kilograms of CO<sub>2</sub> emissions per takeoff. Also worthy of note is that T-Systems developed the software with electricity from renewable energies (SDG 13).

The service also contributes to the following SDGs:

- SDG 17: The solution enhances collaboration, and it saves time by optimizing operational and resources management.
- SDG 11: The A-CDM solution also helps reduce air pollution.

We have awarded this solution the #GreenMagenta label.

### Impact measurement: Our sustainability platform promotes awareness of mobility-related emissions

Direct and indirect emissions from companies' own or purchased resources (Scope 1 and 2 of the Greenhouse Gas Protocol) can be reduced relatively easily with targeted measures. It is important to note, however, that indirect emissions occurring throughout the value chain (Scope 3) will increasingly be the real key to reducing company-wide emissions. Such emissions include CO<sub>2</sub> emissions generated through employees' business travel and commuting.

T-Systems now offers business customers “EcoShift,” a sustainability platform. This business solution shows companies the carbon footprint generated by the mobility of their employees and, on a dedicated platform, translates this data into specific recommendations. On a system dashboard, CO<sub>2</sub> emissions from business travel and commuting can be monitored and analyzed, and suitable reduction measures can be derived.

Impact measurement has shown that use of the sustainability platform can save about 12 tons of CO<sub>2</sub> emissions annually, per 100 employees. The platform's transparent presentation of emissions data helps make employees more aware of their travel-related emissions, and it can inspire them to begin cycling to work or to use public transportation for their commutes. For the development and operation of the platform, electricity from renewable sources was used (SDG 13).

The service also contributes to the following SDGs:

- SDGs 3 and 11: Helps reduce transport-related emissions and air pollution in cities. It also contributes to employees' health and well-being.
- SDGs 9 and 12: The platform visualizes company-wide mobility-related emissions, and it supports derivation of specific measures to reduce them. It also saves time; its dedicated interfaces facilitate carbon-footprint determination, and its real-time data facilitate preparation of company reports.

We have awarded this solution the #GreenMagenta label.

### Impact measurement: “AwareNessi, the Cyber-Activity Book”, makes it fun to learn about data security

Children today begin using the internet at very young ages. Not enough is being done to enlighten them about the “facts of data security,” however. Deutsche Telekom is now publishing “AwareNessi – The Fantastic Cyber-Activity Book”, a magazine for children between the ages of eight and twelve (and their parents) that informs children about the dangers lurking on the internet in a fun and entertaining way – without making them afraid.

“AwareNessi” helps parents talk with their children about this issue and teach them to use the internet with care (SDG 4).

This offering also contributes to the following SDGs:

- SDGs 5 and 10: “AwareNessi” is a gender-neutral avatar. The magazine uses gender-neutral language that is appropriate for children.
- SDG 9: “AwareNessi” advises children and parents with regard to use of security tools in cyberspace, without mentioning any brand names.
- SDG 12: Issues of “AwareNessi” are available in digital form, for printout only as necessary. This helps reduce paper waste.
- SDG 16: For each issue of “AwareNessi,” our employees volunteer 60 hours of their time (for development, design, and communication). In addition to helping make children aware about data security, “AwareNessi” promotes respectful conduct and interaction online.
- SDG 17: The issues are available in 16 different languages. Consequently, “AwareNessi” provides reliable information about data security internationally.

We have awarded this solution our #GoodMagenta label.

**Impact measurement: Our contribution to respect for human rights**

The following diagram illustrates the positive impact that can be achieved in our value chain and beyond through our commitment to human rights.



**Specific commitments to human rights at our company and among our suppliers**

We once again conducted “Human Rights Impact Assessments” on site in our own business units in 2022 – this time in Slovakia, the Czech Republic, and Romania.

The Human Rights Impact Assessment is a means of evaluating the effects business operations have or could potentially have on human rights, and the organization’s ability to prevent, mitigate, or remedy such effects. We took the dimension of digital ethics into account for the first time.

We used the findings to implement changes to the way work is planned. We also initiated various measures to raise awareness, including workshops to explain overtime regulations.

This offering contributes to the following SDGs:

- SDGs 3 and 8: With our Human Rights Impact Assessments, we are implementing measures for observance of human rights throughout the company and in the value chain.

In addition, we implement the relevant recommendations of the “United Nations Office of the High Commissioner for Human Rights”. More information on human rights can be found here.

**Impact measurement: Multimedia learning for media literacy**

For the topic of media literacy, we analyzed the effectiveness of our “Teachtoday” initiative. Joint research with the auditors from PwC (PricewaterhouseCoopers) showed that the methods used by Teachtoday are more than twice as effective as conventional forms

of learning. The reason: The multimedia learning methods used by Teachtoday incorporate several senses at once, unlike conventional methods.

Teachtoday activities to improve media literacy are organized under different mottoes, such as “civil courage” in 2020 and “Gaming” in 2021.

This initiative contributes to the following SDG:

- SDG 4: The multimedia learning methods used with Teachtoday promote safe and competent media use.

More information on media literacy can be found here.

**Impact measurement: Online billing is more eco-friendly than paper billing**

The switch from paper billing to online billing provides a good example of the sustainability potential inherent in digitalization. We applied our approach to impact measurement in order to analyze the effects more closely for Deutsche Telekom.

It showed that the adverse environmental impacts of online billing are more than 50 percent lower than those associated with paper billing (SDG 13).

This offering also contributes to the following SDGs:

- SDGs 8, 9, and 12: The switch to online billing saves paper and printer toner, and also reduces logistics requirements. We have identified the potential negative consequences of this measure as a drop in sales for the timber and paper industries and logistics sector. However, these consequences are less substantial than the positive effects.

**Impact measurement: Sustainable product packaging for remotes**

The primary purpose of packaging is to ensure that products are not damaged during transport to their final destinations (customers). When a product is unpacked, its packaging is usually discarded immediately, meaning it becomes trash and a burden on the environment. In this impact measurement, we analyzed a sustainable packaging solution and compared it with conventional packaging.

This offering contributes to the following SDGs:

- SDGs 11 and 12: Use of recycled materials, and avoidance of plastic, reduce waste.
- SDG 6: Use of soy-based printer ink prevents use of environmentally harmful chemicals.
- This use case has yielded a blueprint for efficient impact measurement of other sustainable packaging solutions.

All of our own products have been shipped in sustainable packaging throughout Europe since mid-2022. More than two thirds of the new packaging for smartphones we source from our suppliers also meets these criteria.

We have awarded our #GreenMagenta label to this service.

# Sustainable Development Goals

## Our Contribution to the Sustainable Development Goals

**„As the leading European telco, we also want to be a leader when it comes to sustainability.“ A comparison with the 17 United Nations SDGs shows that many of our activities, services, and products are already helping to meet ecological and societal challenges today.“**

We support the 17 Sustainable Development Goals (SDGs) of the United Nations (UN). Various studies have come to the conclusion that 103 (of a total of 169) subgoals associated with the SDGs can benefit from the use of ICT. Examples include the study entitled "ICT-centric economic growth, innovation, and job creation," published in 2017 by the International Telecommunication Union, and the "SMARTer2030" study launched by the GeSI (Global e-Sustainability Initiative) initiative in 2019.

Our network infrastructure forms the technological foundation; it enables solutions to social and ecological challenges, hence contributing to achieving many SDGs. That is why we believe we can make the biggest impact on SDG 9: "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation."

The following overview details how we contribute to implementing the SDGs. It also shows how we measure our contribution, and refers to specific examples from the current CR report.



Melanie Kubin-Hardewig  
Vice President Group Corporate Responsibility Deutsche Telekom AG

SUSTAINABILITY GOAL 8

## Decent Work and Economic Growth

We provide excellent working conditions for our employees and work continuously to make the supply chain more sustainable. *Our contribution*



SUSTAINABILITY GOAL 11

## Sustainable Cities and Communities

Our innovative solutions and the network infrastructure build-out help shape the transformation of cities into smart urban spaces. *Our contribution*



SUSTAINABILITY GOAL 9

## Industry, Innovation and Infrastructure

We invest billions in a stable, secure network infrastructure and, in doing so, create the basis for economic performance and participation in the knowledge and information society. *Our contribution*



SUSTAINABILITY GOAL 12

## Responsible Consumption and Production

We increase the share of innovative, sustainable products in our portfolio, ensuring transparency about this by identifying these products with our #GoodMagenta and #GreenMagenta labels. Moreover, we reduce the waste volume generated by our Group and are committed to proper recycling. *Our contribution*

SUSTAINABILITY GOAL 3

## Good Health and Well-being

We support the health care sector by providing various ICT solutions - from hospital management systems to our contact tracing app, the Corona-Warn-App. We also promote the health and well-being of our employees across the Group. *Our contribution*



SUSTAINABILITY GOAL 13

## Climate Action

We contribute to climate protection - within the Group by taking measures to increase energy efficiency and using renewable energy, and outside the Group by providing sustainable products and services. *Our contribution*



SUSTAINABILITY GOAL 4

## Quality Education

We support the population's media literacy and democratic skills with various projects and initiatives. We offer our employees a wide range of individual vocational training and development programs. *Our contribution*



SUSTAINABILITY GOAL 15

## Life on Land

ICT solutions help increase yields in agriculture and conserve resources. We are committed to conserve biodiversity and call on our suppliers to protect the environment. *Our contribution*

SUSTAINABILITY GOAL 5

## Gender Equality

We promote equal opportunities and use targeted measures to increase the share of women in management, in supervisory boards and in STEM professions. We also call on our suppliers to ban gender discrimination. *Our contribution*



SUSTAINABILITY GOAL 1

## No Poverty

Our networks provide the conditions for economic and social participation and thus also access to education, the lack of which is one of the main causes of poverty. *Our contribution*



SUSTAINABILITY GOAL 7

## Affordable and Clean Energy

We increase the share of green energy of our total energy consumption and use energy-efficient technology. *Our contribution*




SUSTAINABILITY GOAL 2

## Zero Hunger

ICT solutions help to boost crop yields while conserving resources such as seeds and water. *Our contribution*

**SUSTAINABILITY GOAL 6**  
**Clean Water and Sanitation**

ICT solutions help reduce the use of water and fertilizer in agriculture. Smart metering systems enable utilities and customers to manage water consumption in a sustainable way. *Our contribution*




**SUSTAINABILITY GOAL 10**  
**Reduced Inequalities**

We are clearly committed to diversity and support our employees, irrespective of gender, age, sexual orientation, disability or non-disability, ethnic origin, religious beliefs, and cultural background. In addition, we expect our suppliers to pay minimum wages in line with the ILO Convention. *Our contribution*




**SUSTAINABILITY GOAL 14**  
**Life Below Water**

Our ICT solutions can help save water. We also take various measures to reduce our own water consumption. *Our contribution*




**SUSTAINABILITY GOAL 16**  
**Peace, Justice and Strong Institutions**

We are clearly committed to ethical codes and legal provisions and have set up a comprehensive compliance management system. Furthermore, our dedicated efforts and products contribute to data protection and data security. *Our contribution*



**SUSTAINABILITY GOAL 17**  
**Partnerships for the Goals**

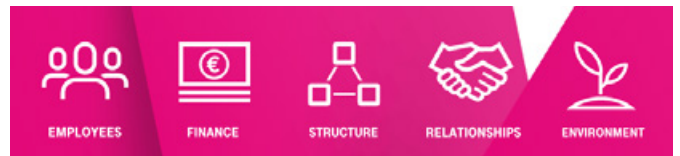
We collaborate with associations, institutions, and companies at national and international level. *Our contribution*



**Value contributions within the company**

Our contributions to achieving the SDGs have also had a positive effect on our Company. In order to highlight these contributions, we have divided them into five areas: “Employees”, “Finance”, “Structure”, “Relationships” and “Environment”. Each area has been assigned its own symbol.

To clearly highlight the contribution our products, services, and activities make toward the individual sustainability development goals and our value chain, we have marked the relevant passages in our annual report and the “Management and Facts” section of the CR report with the respective SDG and value contribution symbols.

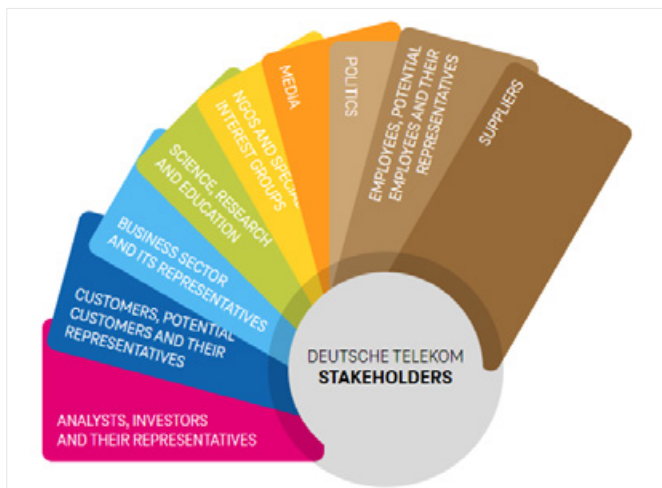


# Stakeholder management

## Our stakeholders

Our interaction with stakeholder groups helps us find support for the things that matter to us and makes it easier to identify trends early on, thereby fostering our innovation processes.

The following overview sets out who our stakeholders are and what matters to them most:



### Analysts, investors and their representatives

TOP-SUBJECTS:

- Data Protection
- Data Security
- ICT solutions that contribute to climate protection
- Ethical business practices and compliance
- Limiting the effects of climate change

STAKEHOLDER GROUPS:

- Private investors
- Funds, asset managers and analysts
- (SRI) rating agencies
- Analyst organizations and associations
- Institutional investors

### Customers, potential customers and their representatives

TOP-SUBJECTS:

- Data security
- Employee involvement
- Privacy
- Cyber safety
- ICT Solutions for a Low-Carbon Economy

Stakeholder groups:

- Youngsters and young adults
- Families
- Middle-aged people
- Senior citizens
- Small and medium-sized enterprises
- Large corporations
- Public authorities
- Consumer organizations and segment-specific interest groups
- Telekom Supervisory Board members

### Business sector and its representatives

TOP-SUBJECTS:

- All top-subjects of the materiality analysis 2022

Stakeholder groups:

- DAX-listed companies
- Other large corporations
- Small and medium-sized enterprises
- Trade and industry associations
- Cooperation partners
- Competitors

### Science, research and education

TOP-SUBJECTS:

- Employee involvement
- Socially relevant application of ICT products and services
- Cyber safety
- ICT Solutions for a Low-Carbon Economy
- Privacy

Stakeholder groups:

- CR and sustainability research institutions
- Political and business research institutions
- Universities
- Schools
- Day care centers
- Student organizations and university associations
- ICT, sociology and design research institutions

### NGOs and special interest groups

TOP-SUBJECTS:

- Privacy
- Cyber safety
- Socially relevant application of ICT products and services
- Transparency and reporting
- ICT and child safety



Stakeholder groups:

- Humanitarian organizations and charities
- Business ethics groups
- Multi-thematic organizations
- Churches and their relief organizations as well as other religious and social groups
- Foundations
- Environmental protection organizations

**Media**

TOP-SUBJECTS:

- All top-subjects of the materiality analysis 2022

Stakeholder groups:

- CR and sustainability
- Players from politics and business
- Education
- Radio broadcasters, daily press, press agencies
- Online media and social networks
- Publishers
- Journalist associations/media groups
- ICT and communications

**Politics**

TOP-SUBJECTS:

- Privacy
- Cyber safety
- Socially relevant application of ICT products and services
- Transparency and reporting
- ICT and child safety

Stakeholder groups:

- Players at national level
- Embassies and consulates
- Supervisory and regulatory authorities
- Communities and their representatives
- International organizations
- Players at EU level

**Employees, potential employees and their representatives**

TOP-SUBJECTS:

- Data Security
- Privacy
- Cyber safety
- ICT Solutions for a Low-Carbon Economy
- Employee involvement

Stakeholder groups:

- Employees
- Managers
- Board of Management
- Applicants and prospective employees
- Trade unions and works councils
- Employees and students
- Endowed chairs
- Apprentices/trainees

**Suppliers**

TOP-SUBJECTS:

- Privacy
- Cyber safety
- Mitigating climate change
- Talent acquisition, retention, development and staff reduction
- Data Security

Stakeholder groups:

- Auditors and certification bodies
- Sub-suppliers
- Consultants
- First-tier suppliers

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 2–29 (General Disclosures)



### Formats for stakeholder engagement

We encourage stakeholder engagement in our corporate activities. With this in mind, we developed an appropriate strategy in 2011. It is based on the three AA1000 principles developed by the NGO AccountAbility: materiality, inclusivity, and responsiveness. Our conformity with these principles was investigated and verified by an auditing firm in 2013. We plan to subject our stakeholder strategy to an extensive review and revision in the course of 2023.

We used a case-based relevance analysis to identify the type and intensity of our stakeholder engagement. The more relevant a stakeholder group is to the topic or project concerned, the more intensive the engagement of that stakeholder group can be. Depending on the intensity, we make a distinction between three types of engagement: participation, dialog, and information.

The infographic is divided into three horizontal sections, each with a colored header and a list of activities:

- PARTICIPATION (Green header):**
  - Supplier development program
  - "You and Me UNITED" (YAM UNITED): Inform, discuss, make aware
  - Strengthening our corporate culture, encouraging a speak-up culture
  - Collaboration for the protection of minors
  - Cooperating in the name of security
  - Co-designing Deutsche Telekom products and services in the think tank [🔗](#)
  - Green Pioneers
  - Experts' group on digitalization
  - Telekom hilft/Telekom helps
  - Telekom Ambassadors
- DIALOG (Blue header):**
  - Expertise in the CR Report: Stakeholders can ask Deutsche Telekom experts questions on selected topics
  - Cyber Security Summit
  - SRI Roadshows
  - Evaluation and implementation of the EMF policy
  - Magenta Moon
- INFORMATION (Dark Blue header):**
  - #TAKEPART-stories [🔗](#)
  - Data protection tips in our one-pager
  - We Care Magazin [🔗](#)
  - Informationszentrum Mobilfunk (IZMF) [🔗](#)
  - Telekom.com [🔗](#)
  - TMTM

The feedback that we receive from our stakeholders is incorporated into our CR activities and also affects the CR program.

### Reporting against standards

Global Reporting Initiative (GRI)  
GRI 2–29 (General Disclosures)

### Overview of memberships and collaborations

Overview of memberships and collaborations as part of our sustainability commitment:

#### Business and industry associations

- BITKOM
- Bundesverband der Deutschen Industrie e. V. (BDI) (The Voice of German Industry)
- European Telecommunications Network Operators' Association (ETNO)
- Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e. V. (econsense) (Forum for Sustainable Development of German Business)
- GSM Association (GSMA)

#### Organizations for protecting the climate and the environment

- B.A.U.M. e. V.<sup>1</sup> (German environmental management association)
- European School of Management and Technology (ESMT)
- Global e-Sustainability Initiative (GeSI)
- Global Compact
- Joint Audit Cooperation (JAC)
- RE100
- Solar Impulse Foundation
- Stiftung KlimaWirtschaft

#### Organizations for societal topics

- Aktion Deutschland Hilft e. V.
- Amadeu Antonio Stiftung
- Bundesarbeitsgemeinschaft der Senioren-Organisation (BAGSO) (German Association of Senior Citizens' Organizations)
- Bundesnetzwerk Bürgerschaftliches Engagement (BBE) (BBE, the National Network for a Civil Society)
- Diversity Charter
- Digital Networking Charter<sup>1</sup>
- CORRECTIV<sup>1</sup>
- Deutschland sicher im Netz (DsiN) (Making Germany safe on the net)
- Digitale Helden<sup>1</sup>
- Diskutier mit mir e. V.<sup>1</sup>
- Europäische Akademie für Frauen in Politik und Wirtschaft Berlin e. V. (EAF Berlin) (European Academy for Women in Politics and Science Berlin)
- esports player foundation
- FemTec
- Freunde fürs Leben e. V.<sup>1</sup> (Friends for Live)
- Gesicht Zeigen! Für ein weltoffenes Deutschland e. V. (Show your face)
- Global Digital Women
- ichbinhier e. V.<sup>1</sup> (I am here)
- JUUUUPORT e. V.
- Kompetenzzentrum Technik - Diversity - Chancengleichheit e. V. (kompetenz) (Competence Center Technology - Diversity – Equal Opportunity)
- Managerfragen.org<sup>1</sup> (Manager Questions)
- 100% MENSCH<sup>1</sup> (100% Human)
- Nummer gegen Kummer<sup>1</sup> (youth counseling line)

- Seitenstark e. V.<sup>1</sup>
- Supplier Development Programme (SDP)
- TelefonSeelsorge1 (crisis hotline)
- VielRespektStiftung1 (MuchRespectFoundation)
- ZDK Gesellschaft Demokratische Kultur <sup>1</sup> (ZDK Society for Democratic Culture)

<sup>1</sup> Website only available in German

#### **Reporting against standards**

##### **Global Reporting Initiative (GRI)**

- GRI 2-28 (General Disclosures)
- GRI 2-29 (General Disclosures)

# Compliance

## Compliance management system aligned with the company's risk situation

Our compliance culture is a key component for corporate governance based on integrity and respect. We have expressed our Group-wide commitment to complying with ethical principles and both legal and statutory requirements. We have enshrined this pledge in our Guiding Principles and our Code of Conduct.

Integrity – which necessarily encompasses compliance – forms the basis of all our business decisions and activities. It defines the behavior of all our employees in dealings with customers, employees, investors, managers, and Deutsche Telekom's overall sphere of operations.

We implemented a compliance management system (CMS) with the aim of minimizing risks arising from systematic infringements of legal or ethical standards that could result in regulatory or criminal liability on the part of the Company, its executive body members, or employees, or result in a significant loss of reputation. The Board of Management considers its overall responsibility for compliance as a key leadership task. Our Chief Compliance Officer is responsible for the design and management of the compliance management system. Compliance officers implement the compliance management system and our compliance goals locally at the level of our operating segments and national companies.

We have derived the following objectives for our compliance work:

- Identifying, analyzing, and assessing compliance risk at an early stage
- Integrating preventive measures in business processes early and permanently, to prevent breaches of compliance
- Minimizing liability risks for the company
- Being viewed as a dependable partner by customers and business partners
- Adopting a consistent approach to preventing, identifying, and responding to non-compliance
- Fostering a compliance culture and ethical conduct

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 2–23 (General Disclosures)
- GRI 2–25 (General Disclosures)
- GRI 2–26 (General Disclosures)
- GRI 205 3–3 (Management of material topics)

## Ongoing audit of compliance management continued

Since 2010, we have commissioned regular audits of our compliance management system (CMS), with a focus on anti-corruption, in accordance with IDW audit standard 980. The last audit run took place in the years 2020 and 2021.

In total, 22 German and international companies were audited successfully. Details of the audit results are published on Deutsche Telekom's homepage. The audits focused on processes that are exposed to an increased risk of corruption, for example, in procurement, sales, events, donations, sponsorships, M&A, and human resources. The next external audit is scheduled for 2024.

## Further development of the compliance management system through regular risk assessment

To identify, analyze, and assess compliance risks to the company and derive risk-oriented measures to prevent breaches of laws and regulations, our central compliance management organization conducts a high-level CRA (compliance risk assessment) each year. It also covers Deutsche Telekom's subsidiaries. For this we have established a compliance risk assessment process, established responsibilities, and defined assessment criteria. The individual steps are documented transparently. The 2022 compliance risk assessment had the following detailed outcomes:

- The companies that participated in the CRA were selected according to a model based on risk and maturity and dependent on governance.
- In 2022, 69 units (61 companies and 8 Group headquarters units) went through this process. This equates to a coverage level of 93.6 percent (by FTE/full-time equivalents) of fully consolidated companies as of December 2021. T-Mobile US uses a different system for its risk assessment.
- We list potential risks to our company in a Group risk map. This enables the various Deutsche Telekom companies, with their different business models, to conduct systematic risk analyses. In 2022, the core risk categories were revised and partly consolidated. In 2022, the risk map covered 22 risk categories, including such categories as corruption, anti-trust law viola-

tions, and human rights violations. All national companies can add more categories specific to their business needs and as warranted. This involves defining which specific threat each risk poses to the national company and stating which steps have already been implemented to rule out this risk as far as possible. If necessary, additional measures are developed to reduce the risks to a manageable level.

- Responsibility for conducting the CRA lies with the respective company or Group unit. Based on the results, management approves a compliance program for the coming year that includes appropriate local measures and responsibilities. The central compliance organization supports them with this and provides a standardized methodology. This means the findings from the CRA can be used to derive risk-oriented Group-wide measures.
- The Board of Management and the Audit Committee of the Supervisory Board of Deutsche Telekom are notified of the results of the compliance risk assessment.
- The central compliance department monitors the execution of measures from the compliance program.

#### Reporting against standards

##### Global Reporting Initiative (GRI)

- GRI 2-16 (General Disclosures)
- GRI 2-25 (General Disclosures)
- GRI 205-1 (Anti-corruption)

#### A clear reference framework: Deutsche Telekom's compliance policies

Integrity, respect, and compliance with the law and internal policies and regulations – these are the principles on which Deutsche Telekom's business activities are based. Our Code of Conduct is the central reference framework for lawful and ethical conduct. It is supplemented by other specific policies, such as the Group Policy on Avoiding Corruption and Other Conflicts of Interest, the antitrust policy, and our digital ethics guidelines on AI. In following the AI guidelines, we have made it our goal to use and refine our AI products and services in a responsible manner. AI must be designed to be human-centric, to protect the sovereignty, freedom from discrimination, and freedom of speech of the persons involved.

An overview of our most important policies is available on our website.

#### Raising awareness of compliance risks among staff

We support our employees Group-wide with a variety of measures to ensure that their everyday work remains ethical and legally compliant:

- A policies database that helps staff find and implement applicable regulations
- Regular compliance and anti-corruption training, which is also part of our onboarding process for new employees (see GRI 205-2)
- International introduction of "Compliance Basics" online training course in 2021. Our employees must repeat this course every two to three years.
- It features short, to-the-point videos on compliance topics of relevance to everyday work procedures. They are available to employees at all times, via the internal portal YAM UNITED and LinkedIn
- Since 2013, on the occasion of UN International Anti-Corruption Day on December 9: Annual execution of international communication campaigns and a variety of measures at the companies. In 2022, for instance, we held an international live stream featuring a comprehensive talk with Board of Management member Birgit Bohle, Chief Compliance Officer Marie von der Groeben, and the Wirecard whistleblower Pav Gill. The objective of the session was to raise awareness among employees of the topics of whistleblowing, a speak-up culture, and corruption. In addition, the Board of Management members pointed out the risks of corruption in a joint email.
- AskMe - the consultation desk for compliance and ethical and lawful conduct. This portal gives employees answers to compliance issues that often come up at work (FAQs). They also have the possibility of contacting the AskMe advisory team, which provides reliable recommendations for behavioral uncertainties relevant to compliance. The number of inquiries and the topics covered can be viewed here
- Annual compliance risk assessment (CRA), which we use to identify and assess compliance risks in Group companies and organizational units and then derive key areas for suitable preventive measures
- Regular anti-corruption statements by Deutsche Telekom Board of Management members
- Additional preventive measures in our annual compliance program derived from the compliance risk situation.

#### Reporting against standards

##### Global Reporting Initiative (GRI)

- GRI 2-26 (General Disclosures)
- GRI 205-2 (Anti-corruption)

### Systematic handling of infractions

We follow up on all tip-offs related to a violation of legal or internal regulations, provided the description of the facts is adequate. One of the channels we use to receive tip-offs is the whistleblower portal TellMe.

- All tip-offs are treated as confidential, checked for plausibility, and carefully investigated.
- Any violations we uncover will be rigorously sanctioned, without exception, according to legal provisions, regardless of the rank and position of the persons involved. This also includes possible termination of the employment relationship and an assertion of claims for damages. Any weaknesses identified in the internal control system during the investigation are systematically analyzed and remedied.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 2–25 (General Disclosures)
- GRI 2–26 (General Disclosures)

### TellMe whistleblower portal

Our TellMe whistleblower portal gives our employees, as well as external parties such as business partners and customers, the possibility to report misconduct – and do so anonymously. We have introduced a Group-wide reporting process to control and monitor these activities.

- All compliance-relevant tip-offs are treated as confidential, checked for plausibility, and carefully investigated. This is also true of tip-offs we receive through other channels.
- Most of the tip-offs received in 2022 focused on “financial interests” (possible cases of fraud, breach of trust, manipulation of targets, and unfair sales methods).
- In confirmed cases, we impose systematic sanctions that are proportionate to the act and the guilt of the perpetrator and are in line with applicable legal provisions. We publish other details, such as information about implemented measures, on our website.

### Receipt and handling of tip-offs on the TellMe portal\*

	2022	2021	2020
Reports (overall)	839	901	1 060
Compliance-relevant tip-offs	81	87	113
Thereof anonymous tip-offs	28	29	57
Confirmed misconduct	39	47	63
Under investigation	13	13	12
Non-plausible tip-offs	9	18	38

\* Tip-offs received directly by the international companies are only included here if they are relevant to the Group.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 2–25 (General Disclosures)

### Measures to strengthen our corporate culture

Our culture of compliance, which fosters lawful and ethical conduct, is a central component of our corporate culture.

The world is getting increasingly complex and we are confronted with new challenges and regulations every day. This makes it more important than ever to offer reliable guidance to all employees, to enable them to act confidently and ethically in different situations.

Our eLearning offerings for compliance have been established. Group-wide, these eLearnings also include value-based, cultural, and integrity-related aspects – such as our eLearning Code of Conduct, Basic ethical concepts in day-to-day business and Compliance Basics. We also held in-person training with Board of Management members and top management in 2022, in which we processed and discussed the best conduct in typical compliance dilemma situations based on case examples.

Our ICARE check, a self-test with five simple questions, supports our employees in making the right, responsible decisions in difficult situations.

### Worldwide cooperation for compliance

Different legal frameworks and cultural values in the countries where Deutsche Telekom is active represent a significant compliance challenge for us. The increasingly dynamic development of global markets, new digital business models, and intensified international competition also influence our compliance strategy.

To meet the Group’s demands as an international corporation, we regularly discuss strategic compliance topics with compliance officers at our international Group companies worldwide. In 2022, the compliance officers at the largest and most strategically important international units once again met in person, together with experts from the Group Compliance unit at a conference for the first time since the coronavirus pandemic. The onboarding process of our new international compliance managers involves inviting them to Germany, to familiarize them with compliance topics, our culture of compliance, and the challenges facing the Group, in addition to introducing them to their colleagues. International interaction also takes place during monthly online “compliance community calls.” Topics for 2022 included: “Presenting new features in the compliance reporting tool,” “Compliance tasks in the ESG governance framework,” “Digital ethics,” and “Presenting the international compliance teams and work priorities.” The compliance community calls also involved presentations of best practices that were developed from compliance audits in the Group and explanations by the units.

We also discuss compliance issues with other companies and with expert groups. In addition, we regularly promote the further development of compliance standards and management systems through specialist presentations, publications, and other contributions.

### Commitment to anti-corruption initiatives

We participate regularly in the work of national and international organizations that focus primarily on compliance issues. As a member of associations and organizations such as the German Institute for Compliance (DICO e.V.), the Compliance & Integrity forum of ZfW (Center for Business Ethics) and BITKOM, Germany's digital association, we make use of opportunities to exchange ideas and experiences related to compliance.

For years now we have been using the United Nations International Anti-Corruption Day on December 9 as an opportunity to raise awareness in the Group about the issue of bribery and corruption. For more details, see the section "Raising awareness among staff".

### Responsible use of artificial intelligence (AI)

Digital responsibility is a task for society as a whole. Deutsche Telekom develops artificial intelligence (AI) and uses it in a variety of products. Our Board of Management members Claudia Nemat and Birgit Bohle actively contribute to discussions on this topic. AI systems have long become an integral component of how we work. For example, they are used to answer inquiries as quickly as possible.

Like our commitments to high service quality and digital sovereignty, we are committed to the ethical use of AI that focuses on people and their needs.

Against this backdrop, in 2018 we were one of the first companies in the world to develop digital ethics guidelines on AI. They clarify how we at Deutsche Telekom intend to use AI responsibly and develop our AI-based products and services. Our AI guidelines outline an approach in which AI is developed with people and their needs in mind. They are oriented to the pertinent legal foundations – and to our Code of Human Rights & Social Principles, in which we commit ourselves to upholding and promoting human rights.

To support the specifics of implementing our AI guidelines, we saw a need to take additional steps, issue additional rules, and introduce additional processes. To that end, we have initiated the following measures:

- True to the motto "share and enlighten," we have created an online training course on "Digital Ethics" for our employees and held presentations on AI-related topics at the German and international levels.
- As part of our work as a member of various bodies, we share our experiences and insights with other companies. This occurs, for example, in our work in the Federation of German Industries (BDI); the German Association for Information Technology, Telecommunications and New Media (Bitkom); the German Association for the Digital Economy (BVDW); and the D21 digitalization initiative.

The following measures have been implemented in support of active application of our AI guidelines:

- We developed the "Professional Ethics" guide together with our technology experts and project managers. The guide presents best practices, methods, and tips for applying the AI Guidelines to development processes. With this guide, we are seeking to ensure that all developers who work with AI conform to the AI guidelines and implement them in the systems and products they develop.
- We conduct "digital ethics assessments" to ensure that our ethical AI requirements can continue to be considered and implemented in our development processes, as part of our "ethics by design" approach.
- In addition, we have added the AI Guidelines to the curricula for various training and development courses for our employees. For example, we have developed relevant training events for our Data Scientist training program and our "Re-Skilling Academy," and we offer these events in various attractive formats in the framework of Telekom Vocational Training, including virtual tours, online training and "Digital Learning Journeys."
- To ensure that our high ethical standards for AI development are also reflected in our supply chain, we supplemented our Supplier Code of Conduct in 2020 with content related to our AI guidelines and updated it in the year under review – making us a pioneer in this area as well.
- In addition, an interdisciplinary "digital ethics" team was founded in 2022, which takes care of the further development, support, and implementation of digital ethics issues at the Deutsche Telekom Group, also preparing the enforcement of the upcoming EU AI Act. The Group is steered by the Board of Management members for Technology and Innovation (VTI) and for HR and Legal Affairs, Labor Director (VP) in a co-creation approach.

### Further development of the Compliance organization

Dynamic challenges in our market environment, increasing regulatory requirements, and changes in the working world require continual adjustments to our compliance management system. We also keep the knowledge of our Compliance staff up to date with requirement-based, situation-related training courses and cross-company interchange formats, among other measures. In addition to professional development, these courses cover topics such as agility, modern working, and tools and processes.

To adapt our Compliance organization to the increasing demands of our internal and external customers and to agile working methods, the Group Compliance organization has been structured according to an agile organizational model and has been working with agile methods since 2021. This organization continued to evolve in 2022, with a focus on customers, processes, and digitalization.

This ongoing development of our Compliance organization is intended to contribute to our customer-centric, lawful, sustained success as a company. Our compliance strategy focuses on our target vision of a leading digital compliance management system (leading digital CMS).

In this vision, the CMS supports the following:

- Integrating compliance requirements in business processes as seamlessly as possible
- Showing the Group-wide status of the CMS and existing compliance risks at all times, transparently and up to date
- It actively takes up and addresses new developments in the business and regulatory domains and uses the insights gained for continuous improvement

The key components of leading digital CMS are culture, trust, and simplicity.

- **Culture** is the foundation of how we work together. Compliance cannot succeed without a good, open corporate culture in which every individual is willing to take responsibility, admit mistakes, and point out risks.
- **Trust** goes in two directions: The Compliance function serves as a trusted advisor, which develops solutions for dealing with compliance risks together with the business units. Conversely, the Compliance unit also returns this trust by only defining binding guidelines, where deemed necessary under risk aspects.
- **Simplicity** means that we want to make it as simple as possible for everyone at the company to follow the rules and implement compliance requirements. This means formulating the rules clearly and simply, for instance, and limiting them to what is essential.

To achieve the objective of a leading digital CMS, we have defined specific measures that we are implementing step by step. We achieved initial successes with it in 2022:

- We created the Compliance Digital Transformation cluster to consolidate digitalization know-how and drive forward the ongoing development and digitalization of compliance processes.
- Digitalization starts with a critical analysis of existing processes. Over the past year, we have identified significant simplifications in our compliance toolkit that intensify cross-functional collaboration with all risk owners with regard to the compliance risk assessment, and also designed a digital compliance reporting tool.
- To address “trust,” “culture,” and “simplicity” overall, we developed the ICARE check, a simple self-test with five questions for critical situations. The test is intended to help all employees master difficult situations and judge whether they should obtain advice before deciding on how to proceed further.

- We also supplemented our classroom training courses with dilemma situations from everyday business. Joint, interactive discussion of situations from everyday business that often make it difficult to find the right answer has resulted in a trusting, open dialog in the training courses, contributing to both the “culture” and “trust” elements.
- Together with colleagues from the Board of Management department for Technology and Innovation, we initiated the Digital Ethics squad, to ensure together that we also act in accordance with our requirements of compliance and integrity in the digital world and when using artificial intelligence, and are prepared for new European frameworks like the EU AI Act.
- In addition, we responded to new statutory requirements, making changes to our compliance risk assessment and our TellMe whistleblower portal, within the framework of a project headed by Corporate Responsibility to implement German Supply Chain Act.



# Political advocacy

## Commitment to consumers

We are Europe's leading telecommunications company in terms of market capitalization, revenue, and earnings. Against this backdrop, consumer policy issues are a high priority for us.

Our key topics:

- Ongoing measures to protect consumer data privacy (in online advertising, for example)
- Efforts to strengthen comprehensive youth protection, across all relevant technical platforms, at the national and EU levels (especially in the framework of the amendment to the Telecommunications Act, which we implemented on time in late 2021)
- Improving customer service standards
- Efforts to ensure consistent, understandable messaging in communications with our customers
- Improving consumer protection in telecommunications (for example, when switching providers for fixed-line and mobile connections)

In all these areas, we stand for a constructive and solution-oriented approach that is geared to both consumer interests and the interests of our company.

## Political advocacy tools

Our partners in parliaments, governments, and non-profit organizations need to uphold their independence and integrity. This principle is codified in Deutsche Telekom's Code of Conduct. For this reason, donations to political institutions, parties, and political representatives are not allowed, for example. Instead, we place importance on factual communication, competence, credibility, and integrity. As a result, politicians and stakeholders feel that the information we provide is authentic and credible and can refer to this information when forming their own opinions. In Brussels, Deutsche Telekom is registered within the EU's public Transparency Register for lobbyists. Also in Germany the company is registered in the Lobbying Register, which was introduced in 2022 by the Lobby Register Act, for the Representation of Special Interests vis-à-vis the German Bundestag and the German Government since February 28, 2022. Within the context of our collaboration efforts in associations and other bodies, we feel that we are under the obligation to comply with all ethical codes and legal provisions.

In 2022, our political advocacy work focused on the following key issues:

- Broadband build-out
- Frequency auctions
- Partnerships in the area of expansion
- Regulatory procedure
- Net neutrality
- Resilience and cyber security
- European cloud ecosystem
- Platform regulation
- Data economy
- Consumer protection
- Green ICT
- Fair Share

On the Deutsche Telekom website, under the special topic heading "Policy and Regulation", we regularly provide information about current issues and perspectives relative to representation of interests.

## Association fees – the main political advocacy outlay

Active involvement in associations is the cornerstone of our political advocacy work. Accordingly, all the various membership fees (for umbrella/trade/industry associations) account for the majority of our outlay in this area. To make our involvement transparent, an overview of the main fees paid in the past three years is provided below.



Category	Institution	2020	2021	2022
Annual total monetary contributions / donations (in EUR)	Trade associations	< 5 000 000*)	< 5 000 000*)	< 5 000 000*)
	Political parties	-	-	-
Largest single annual contributions (in EUR)	(Deutsche) Industrie und Handelskammer (IHK/DIHK)	896 506	2 278 611	2 608 477
	Bundesverband der deutschen Industrie (BDI e.V.)	500 000	520 929	476 928
	Bundesvereinigung der Deutschen Arbeitgeberverbände (BDA)	400 410	400 407	400 407
	Bitkom e.V.	360 000	343 085	368 284

\* The above figures for contributions to trade associations mean “less than 5 million euros per year” (the actual values may vary from year to year; the value given is a rounded maximum value). Deutsche Telekom does not make contributions, grant advantages or give benefits of any kind, directly or indirectly, to political parties, political movements, or trade unions or their representatives or candidates, except as required by applicable laws and regulations.

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 415-1 (Politische Einflussnahme)

## Transparency information on lobbying expenditures

No general definition of lobbying expenditures is available to date. For this reason, we publish our lobbying expenditures in Germany in accordance with the applicable transparency requirements at the federal level (pursuant to the act on introducing a Lobbying Register for the Representation of Special Interests vis-à-vis the German Bundestag and the German Government [Lobby Register Act-LobbyRG]) and in the states of Baden-Württemberg and Bavaria (pursuant to the Transparency Registration Act [TReg] in Baden-Württemberg and the Bavarian Lobby Registration Act [BayLobbyRG]), in Brussels (pursuant to the Interinstitutional Agreement of 20 May 2021 between the European Parliament, the Council of the European Union and the European Commission on a mandatory transparency register), and in Washington for T-Mobile US (pursuant to the Lobbying Disclosure Act [LDA]).

Our guiding principle is to respect the independence and integrity of our political interlocutors – which is why we welcome the introduction of a lobbying and transparency register at the European level and in Germany, and registered as one of the first companies (EU) and on time (in Germany on February 28, 2022).

## Lobbying expenditures 2022 in accordance with applicable transparency rules

Area covered by reporting requirements	Lobbying expenditure (2022)	Relevant transparency rule detailing legal requirements and respective definition of lobbying expenditures.
Deutsche Telekom AG / German Bundestag and Federal Government	2 660 000 EUR*) [1]	Act Introducing a Lobbying Register for the Representation of Special Interests vis-à-vis the German Bundestag and the Federal Government (Lobbying Register Act – Lobbyregistergesetz) [6]
Deutsche Telekom AG / State Parliament and State Government of Baden-Württemberg	65 000 EUR*) [2]	Transparency Register Act (Transparenzregistergesetz – TRegG) [7]
Deutsche Telekom AG / Bavarian Parliament and Bavarian State Government	110 000 EUR*) [3]	Bavarian Lobby Register Act (BayLobbyRG) [8]
Deutsche Telekom AG / European Parliament and European Commission	2 249 999 EUR*) [4]	Interinstitutional Agreement of 20 May 2021 between the European Parliament, the Council of the European Union and the European Commission on a mandatory transparency register [9]
T-Mobile USA / Federal Government of the US	9 049 000 USD*) [5]	Lobbying Disclosure Act (LDA) [10]

- <sup>1)</sup> Lobbyregister
- <sup>2)</sup> Landtag Baden-Württemberg
- <sup>3)</sup> Landtag Bayern
- <sup>4)</sup> Transparency Register
- <sup>5)</sup> United States Senate Lobbying Disclosure
- <sup>6)</sup> Bundestag
- <sup>7)</sup> Landtag Baden-Württemberg
- <sup>8)</sup> Bayerische Staatskanzlei
- <sup>9)</sup> EUR-Lex
- <sup>10)</sup> Lobbying Disclosure Act Guidance

\* The different information is not directly comparable due to the applicable legal regulations in each country. To the extent that lobbying expenditures must be specified as a range according to the requirements of the respective register, the upper value of the range is specified.

### **Our position on broadband – investment incentives are needed**

Having a high-performance, reliable and secure broadband infrastructure is the basis of success for all business sectors and is a key factor in making a business location attractive. For many years now, Deutsche Telekom has been making significant contributions in this area by investing heavily in the infrastructure for mobile internet and the fixed-line network, and especially in our fiber-to-the-home (FTTH) networks. We show more commitment than any other company to providing full-area coverage, including in rural areas.

In order to drive network expansion, network operators in Germany need investment incentives, legal and regulatory planning security, and technological freedom of action. That enables them to respond flexibly to the circumstances of enterprises and households and meet political, economic, and social requirements. Only under these preconditions can we fully harness the potential for cost-effective private network expansion using all available technologies. When it comes to areas where cost-effective broadband expansion is not possible, it is up to the public sector to ensure that white spots are eliminated by providing technology- and supplier-neutral funding programs and exercising sound judgment. Legal frameworks and regulatory practice need to actively support private-sector investment in new fiber-optic networks and prevent unnecessary financial burdens and red tape for the network operators investing in networks.

In view of the fact that the internet and telecommunications markets are converging rapidly, and in light of the growing market power of a few global internet players, the sector-specific regulation of telecommunications that has been pursued to date is creating more and more of an imbalance. The same laws and regulations that apply to telecommunications companies also need to apply to internet companies providing the same services. The objective here must be to create equal competitive conditions and enable fair distribution of the financial burden involved in broadband expansion.

### **Our position on network neutrality – the internet should stay open**

As part of the EU Telecoms Package, regulations on the open internet were adopted and came into effect on April 30, 2016. The regulations particularly address permitted traffic management and transparency requirements and limit commercial product and service differentiation on the internet.

Deutsche Telekom remains committed to preserving an open internet. Content and services will continue to be available online in accordance with the best effort principle. This means that data packets are processed on the internet without preferential treatment and forwarded in the best possible way. We are continuing to expand our infrastructure so that we can cope with rapidly increasing amounts of data traffic and facilitate innovation in our network. As a result, we are satisfying our customers' growing demands and meeting the expectations of online content and application providers, who want to be able to provide services meeting high technical-quality standards both now and in the future.

Building on the best effort internet, we are developing an innovative network architecture – 5G networks – which can better and more flexibly meet the various transmission quality requirements of specific services. We thereby fulfill business and regulatory requirements and enable innovation in the services we offer on our networks. Content is not monitored, nor do we have any influence over user or provider content. When competing with other network operators, we will also continue to market services with guaranteed quality features exclusively on a non-discriminatory basis.

# Sustainability standards

## UN Global Compact – Communication on Progress

This CR report also serves as a Communication on progress (CoP) from Deutsche Telekom as part of the United Nations Global Compact. The table lists the text passages, in this CR report and in other Group publications, in which we provide information about our commitment to implementing the ten principles of the Global Compact, thereby also meeting the expanded Global Compact Advanced criteria.

## German Sustainability Code

The German Sustainability Code has been approved by the Federal Government's Council for Sustainable Development. Deutsche Telekom was one of the first companies to accede to the Sustainability Code. The German Sustainability Code aims to make companies' commitment to sustainability transparent and comparable under a binding framework. Each year, as part of our Corporate Responsibility report, we publish a comprehensive declaration of conformity with the German Sustainability Code. We will provide links to the declaration of conformity for 2022 following its publication in the present context.



## Sustainability Accounting Standards Board (SASB)

There are various standards for CR reporting for companies. Our CR report has been based on reporting in accordance with GRI, in particular, for nearly 20 years. Our annual report has met the European requirements for CR reporting since 2017. We have been making our contribution toward reaching the SDGs transparent in our reporting since 2017 as well. To satisfy the growing interest of our stakeholders in comparable sustainability information, we have published an additional index on the sustainability standards of the Sustainability Accounting Standards Board (SASB) in our CR report since 2021 – with an industry-specific focus on the information and communications technology sector.

In the SASB index, we explain how we satisfy the industry-specific SASB criteria or link to passages in our sustainability communication where we explain how we satisfy them. In addition, we list the SASB criteria at relevant locations within the present report.

We welcome the growing attention being given to sustainability issues, and of course are happy to readily meet growing transparency requirements. At the same time, we are aware of announced efforts to consolidate various relevant standards and frameworks.

Discussion of systems to provide unimpeded service during service interruptions

## GRI-Index

The CR Report 2022 of Deutsche Telekom was created in line with the Global Reporting Initiative (GRI) guidelines and in agreement with the option "in accordance with" (2021: "Core"). With this step, we further increased our claim to transparency in the year under review. The reported information relates to the period from January 1, 2022 to December 31, 2022.

In the GRI content index, we refer to content pertaining to general and specific standard disclosures and explain the content when necessary. The standard disclosures are based on the very relevant aspects identified in our materiality process. Selected content from various action areas, has been reviewed in this regard; such content is suitably marked in the index with [Content reviewed by Deloitte]. The index also contains links and explanations relative to other GRI aspects that are covered in the report.

SASB-Code	Requirement	Reference
<b>Environmental Footprint of Operations</b>		
TC-TL-130a.1	(1) Total energy consumed, (2) percentage gridelectricity, (3) percentage renewable	Total energy consumption Renewable energy ESG KPI "PUE" – lower CO <sub>2</sub> consumption in data centers
<b>Data Privacy</b>		
TC-TL-220a.1	Description of policies and practices relating to behavioral advertising and customer privacy	Our approach to data protection Protection of personal data Our approach to protection of minors in the media Data transparency Telekom
TC-TL-220a.2	Number of customers whose information is used for secondary purposes	Our approach to data protection Transparency report Data privacy Telekom (only available in German)
TC-TL-220a.3	Total amount of monetary losses as a result of legal proceedings associated with customer privacy	All relevant legal procedures and outputs are disclosed in the annual report. Annual report 2022
TC-TL-220a.4	(1) Number of law enforcement requests for customer information, (2) number of customers whose information was requested, (3) percentage resulting in disclosure	Transparency report, from where individual countries can also be accessed
<b>Data Security</b>		
TC-TL-230a.1	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of customers affected	Protection of personal data
TC-TL-230a.2	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	Our approach to data protection Cybersecurity Risks and opportunities arising from data privacy and data security Security dashboard
<b>End-of-Life Management of Products</b>		
TC-TL-440a.1	(1) Materials recovered through take back programs, percentage of recovered materials that were (2) reused, (3) recycled, and (4) landfilled	Used mobile device collection Waste management & recycling Waste volume (including E-Waste) ESG KPI "Take Back Mobile Devices" ESG KPI "Take Back CPEs"
<b>Competitive Behaviour &amp; Open Internet</b>		
TC-TL-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulation	All relevant legal procedures and outputs are disclosed in the annual report. Annual report 2022
TC-TL-520a.2	Average actual sustained download speed of (1) owned and commercially-associated content and (2) non-associated content	The minimum, normal and maximum download speeds are stated in the product specifications. Example MagentaZuhause (only available in German)
TC-TL-520a.3	Description of risks and opportunities associated with net neutrality, paid peering, zero rating, and related practice	Strategic risks and opportunities Risks and opportunities relating to regulation
<b>Umgang mit systemischen Risiken aus technischen Störungen</b>		
TC-TL-550a.1	(1) System average interruption frequency and (2) customer average interruption duration	Network Reliability
TC-TL-550a.2	Discussion of systems to provide unimpeded service during service interruptions	Updating and stabilizing the network architecture Operational risks and opportunities

# Awards

## Awards for climate protection

### Climate protection in the supply chain

Working on behalf of investors, the non-governmental organization CDP regularly assesses the climate protection activities of listed companies worldwide and compiles an index of leading companies, referred to as the A List. In 2022, Deutsche Telekom was included in this list for the seventh time in a row.

In 2017, we reported our ESG KPI “CDP supply chain program” for the first time. It shows the degree to which our procurement volume from carbon-intensive suppliers is covered by the CDP Supply Chain Program.

As part of the CDP supplier program, companies ask their key suppliers about their emissions and their climate strategy. 247 suppliers participated in the CDP supplier program. These cover without T-Mobile US 52 percent of our procurement volume (2021: 72 percent for the Group incl. T-Mobile US). The number of invited suppliers was 445.

Through our commitment to climate transparency in supply chains, we were awarded a place in the “Supplier Engagement Leader Board” for the fourth time in a row in 2022.

## Awards for sustainable products and services

### Speedport Smart 4 and Speedhome WLAN receive TÜV environmental label

The Speedport Smart 4 and Speedhome WLAN don't only win over customers with their technology and design: Both were awarded the Green Product environmental label of the TÜV Rheinland testing service provider. The green properties of the devices have thus been certified by a neutral body. They meet the strict criteria of TÜV and prevailed in all categories. In addition to responsible handling of chemical substances, both products scored points with their resource efficiency with regard to energy, recycling, and durability. TÜV Rheinland also gave favorable ratings to the carbon footprint and compliance with social standards, particularly in production.

### Blue Angel for our fixed-line telephones

To indicate the sustainability benefits of our products to our customers, we make suitable products identifiable with recognized environmental labels. For example, several routers and mesh devices are certified with the Green Product environmental label of the TÜV Rheinland testing service provider. In addition, Telekom Deutschland's fixed-network telephones to a large part carry the Blue Angel seal of approval. The Blue Angel was also awarded to the joint system of Telekom Deutschland and the service provider Teqcycle Solutions for taking back cell phones.

## Representative Office in Berlin certified as sustainable partner

Deutsche Telekom's Representative Office in Berlin makes event facilities available to internal and external groups / organizations. The Representative Office has been recognized by VisitBerlin Convention Partner as a sustainable partner since 2019, in its top category, “Leader.” The Office's sustainability performance was audited in four categories: governance, risk & compliance; environmental aspects; social aspects; and economic aspects.

## Awards for sustainable finance

### Best European telco in the S&P Assessment

In 2022, we qualified, for the eighth time in a row, for the renowned sustainability indexes “Dow Jones Sustainability Index World” (DJSI World) and “Dow Jones Sustainability Index Europe” (DJSI Europe). DJSI World “represents the top 10% of the largest 2 500 companies in the S&P Global BMI based on long-term economic, environmental and social criteria”. In 2022, we took first place in the European and worldwide indexes for the first time.

## Bloomberg Gender Equality Index

In the year under review, we were again selected, as one of 484 companies, for the Bloomberg Gender Equality Index (GEI). The GEI measures and evaluates gender-equality performance in a total of five areas: Female leadership and talent pipeline; equal pay and gender pay parity; inclusive culture; anti-sexual harassment policies; and pro-women brand.

A complete overview of the indexes in which the Deutsche Telekom T-Share is listed, in the year under review, is available [here](#).

## Awards for our commitment to digital inclusion

### Awards for Teachtoday

In 2022, the Teachtoday initiative won two prizes at the Comenius EduMedia Awards, which recognize digital educational media. An international jury of scientists, specialists, and education practitioners examined over 200 different educational media. The Teachtoday portal and the SCROLLER media magazine for kids won the panel over with their outstanding educational and media quality and won prizes in the categories “IT, communication, and media education” and “General multimedia products.”

### Award for DIGITAL@School

The “DIGITAL@School” volunteer initiative was awarded the special prize in the category “Corporate commitment” by the IT Executive Club at the ITEC Cares Award 2022. The award recognizes outstanding commitment in the area of digital education.

**Awards for our campaign “#No hate speech”**

With our campaign “#No hate speech,” we are working to ensure that people have nothing to worry about as they navigate cyberspace. Via channels such as video and radio spots, workshops and podcasts, we are calling attention to hate speech, social media outrage and cyberbullying, and encouraging people to show “civil courage online” and stand up against such negative trends. We received several awards for this campaign:



**Audio Prize 2022 of the Media Authority of North Rhine-Westphalia**

The second season of our podcast “Digital Crime – When words become weapons” (“Digital Crime – Wenn Worte zur Waffe werden”) won the Audio Prize 2022 from the Media Authority of North Rhine-Westphalia in the category “Respectful interaction on the internet” (“Respektvoller Umgang im Netz”). The judging panel praised the podcast’s excellent production values, outstanding research, and differentiated view on the topic of online hate.



**Epica Award 2022: Silver**

In 2022, the song “The choir against hate speech” from our “No hate speech” campaign won an

Epica Award. The song won a silver trophy in the category “Best use of music.”

**Awards for our commitment in the area of diversity**

**4th place in the Boston Consulting Group Gender Diversity Index**

In 2022, we took fourth place in the Gender Diversity Index of the Boston Consulting Group, putting us in the top 5 of the best 100 companies. This ranking highlights the percentages of women in management positions at major companies. It has now been published for the sixth time.

**Best employer, according to the magazine “Brigitte”**

In a study carried out by the magazine “Brigitte” and personnel marketing experts from “TERRITORY Embrace,” looking at aspects such as work-life balance, career advancement, transparency, and gender equality, we were named one of the best employers for women – and received five stars, the highest ranking.

**Awards in the diversity area for T-Mobile US**

For its commitment on behalf of diversity, T-Mobile US received the prestigious honor of being named one of Forbes’ “Best Employers for Diversity 2022.” As part of the honor conferred by Forbes, T-Mobile was listed as one of 500 companies that are recommended by their own employees, have diversity in their boards of directors and among their executives, and carry out initiatives for diversity and inclusion.

**Top 5 in diversity ranking**

In the year under review, Deutsche Telekom was nominated as one of the top 5 companies in the category “Diversity Company of the year” by the “Beyond Gender Agenda.” The German Diversity Award recognizes individuals and companies for which diversity, equity, and inclusion are decisive factors for success.

**Sales & service awards**



**TÜV quality seal for “proven customer satisfaction” 2022**

For the tenth time in a row, TÜV Rheinland, a leading, independent international provider of technical

services, awarded our hotline, our technical service, and the Telekom Shops its “proven customer satisfaction” quality seal. 2 550 customers from Germany took part in the representative survey. Deutsche Telekom received a “good” rating, with an average score of 1.97 for the hotline, 1.65 for technical service, and 1.56 for the Telekom Shops – where 1 is the highest score.



**connect hotline test: Mobile communications 2022**

Every year, connect magazine tests the mobile hotlines of the different providers and evaluates the categories of accessibility, waiting time, staff friendliness, and quality of statements. In issue 5/2022, “connect” praised Deutsche Telekom’s customer service as “very good.” The magazine certified us as having the best mobile hotline, with 445 out of 500 points.



**connect mobile communications shop test 2022**

In 2022, Deutsche Telekom once again took first place in the connect Mobilfunk Shoptest (mobile communications shop test). The testers gave 14 Shops a ranking of “very good” for their consultation quality. Six shops set new standards by being ranked “outstanding.” In the overall ranking, Deutsche Telekom received 438 out of 500 possible points, with impressive showings especially in the consultation categories services, rates, and devices, as well as in the category shop atmosphere/facilities.



**F.A.Z. Germany’s best customer advisers**

In 2022, the newspaper F.A.Z. named Deutsche Telekom’s customer advisers the best in the mobile communications sector. The rating was derived based on mentions on websites and in forums, blogs, consumer portals, and social media channels. Press releases and news pages of different mobile providers were also viewed. Deutsche Telekom took first place in the categories Hotline, Service, Customer advice, and Price.



**Top rating in CHIP mobile phone shop test 2022**

The trade magazine CHIP has conducted its first ever survey of the customer experience in mobile network shops. Deutsche Telekom took first place straight away. The general appearance of employees, neatness of the shops, and willingness of staff to help were particularly well received. The testers also gave Deutsche Telekom the best rating in the categories of phone consulting and rate plan consulting.





**“Service King” 2022 award from “Focus Money”**  
 In 2022, we took first place in the telecommunications sector in the customer satisfaction survey of “Focus Money” for the seventh time in a row. The financial magazine surveyed 313 691 customers. Deutsche Telekom placed first in the telecommunications industry – at the national level and in 50 of 56 cities.



**“Computer Bild” top digital assistant 2022**  
 For the fourth time, IT magazine “Computer Bild” and online portal “Statista” tested digital assistants (service chatbots) from the telecommunications, insurance, finance, and utilities & transport sectors. In late 2022, it was confirmed that Deutsche Telekom has the best digital assistant in the telecommunications sector and is also leading in this category across all sectors. User guidance, functionality, user experience, security, and ethical aspects were evaluated.

**Awards for our mobile network in Germany**



**CHIP (edition 1/2022)**  
 We won the “Mobile Network Test” of CHIP trade magazine for the twelfth time in a row in 2022 and were declared the “best network.” In addition, we received the “Best 5G network” (“Bestes 5G-Netz”) logo.



**“connect Mobile Network Test” (edition: 1/2022)**  
 We were also the overall winner of the “2022 Mobile Network Test” of “connect” magazine, with a rating of “very good.” Testing focused on the performance and reliability of the networks for voice (e.g., call setup time) and data (e.g., downloads and uploads).

**Awards for our work in training and development**

For employers competing to recruit IT and tech specialists, it is vitally important to have an excellent employer brand. Consequently, we continually aim to improve Deutsche Telekom's attractiveness, on a lasting basis, as an employer for IT/tech talent. In 2022, we again received various awards for our achievements as an employer and training provider. This strengthens our conviction that we are on the right track with our recruiting and employer-brand strategy.

**Deutsche Telekom is the “Employer of the future”**

The German Innovation Institute for Sustainability and Digitization awarded Telekom Deutschland GmbH “Employer of the future”. Our deep understanding for the needs of our customers and employees was mentioned as the key factor for their decision. In addition, the Institute praised our modern, innovation-centered corporate culture and the commitment of our management to digitalization and sustainability.

**Deutsche Telekom is “LEADING EMPLOYER 2022”**

The aim of the independent meta-analysis “LEADING EMPLOYER 2022” is to rate employers holistically based on a wide variety of subject areas, such as employee satisfaction, working conditions,

understanding of values, job security, prosperity, HR expertise, image, environmental awareness, and many more. With its excellent results, Deutsche Telekom was rated among the best 1 percent of employers in Germany for the first time.

**Good ranking among university students**

Every year, students vote for their ideal employer in the “Universum Talent Survey”. This year, more than 38 600 university students were asked about the qualities they find most attractive for a potential employer and who they think the ideal employer is. Deutsche Telekom took 25th place among IT students in the ranking of Germany's most attractive employer 2022.

**HR Benchmark: First place for career website**

The HR Benchmark from NetFed examines the current state of digital HR communications. In a comparison of 50 large German companies with a corporate structure, Deutsche Telekom took first place.

**Potentialpark Azubi Communication Study**

After capturing second place the previous year, Deutsche Telekom won gold for best student communications for the first time in 2022. The Azubi Communication Study 2022 from Potentialpark and Ausbildung.de examined the communication channels career website, online application, mobile pages, and social media platforms of 100 employers and surveyed 1 300 secondary school students on their online communications.

**Second place in Talent Communication Study**

Deutsche Telekom's career communications won second place in the Potentialpark study Online Talent Communication 2022. We even captured the top spot in the individual categories “Career Website” and “Social Media.” With these awards, the Swedish market research institute confirms that Deutsche Telekom is leading in digital talent communication with potential candidates. The study examined 140 companies and took over 350 criteria into account.

**Awards for CR reporting**

**First place in the ranking of sustainability reports**

In 2022, our CR reporting took first place in an independent, cross-industry ranking of sustainability reports. Based on a comprehensive set of social, ecological, management-related, and communication-related criteria, the Institute for Ecological Economic Research (IÖW), together with the business association Future, regularly ranks the sustainability reporting of major German companies, as well as smaller and medium-sized companies. The ranking is supported by the German Federal Ministry for Labor and Social Affairs (BMAS).

**Second place in the CSR Benchmark for best digital sustainability communication**

We took second place in the NetFederation Corporate Social Responsibility (CSR) benchmarks in 2022 (2021: first place). To calculate the CSR Benchmark, the CSR websites of 50 selected major companies with corporate structures were analyzed and examined based on 58 differently weighted criteria, which are assigned to the three categories “Attitude and credibility,” “Reporting and publications,” and “Facts and KPIs”. The NetFed bench-



mark is an annual study on the current status of digital sustainability communication. The key questions in the 2022 study were, “What is the level of digitalization in CSR communications?” and “Which information and services do the companies provide to interested parties?”

**Silver and bronze MERCURY Awards for our CR Report**

At the 2021/2022 MERCURY Awards, our Corporate Responsibility Report won the silver prize as best report in two categories: Corporate Social Responsibility and Interactive (there was no gold award winner). We took third place in the category Sustainability Report, winning the bronze award. The MERCURY Awards honor outstanding international performance in the different areas of public relations work. The independent jury assesses the use of imaginative ideas, how well the information is visualized, and the general expression of the message, among other factors.

# Sustainable finance

## Socially responsible investment

SRI investment products consist of securities from companies that have passed an audit based on environmental, social, and governance (ESG) criteria. The development of demand from socially responsible investors for T-Shares serves as an indicator we can use to assess our sustainability performance.

With our Socially Responsible Investment (SRI) ESG KPI, we measure how the financial markets perceive our CR activities.

The concept behind the United Nations' Sustainable Development Goals (SDGs) continues to attract attention on the part of investors. With a view, in part, to evaluating our operations in light of the SDGs, we have introduced a process for assessing the impacts of projects, products, and measures.

## T-Shares in sustainability ratings and indexes

As part of our CR strategy, we have taken part successfully for many years in ESG ratings, which we select based on reputation, relevance, and independence. When rating agencies give high marks to our social and ecological commitment, the T-Share is included in the financial market's sustainability indexes.

In 2022, the T-Share was again listed on leading sustainability indexes, including S&P Global's prominent, and CSA-based, DJSI World and DJSI Europe. Our shares were also listed yet again on the FTSE4Good Index Series (for the eleventh year running) and the UN Global Compact 100 Index. We are also still listed on the Euronext Indexes.

The table below presents a selection of other T-Share listings.

Rating agency	Indexes/ratings/ranking	Successfully listed in index				
		2018	2019	2020	2021	2022 
S&P CSA	DJSI World					
	DJSI Europe					
	S&P ESG Index Series					
CDP	STOXX Global Climate Change Leaders					
	Supplier Engagement A-List					
MSCI	ESG Universal Indexes					
ISS-ESG	„Prime“-Status (Sector Leader)					
Bloomberg	Gender Equality Index					
Sustain-alytics	STOXX Global ESG Leaders <sup>a</sup>					
	UN Global Compact 100					
FTSE Financial Times Stock Exchange	FTSE4Good					
Moody's	Euronext indexes based on Moody's ESG data					

 Listed

 Not listed

 Index did not exist in the relevant year

<sup>a</sup> In weiteren Indizes des entsprechenden Universums gelistet.

 Data checked by Deloitte.

## Reporting against standards

### Task Force on Climate-related Financial Disclosures (TCFD)

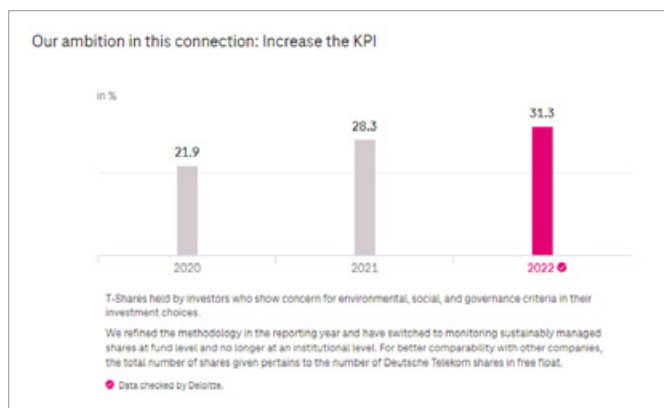
- The most important key figures for measuring and managing climate-related opportunities and risks

### ESG KPI “Socially Responsible Investment (SRI)”

More and more investors take into account sustainability aspects of their investments (Socially Responsible Investments, SRI). SRI investment products consist of securities from companies that have passed an audit based on environmental, social, and governance (ESG) criteria. The development of demand from socially responsible investors for T-Shares serves as an indicator we can use to assess our sustainability performance. The Socially Responsible Investment ESG KPI indicates the proportion of shares in Deutsche Telekom held by these kinds of investors.

Our commitment to greater sustainability pays off: As of December 31, 2022, around 31.3 percent of all T-Shares were held by investors who take environmental, social, and governance criteria into account for their investment strategy; the same figure was 28.3 percent in the previous year.

Our ambition in this connection: Increase the KPI



### Reporting against standards

#### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

#### German Sustainability Code

- Criterion 1 (Strategy)
- Criterion 7 (Control)

### Sustainable capital investments & bond issues

In the past years, sustainability criteria have become increasingly important, both politically and economically, with respect to capital investments. And we are among those seeking to make our capital investments increasingly sustainability-oriented. This applies both to money that we invest and to bonds that we issue for the purpose of raising borrowed capital for investments. To this end, we regularly evaluate financing models that are attractive and sustainable, working in close consultation with our Group units Corporate Responsibility and Treasury (financial management).

### Sustainable capital investments

Since 2019, Deutsche Telekom’s capital investments (DT Trust) have been geared toward ecological and social standards. The DT Trust is based on the criteria for the Government Pension Fund Norway (Norges Bank). Among other things, we exclude compa-

nies that violate human rights, manufacture certain weapons, or whose core business is considered harmful to the environment.

### Sustainable bond issues

As early as 2021, our Board of Management approved a framework for sustainability-oriented bond issues – the “Sustainability-Linked Bond Framework.” This financing instrument will enable us to offer investors the opportunity to support our commitment in the fight against climate change. The interest rates for bonds that fall within the Framework are tied to the achievement of the pertinent defined climate targets: In cases in which we do not achieve our targets, we promise to pay higher interest rates.

### EU taxonomy: compliance

The EU Taxonomy Regulation is the outcome of a European regulatory initiative. The goal of the Regulation is to promote investment in companies that are managed responsibly and that are involved in sustainable economic activities. The EU taxonomy aims to create a uniform understanding of which activities and investments are sustainable. For this, the European Commission has defined clear criteria with exact metrics. This is intended to help investors to assess whether a company in which they want to invest operates sustainably. Since 2021, the businesses affected have had an obligation to report on how much of their turnover comes from the economic activities covered by the EU taxonomy. In addition, companies must disclose the extent to which they invest in these economic activities, and what level of operating expenditure is associated with these activities.

### Six environmental objectives

The first criteria regarding which economic activities are to be classed as environmentally sustainable in accordance with the EU taxonomy were agreed in 2021. They apply to the taxonomy environmental objectives “climate change mitigation” and “climate change adaptation.” The taxonomy includes further environmental objectives in the areas of “the sustainable use and protection of water and marine resources,” “the transition to a circular economy,” “pollution prevention and control,” and “the protection and restoration of biodiversity and ecosystems.” The European Commission has not yet published any criteria for these objectives, however.

The EU taxonomy distinguishes between economic activities that are “taxonomy-eligible” and “taxonomy-aligned”:

- “Taxonomy-eligible” economic activities are those activities for which concrete sustainability criteria are listed in the taxonomy (Annexes I and II of the Delegated Regulation (EU) 2021/2139).
- “Taxonomy-aligned” economic activities meet these criteria in full. To be taxonomy-aligned, an economic activity must make a substantial contribution to one of these six environmental objectives while at the same time avoiding any negative impact on other objectives (the principle of “do no significant harm” or DNSH). In addition, the company must meet the minimum social standards defined in the Taxonomy Regulation. The diagram below provides a summary of the taxonomy requirements:

Requirements of the EU taxonomy = Taxonomy-eligible economic activities



### Substantial contribution

to at least one of the six environmental objectives of the EU taxonomy:

1. Climate change mitigation
2. Climate change adaptation
3. The sustainable use and protection of water and marine resources
4. The transition to a circular economy
5. Pollution prevention and control
6. The protection and restoration of biodiversity and ecosystems

### Do no significant harm

An activity can only be considered to contribute to one of the six objectives if it has no other significant negative environmental impact (DNSH principle).

### Compliance with minimum safeguards

The minimum safeguards are social requirements in accordance with

- the OECD Guidelines for Multinational Enterprises,
- the UN Guiding Principles on Business and Human Rights,
- the Core Labour Standards of the International Labour Organization (ILO),
- and other requirements of European legislation.

### Implementation at Deutsche Telekom

The following economic activities carried out by Deutsche Telekom are currently taxonomy-eligible (the activity numbers refer to Annex I of the Delegated Regulation (EU) 2021/2139, which lists the criteria for the taxonomy environmental objective “climate change mitigation”):

- Data processing, hosting and related activities (8.1)
- Data-driven solutions for GHG emissions reductions (8.2)
- Infrastructure enabling low-carbon road transport and public transport (6.15): charging infrastructure for the electric vehicles of our subsidiary Comfort Charge
- Transport by motorbikes, passenger cars, and light commercial vehicles (6.5): Deutsche Telekom vehicle fleet (cross-cutting activity)

A complete overview of the economic activities that are currently part of the EU taxonomy is available using the EU Taxonomy Compass.

All activities identified as taxonomy-eligible were checked for their taxonomy alignment. A taxonomy criterion that applies to all activities is the climate risk analysis. This was carried out at Group level and no significant climate risks were identified in association with the taxonomy-eligible activities. However, the management of climate risks is still under development in the United States operating segment and in the national companies in Greece and Hungary and does not yet meet the taxonomy requirements in full. Therefore taxonomy-eligible activities that are allocable to the United States operating segment and our national companies in Greece and Hungary are reported as non-taxonomy-aligned for the reporting year. We ensure compliance with minimum social standards for all taxonomy-eligible activities through a Group-wide management system. The standards refer to the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, including the ILO Core Conventions and the International Bill of Human Rights. We perform our human-rights-related due diligence obligations using a risk-based management system encompassing both the Group and our supply chain. We also maintain a process of trust-based dialog with employees’ representatives and trade unions.

You will find comprehensive information on checking for taxonomy alignment in the relevant sections of the CR Report and the non-financial statement in our Annual Report.

The following table provides an overview of our taxonomy-aligned economic activities for the reporting year. It breaks the figures down into both absolute values and the applicable percentage of Group turnover, capital expenditure, and operating expenditure.

## EU taxonomy KPIs – taxonomy-eligibility and -alignment of the economic activities of the Deutsche Telekom Group

Deutsche Telekom Group in 2022

		Turnover		Capital expenditure		Operating expenditure	
		millions of €	%	millions of €	%	millions of €	%
<b>Relevant total figures for the Group</b>		<b>114 197</b>	<b>100</b>	<b>38 486</b>	<b>100</b>	<b>404</b>	<b>100</b>
<b>Of which:</b>	<b>taxonomy-eligible</b>	<b>2 063</b>	<b>1.8</b>	<b>310</b>	<b>0.8</b>	<b>135</b>	<b>33.5</b>
<b>Of which:</b>	<b>taxonomy-aligned activities</b>	<b>565</b>	<b>0.5</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0.4</b>
	8.2 Data-driven solutions for GHG emissions reductions	565	0.5	0	0	2	0.4
<b>Of which:</b>	<b>non-taxonomy-aligned activities</b>	<b>1 498</b>	<b>1.3</b>	<b>310</b>	<b>0.8</b>	<b>134</b>	<b>33.1</b>
	8.1 Data processing and hosting	1 124	1	171	0.4	77	19
	8.2 Data-driven solutions for GHG emissions reductions	364	0.3	3	0	57	14.1
	6.15 Infrastructure enabling low carbon road transport and public transport	10	0	5	0	0	0
	6.5 Transport by motorbikes, passenger cars, and light commercial vehicles	0	0	130	0.3	0	0
<b>Of which:</b>	<b>non-taxonomy-eligible activities</b>	<b>112 134</b>	<b>98.2</b>	<b>38 176</b>	<b>99.2</b>	<b>269</b>	<b>66.5</b>

The total Group figures used as the basis for calculation in accordance with the EU taxonomy in the reporting year amounted to EUR 114.2 billion (turnover), EUR 38.5 billion (capital expenditure), and EUR 0.4 billion (operating expenditure). The turnover and capital expenditure were determined on the basis of the consolidated financial statements. In line with the EU taxonomy regulations, the disclosures on capital expenditure do not form part of a capital expenditure (capex) plan that is part of a plan to expand taxonomy-eligible economic activities. Operating expenditure relevant to the EU taxonomy represents only a small proportion of total operating expenditure. This includes costs that relate to research and development; building remediation measures; short-term leases; maintenance and repair; and any other direct expenditures relating to the day-to-day maintenance of property, plant and equipment. You will find more information on the reporting principles and KPIs for the EU taxonomy in the non-financial statement in our Annual Report.

As Deutsche Telekom's core business is not yet adequately covered by the criteria in the EU taxonomy, an aggregate view of the taxonomy eligibility of all economic activities results again in 2022 in very low proportions of **taxonomy-eligible turnover (1.8 percent), capital expenditure (0.8 percent), and operating expenditure (33 percent) for the Deutsche Telekom Group.**

In the 2022 financial year, the **taxonomy-aligned proportion of all economic activities of the Deutsche Telekom Group was 0.5 percent of turnover, 0.0 percent of capital expenditure, and 0.4 percent of operating expenditure.** The taxonomy-aligned proportion is attributable to economic activity 8.2 Data-driven solutions for GHG emissions reductions.

For the **Systems Solutions operating segment (T-Systems)** the taxonomy-aligned proportion of turnover was 12.3 percent, 0.1 percent of capital expenditure, and 0.8 percent of operating expenditure. We plan to increase the taxonomy alignment of our economic activities on a continual basis. You will find further information in the sections on taxonomy activity 8.1 and taxonomy activity 8.2.

### EU taxonomy: industry view and outlook

#### Further development

The bulk of our business model is not yet included in the EU taxonomy, because the taxonomy does not include criteria for the economic activity "Provision and operation of a network infrastructure for telecommunications." We can therefore only reflect the added value of our activities for digitalization and the associated environmental benefits within the EU taxonomy to a very limited extent. We firmly believe that the IT solutions and products running on our network can help both businesses and private individuals to reduce their carbon emissions. For this reason, as the taxonomy is revised and updated, it should take into account the importance of telecommunications networks. We are therefore active in a range of business and industry associations assessing whether our core activities could be reflected by suitable criteria in the EU taxonomy. These associations include the Sustainable Finance working group in the European Telecommunications Network Operators'

Association (ETNO), and, until 2022, the EU Platform on Sustainable Finance. We are also active within the European Round Table (ERT), and at national level we are part of the econsense network and several other organizations and stakeholder dialogs. We have set out our position in a range of position papers, for example, here with ETNO.

The European Commission is currently drawing up criteria for the four environmental objectives that do not yet have any. These objectives are "the sustainable use and protection of water and marine resources," "the transition to a circular economy," "pollution prevention and control," and "the protection and restoration of biodiversity and ecosystems." The criteria will be based on the recommendations submitted to the European Commission by the Platform on Sustainable Finance in March and October 2022. For Deutsche Telekom, the proposal by experts to include IT solutions in the EU taxonomy that contribute to the circular economy or to the protection of water resources is key. As soon as the European Commission publishes the draft criteria, we will check how these can be applied in the information and communications sector, and will contribute our assessment to the planned consultation phase.

In its current form, the EU taxonomy concentrates on environmental objectives. It is to be expanded in the future with the inclusion of a "social taxonomy." The aim of this is to give businesses the opportunity to reflect their social contributions, too. Given the demanding regulatory environment currently facing businesses, these plans have been temporarily suspended. However, in October 2022, the Platform on Sustainable Finance expert committee took the initial step of compiling a proposal for fleshing out the minimum social standards that are already part of the EU taxonomy. The experts suggest focusing on the following areas: respect for human rights and labor law; anti-corruption; tax; and fair competition. It is not yet clear to what extent the European Commission will make these expert recommendations legally binding.

The application of the Corporate Sustainability Reporting Directive, which entered into force on January 5, 2023, will progressively increase the number of businesses that are obligated to publish taxonomy-related information. Going forward, this will help us to check the taxonomy alignment of goods and services we purchase, as required by the EU taxonomy.

#### Taxonomy activity 8.1: Data processing, hosting and related activities

We cover the taxonomy-eligible economic activity Data processing, hosting and related activities (8.1) with our Systems Solutions operating segment (T-Systems). As well as data centers operated by T-Systems, we also included data centers operated on co-locations in the evaluation of taxonomy eligibility.

Economic activity 8.1 represents the largest proportion of taxonomy-eligible turnover, capital expenditure, and operating expenditure: in 2022, taxonomy-eligible business activities for data processing and hosting represented 1.0 percent of turnover, 0.4 percent of capital expenditure, and 19.0 percent of direct expenses, based on the relevant total figures for the Group. To illustrate tax-

onomy eligibility at segment level, too, we also report supplementary KPIs for the Systems Solutions operating segment (T-Systems). The taxonomy-eligible portion is 36.0 percent in relation to net revenue of the segment, and 62.6 percent in relation to capital expenditure.

Data centers must comply with the European Code of Conduct for Energy Efficiency in Data Centres to be considered as making a substantial contribution to climate change mitigation in accordance with the EU taxonomy. Five of the eight sites operated directly by T-Systems currently comply with this Code of Conduct. Compliance with the Code of Conduct has not yet undergone external auditing, which is a requirement of the EU taxonomy. We are therefore classifying the data centers used for economic activity 8.1 as non-taxonomy-aligned in the reporting year.

In addition, the EU taxonomy stipulates that the refrigerants used in data center cooling systems may not exceed a global warming potential value of 675. This criterion is currently met by one data center that was fully refurbished in 2022. At present, the other sites still use industry-typical refrigerants that meet the criteria of the EU directive on fluorinated greenhouse gases. The taxonomy-aligned turnover, capital expenditure, and operating expenditure for economic activity 8.1 are therefore all 0.0 percent.

We will make the change to taxonomy-aligned refrigerants as part of the regular refurbishment program for our data centers. We will carefully review the individual data centers' compliance with the criteria for preventing significant harm to the remaining environmental objectives in each case as soon as they fulfill the aforementioned climate change mitigation requirements in full. This will enable us to continually increase the taxonomy alignment of our data centers.

### Taxonomy activity 8.2: Data-driven solutions for GHG emissions reductions

We associate those solutions and products that are predominantly aimed at the provision of data and analytics enabling GHG emission reductions with the economic activity Data-driven solutions for GHG emissions reductions (8.2). These are, in particular, solutions and products that we have incorporated into our Enablement Factor and Sustainable Revenue Share ESG KPIs, and/or that have been awarded our #GreenMagenta label. We have identified the following taxonomy-eligible services within our Group-wide business activities:

- Business-related video conferences (saves travel-induced CO<sub>2</sub> emissions)
- Workplace and cloud solutions (increases energy efficiency by improving server utilization)
- IoT solutions (saves CO<sub>2</sub> emissions through, for example, efficient light switching)

We provide these services to a significant financial extent in the Germany operating segment, in our major subsidiaries in the

Europe operating segment, and in the Systems Solutions operating segment (T-Systems).

Taxonomy-eligible solutions under economic activity 8.2 represent 0.8 percent of turnover. Business-related video conferences make a particularly substantial contribution in this regard.

A life-cycle analysis is required as evidence of taxonomy alignment. This must show that a solution results in substantial greenhouse gas emission reductions both over and beyond its entire life cycle in comparison with the relevant reference solution available on the market. We understand reference solutions to be alternative solutions that would typically be used in a company in our footprint markets. This assumes that the companies are aligned with best practices. The technical screening criteria do not stipulate a specific threshold for "substantial" reductions in greenhouse gases in comparison with the reference solution. As there are differences in the technologies of the various taxonomy-eligible solutions, we have reviewed each solution separately to determine the point from which greenhouse gas savings can be considered "substantial" in accordance with scientific findings. The requisite life-cycle analyses have been prepared for business-related video conference solutions and for the cloud solutions Future Cloud Infrastructure, Open Telekom Cloud, and SAP Cloud Services. To date, we have not prepared a life-cycle analysis for the IoT solutions and therefore we do not report them as taxonomy-aligned for the reporting year.

A comparison of in-person meetings with the taxonomy-eligible business-related video conference solutions included in the analysis provided evidence of significant reductions in greenhouse gases. For instance, hybrid meetings reduce greenhouse gas emissions by around 28 percent (small meetings) or 37 percent (large meetings).

Of the workplace and cloud solutions covered by the life-cycle analysis, Future Cloud Infrastructure reduced greenhouse gas emissions by around 16 percent (in comparison with decentralized data centers operated by our customers themselves). Future Cloud Infrastructure is based on an infrastructure as a service model: the customer's IT systems are brought together on a platform hosted by T-Systems. Centralizing the service in this way not only reduces the consumption of materials for hardware but, thanks to the highly energy-efficient operation of our data centers, also cuts greenhouse gas emissions. The Open Telekom Cloud is also offered as an infrastructure as a service model. Via a platform operated by T-Systems, businesses can flexibly purchase computing capacity, memory resources, and network resources, among other things. Improved server utilization and the highly energy-efficient operation of our data centers mean that, according to the life-cycle analysis, using the Open Telekom Cloud or SAP Cloud Services leads to savings in greenhouse gas emissions of 50 percent in comparison with the reference scenario. This scenario is based on the assumption that our customers use their own, decentralized server infrastructure for storing and processing data, rather than the cloud solution. Our SAP Cloud Services, which run on a cloud platform operated by T-Systems, achieve a similar level



of savings in greenhouse gas emissions. In view of the demonstrated reduction in greenhouse gases, we classify all web conferencing, workplace, and cloud solutions included in the life-cycle analysis as taxonomy-aligned.

For the aforementioned solutions, we exclusively use infrastructure located in Germany. The requirements for the “Transition to a circular economy” conform to current EU legislation, which we enforce as part of our environment management activities at our EU sites.

The taxonomy-aligned solutions for GHG emissions reductions represented 0.5 percent of turnover, 0.0 percent of capital expenditure, and 0.4 percent of operating expenditure. For the Systems Solutions operating segment (T-Systems), the taxonomy-aligned proportion of turnover was 12.3 percent, while 0.1 percent of capital expenditure and 0.8 percent of operating expenditure were taxonomy-aligned.

#### **Additional taxonomy activities (e-mobility)**

The economic activity Infrastructure enabling low-carbon road transport and public transport (6.15) covers the construction, modernization, maintenance, and operation of such infrastructure. This also includes electric vehicle charging stations. This means that the business areas of our subsidiary Comfort Charge can be assigned to this taxonomy-eligible activity. As the Comfort Charge business is still under development, no material taxonomy-eligible turnover was generated for economic activity 6.15 in the 2022 financial year.

According to the technical screening criteria, electric vehicle charging stations alone make a substantial contribution to the environmental objective “Climate change mitigation.” The further regulations largely constitute elements of current EU legislation that we apply within our environmental management system. The charging infrastructure is constructed and maintained by service providers. It has not yet been possible to demonstrate that their activities comply with the circular economy criteria. We have therefore reported the Comfort Charge business as non-taxonomy-aligned for the reporting year.

Deutsche Telekom has a vehicle fleet that includes both company cars and service vehicles. The economic activity Transport by motorbikes, passenger cars, and light commercial vehicles (6.5) is therefore relevant as a cross-cutting activity with a supporting function for our core business.

As we are pushing forward with the transition to a fully electric fleet, especially in Germany and the EU, the majority of new vehicles purchased already meet the CO<sub>2</sub> thresholds set in the EU taxonomy. We were also able to provide evidence of the alignment of these vehicles with the other key EU taxonomy requirements, which are based on current EU legislation for new vehicles. As the choice of tires is left to the vehicle users themselves, we could not provide evidence of the taxonomy alignment of tires for the reporting year. We therefore report capital expenditure associated with our vehicle fleet as non-taxonomy-aligned.

#### **Investor communication**

We have observed that investors are increasingly incorporating SRI approaches in their investment strategies. In addition, investors, analysts, and rating agencies are increasingly inquiring about our CR activities. To meet these requests, we use different formats – both in our reporting and for direct dialog.

We publish this CR report annually. The Management and Facts section provides readers with detailed information that helps them assess our CR performance. In addition, we have also prepared under Experience sustainability relevant sustainability issues in a straightforward, clear manner for a broad readership. Our Annual Report also includes a non-financial declaration that allows us to meet the current EU requirements for sustainability reporting. We also offer ESG information for financial market players on our company website, under “Corporate Responsibility”, and on our investor relations portal, under “Socially responsible investment”. In addition, we provide social indicators in our HR Factbook.

We strive to engage in personal dialog with investors and regularly hold national and international information events as SRI roadshows. We also regularly take part in SRI conferences or meetings, and, upon request, present our CR strategy as best practice. In addition, we provide information to interested investors in conference calls, and answer numerous direct inquiries. This reporting year, we again ran our investor dialogs, including our SRI roadshows, online.

#### **Taxes**

The Group Tax department is responsible for ensuring that the Deutsche Telekom Group pays taxes at the national and international level in accordance with the applicable laws. This includes the Group’s income taxes, which must also be regularly reported in our IFRS financial statements, VAT and income tax on salaries payable within the context of customer transactions and for Group employees, as well as other types of tax incurred in the Group.

Group Tax also ensures that the Group has an efficient tax structure within the framework of German and foreign tax laws as applicable in each country (avoidance of any unnecessary tax burden not prescribed by law). The goal is to achieve sustainable tax efficiency for the Group. In the view of Group Tax, transparent, trust-based cooperation with local tax authorities – for example, in connection with operationally advisable company reorganizations – plays an essential role in any efforts toward that goal.

In addition, Group Tax undertakes to contribute as much as possible to the success of Deutsche Telekom’s operations, e.g., by providing detailed advice regarding new business models or innovative technological developments. In such matters, it focuses particularly on directly clarifying any unresolved issues related to tax law, as well as on providing practical solutions to meeting all applicable tax requirements.

The company’s “Tax Compliance, Sustainable Tax Efficiency, Tax as Valued Business Partner” tax strategy (including tax policy) has been approved by the Deutsche Telekom Board of Management.

For detailed information on the work of Group Tax, its principles, and its responsible approach to taxation, please refer to the detailed document “Tax strategy.”

**Further information with regard to taxation of Deutsche Telekom**

Additional information with regard to our taxes – for example, about our country-based reporting, and additional details about tax rates – is provided in the documents on Country-by-Country Reporting 2021, Country-by-Country Reporting 2022 and on the Cash Tax Rate Reconciliation.

In addition, Deutsche Telekom participates in initiatives aimed at developing a comprehensive approach to determining and publishing meaningful information about tax payments by enterprises and enterprise groups. The aim is to give a full and differentiated view of the various contributions to the financing of the public domain that are made in connection with or otherwise result from enterprises and entrepreneurial activities. In this context, for some years now, Deutsche Telekom has determined Total Tax Contribution figures for our key national companies in the telecommunications sector. This approach is explained in greater detail in the document on Total Tax Contribution, which also contains the respective information relating to our Group. Deutsche Telekom also intends to collect and publish such information in the coming years, and to extend its scope to additional national companies where applicable.

**Total Tax Contribution**

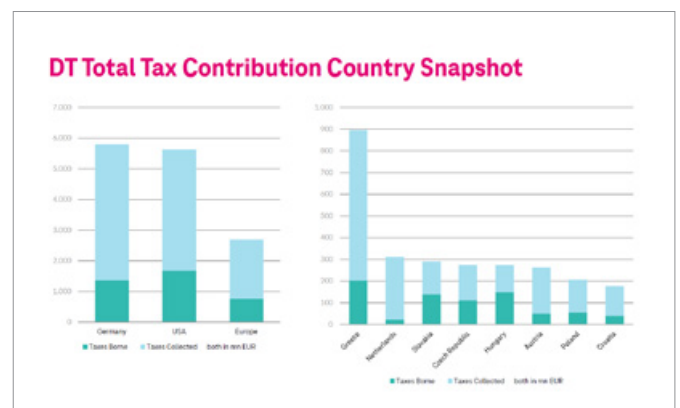
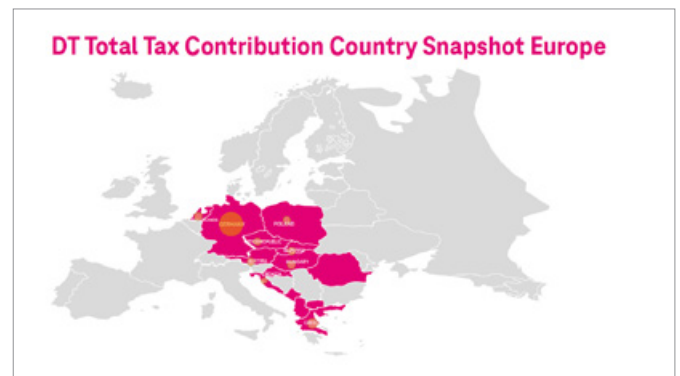
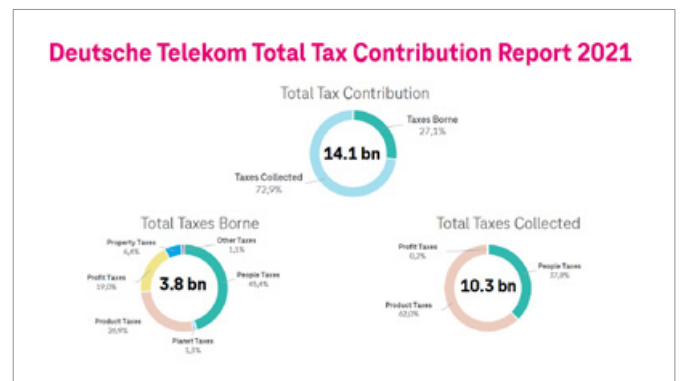
With its participation in a survey carried out by PwC regarding the Total Tax Contribution, Deutsche Telekom supports an initiative of the European Business Tax Forum (EBTF) for the development and establishment of a comprehensive approach regarding the determination and publication of information relating to enterprises with respect to tax. In this context, so far Deutsche Telekom has taken the main European group companies in the telecommunications sector into account. The figures were compiled for the first time by Deutsche Telekom in cooperation with PwC for the reporting year 2018. The corresponding figures have also been compiled for subsequent reporting years. The figures for 2021 are presented below. Deutsche Telekom intends to determine and publish such information also relating to subsequent years and to potentially extend this to further group companies.

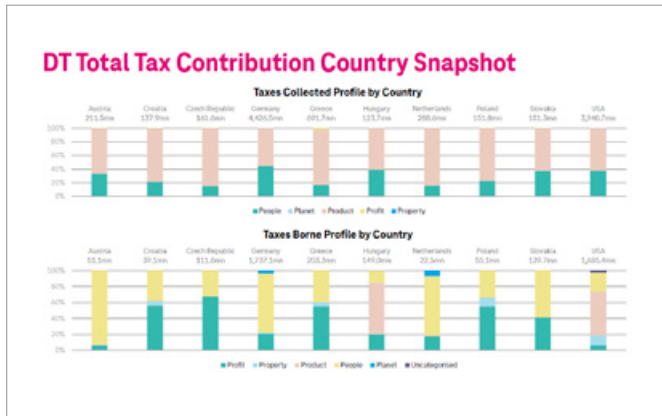
Put simply, the Total Tax Contribution addresses the contributions as a whole to the financing of the public domain that are made in connection with, or are a result of, enterprises and entrepreneurial activities. In this respect not only are the taxes levied on the profit of the enterprise or group of companies taken into account, further types of taxes are also addressed, which can be quite substantial, in particular also in the telecommunications sector. Moreover, the so-called “Taxes Borne” as well as so-called “Taxes Collected” are included in the approach in order to comprehensively visualize the financial weight of the enterprise and its activity for the public domain. For example, it also illustrates the aspects of employment and value-added through the presentation of wage taxes, social contributions and value-added taxes. As a consequence, a differentiated and therefore meaningful picture results regarding the

positive financial impact on the public community in connection with the enterprise and its activity. In addition, this approach can also show national differences in the tax frameworks.

Further information regarding the EBTF as well as the PwC survey can be found at <https://ebtforum.org> and <https://www.pwc.com/gx/en/services/tax/publications/total-tax-contribution-framework.html>. Under both links, explanations and details regarding the definition of the Total Tax Contribution are also given, for example with respect to the concepts of Taxes Collected and Taxes Borne and further breakdowns of the Total Tax Contribution, as well as a presentation of the findings of the survey carried out by PwC.

The following charts show the Total Tax Contribution 2021 of the group companies addressed.





In 2021, hubraum, in cooperation with Bundesverband Deutsche Startups (German start-ups association), produced a study of AI-oriented start-ups in Germany that highlights the promise and strengths of the German AI ecosystem. The study's key results include the finding that young AI companies, while enormously ambitious, tend to lack resources and impetus for growth. At the same time, the study also found that women are underrepresented in the AI sector, and that this situation needs to change, in light of the need for participatory, unbiased AI systems – and of the insight that diversity in AI-developer teams reduces bias in the resulting AI systems. In this regard, the study was able to offer a positive outlook, by reporting that 81 percent of AI start-ups believe that AI-technology development needs to take account of ethical issues. [Click here to find out more about current hubraum projects.](#)

### Research and development

As a future-oriented telecommunications business, we support and participate in ongoing research. We collaborate with various universities. For example, we established a professorship for software engineering (with a focus on blockchain) at the CODE University of Applied Sciences in Berlin. We invest in various fields of research such as the Internet of Things (IoT). We invested a total of 30 million euros in research and development in the Group in 2022.

For the third year in a row, Telekom Deutschland and T-Mobile US teamed up to run the T-Challenge in November 2022 – a competition aimed at startups, researchers, creatives, and developers. This time the focus was on the search for technologies for a human internet. The participants' remit is to develop innovative ideas, including in the areas of sustainability as well as network and infrastructure. Here they are supported by enterprises that help them turn their ideas into reality. The prize-giving ceremony will be held in May 2023. Six selected projects will then receive prize money of 600 000 euros in total, along with the opportunity to have the solutions put on the market in Europe and the United States by Telekom Deutschland and T-Mobile US.

We also promote young, innovative business ideas in our technology incubator hubraum and allow start-ups to benefit from our experience, and provide financial assistance and access to exclusive technologies. We bring young participating companies together with relevant business units within the Group, for the purpose of testing innovative technologies and new business models and bringing them to the market. In 2022, our technology incubator collaborated with about 60 start-ups.

With our Deutsche Telekom hubraum “5G Sustainability Award,” we highlight efforts by industry and start-ups to bring about a sustainable world. The award honors projects with a focus on the sustainability of 5G networks, such as projects in the areas of smart infrastructure and AI-controlled (AI = artificial intelligence) energy management.

# Suppliers

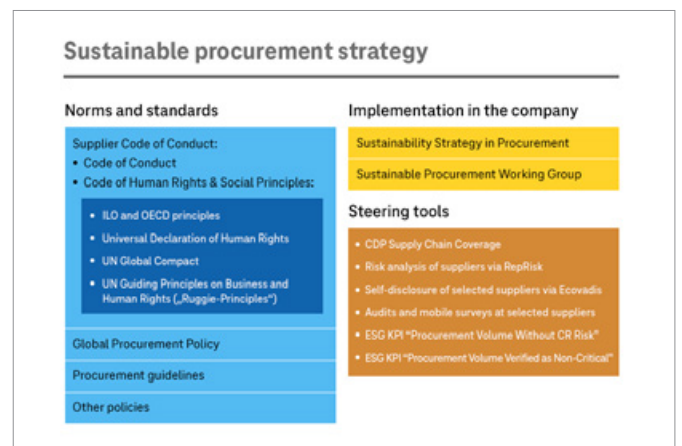
## Our approach to sustainable procurement

Our Group-wide procurement strategy and derived guidelines take full account of the issue of sustainability. These guidelines affect the entire procurement process. The strategy is put into action using internal and external performance indicators and management tools.

- Until the end of 2021, the responsibility for ensuring sustainable procurement lay in the Finance, and Human Resources and Legal Affairs Board departments. As of January 1, 2022, this responsibility now lies with the Chairman of the Board of Management department and the Finance Board department.
- The issue of sustainability is taken into account throughout the procurement process. Right from the onboarding process, suppliers must always adhere to our Supplier Code of Conduct. This includes our ambitious CR targets and requirements.
- As part of tenders, we assign a maximum 20 percent weighting to sustainability performance as part of the supplier selection process.
- In 2022, we refined specific sustainability criteria for the supplier selection: Particular importance is attached to the CO<sub>2</sub> footprint of our suppliers and their commitment to achieving ambitious climate targets; after all, the reduction of carbon emissions in our supply chain (Scope 3) plays a key role in achieving our goal of being climate-neutral by no later than 2040 along the entire value chain.
- In close collaboration with the telecommunications company Orange we have developed a set of product-specific criteria for IT and network/hardware products as well as for passive products such as fiber-optic cables. As of 2023, these criteria will be used with selected tenders for IT/NT hardware products and fiber-optic cable/hardware products.
- In 2022, we made the necessary adjustments to our procurement processes and guidelines to enable us to meet fully the requirements from the Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz – LkSG) in our supply chain from 2023.
- We monitor potential sustainability transgressions by our suppliers through third-party providers. In the event of a relevant violation of our requirements, we initiate a corresponding risk escalation process.
- We train our employees throughout the Group using CR e-learning. In addition, our Global Procurement Policy and a guideline for buyers provides an overview of which CR criteria must be considered at which point in the procurement process.
- In the framework of our working group “Sustainable Procurement Group,” which has been internationally oriented since 2021, procurement staff consult with each other, nationally and internationally, regarding sustainability issues.
- We ensure business partners and suppliers are up to the mark by offering workshops on specific topics and operating our Supplier Development Program.

Corruption and bribery may cause long-term economic losses, prevent fair competition and needs-based investment, destroy jobs, and accentuate poverty and inequality in the population. As part of the impact analysis of our materiality assessment process, we have also analyzed in detail our suppliers' sustainability performance. We identified a moderate risk here for the issues of corruption and bribery.

We are therefore committed to promoting, among other things, the responsible procurement of minerals and do our utmost to substitute conflict materials. We also offer our suppliers e-learning courses on Compliance.



## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 205 3–3 (Management of material topics)

**Global Compact**

- Principle 1 (Support and respect for internationally proclaimed human rights)
- Principle 2 (No complicity in human rights abuses)
- Principle 3 (Uphold freedom of association and the right to collective bargaining)
- Principle 4 (Elimination of all forms of forced and compulsory labor)
- Principle 5 (Abolition of child labor)
- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)
- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

**Supplier compliance**

With our Supplier Code of Conduct, we place our suppliers under an obligation to uphold the principles and values anchored in our Code of Conduct and in the Code of Human Rights & Social Principles. As of 2020, suppliers of solutions involving artificial intelligence (AI) must also comply with the requirements of our Digital Ethics Guidelines on AI. Deutsche Telekom suppliers are also under the obligation to do everything necessary to prevent active and passive forms of corruption. We expect our suppliers to impose the same requirements on their subcontractors too.

The Supplier Code of Conduct forms part of our General Terms and Conditions for Purchasing, but does not, of course, supersede the laws and regulations of countries in which our suppliers operate. Rather, it is designed to facilitate compliance with these laws and regulations and ensure that legal requirements are implemented faithfully and effectively. Since 2014, we have offered online compliance training for our suppliers.

When selecting business partners, we conduct compliance business assessments based on the risk of compliance violations. In addition to suppliers, and development and joint venture partners, this applies in particular to certain groups of consultants, such as sales agents. We have created a separate policy for partnerships with them (Consultant Policy).

**Reporting against standards**

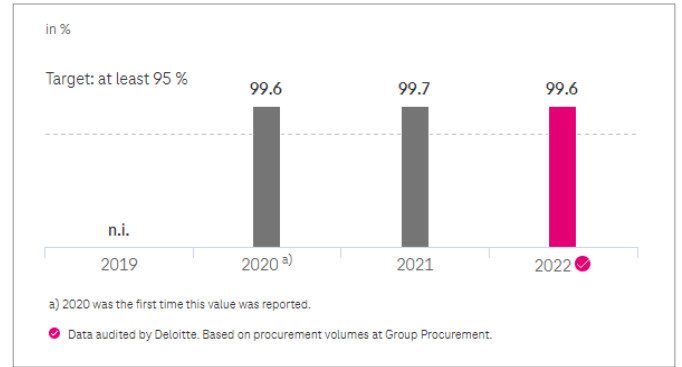
**Global Compact**

- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

**ESG KPI “Procurement Volume Without CR Risk”**

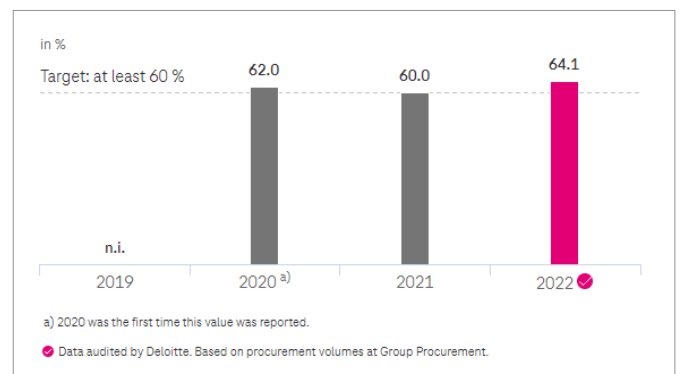
The ESG KPI “Procurement Volume Without CR Risk” – for which the target is 95 percent by 2025 – measures the procurement volume from direct business partners for whom, in the period under review, checks by an established external service provider turned up no negative media reports. It also includes suppliers for whom such reports were identified and who took suitable action to correct the issues involved. The procurement volume so assessed for risks accounted for a 99.6 percent share of the total relevant vol-

ume in 2022 (previous year: 99.7 percent). This ESG KPI, along with the ESG KPI “Procurement Volume Verified as Non-Critical”, is calculated with respect to the reviewed Group-wide procurement volume shown in the Group’s standardized procurement-report system (not including the category “Network Capacity” and not including T-Mobile US).



**ESG KPI “Procurement Volume Verified as Non-Critical”**

The ESG KPI “Procurement Volume Verified as Non-Critical” – target for 2025: 60 percent – measures the share accounted for by suppliers checked for social and ecological criteria by means of dedicated reviews – e.g., via EcoVadis, the Carbon Disclosure Project (CDP), social audits, supplier visits, or our Supplier Development Program. In 2022, such CR-verified suppliers accounted for a share of 64.1 percent (previous year: 60 percent). This ESG KPI, along with the ESG KPI “Procurement Volume Without CR Risk”, is calculated with respect to the reviewed Group-wide procurement volume shown in the Group’s standardized procurement-report system (not including the category “Network Capacity” and not including T-Mobile US).

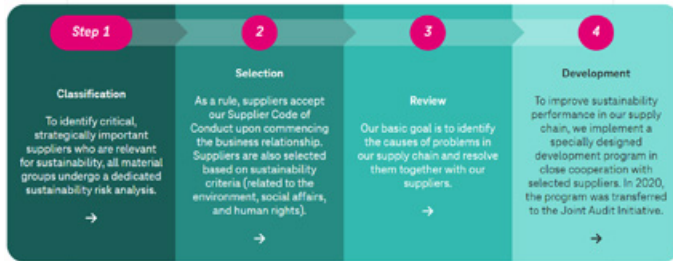


**Supply chain management**

To be able to enter into a business relationship with us, suppliers have to register on our supplier portal and undergo a qualification process. The data provided gives us comprehensive information on our suppliers, including on their sustainability goals. Suppliers themselves also receive detailed information via the Supplier Code of Conduct on Deutsche Telekom’s sustainability requirements and efforts, which they must accept during the onboarding process.



As a rule, our supplier management runs through a five-step process. The aim is to minimize risks in the supply chain and encourage our suppliers to improve their practices.



### Step 1

During the process, we consider a wide range of sustainability aspects such as potential savings in energy consumption, the reduction of CO<sub>2</sub> emissions, the risk of forced or child labor, and potential environmental contamination. During the process, we use external verification systems such as RepRisk and RiskMethods as supporting tools, resulting in the following classification of material groups and suppliers:

- Material groups at risk in 2022: 5 189 suppliers (25,53 percent of the procurement volume)
- Material groups not at risk in 2022: 21 369 suppliers (74,47 percent of the procurement volume)

### Step 2

In addition, we take into account relevant product criteria such as energy consumption, resource efficiency, suitability for circular economy, pollutants and conflict materials. The sustainability criteria mentioned are generally given a weighting of 20 percent when choosing suppliers.

### Step 3

To that end, we conduct comprehensive sustainability assessments and reviews of selected suppliers assigned to critical material groups using, for example, the EcoVadis ESG questionnaire, data from the CDP suppliers disclosure or the RepRisk Rating. We also use social audits and anonymous mobile surveys for assessments. You can read about these measures and the number of participating suppliers here.

The decision regarding which tool to use is made individually for each supplier and depends, among other things, on the supplier's sustainability performance and risk classification. We are improving the effectiveness of all our assessment activities by cooperating with other telecommunications operators in the Joint Audit Cooperation (JAC).

If the assessment shows a need for action, we define corrective measures and a timeframe for their implementation. We then monitor whether the schedules are met and, if necessary, initiate an escalation process that can lead to termination of the business relationship.

All suppliers are continuously monitored via RepRisk. We hold regular talks with critical suppliers who present a sustainability risk, in which we also address CR topics with the aim of ensuring and promoting the companies' sustainability performance. We also use the following Group-wide ESG KPIs as a monitoring and control tool:

- "Procurement Volume Without CR Risk" ESG KPI
- "Procurement Volume Verified as Non-Critical" ESG KPI
- "CDP Supply Chain Program" ESG KPI

### Step 4

We also hold regular workshops with selected suppliers on relevant sustainability topics. The topics covered by the workshops included:

- Emissions management
- Avoiding hazardous substances and using alternative materials in products
- Extending the product life span
- Reducing electrical scrap and launching collection programs
- Designing for greater sustainability and innovation

The main objective of our sustainable supply chain management is to minimize potential risks while generating long-term economic benefit for all parties involved.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 2–6 (General Disclosures)

#### Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)
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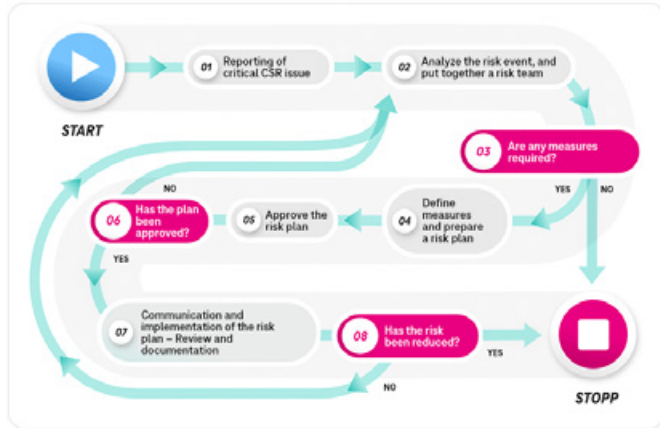
### Escalation process

If a supplier cannot meet the sustainability requirements anchored in our Supplier Code of Conduct to our satisfaction or there are specific transgressions, we initiate our risk escalation process.

Our procurement organization is primarily responsible for this process – with support and advice from Group Corporate Responsibility, Compliance, and Legal Affairs. We hold discussions with the supplier to make our requirements clear to them. If the discussions held on various levels do not lead to the desired outcome, the responsible decision-makers consult with each other to reach

agreement about how to proceed with the supplier. In the worst case, this could lead to the business relationship with the supplier being terminated.

Everyone who identifies irregularities in our supply chain regarding compliance with laws, internal guidelines, and standards of conduct, can report these – and can do so anonymously if they wish – using our TellMe portal.



**Reporting of critical CSR issue**

Incidents in which a supplier fails to comply satisfactorily with provisions of the Supplier Code of Conduct – or even engages in out-and-out misconduct – can amount to critical CSR issues. We work together with suppliers (and services providers), and carry out special on-site audits, in the interest of identifying any critical issues.

**Analyze the risk event, and put together a risk team**

Every time a critical issue is identified, a risk manager is assigned to the issue. The risk manager’s task is to analyze the risk event and put together a risk team.

**Are any measures required?**

In each case, the risk manager must determine whether measures, oriented to the critical CSR issue, need to be defined with regard to the relevant supplier. If measures do not need to be defined, the process up to that point must be duly documented, and the process is then stopped.

**Define measures and prepare a risk plan**

If measures are deemed to be necessary, they have to be defined, and a risk plan has to be prepared. In the process, the risk manager is supported by the company’s procurement and sustainability areas.

**Approve the risk plan**

The risk plan has to be approved by the company’s procurement department.

**Has the plan been approved?**

If the risk plan is approved by the company’s procurement department, the risk manager can proceed with the next steps in the process. If the risk plan is not approved, the process starts over, from the beginning.

**Communication and implementation of the risk plan – Review and documentation**

If the risk plan has been approved, it is communicated and implemented by the risk manager. The success of the risk plan is reviewed, and duly documented.

**Has the risk been reduced?**

If the risk has been successfully reduced, the process is stopped. If the risk has not been adequately reduced, the process starts over, from the beginning.

**Risk monitoring**

In Procurement, we work with a comprehensive supplier risk monitoring scheme. We first conduct a risk assessment of all material groups on the basis of the CSR sets of criteria defined by Group Corporate Responsibility. We then subject suppliers to a comprehensive risk analysis. Specialized companies evaluate all suppliers with regard to financial, CR, and compliance risks.

Suppliers that present especially high levels of risk are also monitored with regard to global risks (e.g., natural disasters, political risks). For this purpose, we use EcoVadis and carry out special audits on location. Our aim is to address deficits together with the supplier and take appropriate corrective action. Only if no solutions are possible do we have to cut ties with suppliers.

**2022 supplier sustainability reviews (excl. T-Mobile US)**

In 2022, we conducted a total of 98 supplier reviews – 83 of which were on-site reviews (social audits ) and 15 mobile surveys. 40 direct and 58 indirect suppliers were involved in the checks.

For the on-site reviews, we let the supplier know the approximate time of our visit in advance (“semi-announced audit”). This is necessary to make sure that relevant contacts in key functions are present for the audit. The mobile surveys give our suppliers’ employees the opportunity to provide anonymous information about the social and ecological situation at their company. The surveys are primarily used to gain an initial impression of the local working conditions in order to then initiate further measures as needed, such as specific on-site reviews (social audits).

	Number of reviews	Number of findings	Number of completed finding
Social audits (by external audit firms)	83	549	464 (224 findings from 2022 and 240 outstanding findings from previous audits)
Mobile surveys *	15	-	-
EcoVadis (2014–2022)	275	-	-
CDP Supply Chain **	207	-	-
Total	580	-	-

\* Mobile surveys with selected suppliers, in particular to assess the situation of workers at the operating sites\*\* CDP’s supply chain program is used for direct suppliers with high emission intensity.



### Auditing procedures

We focus our audit activities on strategically important and particularly risky suppliers. They are routinely audited every two to three years. This group includes roughly 250 of our 25 000 or so active suppliers. Together, they cover around 80 percent of our procurement volume. These audits give us transparency about the risks in large parts of our supply chain.

The majority of the audits are conducted within the scope of Joint Audit Cooperation (JAC). The audits cover the following areas:

- Labor standards
- Social standards
- Living standards
- Environmental requirements

The JAC Guidelines require, among other things, that our suppliers:

- Pay a fair wage that enables employees to enjoy a decent standard of living;
- Respect the right to freedom of association and collective bargaining, and provide a healthy, safe working environment and
- Do not exceed a 48-hour working week and a weekly maximum of twelve hours' overtime, and grant at least one free day after six consecutive days of working.

Compliance with all these requirements is reviewed regularly during our on-site audits. This also includes inspection of the features and quality of the working, sleeping, and cafeteria areas.

Deutsche Telekom does not require its suppliers to obtain external environmental or social certification. But if suppliers cannot show any environmental and social responsibility certificates, we do expect equivalent management systems to be used. Our auditing experience shows, however, that the majority of our relevant manufacturing suppliers have an external certificate or equivalent management systems.

Verification of important social and ecological aspects as well as fundamental human rights during our audits is in line with internationally recognized guidelines and standards such as the ILO core labor standards, the UN Guiding Principles on Business and Human Rights, and the OECD Guidelines for Multinational Enterprises.

### Reporting against standards

#### Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)
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- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
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- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

### 2022 audit results

In the audit program, which has been established and is controlled at Group level, a total of 83 on-site audits were carried out in 2022.

As in previous years, we concentrated our auditing activities on suppliers in Asia, Europe, Latin America, Oceania, and Africa.

Audited suppliers included manufacturers in the areas of IT hardware, software and services as well as networks and devices.

All violations identified in the course of such audits enter into a correction and measures plan, and the timely implementation of measures is regularly monitored. In the audits carried out in the period under review, no serious transgressions in the areas of working conditions and other basic human rights – such as discrimination, forced labor, and child labor – were found. In addition, no cases of bribery or corruption, and no critical violations of general compliance rules, such as rules governing the right to intellectual property, were found.

- Of the 83 suppliers we audited in 2022 (eleven of which were in accordance with the validated audit processes of the Responsible Business Alliance), around 43 percent (36 audits) were direct suppliers and 57 percent (47 audits) were tier 2, 3, and 4 suppliers – that is, indirect suppliers.
- The audits carried out in 2022 revealed a total of 549 violations of Deutsche Telekom's supplier requirements. These findings break down as follows: 231 cases regarding occupational health and safety, 67 cases regarding working hours, 104 cases regarding environmental protection, 23 cases regarding working conditions, 51 cases regarding wages and remuneration, 53 cases regarding corporate ethics, eight cases regarding freedom of association, four cases regarding disciplinary measures, and eight cases regarding discrimination. In addition, the violations included 36 transgressions that needed to be addressed on a priority basis and an additional 286 serious findings. A total of 464 violations were corrected in 2022, including several open improvement measures from previous years. Examples of critical violations in 2022 and improvement measures can be found in the table below. As in previous years, most violations (42 percent) were linked to occupational health and safety (2021: 43 percent), followed by violations linked to the environment at 19 percent (2021: 16 percent). At 12 percent, working hours constituted the third biggest issue (2021: 18 percent).

Areas	Findings at suppliers	Initiated improvements	Status (end of 2022)
<b>Environment</b>	One plant had failed to present documentation on assessment of services providers with regard to proper disposal of hazardous waste.	The plant has since prepared checklists for auditing of services providers with regard to proper disposal of hazardous waste, and it is carrying out relevant reviews.	complete
	The responsibility for disposing of hazardous waste was delegated to a qualified, certified company that carries out the necessary record-keeping. The waste-oil container (lubricants) in question did not have a GHS label, however, and it was being kept outside, next to the building, in an uncovered area. A check showed that the waste-oil container contained various types of oils, such as lubricants and cutting compounds.	Now, GHS labels are being applied to all waste containers, and all waste containers are being kept in an outside area, next to the building, that is covered and where the containers will not be damaged by being exposed to rain.	complete
<b>Business ethics</b>	The supplier had no risk-analysis procedure.	Risk analysis was carried out with regard to corruption risks.	complete
<b>Forced labor</b>	Employment contracts of agency workers contained unlawful terms and specified unlawful positions. The standard employment contracts of these workers were incomplete – for example, they lacked job titles and validity periods. Furthermore, the plant concluded no open-ended employment contracts with workers who had been with the company for more than 10 years, and it failed to obtain the consent of workers for this policy. Contracts with workers who were exposed to health risks in their work contained no specifications regarding occupational health and safety, working conditions, and protection against occupational risks.	A new contract was signed with the employment agencies. The workers' salaries are being paid by our company, and the relevant agency fee is paid to the employment agency on a monthly basis. All workers receive proper instruction in relevant aspects of labor law. New workers have to confirm the job titles specified in their employment contracts. In each case, employment contracts include the worker's job description, place of work, and contract term (duration). Workers who have been with the company for more than ten years have received open-ended employment contracts. Workers have received proper instruction regarding legal requirements pertaining to prevention of occupational illnesses, and additional agreements regarding occupational-illness risks have been concluded with affected workers.	complete
<b>Occupational health and safety</b>	The plant failed to carry out evacuation drills in workers' sleeping quarters.	The plant has carried out an evacuation drill in workers' sleeping quarters. The drill was approved by the auditor.	complete
	On-site inspections revealed that the workshop's eye-wash station consisted of a pressure-actuated unit that only had a capacity of five liters, and thus did not comply with the applicable requirements.	A permanent eye-wash station with a capacity of 53 liters was installed.	complete
	Two soldering workers on the assembly line wore active-charcoal masks instead of dust-tight masks. The plant corrected this error on site.	Training courses on workplace safety and health were carried out for managers. In addition, workers at the site received new protective equipment.	complete
<b>Working hours</b>	The worker's monthly working time exceeded the legally permitted maximum.	The plant has prepared a plan for gradual reduction of work time and overtime, to ensure that the monthly working time complies with national laws.	complete
<b>Wages &amp; salaries</b>	One plant failed to pay workers the legally mandated overtime allowances.	The plant has since prepared procedural documents relative to its social responsibility; introduced a "procedure for controlling working time" and a "procedure for controlling salaries and remuneration"; and continually improved working conditions with the help of the said procedural documents. Also, attendance-records policies have been revised, with a view to precise recording of daily presence and overtime hours. The plant is now paying overtime allowances in strict conformance with attendance records and the "overtime-management system," and in keeping with the applicable laws and regulations.	complete

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 407-1 (Freedom of Association and Collective Bargaining)

**Expenditure analysis 2022**

Our suppliers come from various industries and countries. To capture the diversity of our more than 25 000 suppliers, the following graphic depicts the types of suppliers we commission; the overview includes the share of our expenditure (capex and opex) attributable to them and their geographical distribution.

2022

Supplier Category	Proportion of Spend %	Number of Consolidated Suppliers	Number of domestic subsidiary suppliers	Number of foreign subsidiary suppliers	Number of critical subsidiary suppliers	Number of risky subsidiary suppliers
Building, facilities, furniture and rel. services	3.5%	2 292	563	1 969	53	2
Civil Works	18.2%	4 868	4 435	1 297	168	0
Consulting, contracting, temp. labour and service center	2.7%	1 174	336	1 002	27	0
Electrodomestic appliances	0.0%	104	35	78	4	0
Enduser communication technology and equipment	22.1%	1 071	347	911	42	0
Energy, fuel, gas, water	0.4%	148	45	107	4	0
Financial Services, insur, fees, invest, cert	1.0%	864	216	824	17	2
Fleet and travel	0.6%	671	234	472	35	2
Food and catering	0.1%	365	78	309	22	0
HR services, training and translation	0.7%	2 654	1 157	1 780	67	2
Information technology	17.5%	5 192	1 907	4 552	151	1
Logistics and mail	0.9%	592	256	419	9	1
Marketing, media, content, print, fairs	8.7%	5 425	2 473	3 469	152	3
Network capacity	5.6%	1 051	147	1 436	40	1
Network infrastructure	13.8%	2 286	892	1 998	76	2
Office equipment, office technology and stationery	0.2%	786	403	433	14	0
Service platforms	1.3%	735	282	540	24	0
Sim cards	0.1%	39	25	24	2	0
Tools and protection equipment	0.3%	537	199	353	13	0
Undefined/Undefined	2.2%	224	107	109	6	0
<b>TOTAL</b>	<b>100%</b>				<b>748</b>	<b>10</b>
		<b>Unique consolidated suppliers: 20 943</b>	<b>Unique local/subsidiary suppliers: 28 272</b>		In total with no regards to the corresponding category	In total with no regards to the corresponding category

**Definitions and examples**

Consolidated supplier = Group level

Domestic subsidiary of the supplier = Subsidiaries of the corresponding company located in Germany

International subsidiary of the supplier = Number of supplier subsidiaries which are located outside of Germany

Consolidated suppliers are uniquely counted at Group level; local suppliers are multiple counted in case of different business operations/locations

Critical supplier: Supplier with compliance, financial, and resilience risks

CR risky supplier: Adherence/Compliance risks to defined ethical, ecological, and social requirements

### Supplier Development Program

We collaborate as partners with our suppliers to make sure they are able to meet our high sustainability criteria.

Since 2018, we have continued the former Deutsche Telekom supplier development program as an industry approach (Sustainable Development Program, SDP). In 2021, the SDP was transferred to the Joint Audit Cooperation (JAC). Alongside Deutsche Telekom in charge of project management, Telefónica, Swisscom, and Orange are working together to continually refine the SDP concept in accordance with the JAC sustainability targets.

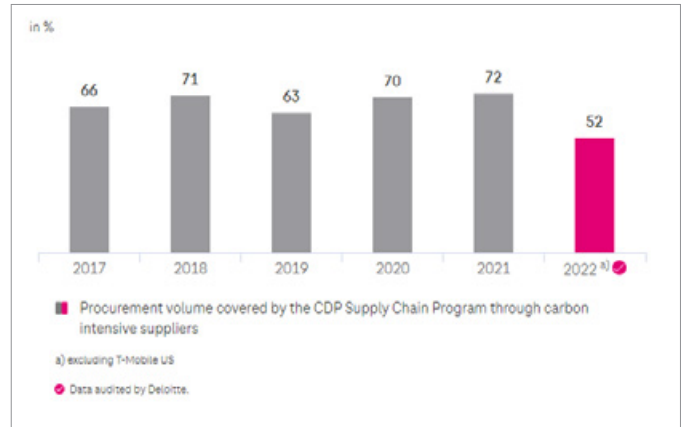
We expect more JAC member companies to join the program in the near future. The diagram shows the areas in which we audit the suppliers participating in our program. Based on these audits, we work with the respective supplier to develop a plan for remedying any issues. All activities and findings are documented so that we can assess the effectiveness of the measures employed.



### ESG KPI “CDP Supply Chain Program”

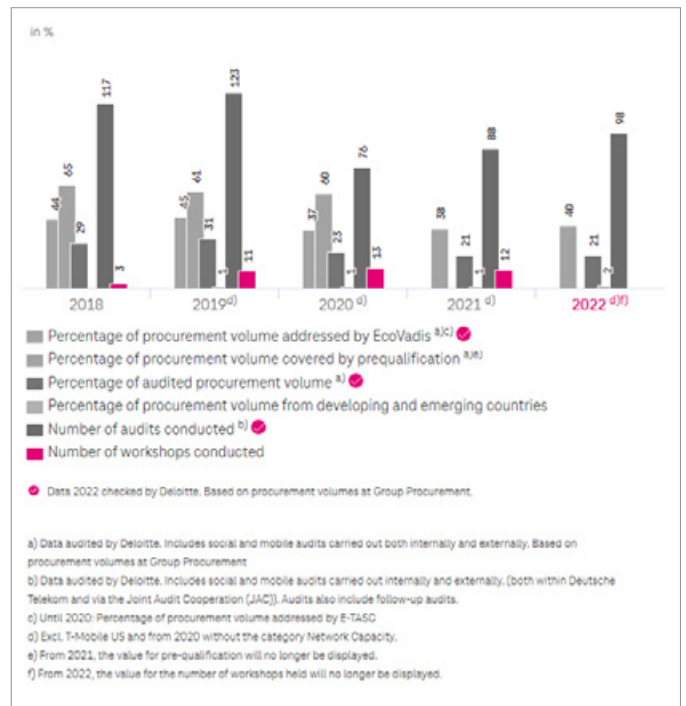
Since as early as 2016, we have been disclosing our activities to bring on board suppliers as part of CDP’s supplier engagement rating. This rating assesses how well companies have been able to integrate the topic of climate protection into their supply chain. In 2022, we were awarded an A rating, as in the previous year. This has secured our place on the Supplier Engagement Leader Board. An important step in achieving this was calculating the supplier-specific emission intensities based on supplier responses to the CDP Supply Chain Program. This involved calculating the ratio between a supplier’s overall emissions (Scopes 1 and 2 and Scope 3 for the upstream supply chain) and the supplier’s overall sales.

The ESG KPI “CDP Supply Chain Program” indicates the degree to which our procurement volume from carbon-intensive suppliers is covered by the CDP Supply Chain Program. In 2022, over 52 percent of the procurement volume was covered by the CDP Supply Chain Program.



### Supplier relationship

The percentage of audited procurement volume increased slightly from 20.6 percent in the previous year to 21.1 percent in 2022. At the same time, the percentage of procurement volume covered by EcoVadis increased slightly to 39.7 percent.



### Reporting against standards

#### German Sustainability Code

- Criterion 1 (Strategy)
- Criterion 3 (Objectives)
- Criterion 4 (Depth of the Value Chain)
- Criterion 6 (Rules and Processes)
- Criterion 17 (Human Rights)

#### Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)
- Principle 2 (No complicity in human rights abuses)
- Principle 5 (Abolition of child labor)

#### European Federation of Financial Analysts Societies (EFFAS)

- V28-04 (Supply Chain)

### Responsible procurement of raw materials

We require our suppliers to protect the environment and use resources responsibly. This requirement is enshrined both in our “Code of Human Rights & Social Principles” and in our Supplier Code of Conduct, which sets out requirements that must generally be accepted by all suppliers.

In the case of relevant material/product groups, the use of hazardous materials and conflict materials is checked and assessed as part of the supplier and product selection. In the case critical suppliers in particular, we request disclosure of information about their activities (via EcoVadis and CDP) and we perform supplier audits in the form of social audits. In these audits, we check whether our suppliers use an environmental management system, including a waste management system, and review how they manage their energy and water consumption.

In addition, we always check whether there is a management system in place to address the issue of conflict resources. When selecting suppliers and products, we review and evaluate, for example, the use of hazardous and conflict materials as well as rare-earth metals – especially in light of the OECD Due Diligence Guidance for Responsible Supply Chains.

In the period under review, we have readjusted the requirements placed on our suppliers and tightened them up significantly, particularly in relation to environmentally-responsible action, including against the background of the Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz – LkSG). Since then, contributions to environmental protection and climate change, responsible waste management, and the handling of persistent organic pollutants that only degrade very slowly in the environment, have been enshrined in our Supplier Code of Conduct along with a ban on manufacturing any products containing mercury. Since 2022, these criteria are being used for selected tenders and incorporated into the supplier selection process with a weighting of up to 20 percent.

### Reporting against standards

#### Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)

# Sustainable and innovative products

## Our approach to sustainable products and services

Our core business consists of operating and expanding our networks. Our networks provide the foundation for digital participation. Since 2021, 100 percent of the electricity for our networks has been obtained from renewable resources. Also, by providing innovative, network-based, and digital solutions, we support our customers in reducing their own carbon emissions and in contributing to climate protection.

We want to make our entire product range more and more sustainable. Furthermore, we take a holistic perspective on this issue, a perspective that extends to the rates and devices we offer, and that includes a comprehensive approach to achieving a circular economy – a product-life-cycle approach that extends to production, sustainable packaging, product use, product refurbishing and product recycling. This requires thoroughgoing measures along all stages of the value chain. Consequently, we begin with procurement, and we strive to ensure that our suppliers comply with our ecological, social, and ethical sustainability requirements.

## Our labels

We have developed our #GreenMagenta and #GoodMagenta labels as tools for informing our customers about sustainability benefits. Deutsche Telekom products, services and initiatives that carry these labels have been reviewed in keeping with clearly defined requirements. In addition, we permit products to carry recognized third-party environmental labels when this is appropriate. For example, several of our router and mesh devices have been certified with the TÜV Rheinland “Green Product” label (TÜV Rheinland is a leading international provider of technical services, including certification). Furthermore, a significant share of the fixed-network telephones offered by Telekom Deutschland are certified with the “Blue Angel” label. The strict requirements of these labels help us see how we can further improve our products.

In 2021, working in cooperation with other mobile network operators, we developed a sustainability ranking system for mobile phones – the Eco Rating. It enables customers to see at a glance which phones score well with regard to durability, reparability and recyclability, climate compatibility, and resources conservation.

## Packaging

We have also been making our product packaging more and more sustainable. Since mid-2022, and on a European-wide basis, all of our own new products are being sold in sustainable packaging for which we have developed suitable sustainability criteria. Nearly 90 percent of the new packaging for our suppliers’ smartphones conforms to these criteria as well. Wherever possible, we reduce package sizes with the help of special packaging machines. Increasingly,

we are relying, e.g., on PaperFoam, a bio-based and biodegradable alternative to conventional packaging materials, as a means of protecting our products within the packaging.

For example, our Speedport Smart 4 router is sold in a plastic-free package. Most of the paper used is already recycled, or comes from sustainable forestry (FSC®-certified).

## Responsible use of resources

Our efforts to use resources responsibly begin right with the earliest stages of production. In our Speedport Smart 4 router, for example, we limit the use of harmful substances (such as in electronic components) beyond the degree required by law. Furthermore, a total of 90% of the housing of the Speedport Smart 4 consists of recycled plastic.

Another example: In October 2022, in North Macedonia and Hungary, we introduced a Magenta TV Box (set top box) with a housing made of bio-based polycarbonate. Bio-based polycarbonate is an environmentally friendly plastic that is manufactured solely from renewable raw materials. In the same year, we began making our SIM cards out of recycled plastic. That change alone is saving some 63 metric tons of CO<sub>2</sub> per year. The SIM cards carry the #GreenMagenta label. At the same time, we are aiming to do away entirely with plastic SIM cards and use only eSIMs. Via various measures, including customer advising, we are gradually increasing use of eSIMs. This is saving additional resources.

At the end of products’ life cycles, we help to ensure that they are reused or properly recycled. In fact, we have been collecting and buying back used mobile devices for this purpose since 2003. Since then, in Germany, we have helped to conserve resources by recycling, or providing for reuse, more than 3.4 million used devices. In November 2022, we reorganized our smartphone-collection system in our shops. Now, when customers return an old smartphone that has little residual value, and we can’t make them a purchase offer, they still receive a small consideration for their trouble. This provides an incentive for phone returns. Our national companies also accept used devices. This is the case in North Macedonia, for example, where our national company has earned the #GreenMagenta label for its collection process for used phones.

In Germany, persons interested in giving used smartphones a second life can sell them to us, via our “Handyankauf” (phone buy-backs) portal, for refurbishment. We also buy back smartphones from the German B2B segment. Also, Deutsche Telekom returns its used smartphones (i.e., used for business purposes) for refurbishment/recycling. Via the “ReUse MyMobile” portal, we sell products



that are fully refurbished and completely free of any technical defects. Each such product comes with a fresh 24-month warranty. Our “Handyankauf” and “ReUse MyMobile” programs have both been awarded the #GreenMagenta label. Other national companies also sell refurbished smartphones. This is the case in Austria, for example. Our phone-resale program there has also earned the #GreenMagenta label.

To promote sustainability, we are also committed to ensuring that routers and media receivers are not simply disposed of after being replaced. With our “Rent instead of Buying” rental service, we conserve resources, reduce electronic waste, and thus avoid carbon emissions. Last year, we provided around one million refurbished devices to our customers in Germany.

### **An affordable 5G smartphone: the T Phone**

As of the year under review, we are offering our new T Phone and T Phone Pro 5G smartphones in a total of nine European countries, with a view to enabling the largest possible numbers of people to profit from our 5G-network expansion. Since the end of January 2023, the phones have also been available in Germany. These phones are designed to be more affordable, so that more people can participate in the digital world. As an added benefit, the T Phone comes in sustainable packaging.

### **Subsidized rates**

In Germany and at several national companies, we offer various subsidized rates, to enable customers on low incomes and people with disabilities to make calls at reasonable prices.

### **Subsidized rate plans**

Telekom Deutschland offers special rate plans to promote digital participation among different groups in society. Since 2000, our “Telekom@School” project has been providing general and vocational schools nationwide with internet accesses for teaching purposes. Participating schools receive the accesses either free of charge or at a considerably reduced price, depending on the access bandwidth. What’s more, German Red Cross employees and firefighters can get special rates for Telekom rate plans thanks to corresponding framework agreements.

### **Helping people work from home**

We offer our business customers secure solutions that enable their employees to work from home efficiently. Our home office configurator helps small and medium-sized businesses, for example, to develop customized solutions for staff working from home. Likewise, our Digital Schutzpaket Business (digital business protection package) keeps sensitive customer data safe.

In addition, we offer videoconferencing solutions of various established providers, including some solutions with added, proprietary functions of our own that support energy-efficient work from home offices.

### **Measuring progress**

We measure our progress by means of various KPIs:

- We use the “Sustainable Revenue Share” ESG KPI to determine the proportion of sales generated with products and services that are classified as more sustainable, based on a risk-benefit analysis.
- With our “Ecologically sustainable products” KPI, we show what share of our entire product range consists of sustainable products.
- With our “Take Back Mobile Devices” and “Take Back CPE” ESG KPIs, we measure the impacts of our circular economy concepts.
- We use the “Enablement Factor” ESG KPI to calculate the positive carbon effects generated as our products are used by customers.
- With the “Sustainable Packaging” KPI, we show what share of Deutsche Telekom-branded products consists of products with sustainable packaging.

### **Reporting against standards**

#### **Global Reporting Initiative (GRI)**

- GRI 301 3-3 (Management of material topic)

### **Analysis of our products’ sustainability benefits**

To date, there is no industry-wide established system that provides sustainability information about ICT products and services. Since 2014 at Deutsche Telekom, we have been using an in-house analysis method to assess the sustainability of our products. This includes, for example, examining the safety of the products, or how well they can be recycled.

We inform our customers about how our products are contributing to sustainability. The results of our analyses also allow us to position ourselves as a responsible company with respect to the competition. In the year under review, our analysis included a review of selected products in light of EU Taxonomy criteria.

### **Correlation with SDGs**

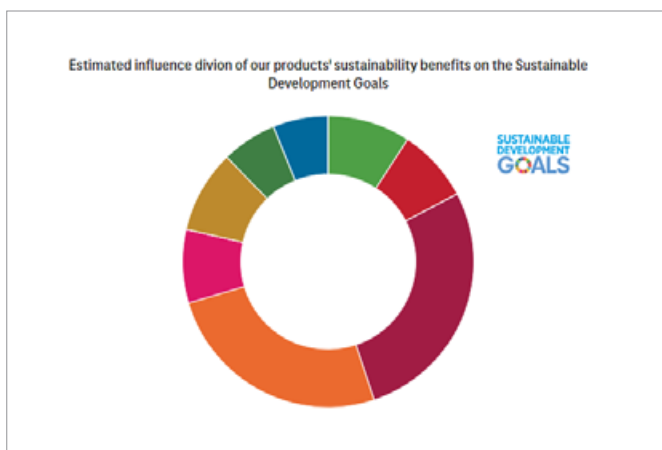
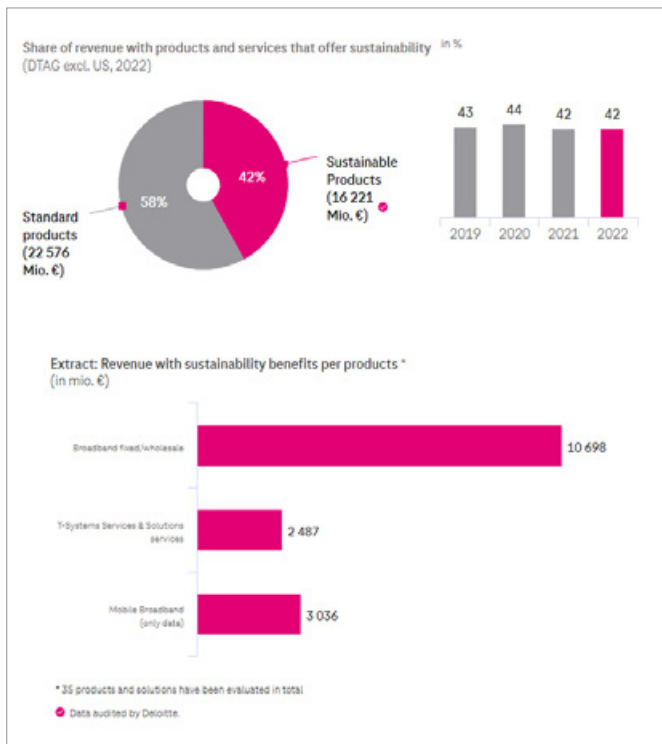
In the year under review, we reviewed – with support from internal experts – the sustainability benefits of a number of our products in light of the Sustainable Development Goals (SDGs). The degree of detail depended on the revenue generated with the product under review. If revenues were high, we considered the impact on all SDGs. Where revenues were limited, we only took the impact on the most relevant SDG into account.

### **Results of the analysis**

In the year under review (2022), we studied 35 product groups in detail, analyzing both their contribution to sustainability and their business potential (as of the end of 2022).



We measure the result of this analysis with the Sustainable Revenue Share ESG KPI. The share of revenue from more-sustainable products was around 42 percent in 2022 (excluding T-Mobile US). The share thus remained constant compared to the prior year (42 percent in 2021). A key reason for the slight percentage decrease seen in this area is that total revenue (not including revenue in the United States) grew more strongly than did sustainability-related revenue. In addition, we have made our assessment methods more stringent. Now, intensified use of renewable energies no longer counts as a positive aspect that makes a portfolio element, as assessed, “more-sustainable.” This change reflects the fact that the entire Group is now using renewable energies. Also, and as in previous years, potential cost savings are simply seen as additional information, and not as significant criteria for a sustainability assessment.



### The #GoodMagenta and #GreenMagenta labels

We use our #GreenMagenta and #GoodMagenta labels as a way of highlighting our products and initiatives that offer sustainability benefits. The #GreenMagenta label highlights products, services, projects, measures, and initiatives that are especially noteworthy in the areas of climate action and responsible use of resources. #GoodMagenta is applied to projects, actions, and initiatives that make a positive contribution to overcoming social and societal challenges in the digital world. Awarding of the two labels is subject to strict rules of our own definition. In each case, the product or effort, etc., has to show proven sustainability benefits. For awards of the #GreenMagenta label, for example, we carry out extensive impact assessments. In cases in which societal or ecological impacts emerge that are clearly adverse, the #GreenMagenta and #GoodMagenta labels may not be awarded, regardless of whatever benefits the product or effort provides. To date, over 35 products from Germany, and from several European national companies, such as Magenta Telekom in Austria and Makedonski Telekom in North Macedonia, have been awarded one of the two labels. For example, our green network – which since 2021 is being operated worldwide with 100 percent renewable energy – and our Speedport Smart 4 router carry the #GreenMagenta label.

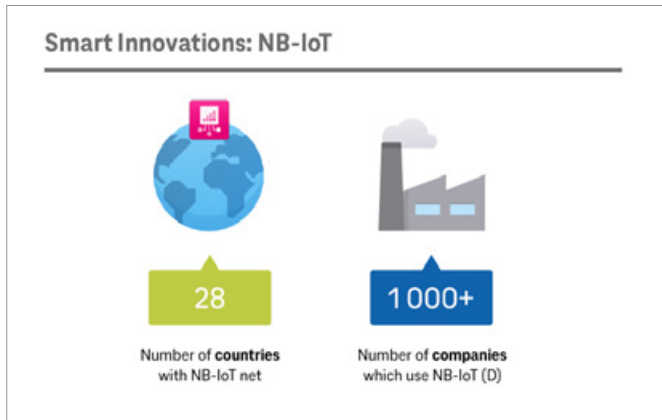
### Smart Innovation

In this section, we will introduce some “Smart Innovation” solutions. The associated business models are based on the most advanced technology and provide an immediate value-add for our customers. At the same time, these solutions are also making an ecological and/or social contribution to society.

We are, for example, utilizing future-oriented and widely available technologies to make cities viable for the future and to develop solutions for social challenges. For this, we are relying on innovative NarrowBand IoT (NB-IoT) technology, with which we are paving the way for the Internet of Things. NB-IoT devices have a large operating range and long battery service lives. Consequently, this technology provides the basis for many innovative uses that are both cost- and energy efficient. Particularly useful areas of application for NB-IoT are, for instance, smart parking, smart cities, smart meters, as well as transport and logistics solutions. One example is the networking of irrigation systems.

For example, we have entered into close cooperation with the Free and Hanseatic City of Hamburg in the area of urban mobility. At the ITS 2021 transportation and logistics congress, we jointly presented solutions for improved mobility in road traffic - for example, to measure and display available parking spaces using sensors and intelligent dashboards. Another technology enables mobility stations and trucks in the Port of Hamburg to be networked and smartly controlled. These innovations go a long way toward optimizing traffic. Similar projects are also being developed in other cities, for example in Pforzheim.

NB-IoT and LTE-M are available in all cities and towns in Germany. Deutsche Telekom currently offers NB-IoT in 28 countries and LTE-M, which was only launched in Germany in 2020, is now available in 23 countries. NB-IoT and LTE-M roaming is available to our customers across the entire footprint.



**Accessible products and services**

We want to make it easier for people with disabilities to have access to the knowledge and information society. To that end, we offer them specially tailored services. Our national companies also strive to provide barrier-free access to their services. Further information is available in the respective country profiles.

**Digital assistant for accessibility**

The nora Notruf App (nora emergency-call app), available in Germany since 2021, is a digital assistant which can determine the user’s precise location and trigger emergency calls at a tap. It is a boon for people who have speech or hearing impediments that make it difficult or impossible to make phone calls the usual way. The app, which Deutsche Telekom holds the patent for, is especially attractive by virtue of its versatility. In addition to simply alerting first responders (police, fire department, or paramedics), the user can also tap to identify the type of emergency involved, such as a crime in progress, accident, fire, severe illness, flooding, person in distress, or animal in distress. While people with speech or hearing impediments can report emergencies by using the Tess Relay services or sending an emergency fax, those options can wind up wasting valuable time.

**Services for the hearing impaired**

In 2003, we set up a hotline (“Deaf Hotline”) for deaf and hearing-impaired customers. Every day, up to 50 people contact the hotline. Customers and consultants can see each other using a video-based live chat application and can communicate with each other in sign language. Also, we offer a chat service in which specially trained staff advise deaf and hearing-impaired persons in simplified language.

In addition, for hearing-impaired customers and members of the German association for hearing-impaired persons, Deutscher Gehörlosen-Bund e. V., we operate a special online sales site. There, we offer a discounted mobile-communications and fixed-line portfolio that is tailored to the exact needs of hearing-impaired persons. Via the website, customers can either book desired rates directly or contact our Deaf Hotline.

Since 2018, hearing-impaired people in Germany have had access to a 24-hour emergency call service with sign language interpreters for emergency situations. The service is jointly financed by the mandatory social security contribution paid by Deutsche Telekom to Germany’s Bundesnetzagentur (Federal Network Agency).

Our various national companies also offer services for hearing-impaired persons. T-Mobile Czech Republic, for example, working in cooperation with the social enterprise Transkript Online, offers in its shops both a deaf hotline and an online-transcription service (a speech-to-text service for interactions either in person or over the phone). T-Mobile Polska offers its customers a sign-language-interpreting service via its shops and customer-service operations.

**Supporting users with simplified language**

According to studies, 12 percent of people in Germany are not able to grasp complicated texts. In our endeavor to make it easier for them to access our products, we also offer some of our product information in simpler language. Also, our #TAKEPART stories, and a number of topic pages within this CR Report (under “experiencing sustainability” – “Nachhaltigkeit erleben”) are made available in simplified language.

**For companies and municipalities: Finding support programs for digital investments**

Supply shortages, rising prices, and overall inflation present major challenges for companies and municipalities alike. Digital solutions, which make processes more efficient, facilitate the development of new business models and help organizations become more innovative and sustainable, can play especially useful roles in difficult times. In Germany, numerous types of state subsidies are available for digital business solutions, digital technologies, and IT systems. In such assistance, the federal and Länder governments assume up to 70 percent of incurred costs, and municipal governments sometimes even assume all of the costs involved. Also, many funding programs focus especially on sustainability-oriented digitalization projects and initiatives that are good for the environment and support efforts toward Germany’s climate targets.

In our “Schubkraft” (“Thrust”) initiative, we help customers gain a clear understanding of available funding options, and we work with them in reviewing ways of applying investments and obtaining federal and Länder subsidies for them. Our relevant website offers valuable tips on how to apply, on the numerous funding programs available, and on available free consultations of relevance to customers’ individual situations. Also, “Meine Förderung” (“My Funding”), a free Deutsche Telekom app, provides a good overview of the some 3 000 funding programs currently in place, along with a “funding-check” eligibility-checking function. Finally, we offer a toll-free hotline, at 0800 330 6001, via which experts provide overview information about Germany’s funding sector and about applicable terms and conditions.

# Network expansion

## Our approach to infrastructure rollout

Deutsche Telekom is Germany's largest investor when it comes to expansion of the network infrastructure. We are continuously expanding our networks, increasing the efficiency of our network systems and further strengthening our role as a leader in network quality. This includes efforts via our national companies in Europe and the United States, which are working continually to expand our network infrastructure and improve our network quality.

In expanding our mobile network in Germany, we conform to the coverage requirements imposed by the Bundesnetzagentur (BNNetzA, Federal Network Agency). As of the end of 2022, we had made LTE coverage available to 99 percent of all households. In addition, we have been providing broadband service, with bandwidth of 50 or 100 Mbps, along more and more traffic routes. Already, over 94 percent of people in Germany now have access to Deutsche Telekom's fast, new 5G mobile network. Our goal: To be providing 5G coverage to 99 percent of the population by the end of 2025.

We have almost completed our FTTC (fiber to the curb) expansion in our fixed network in Germany. With our FTTH (fiber to the home) expansion, we are installing fiber-optic connections directly in customers' homes. Our aim is to close gaps in the network in rural areas and provide urban centers with the high bandwidth they require. We want to continue this rollout efficiently and, to this end, are also participating in funding programs. In the coming years, we expect to provide FTTH to up to an additional 3 million households per year.

Further information about our network expansion is available in our annual report.

## Progress in network build-out

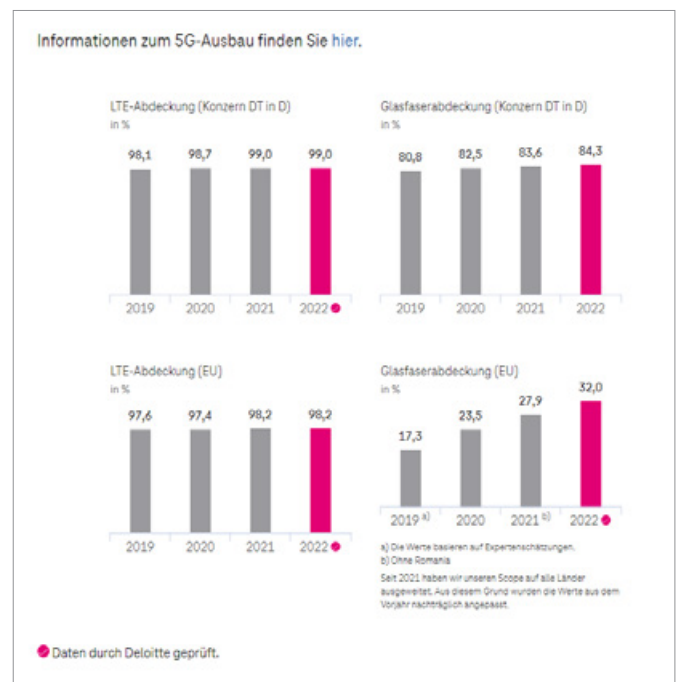
Our network strategy also calls for systematically upgrading our mobile networks with 4G/LTE and 5G technologies, with a view to increasing the transmission rates offered by all of our national companies. Thanks to our investments, our customers are enjoying better network coverage and fast mobile broadband service. As of the end of 2022, for example, in Germany we were making LTE coverage to approximately 99 percent of households, and 5G coverage to over 94 percent of households. The corresponding 5G figure for Europe is 47 percent. As of the end of the year under review, we had brought fiber-optic technology to some 5.4 million households in our fixed network. We are continuing to give priority to connecting households directly to our fiber-optic network. In 2022, we provided some two million additional households with

the option of ordering fiber-optic accesses. Also, we offer innovative products, such as our hybrid router, that enable customers to combine fixed-network and mobile bandwidth. This is an effective strategy for increasing bandwidth that is especially useful in rural regions.

Our network expansion progress in Germany can be followed in our online expansion tracker (only available in German).

Since November 2022, Telekom Deutschland has been directing the "6G-TakeOff" research project, which is being funded by the German Federal Ministry of Education and Research (BMBF). The project is aimed at developing a consistent 6G architecture for communications networks, consisting of satellite access stations, airborne infrastructure platforms and satellites. A total of 22 industry and scientific partners are collaborating in the effort. The first 6G networks are expected to become operational in 2030.

Information on 5G expansion is available [here](#).



**Updating and stabilizing the network architecture**

The fundamental aim is to operate our networks in the most stable and failure-free manner possible. Major events such as festivals and summit meetings place networks under particular strain. We make sure, however, that voice calls and data are still transmitted in the quality our customers have come to expect by temporarily setting up extra mobile masts or laying additional fiber-optic cables.

In emergency situations, it is especially important for networks to function properly, so that emergency calls can be made and responses organized. In emergencies, such as floods or large fires, in which network equipment is damaged to the point that cellular and fixed-line services cannot be quickly restored, our Disaster Recovery Management (DRM)(only available in German) comes into play. It operates mobile containers with communications equipment that can quickly stand in for disrupted cellular and fixed-line service.

The disastrous floods of July 2021 damaged large portions of the telecommunications infrastructure in Germany. An interdepartmental task force was established to manage the restoration effort. The team was able to quickly restore operations at 250 of the 300 cellular base stations that had suffered flood damage. A total of 120 base stations had suffered major damage, however, and wireless service for 250 000 people was temporarily disrupted. Cellular capacities were then increased using mobile masts and special antennas fitted to existing masts. As a result of these efforts, cellular service was completely restored in the flood-damaged areas within the space of only a week. In addition, around 97 percent of the some 100 000 destroyed fixed-network accesses were restored by the end of 2021. As a stopgap measure, we provide affected customers with free LTE or hybrid routers, along with unlimited data allowances for calling and internet usage.

In the hardest-hit regions, existing copper-wire accesses that had been damaged or destroyed were not restored; instead, they were replaced with fiber-to-the-home (FTTH) fiber-optic accesses. As a result, some 45 000 new fiber-optic accesses were installed in the states of Rhineland-Palatinate and North Rhine-Westphalia.

In the interest of even faster network restoration following extreme events such as those disastrous floods, Deutsche Telekom's DRM team is working to provide a satellite-based mobile base station. Such a station would make it possible to establish a mobile network within just a few hours. This project is currently in its pilot phase in the lower Franconian city of Fuchsstadt. The first trials with the new system have been promising, and it seems as if it will indeed be possible in the future to restore service very quickly following extreme events.

**Reporting against standards**

**Sustainability Accounting Standards Board (SASB)**

- TC-TL-550a.2 (Managing Systemic Risks from Technology Disruptions)

**Rollout of the new 5G mobile generation**

A total of 80 000 antennas are now operating at the 5G standard in Deutsche Telekom's network in Germany (as of December 2022). As of the end of 2022, this new mobile communications standard was available to over 94 percent of all households in Germany. Most of the antennas transmit on the 2.1 GHz frequency, both in large cities and in smaller communities and rural areas.

5G on the fast 3.6 GHz frequency band is available in 630 cities and communities (as of December 2022). Over 7 800 antennas are now in place, at a total of over 2 600 locations. As a result, more and more people are now able to enjoy high-speed 5G service.

Deutsche Telekom decommissioned its 3G network in Germany in 2021. The frequencies that have become available as a result are now being used for 5G and LTE service. In other words, more bandwidth is now available for these two newer, and considerably more powerful, technologies.

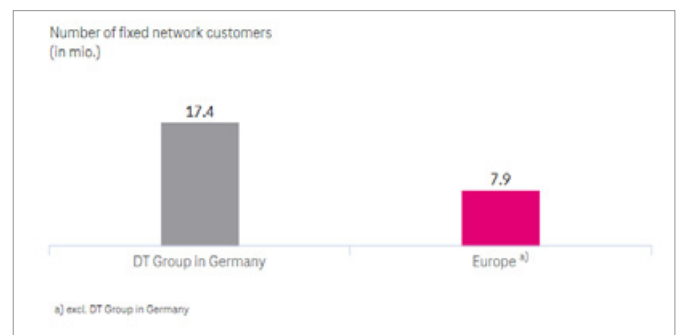
**Continuing expansion of the fiber-optic network**

Deutsche Telekom's fiber-optic network is the largest in Europe, with a length of over 690 000 kilometers in Germany alone (as of December 2022). As global data traffic continues to grow rapidly, we are continuing to expand our fiber-optic network. To do this as quickly and efficiently as possible, we use planning software and modern deployment methods such as trenching. Via our expansion tracker for Germany(only available in German), we provide clear reports on our progress.

To expand the fiber-optic network, we are using FTTC (fiber to the curb) technology with super vectoring and are expanding FTTH (fiber to the home) as well.

	DSL 16 000	FTTC mit Super-Vectoring	FTTH
Download	up to 16 Mbit/s	up to 250 Mbit/s	up to 1 000 Mbit/s
Upload	up to 2,4 Mbit/s	up to 40 Mbit/s	up to 500 Mbit/s

**Number of fixed network customers**



# Customer satisfaction

## **Our approach to top service quality in Germany**

We strive to offer our customers impeccable service. We work constantly to improve our service, with the aim of ensuring our customers enjoy a positive customer experience. Our approach in this regard is to devote more time to customers, answer their queries on the spot and with a smile, and be there when they need us.

## **Very active service in 2022**

In 2022 in Germany, we had a total of 30 000 employees providing service to our mobile and fixed-network customers, making a total of 90 million personal contacts in the process. Also in the year under review, callers to our service hotline had to wait less than two minutes on average to speak with a service representative. In the same year, the percentage of service technician appointments that failed to take place was considerably less than one percent. Our good service is paying off: Since 2017, we have been able to cut the number of customer complaints in Germany by a total of 80 percent.

## **Arranging appointments with Deutsche Telekom**

The online appointment booking tool (only available in German) is an easy way for customers to book their consultations and service appointments. They can decide themselves what format they prefer, either a consultation in a Telekom Shop, from the comfort of their own home, or an appointment with a service technician from Deutsche Telekom. Customers can also use the tool to arrange an appointment for queries which can be resolved via phone call or video chat.

Customers can see when to expect their service technician with a tap thanks to the "Mein Telekom Techniker" ("My Deutsche Telekom Service Technician") app. They receive a text message to remind them of their planned appointments beforehand. The text includes a link to near-real-time updates on the technician's probable arrival time. If customers experience a sudden change of plans, they can change scheduled appointments with just a few taps. And when a job is being performed, it is even possible to monitor the service technician's progress step by step. This can be helpful, for example, when excavation work is required.

## **Always available – even in a crisis**

We are always there for our customers – even in challenging times such as the COVID-19 pandemic. When the Telekom Shops had to close their doors during the lockdowns in 2021 and part of 2022, around 900 of our shop employees were on hand for our customers, working from home voluntarily. Our field service staff also continued to provide service calls to our customers throughout Germany, with infrastructure-sales and "Servicemobil" vehicles.

Our employees were also on the scene right away when the flooding disaster in the Ahr valley happened in July 2021. There were volunteers handing out free cell phones and power banks to those affected, for example. Customer service answered the inhabitants' questions on site and mobile service stations regularly offered fixed periods of availability for consultations.

We also reacted swiftly after Russia began its war of aggression against Ukraine in early 2022: on top of their day-to-day work, our sales and service employees helped out with initiatives such as distributing free SIM cards to refugees at the Telekom Shops and central points of contact – sometimes even outside of their working hours. They were on hand to respond to any questions or issues from refugees. Employees have joined forces to coordinate various relief measures and are continuing this work together.

## **Customer service for the region – and from the region**

We have established a total of 14 regional centers, known as "Regiocenters," in major cities nationwide, with the last opening in April 2022. These centers' service teams serve customers' needs throughout their regions, including customers in both urban and rural areas. Each such center offers a full range of service expertise and products, from back-office support and technical customer service to field service, stores, and equipment. Customer calls are automatically forwarded to the relevant Regiocenter, which will be able to directly handle all types of concerns – mobile network, fixed network, service disruption, or a field service request.

## **Promoting competence**

We continuously provide our service employees with training on products and services. They can learn about and try out the latest solutions in specially equipped rooms at our service centers. We have also intensified our personal coaching by team leaders in everyday work. Knowledge databases and digital tools are enabling our employees to address customers' concerns more and more quickly.

The high quality of our services has been independently verified by numerous successes in tests. For example, in 2022 the business magazine Focus-Money once again honored us as a "Service King." For its awards, Focus-Money conducted a survey of over 314 000 people, asking which companies they thought gave them the best service. Awards such as these show that we are on the right track.

## **Improving our contact and process quality**

We want to offer all customers the best-possible service experience. To meet that goal, several million responses from our customers are annually collected and analyzed by our quality man-

agement team. Customer satisfaction and resolving their request on first contact are our top priorities.

Our surveys are conducted either directly after a contact (for example, via the hotline, in a shop, on a field service call, or after an online inquiry by email or chat) or a completed process (for example, after service provisioning).

If a customer tells us in a survey that their request has not yet been resolved, a callback offer is made to clarify the request once and for all. The results of customer surveys are also used for internal training of our customer advisors.

### Measuring customer retention and endorsement

We use the TRI\*M index to gauge customer retention and regularly participate in benchmarking. The recorded data is based on a customer survey conducted in all markets and segments (except T-Mobile US). To measure the TRI\*M value, customers are asked four standardized questions – for example, whether they would recommend Deutsche Telekom to others; their answers are compiled in a key performance indicator. The TRI\*M value for the Deutsche Telekom Group is calculated as an overall value from the individual measurement results of the countries or segments.

At the end of the year under review, the indicator for the Group (excluding T-Mobile US) came in at 76.0 points versus an adjusted value of 72.6 points at the start of the year (both determined on a comparable basis). As a result, the index value improved, and we firmly achieved our Group aim of increasing it slightly. The Germany and T-Systems operating segments contributed to the very positive development in particular with significant improvements in customer loyalty. The EU segment also contributed to these results with a strong increase in customer loyalty.

At 71.7 points, the TRI\*M index for Germany is significantly higher than in the previous year (69.2). It is also considerably higher than the comparable figures for the competition when it comes to both consumers and business customers. We also experienced a slight improvement in our EU business segment, from 68.8 to 70.2, while the TRI\*M index for T-Systems actually increased to 96 from a baseline of 87 points. In sum, we once again firmly reached our overall goal of a slight increase for the Group as a whole. Thanks to the figures achieved at Telekom Deutschland and T-Systems in particular, we are in a leading position which we aim to maintain in 2023. Our aim for the EU segment is to achieve a slight improvement.

Customer satisfaction and loyalty scores are factored into both the long-term variable remuneration scheme for our board members and, to an extent, the performance assessments of our managers, meaning some of their variable salary components are linked to these ratings.



# Consumer protection

## Our approach to consumer protection

Consumer protection is a multi-faceted topic at Deutsche Telekom. A core element is keeping our customers' data safe and secure. Data protection and data security are therefore top priorities for us.

Children and young people, in particular, need to be shielded from dangers online. That's why protecting children and young people also plays a big part in what we do. We take youth protection aspects into consideration in our product and service design. When we develop services that are relevant in terms of youth protection in Germany, we consult our youth protection officer for suggestions of restrictions or changes. We have appointed a child safety officer (CSO) at each of our national companies within the EU who is responsible for issues pertaining to the protection of minors. The CSO acts as a central contact for stakeholders from the community in the respective country and plays a key internal role in coordinating issues related to youth protection. We thereby strengthen Deutsche Telekom's lasting and transparent commitment to protecting minors.

In addition, we strive to ensure that our networks and mobile devices are safe to use. We study the latest scientific research on mobile communications and health, and we provide our customers with transparent updates in this regard.

## Our approach to protection of minors in the media

We want to protect children and young people when using digital media. We pursue a three-pillar strategy to do this:

- We provide attractive, age-appropriate offers for children. We give parents and legal guardians the information they need in order to be able to protect their children against inappropriate content.
- We participate in combating child abuse and its depiction to the extent that this is permitted within the European and national legal frameworks.
- We implement various measures to ensure that young people acquire media skills and can interact safely with online content.

We also collaborate closely with prosecuting authorities and NGOs as well as other partners from business, politics, and society to ban online content that is harmful to children and young people. We have anchored our commitment to protecting minors from unsuitable media content in Germany in relevant codes and introduced minimum standards. In 2007, we committed ourselves to fighting

child pornography on the internet throughout the European Union. GSMA (an association representing the interests of mobile operators worldwide), of which we have been a member since 2008, pursues the same objectives at a global level.

To better coordinate our activities within the Group, we have been following binding general guidelines since 2013 for our activities to help protect minors against inappropriate media content, and thereby setting standards in our markets in the process. In consideration of their particular cultural situation and business model, each international subsidiary in the European Union can further specify these measures and adopt additional measures to determine their own strategic focal points.

## Cooperation with organizations for the protection of minors

Protecting minors from unsuitable media content poses a challenge that affects many industries. We therefore work together with different organizations for the protection of minors and participate in coalitions that coordinate the involvement of companies and organizations from the internet and media sector.

- For example, we are a member of the "Alliance to better protect minors online," which has set out to make the internet a safer place for kids.
- We have also taken a leading role in the "ICT Coalition for Children Online." In this coalition, we pursue a comprehensive and cross-industry approach based on six principles that expressly includes helping young people learn media skills.

Since 2013, in the framework of the two cooperative efforts, we have been implementing an EU-wide package of measures based on the principles of the ICT Coalition. We provide transparent and regular information on its implementation. Most recently, we provided such information in 2021, in our ICT Coalition report. The ICT Coalition had first published an annual report in 2014 on the implementation of corresponding measures at all of the companies represented in the ICT Coalition. This report was written by an independent expert from the Dublin Institute of Technology, and comes to the conclusion that Deutsche Telekom's approach to implementing the ICT Coalition's principles is exemplary.

## Online "Safer Internet for Kids" campaign

The internet is part of our daily life – for children too. To make sure they are safe online, children need to be aware of what to avoid. As part of the educational project "Online, being informed is being protected," we started an online campaign for social media in early 2022. As part of the "Safer Internet for Kids" campaign, Telekom



Romania explained the dangers of the internet, making parents and children more aware of the risks. We set up a survey on LinkedIn and Facebook and published six video tutorials. Each video included relevant information and useful tips from an expert – including on the topics of cyber bullying, online safety, and how to spend less time online. The campaign reached over 1 million users on both platforms.

**Reporting against standards  
Sustainability Accounting Standards Board (SASB)**

- Code TC-TL-220a.1 (Data privacy)

**Our approach to safe mobile communication**

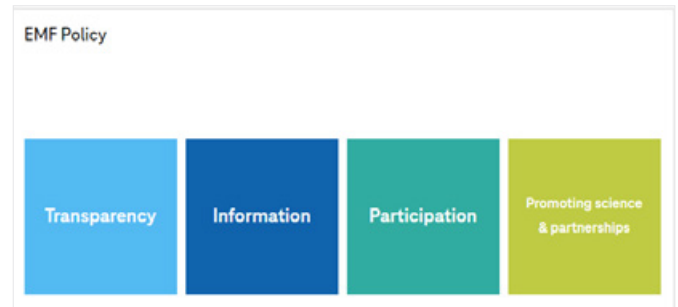
We want to make our mobile communications infrastructure and our products, as well as the processes on which they are based, as resource-efficient, secure, and safe for health as possible. In Germany these activities are based in particular on voluntary commitments by mobile network operators and a mobile communications agreement with local authorities' associations. External experts review compliance with these voluntary commitments every two years. In 2022, the mobile network operators presented the latest mobile communications expert report (for 2020 and 2021) to the German government, which was coordinated and published by the Deutsches Institut für Urbanistik (German Institute for Urban Studies). According to the report, the mobile communications expansion is progressing smoothly for the most part, with the few controversial issues down to isolated incidents. The report surveyed over 1 700 municipalities throughout Germany, with 90 percent of them reporting they had few or no controversial cases to decide.

In June 2020, working in cooperation with the leading municipal associations and other German network operators, we revised and updated the existing agreement on information exchange in connection with the expansion of mobile networks that had been in place since 2001. Its goal is to ensure that municipalities are involved in establishing the 5G networks and in a swift and conflict-free expansion of the network infrastructure. In addition, the four network operators added a regulation for the expansion of small cells to the 2020 agreement with the municipal associations. Network operators had already agreed to this in February 2020 in their voluntary commitment on the issue of small cells to the German government.

**Policy on Electromagnetic Fields**

The policy on electromagnetic fields (EMF) in force throughout the Group since 2004 plays a primary role: Our EMF Policy contains uniform minimum requirements for mobile communications and health that go far beyond the national legal requirements. Our policy provides our national companies with a mandatory framework that makes sure that the topic of mobile communications and health is addressed in a consistent, responsible way throughout the Group. All of our national companies have officially accepted the EMF Policy and implemented most of the required measures.

Our EMF Policy stipulates the following principles and measures:



**Transparency**

We place importance on openly discussing issues involved in mobile communications. We make all relevant information regarding our mobile communications equipment in Germany accessible to the public, e.g., on the EMF database operated by the German Federal Network Agency.

**Information**

We provide consumer information that is easy to understand and pursue a fact-based, sound information policy. On our Group website we provide the latest information to those interested. We also provide our customers with information online on the SAR levels of their mobile devices. Additional details are also available in the shops and through our free environmental hotline.

**Participation**

We rely on close collaboration and constructive dialog with all those involved, including municipalities, when it comes to network expansion. Our goal is to find amicable solutions and negotiate acceptable compromises, which can only be achieved by responding fairly to critical arguments and being ready to learn from mistakes.

**Promoting science & partnerships**

Our guidelines call for promoting targeted research, scientific excellence, transparency, objectivity, and intelligibility.

We conduct ongoing reviews of compliance with our EMF Policy. Our international working group, the "EMF Core Team", uses the findings to improve individual aspects a to jointly develop solutions.

### Mobile communications and health (EMF)

Electromagnetic fields (EMFs) are a prevalent part of our connected world, even if we are not able to perceive them directly. Their effects on our health remain a topic of discussion. Deutsche Telekom, like all providers, must ensure that the statutory threshold values are observed in mobile communications. In Germany, the threshold values are set by the Federal Government and are based on the recommendations of the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

The effects of EMFs have been thoroughly researched over the past decades in numerous scientific studies. The World Health Organization (WHO) analyzes the findings of scientific research and most recently made a statement regarding the results in 2014. In its statement, it concludes that the current threshold values for EMFs ensure that mobile communications technology can be used safely and that research should accompany further development of the technology. In 2020, after evaluating the latest scientific research, the ICNIRP once again confirmed the protection concept for EMFs, as they are used in mobile communications. According to ICNIRP, the threshold values ensure comprehensive protection for people and the environment. This also applies to frequency ranges used by 5G, because, like earlier network types, 5G requires high safety standards. Safe operation of mobile communications technology in Germany is therefore ensured.

Since 2020 the Informationszentrum Mobilfunk (Mobile Communications Information Center) together with the local authorities' associations have published three information brochures on the issue of mobile communications (only available in German). The content is geared primarily to municipalities and local decision-makers. In the year under review, the range of information (only available in German) was supplemented by videos, articles, and podcasts on socially relevant 5G applications, along with explanatory videos on the mobile communications expansion. Informationszentrum Mobilfunk also supported the communications initiative from the German government "Deutschland spricht über 5G (Germany talks about 5G)" – with work such as the implementation of citizen dialog initiatives.

In cooperation with the three other 5G licensees in Germany, Telefónica Germany, Vodafone, and 1&1 Mobilfunk, we support Informationszentrum Mobilfunk. The portal provides objective, scientifically sound information about basic issues relating to mobile communications, including controversial issues, in the areas of health and safety, technology and network expansions, the environment and sustainability, and politics and legal questions.

Further information on this subject can be found under CR facts.

# Data protection and data security

## Our approach to data privacy

The highest standards of data privacy and data security are part of our brand identity. Our active data privacy and compliance culture, which has been built up over many years, sets national and international standards.

The company's Human Resources and Legal Affairs Board department, headed by Board of Management member Birgit Bohle, has responsibility for the area of data privacy. The Technology and Innovation Board department, headed by Board of Management member Claudia Nemat, is responsible for the area of data security.

Since 2009, the Group Board of Management has been advised by an independent Data Privacy Advisory Board comprising reputable experts from politics, science, business, and independent organizations. At the beginning of 2020, the Advisory Board took on a bigger role through the addition of new members from the Board of Management and the Supervisory Board of Deutsche Telekom AG.

## Ensuring effective data privacy

### ■ Global data privacy organization

With the help of our globally operating data privacy organization, we work constantly to maintain transparent, high data privacy standards in all of our companies. To achieve this, Deutsche Telekom's data privacy must be highly organized on both a national and international level.

### ■ Policies on data privacy and information security

To the extent legally possible, our Group companies conform to our Binding Corporate Rules Privacy (BCRP), which define common, high data privacy standards for our products and services. The Group Security Policy includes significant information security and data privacy-related principles followed within the Group, which are based on the international ISO 27001 and ISO 27701 standards. The Policy ensures that adequate, consistent security standards are maintained throughout our entire Group.

### ■ Consistent transparency vis-a-vis the public

At [www.telekom.com/data-protection](http://www.telekom.com/data-protection), we provide comprehensive information about our data privacy activities. We have also published an annual transparency report since 2014. Moreover, in the Consumer protection section of this CR report we explain how we make our products and services safe for users.

### ■ Information on data handling

We provide transparent information regarding which personal data is processed and for what purposes, as well as the length of time it will be stored. As a rule, personal data is not forwarded to third parties. We sometimes use anonymized data for analyses, so we can continually improve the quality of our offering. These analyses help us spot certain trends better, for example, showing us where to improve network coverage.

### ■ Regular employee training courses

Telecommunications companies are obliged to provide new employees, at the beginning of their employment relationships, with information on data privacy regulations. We go above and beyond these legal requirements. Every two years, we provide training in this area to all Group employees and place them under an obligation to uphold data privacy and telecommunications secrecy. We have also introduced specific training in the customer and human resources departments. This training includes online courses for independent learning, presentations on data privacy and face-to-face courses on specific topics such as data protection at call centers. This helps us ensure that all employees have in-depth understanding of the relevant data privacy policies.

### ■ Regular review and adaptation of measures

We carry out a Group data privacy audit every two years, to measure and improve the general data privacy standards throughout the Group. For each such audit, we conduct an online survey of a total of 15 percent of our Group employees, chosen at random. The Group data privacy audit is supplemented by internal and external on-site checks. Group Privacy assesses the results and checks whether action needs to be taken in the respective units. Where necessary, the Global Data Privacy Officer calls for improvement measures and, to this end, holds personal meetings with the responsible directors, managers, and data privacy officers at the different departments. Group Privacy offers advice on the implementation of the measures and determines whether they are effective. We take any unusual audit results into consideration when planning the follow-up audit.

### ■ Certifications

We have the security of our processes, management systems, products, and services certified by external, independent organizations such as TÜV, DEKRA, and various auditing firms.

### How we handle “big data” and “artificial intelligence”

When we process very large volumes of data, we need to take special measures to protect data subjects' privacy. To this end, we apply mandatory principles for handling big data – a total of eight principles that have been in place with us since 2013. In addition, we apply a “Ten-point program for better online security” that defines specific measures to protect data and the network infrastructure. We introduced the program in 2015. In this framework, we have developed a number of special protection products – including the “Protect Mobile App,” which looks for any risks in the mobile network one's smartphone is currently connected to. Furthermore, we have published a guideline for designing artificial intelligence (AI) systems in compliance with data privacy requirements.

### Review of our products

Data privacy and security begin playing an important role in connection with our products and services right from the start of the products' and services' development. Our Privacy and Security Assessment (PSA) procedure allows us to review the security of our systems in each step of the development process. This procedure applies to newly developed systems as well as to existing systems that undergo changes in technology or in the way data is processed. We use a standardized procedure to document the data privacy and data security status of our products throughout their entire life cycle.

### Reporting against standards

#### Sustainability Accounting Standards Board (SASB)

- Code TC-TL-220a.1 (Data Privacy)
- Code TC-TL-230a.2 (Data Security)

### Transparency report

Telecommunications companies are legally obliged to support security authorities in their efforts to uphold security. Companies' obligations in this regard include permitting surveillance/monitoring measures, and providing certain data, when they are ordered to do so by authorities.

Internationally, the legal framework in this area differs widely from country to country. In some countries, we are legally prohibited from providing any information about security measures, while in others authorities may directly conduct surveillance without any participation on the part of telecommunications companies. The support we provide for authorities in this area is always provided solely on the basis of an unambiguous, legally binding legal foundation in the relevant country. Details on the different situations in the relevant countries are available on our website.

We place great priority on transparency in this area. Since 2014, we have published an annual transparency report for Germany; since 2016, we have also published an international transparency report. In these reports, we reveal – to the extent legally permitted – the nature and extent of any information we had to disclose to security authorities.

### Reporting against standards

#### Sustainability Accounting Standards Board (SASB)

- Code TC-TL-220a.2 (Data Privacy)
- Code TC-TL-220a.4 (Data Privacy)

### Cybersecurity

Deutsche Telekom Security GmbH is among the world's largest digital-security providers. This company, the market leader in Germany, Austria and Switzerland, marshals the cybersecurity expertise available throughout the entire Deutsche Telekom Group. For many years now, it has been successfully protecting our own infrastructure – and offering our customers the same security solutions that protect the Deutsche Telekom Group worldwide. Also, Deutsche Telekom Security is working to continually improve cooperation in the area of protection against digital threats. To this end, it works with many different organizations and associations, often as an active member, in Germany and at the EU level. The organizations it collaborates with include the German Federal Office for Information Security (BSI), Germany's Bundeskriminalamt (federal criminal police office, BKA) and the European Union Agency for Cybersecurity (ENISA).

In addition, the company collaborates with research institutes, industry partners, initiatives, standardization bodies, public institutions, and other internet and telecommunications service providers worldwide. Together, we want to fight cybercrime and improve online security.

We also provide up-to-date information about all of our security and data protection activities on our Group website.

### Reporting against standards

#### Sustainability Accounting Standards Board (SASB)

- Code TC-TL-230a.2 (Data Security)

### Our cybersecurity infrastructure

#### Cyber Emergency Response Team

We are always working to develop new ways to defend against attacks. We launched a Cyber Emergency Response Team (CERT) in the mid-1990s, which is responsible internationally for managing security incidents for our information and network technologies. Since then, we have continued to expand our activities in relation to cyberdefense, and promote more information and information sharing. Since 2020, our CERT has been officially certified according to the SIM3 standard (Security Incident Management Maturity Model). It is now one of only three German CSIRT (Computer Security Incident Response Team) / CERT organizations that comply with this standard.

### Cyber Defense Centers

At our Cyber Defense and Security Operations Centers (SOCs), we monitor the security situation 24/7, 365 days of the year, for ourselves and our customers. With the aid of artificial intelligence (AI), the SOCs analyze about a billion security-relevant data items, from some 3 000 data sources, every day. Our security specialists detect attacks in real time, and immediately initiate the steps necessary to neutralize them or even ward them off completely.

In 2022, we registered peaks of up to 111.2 million attacks per day against Deutsche Telekom's "honeypot" systems – systems intentionally designed to lure attackers. In addition, we actively combat botnets (interconnected computers infected with malware) in the Deutsche Telekom AG network. We are the only internet provider in Europe that safeguards its network in this way. This is how we protect our infrastructure, and hence also our customers' data.

#### **Threat Intelligence Team**

When we register an attack, our Threat Intelligence team studies it to determine precisely how it has been perpetrated. To such ends, our Threat Intelligence team consults with, and shares findings with, researchers throughout the world. In this way, our team always stays abreast of the latest scientific findings – and well informed about the threats and perpetrators it faces. Even if we cannot always stay a step ahead of cybercriminals, we always try to ensure they are well aware of our presence.

In the same way, we also provide other companies with our measures to fight cyberattacks: More than 30 German DAX companies and SMEs employ our services for their own protection.

#### **Protection of personal data**

Protecting our customers' data is one of our top priorities. On our Group website, under "Data protection and data security," we provide regular – daily, in some cases – information about our commitment in this area.

Although we take a wide range of preventive measures, we cannot completely prevent data breaches. In 2022, we recorded a total of 165 data breaches in Germany. We investigated 102 of these breaches as a result of customer complaints, and four as a result of complaints of supervisory authorities. All in all, some 1 214 customers were affected by the data breaches. In none of the cases did the breach amount to a critical violation.

We participate in various projects aimed at continually improving data privacy and data security. The following are just a few examples of our recent activities during the reporting period.

In 2020, we joined with the software company SAP to develop our contact tracing app, the Corona-Warn-App. It informs users in Germany and several other countries about possible contact with people infected with the coronavirus. Even before development of the app began, the underlying data protection and security concept for it was discussed intensively. To ensure a maximum level of protection for personal data, the German government decided that storage of such data should be decentralized. This means that personal data remain on the user's own cell phone – they are not stored centrally in the system. This concept has paid off: In Germany alone, the app has been installed as often as all other similar apps, combined, have been installed in other European countries. It is considered one of the most successful tracing apps used during the pandemic worldwide.

#### **International cooperation for cybersecurity**

We have been a member of the "Cyber Security Sharing & Analytics" (CSSA) association since 2014. The association provides a technical and organizational framework via which members'

experts can share sensitive information securely – and thereby interact with and support each other.

#### **Knocking out botnets**

An international comparison shows that Deutsche Telekom AG is a leader, among network operators in Europe, in the area of detection and suppression of botnets. Botnets are illicit networks of hijacked devices, created for various criminal purposes. The bigger a botnet is, the greater its cyberattack impacts can be. To keep hackers from controlling hijacked devices within a botnet, Deutsche Telekom Security GmbH experts analyze the botnet's structures and suppress communications with its controlling servers. Botnets have frequently hijacked devices of our customers. In over 475 000 instances in 2022, we informed customers of botnet problems and helped them remove bots from their devices.

#### **Uncovering stolen identities**

Our "fraud scouts" (experts from the Deutsche Telekom security team) use a special application to search the world wide web and the dark web for identities stolen from our customers. When they find such identities, we warn the relevant customers and help them address the problem. If necessary, we block affected accounts. We also inform our customers in connection with other types of security incidents, such as "smishing" (sending of fraudulent text messages (SMS)), malware infections of mobile devices and spamming. In 2022, we provided such warnings about 670 000 times. When our customers require assistance, they are welcome to contact our specially trained customer advisers.

#### **Smart can also be safe and transparent**

We not only want to comply with legal guidelines, we also want to actively ensure that our customers' data is protected. To do so, we continue to enhance technical standards, and promote maximum transparency.

For example, with our "VoicelD" ("SprachID") service, we do not save a customer's voice file. Instead, we save a mathematical pattern that is calculated from characteristics in the voice. The original voice – and the customer behind it – cannot be identified via such a pattern.

#### **Strengthening trust in the cloud**

Since September 2021, T-Systems has been a member of the "EU Cloud Code of Conduct General Assembly" of SCOPE Europe, an association for the development of a common regulatory framework for the digital economy. With this membership, we express our commitment to the "EU Cloud Code of Conduct," the first cloud-services standard to be accepted by European data protection authorities. T-Systems now structures all of its cloud services accordingly.

For information about other projects, please refer to our CR facts.

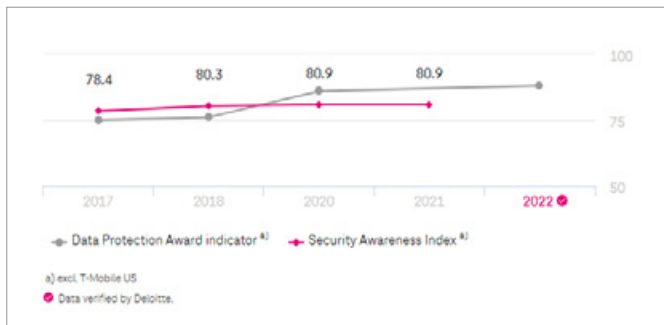
#### **Reporting against standards**

##### **Sustainability Accounting Standards Board (SASB)**

- TC-TL-550a.2 (Managing Systemic Risks from Technology Disruptions)

### IT security & data protection

A random sample of 50 000 Telekom employees are surveyed on the topics of data protection and IT security every two years. The findings of the survey are used, for example, to determine the Security Awareness Index (SAI) and the Data Protection Award indicator. The indicators help us to review the effectiveness of our measures in the areas of IT security and data protection. The data protection award indicator was last measured in 2022 and stood at 88 percent (without T-Mobile US). In the last survey in 2021, security awareness reached 80.9 (without T-Mobile US) of maximum 100 points (which is higher than for all other companies in the benchmark).



The Data Protection Award indicator measures the level of data protection within the units on a scale of 0 to 12. It is calculated based on what the employees said they thought, did and knew about data protection.

The Security Awareness Index measures our employees' perception of IT security at Deutsche Telekom. The assessment is based on Deutsche Telekom employee answers on management awareness of the topic, the security culture, the influence of security requirements on their own work, and their personal responsibility for and attitudes towards IT security. The index includes a scale from 0 to 100 – the higher the value, the higher IT security is rated at Deutsche Telekom.

### Reporting against standards

#### Global Compact

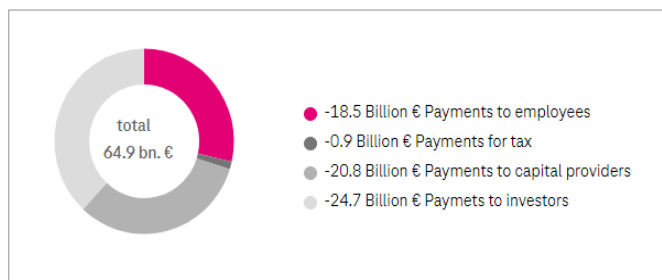
- Principle 1 (Support and respect for internationally proclaimed human rights)



# Financial performance indicators

## Net value added

The increase in net value added from 61.5 billion euros to 64.9 billion euros is mainly due to significantly higher investments in intangible assets (especially spectrum licenses) and our high investments in network roll-out in 2022. In addition, significantly higher repayments to providers of capital had an impact in 2021 compared with the prior year. Payments to employees increased primarily due to the translation of U.S. dollars into euros in the operating segment USA. This was offset by a reduction in the number of employees in Germany and the sale of T-Mobile Netherland in the operating segment Group Development.



In contrast to the statement of income, the net value added only takes account of real payment flows. That means that deferred tax expenses and the accrual of provisions do not impact the net value added of the reporting period. Although these costs are deducted from net profit in the statement of income, they are not linked to any current payments to stakeholder groups, as is the case with net value added. Outpayments in this respect are scheduled for the future and will only be accounted for in net value added in future years.

## Net revenue, EBITDA and net profit

A detailed clarification of our financial KPIs is available at [www.telekom.com/investorrelations](http://www.telekom.com/investorrelations).

in bn. €	2019	2020	2021	2022	
Net revenue <sup>A, B)</sup>	80.5	99.9	107.6	114.2	
EBITDA AL (adjusted for special factors) <sup>A, C)</sup>	24.7	35.0	37.3	40.2	
EBITDA AL margin (adjusted for special factors) <sup>A, C)</sup>	in%	30.7	35.0	34.6	35.1
Net profit (loss) <sup>A, D)</sup>		3.9	4.2	4.2	8.0

<sup>A)</sup> Since the third quarter of 2022, the GD Towers business entity, which operates the cell tower business in Germany and Austria, assigned to the Group Development operating segment, has been recognized in the consolidated financial statements as a discontinued operation. However, in the combined management report we continue to include the contributions by GD Towers in the results of operations according to the management approach. For information on the agreement with DigitalBridge and Brookfield on GD Towers, please refer to the annual report section "Group organization" in the combined management report and to the section "Summary of accounting policies" in the consolidated financial statements.

<sup>B)</sup> The prior-year comparatives up to and including 2020 were adjusted retrospectively to take account of changes to the principal/agent policy regarding the recognition of gross and net revenues as of the third quarter of 2022. For further information, please refer to the annual report section "Development of business in the Group" in the combined management report and the section "Summary of accounting policies" in the consolidated financial statements.

<sup>C)</sup> Comparatives for 2018 were calculated on a pro forma basis for the key performance indicators redefined as of January 1, 2019 following the introduction of the IFRS 16 accounting standard.

<sup>D)</sup> As a result of the agreement concluded on July 13, 2022, since the third quarter of 2022, the GD tower companies have been recognized in the consolidated financial statements as a discontinued operation. The prior-year comparatives up to and including 2020 were adjusted retrospectively. For further information, please refer to the annual report section "Summary of accounting policies" in the consolidated financial statements.

## Revenue development

In 2022 Deutsche Telekom generated Group revenue of 114.4 billion euros. With growth of 5.6 billion euros, it rose by around 5.1 percent compared with the previous year's level. The international share of Group revenue increased by 1.1 percentage points to 77.4 percent.

in bn. €	2020	2021	2022	Change on 2021 (in bn/pp)
Net revenue Germany <sup>A)</sup>	25.2	25.8	26	0.8%
Net revenue international <sup>A)</sup>	75.8	83.0	88.5	6.6%
Net revenue Group (total)	10.01	108.8	114.4	5.1%
International revenue as a percentage of Group revenue	75.0%	76.3%	77.4%	1.06 pp

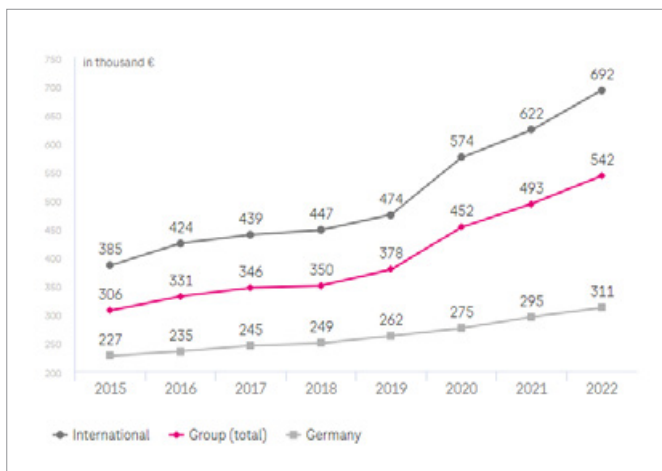
<sup>A)</sup> Since revenue allocation to determine ratios is from an HR perspective, it reflects the location of employees (FTE); see annual report section "Workforce statistics". In the annual report revenue is allocated to the country where it is generated.



# Financial personnel indicators

## Revenue per employee

In the year 2022, revenues per employee increased to EUR 542 000 groupwide – this represents an increase of about 10 percent. In Germany, the revenues per employee has increased by 5.5 percent. Outside Germany, revenues per employee increased by about 11 percent.



## Personnel costs and personnel cost ratio

in bn. €	2015	2016	2017	2018	2019	2020	2021	2022
Personnel costs in the Group	15.8	16.5	15.5	16.4	16.7	18.9	18.5	19.4
of which: Germany	9.4	9.8	8.5	9.2	8.7	8.8	8.5	8.4
Special factors	1.2	1.5	0.6	1.2	1.0	1.8	0.9	1.4
Personnel costs in the Group adjusted for special factors	14.6	14.8	14.9	15.2	15.7	17.0	17.6	18.1
Net revenue <sup>1)</sup>	69.2	73.1	74.9	75.7	80.5	101.0	108.8	114.4
of which: Germany	25.7	25.3	25.2	25.0	25.2	25.2	25.8	26.0
Adjusted personnel cost ratio Group (total, in %)	21.2	20.3	19.9	20.1	19.5	16.8	16.1	15.8
Adjusted personnel cost ratio Germany (in %)	33.0	32.9	32.1	33.0	31.6	30.7	29.9	32.3

<sup>1)</sup> As revenue allocation is separated into Germany/international from an HR perspective, this reflects employee location, unlike the financial report, which allocates revenue to the country where it was generated.

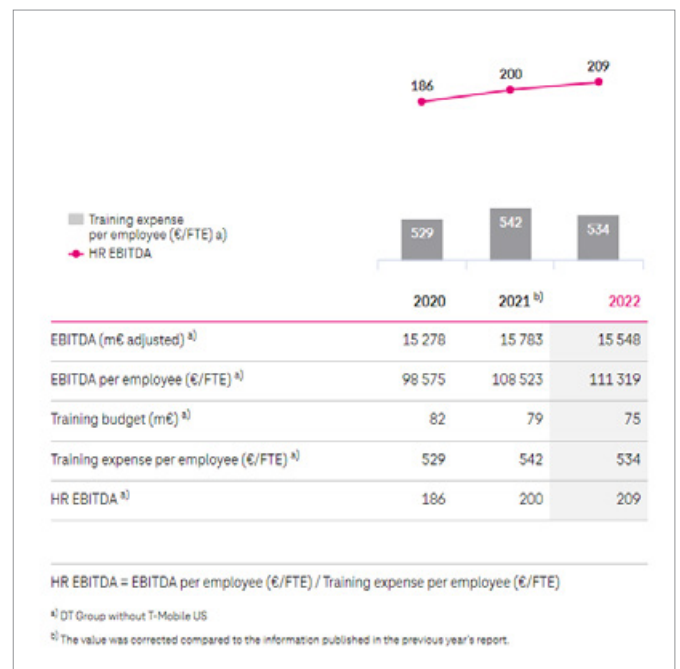
By personnel costs we mean basic personnel costs (salaries) and incidental personnel expenses. The indicator is adjusted for special factors in conjunction with personnel restructuring measures (individual downsizing instruments). The personnel cost ratio represents personnel costs as a proportion of revenue. The development of this rate serves as a benchmark for company business. In the Group, the personnel expense ratio fell once again this year. Following a record low last year, the ratio last year, the ratio fell again this year by 0.3 percentage points to 15.8 percent.

The significant increase in Group sales is only one reason, alongside the proportionally lower rise in personnel expenses.

The disadvantage of the personnel cost ratio is that it ignores external personnel costs. Therefore the total workforce costs ratio is more meaningful for the management of personnel costs at Deutsche Telekom.

## HR EBITDA (Ratio)

The „HR EBITDA“ of Deutsche Telekom Group (without T-Mobile US) puts into ratio the calculated earnings per employee with the investments in training per employee.



## Reporting against standards

### German Sustainability Code

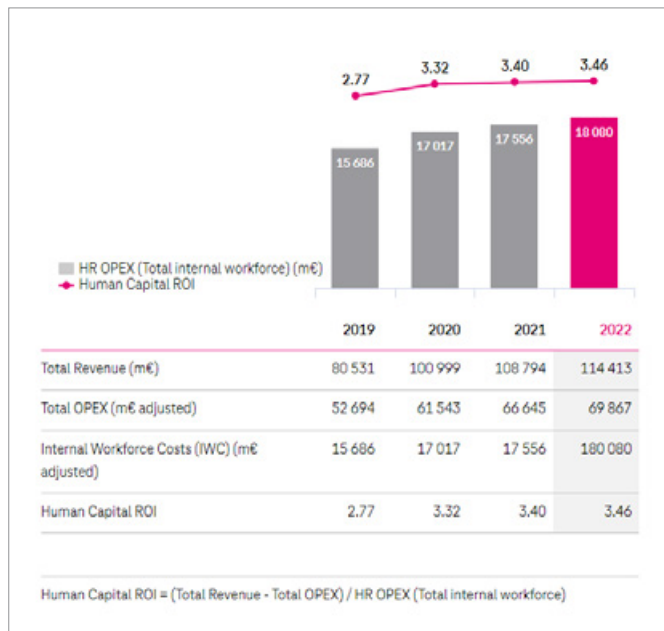
- Criterion 16 (Qualifications)

### European Federation of Financial Analysts Societies (EFFAS)

- S02-02 (Average expenses on training per FTE p.a)

### Human Capital ROI

The “Human Capital Return on Invest (ROI)” illustrates the company’s return on investment in human capital by building a ratio between revenue, OPEX and the costs of our internal workforce (IWC).



### Reporting against standards

#### German Sustainability Code

- Criterion 16 (Qualifications)

#### European Federation of Financial Analysts Societies (EFFAS)

- S02-02 (Average expenses on training per FTE p.a)

### Total Workforce Costs

In bn. €	2017	2018	2019 <sup>1)</sup>	2020	2021	2022
TWC <sup>a)</sup>	16.9	17.1	17.5	19.1	19.6	20.3
of which: Germany	8.9	9.0	8.7	8.3	8.3	8.3
IWC <sup>b)</sup> (PC <sup>c)</sup> adjusted	8.1	8.1	7.9	7.7	7.7	7.6
EWC <sup>d)</sup> Leased and temporary workers	0.04	0.05	0.04	0.03	0.02	0.03
EWC <sup>d)</sup> Freelancers and consultants	0.8	0.8	0.75	0.5	0.6	0.7
of which: international	7.9	8.0	8.8	10.7	11.3	12.1
IWC <sup>b)</sup> (PC <sup>c)</sup> adjusted	6.8	7.1	7.7	9.3	9.9	10.5
EWC <sup>d)</sup> Leased and temporary workers	0.2	0.2	0.2	0.2	0.2	0.2
EWC <sup>d)</sup> Freelancers and consultants	0.8	0.8	0.9	1.2	1.3	1.4

<sup>a)</sup> Total workforce cost: external workforce cost + personnel cost adjusted for special factors  
<sup>b)</sup> Internal workforce cost  
<sup>c)</sup> Personnel cost  
<sup>d)</sup> External workforce cost: cost of leased and temporary workers + cost of freelancers and consultants  
<sup>1)</sup> The value for 2019 has been corrected compared to the previous year's published value.

### Total Workforce Ratio

Total workforce management allows HR to be managed in a holistic manner, enabling qualitative and quantitative personnel planning over the long term. The total workforce ratio describes the relationship between all personnel expenditure and revenue. This means: if the ratio has fallen in comparison with the previous year, either revenue has remained constant while total workforce costs have gone down, or revenue has increased with stable Total Workforce Cost.

Deutsche Telekom's total workforce quota improved again in 2022. The adjusted ratio for the Group as a whole dropped by 0.3 percentage points in 2021 compared with the previous year. While total revenue was up 5.1 percent (5.6 billion euros) in 2022, total workforce costs only increased by around 3.6 percent year-on-year.

In bn. €	PA <sup>a)</sup> adjusted 2022	EWC <sup>b)</sup> 2022	TWC <sup>c)</sup> 2022	Revenue <sup>d)</sup> 2022	TWQ <sup>e)</sup> adjusted 2019	TWQ <sup>e)</sup> adjusted 2020	TWQ <sup>e)</sup> adjusted 2021	TWQ <sup>e)</sup> adjusted 2022
Germany	7.6	0.7	8.3	26.0	34.8%	33.1%	32.2%	31.9%
International	10.5	1.6	12.1	88.5	15.8%	14.2%	13.7%	13.7%
Group (total)	18.1	2.3	20.3	114.4	21.7%	18.9%	18.1%	17.8%

<sup>a)</sup> Personnel cost  
<sup>b)</sup> External workforce cost: cost of leased and temporary staff + cost of freelancers and consultants  
<sup>c)</sup> Total workforce cost: external workforce cost + personnel cost adjusted for special factors  
<sup>d)</sup> As revenue allocation is separated into Germany/international from an HR perspective, this reflects employee location, unlike the financial report, which allocates revenue to the country where it was generated.  
<sup>e)</sup> Total workforce quote = TWC/revenue

# Climate protection & risks

## Climate strategy

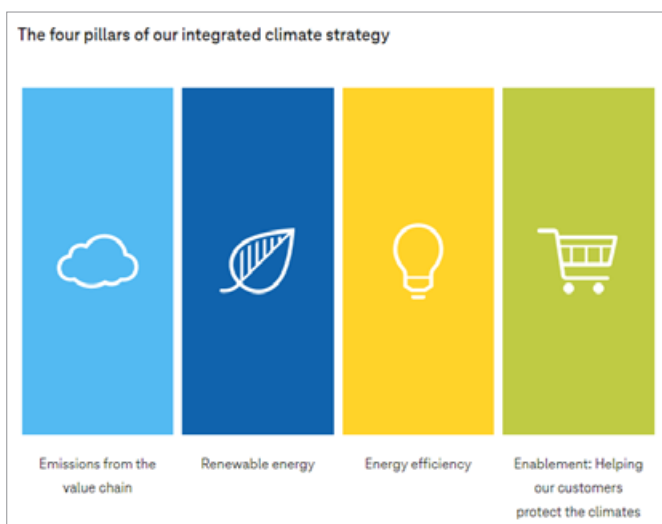
We see ourselves as a responsible company and have made that a core element of our Group strategy. Our Corporate Responsibility strategy, which is derived from this, has been further refined in the period under review, with four particular focal points identified where we aim to lead the way:

1. Our strict commitment to climate-neutral business practices
2. Our determined efforts to ensure our products and services are compatible with the principle of circularity
3. Our pursuit of diversity, equity and inclusion in our teams and our investment into future skills
4. Our determination to help shape a digital society that is based on our fundamental democratic values and in which all people can participate safely, competently, and with autonomy

More information about our focal points is available in the relevant section of the strategy chapter.

To support the climate strategy and achieve the ambitious Group targets, the national companies have developed and implemented their own climate protection strategies, concepts and measures. These can be viewed in the relevant profiles.

Our integrated climate strategy is based on four pillars: Emissions from the value chain; renewable energy; energy efficiency; and enablement (positive climate protection effects for our customers). We have defined objectives and/or key performance indicators for each of the four pillars.



## Emissions from the value chain

We record all direct and indirect emissions using the globally recognized Greenhouse Gas (GHG) Protocol. As of 2021, all of the electricity we use comes from renewable energy. This has enabled us to reduce the emissions generated to zero (see "Renewable energy"). Additionally, we are modernizing our network to make it twice as energy efficient (see "Energy efficiency"). We are also taking measures to reduce emissions tied to the use of gas or oil. For example, we are transitioning to e-mobility and are carrying out facility-space consolidations. This has enabled us to significantly reduce emissions and contribute to our goal of climate neutrality by 2025 for Scope 1 and 2 emissions.

Indirect emissions from the upstream and downstream value chain (Scope 3 emissions) pose the greatest challenge. Our goal is to become entirely climate neutral by 2040 at the latest. We consult closely with our suppliers in order to reduce the emissions generated during production, and to have products manufactured that are energy-efficient in their utilization phases.

## Renewable energy

Since 2021, we have been drawing all of our electricity from renewable sources, having converted the entire Deutsche Telekom network, throughout the spectrum from mobile communications to high-speed DSL, to use renewables-only power. We are scaling up our in-house generation activities and concluding power purchase agreements (PPAs) with a view to reducing our reliance on the electricity grid. A PPA is a long-term electricity supply contract. For us, this additionally means that the electricity supplied always comes from renewable sources. We aim to meet 50 percent of our energy needs through PPAs by 2025. In Germany, PPAs already account for over 10 percent of the power we use. As of the end of 2022, 27.7 percent of the power used throughout the Group was obtained via PPAs. In 2020, we published a guide for the Deutsche Telekom Group, the purpose of which is to support our national companies in choosing the ideal solution for their individual needs by providing information on the various options they have available for the purchase of green electricity.

## Energy efficiency

The rapid growth in data traffic and the resultant need for network expansion must not also lead to a corresponding rise in energy consumption. This is why we have committed to doubling our energy efficiency in Germany and Europe by 2024, relative to 2020 levels. This will involve producing more data while using a similar or far lower volume of energy. Two key means of reducing our energy consumption are network modernization and the phasing-out of old technologies.

One example of this has seen us migrate our entire network infrastructure to IP technology. In addition, we are working to concentrate data traffic on a small number of data centers that are especially efficient. The PUE metric serves as one indicator for energy-efficiency enhancements in our data centers. We determine this metric using the method recommended by the EN50600 standard for data centers. In order to measure our progress, we also use the key performance indicators (KPIs) “Energy Intensity” and “Carbon Intensity”.

#### **Enablement: Helping our customers protect the climates**

Many of our products and services provide sustainability advantages. They can help reduce energy consumption and carbon emissions, improve healthcare and make logistics more efficient. In addition to our own carbon footprint, we also calculate the positive carbon effects facilitated for our customers through using our products and solutions. We assess both variables in relation to the Enablement Factor ESG KPI. This helps us evaluate our overall performance in relation to climate protection.

By offering increasingly sustainable products and solutions and by reducing our own emissions, we aim to consistently keep the enablement factor well above 1.0 in order to make a positive contribution to climate protection.

#### **Reporting against standards**

##### **Global Reporting Initiative (GRI)**

- GRI 305–5 (Emissions)

##### **Task Force on Climate-related Financial Disclosures (TCFD)**

- The most important key figures for measuring and managing climate-related opportunities and risks

#### **Our climate targets**

We are helping to mitigate climate change and contributing to compliance with the Paris Climate Agreement. Our current climate targets were adopted by the Board of Management in 2019 and have applied since 2020. The ambition level was increased again in March 2021. In March 2023, we replaced our interim goal with a more ambitious target based on the Science Based Targets initiative's (SBTi) Net-Zero Standard. In addition, since 2021, the Board of Management's remuneration has been linked to various factors, including the meeting of climate targets and the performance indicators “energy consumption” and “CO<sub>2</sub> emissions” (Scope 1 and 2) (excluding T-Mobile US).

Our targets are:

1. We have already achieved our goal of using 100 percent electricity from renewable sources (Scope 2) throughout the Group by the end of 2021.
2. Now, we aim to reach climate neutrality for our own direct and indirect emissions throughout the company by the end of 2025 (Scope 1 and 2). To that end, we plan to reduce carbon emissions by up to 95 percent, with respect to their 2017 levels, and offset any remaining emissions via suitable measures. In the

process, we are concentrating on offsetting measures aimed at long-term removal of carbon from the atmosphere, such as afforestation. We also conclude power purchase agreements (PPAs) for green electricity with operators of wind power or photovoltaic parks. In this way, we offer operators investment security and promote the expansion and use of renewable energies. In addition, we are reducing our energy consumption, e.g. through energy efficiency measures and space reduction in buildings, as well as through electrification, especially in our vehicle fleet.

3. As an interim target on the way to becoming climate neutral, we have set ourselves the task of reducing carbon emissions in Scopes 1–3 by 55 percent with respect to 2020 levels. As a result of our systematic efforts to reduce our Scope 1 and Scope 2 emissions, the majority (over 98 percent) of our carbon footprint now occurs through the production and use of our products. We consult closely with our suppliers in order to reduce the emissions generated during production, and to have products manufactured that are energy efficient in their utilization phases. The new interim target is more ambitious than our previous target, which was to reduce Scope 3 emissions by 25 percent per customer (compared to 2017) by 2030.
4. We want to be completely climate neutral (“net zero”), with no carbon footprint left in any of the three scopes, by the end of 2040 at the latest. We will offset any emissions we are still creating at that point using suitable instruments, as set out in our planning for Scope 1 and Scope 2 emissions. We intend to cut emissions by at least 90 percent, so that we only need to offset up to 10 percent.

Our climate targets from 2019 were developed using the method proposed by the SBTi. The SBTi officially confirmed in May 2019 that we are the third DAX-listed company to contribute toward implementing the Paris Climate Agreement through our climate protection targets. We have thus followed our national companies in the United States and Hungary, whose targets were already endorsed by the SBTi in 2018 and at the start of 2019, respectively. The targets that were adjusted in 2021 and the interim target on the way to climate neutrality approved in March 2023 are currently being validated by the SBTi. At the end of January, the reduction target for T-Mobile US of reducing Scope 1–3 emissions by 55 percent with respect to 2020 by the year 2030 was validated by the SBTi.

#### **Impact assessment for our materiality analysis**

Greenhouse gas emissions are associated with a detrimental impact on humans and the environment. For this reason, we have identified climate protection as a key topic throughout the value chain in the impact assessment conducted as part of our materiality analysis. Analysis of the criteria “probability of occurrence” and “severity” has revealed that significant greenhouse gas emissions could be generated in the upstream value chain in particular (during raw material extraction and supplier activities), as well as in the downstream value chain, which comprises the utilization, disposal and recycling of products.

**Our approach to measuring our climate-protection progress**

We calculate our emissions for our climate targets along the entire value chain, taking account of our own energy-consumption emissions and those of our suppliers, based on the market-based method of the internationally recognized Greenhouse Gas (GHG) Protocol. We have broken down all our CO<sub>2</sub>e emissions in detail here.

The emissions data enter into various KPIs that we use to measure our contribution to climate protection and make our progress transparent. The Carbon Intensity and Energy Intensity KPIs are used to analyze the relationship between our CO<sub>2</sub>e emissions or energy use and the transmitted data volume. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks. The Enablement Factor, PUE, and Renewable Energy KPIs also improve the management and transparency of climate protection issues.

Indirect emissions along our value chain, or Scope 3 emissions, make up the majority of our total emissions. By recording them, we lay the foundation for reducing emissions in our value chains through targeted measures together with our suppliers and customers.

The Board of Management is informed each year in detail by the Group Corporate Responsibility (GCR) unit about the status of the programs we have implemented to achieve our climate targets.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 302 3–3 (Management of material topic)
- GRI 305 3–3 (Management of material topic)
- GRI 305–1 (Emissions)
- GRI 305–2 (Emissions)
- GRI 305–3 (Emissions)

**Climate target achievement**

At the end of the year, our progress toward our targets was as had been forecast.

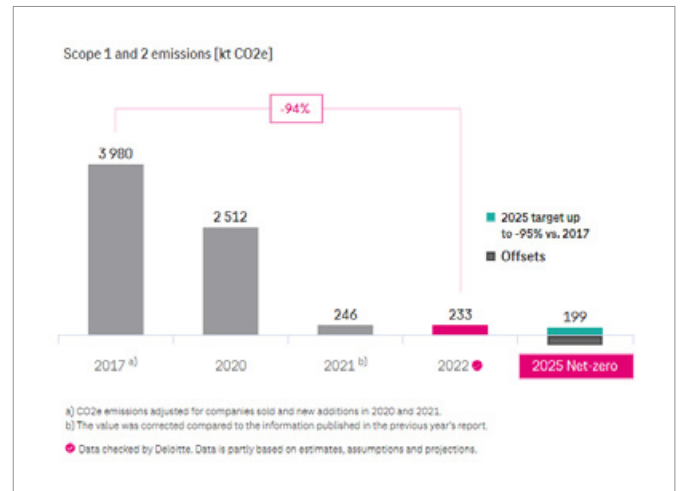
**Electricity from 100 percent renewable energies**

Since 2021, 100 percent of the electricity we use, Group-wide, has been sourced from renewable energies (Scope 2).

**Climate neutrality by 2025 (Scope 1 and 2)**

Our targets call for us to reduce our Scope 1 and Scope 2 emissions by up to 95 percent, with respect to their 2017 levels, by 2025, and to offset all remaining emissions, via suitable measures, in order to achieve climate neutrality in our operations.

In the year under review, we reduced our Scope 1 and Scope 2 emissions by 94 percent with respect to their 2017 levels.

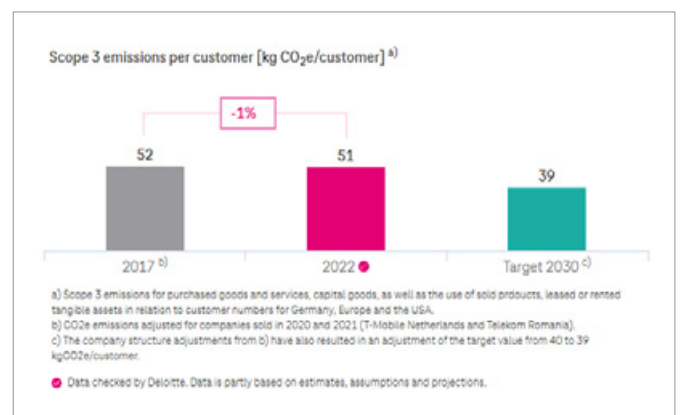


**25 percent reduction of per-customer Scope 3 emissions by 2030**

For reasons of transparency, we are once again reporting the previous Scope 3 climate target for 2030 in this reporting year, which relates to the number of customers. This describes the reduction of Scope 3 emissions per customer by 25 percent (2017–2030). Relevant for the calculation are the Scope 3 categories: Purchased goods and services, Capital goods, Use of sold products, Rented or leased equipment.

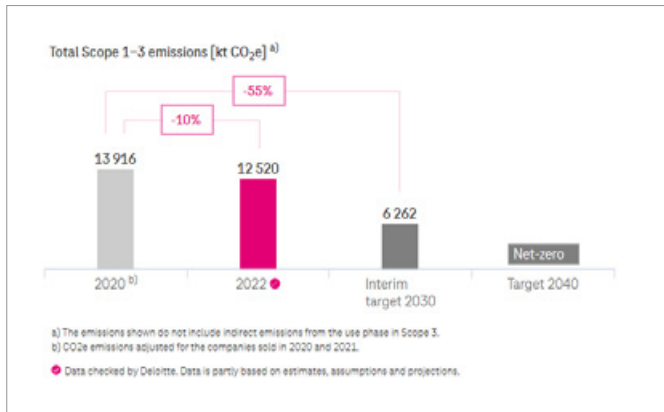
The figure for the base year 2017 was corrected in comparison with the prior-year reporting due to a different basis of calculation. The reason for this is the exclusion of the units T-Mobile Netherlands and Telekom Romania, which have since been sold, from the base year and from the target figure. The customer figures excluding wholesale customers are used for the calculation.

In the year under review, we reduced our per-customer Scope 3 emissions by 1 percent with respect to their 2017 level.



### Climate neutrality by 2040

We want to be climate neutral in all three Scopes by 2040 at the latest, so that we no longer have a carbon footprint at all. To date, we have achieved 10 percent of this ambitious target. To allow us to better monitor our progress, in 2023 we replaced our interim target of reducing Scope 3 emissions by 25 percent per customer (compared to 2017) by 2030 with a more ambitious interim target: by 2030, we want to have achieved an absolute reduction of 55 percent in Scope 1–3 emissions (compared to 2020).



### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 305–5 (Emissions)

### Orientation to the TCFD's recommendations

The “Task Force on Climate-related Financial Disclosures (TCFD)” was established at the 2015 United Nations Climate Change Conference in Paris. Its aim is to develop voluntary, consistent climate-related financial risk disclosures. In 2017, the TCFD published specific recommendations for putting these disclosures into practice, recommendations that companies can use as a guideline to inform investors, lenders, insurers, and other stakeholders about the risks climate change presents for their business model.

We welcome the aims tied to the TCFD, and we are moving forward with TCFD-based reporting relative to those aims. As is already becoming increasingly clear, the physical risks posed by climate change include extreme weather events. In addition, transitional risks, such as the trend in carbon prices, are increasingly affecting political debate in this context. This directly influences our operations and our stakeholders. The risks applying to the continuation of our operations are analyzed, and those risks are operationally managed by our business units. In addition, we evaluate internally how reporting on climate-related financial risks and opportunities can be aligned with the TCFD's recommendations. Ideally, such alignment would build on existing approaches for strategy, controlling, and risk management.



### Reporting against standards

#### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks



## Governance

Disclosures	Input
<p>a) Describe the supervision of the Board of Management relative to climate-related opportunities and risks.</p>	<ul style="list-style-type: none"> <li>■ Since sustainability and climate change are important issues for Deutsche Telekom, efforts to address these issues are managed at the top level of the company. Our CEO, along with the other members of the Deutsche Telekom Board of Management, has responsibility for addressing climate-related issues throughout the entire Group. This extends to our climate strategy, our climate targets, and our climate-related opportunities and risks.</li> <li>■ Deutsche Telekom's Board of Management is informed annually concerning the current status of the company's achievement of its climate targets and regarding other climate issues which are relevant for the company. Climate indicators (Energy Intensity ESG KPI, Carbon Intensity ESG KPI) also form part of the quarterly report submitted to the Board of Management. As of January 1, 2022, the CEO has this responsibility.</li> <li>■ In addition, Deutsche Telekom's risk management team reports, on a quarterly basis, to the Supervisory Board's Audit Committee regarding ESG risks and opportunities. When unforeseen risks occur outside of the regular-reporting framework, they are flagged on an ad hoc basis, and reported to the company's Board of Management and Supervisory Board. The key risks for the Deutsche Telekom Group are reported in our annual report.</li> </ul> <p>Further information is available at:</p> <ul style="list-style-type: none"> <li>■ Current CR-organization structure</li> <li>■ Risk and opportunity management</li> <li>■ Addressing climate risks</li> <li>■ CDP questionnaire, C.2 Governance</li> </ul>
<p>b) Describe the management's role in assessing climate-related opportunities and risks.</p>	<ul style="list-style-type: none"> <li>■ Responsibility for managing the company's efforts in connection with CR- and climate-related issues lies with the Group Corporate Responsibility department (GCR). That responsibility extends to evaluation of climate-related opportunities and risks. Responsibility for implementing the climate strategy rests with the Group business areas and segments.</li> </ul> <p>An overview of Deutsche Telekom's complete CR-organization structure is available in the CR report.</p> <p>Further information is available at:</p> <ul style="list-style-type: none"> <li>■ Risk and opportunity management</li> <li>■ Addressing climate risks</li> <li>■ CDP questionnaire, C.2 Governance</li> </ul>



## Strategy

Disclosures	Input
<p>a) Describe the climate-related opportunities and risks that the organization has identified for the short, medium and long terms.</p>	<ul style="list-style-type: none"> <li>■ The central climate-related risks include the possible failure of the network infrastructure, as a result of damage to the secondary infrastructure (such as through power failures) or failures of cooling systems. Another risk consists of possible network damage or failure as a result of network-infrastructure damage resulting from climate events or changes in climate conditions. The primary transitional risks mentioned include carbon prices and regulation of products and services – for example, via increased energy-efficiency requirements. In addition, there is a risk of negative stakeholder feedback and reputational damage. For the most part, the time horizon for the identified risks is seen as medium-term to long-term.</li> <li>■ With regard to opportunities, we have identified our increasing use of energy-efficient technologies, and growing demand for climate-friendly products and services, as significant climate-related opportunities.</li> </ul> <p>Further information is available at:</p> <ul style="list-style-type: none"> <li>■ Progress in implementation of the TCFD recommendations</li> <li>■ CDP questionnaire, C.3 Risks and Opportunities</li> </ul>
<p>b) Describe the impacts of climate-related opportunities and risks on the organization's business operations, strategy and financial planning.</p>	<ul style="list-style-type: none"> <li>■ Climate-related opportunities and risks have affected our business operations in many different ways. Energy efficiency, for example, is of great importance for Deutsche Telekom, since the network's energy consumption strongly affects operational costs. It is also important in light of the Group's strategic approach to climate protection and of the growing concerns and expectations of our stakeholders. Consequently, we are now aiming to at least keep our annual energy consumption stable, despite the expected increase in data consumption. In Germany and Europe, we have set ourselves the target of doubling the energy efficiency of our networks by 2024 and thus reducing energy consumption further. Cutting energy consumption and reducing Scope 1 and 2 emissions have each been declared as remuneration-related targets, with a 50-percent weighting in each case.</li> <li>■ For this reason, we have launched a number of programs for improving energy efficiency at our locations and in our operations. We have studied our value chain in order to identify potential for enhancing resource efficiency and reducing carbon emissions. We have identified central action areas for future measures that are expected to make our company's operations more sustainable overall. The measures include, for example, labeling of products that are especially sustainable.</li> </ul> <p>Further information is available at:</p> <ul style="list-style-type: none"> <li>■ Analysis of our products' sustainability benefits</li> <li>■ Energy consumption &amp; efficiency</li> <li>■ Climate strategy</li> <li>■ CDP questionnaire, C.3.3 and 3.4 Business Strategy</li> </ul>
<p>c) Describe the resilience of the organization's strategy, taking account of various climate-related scenarios, including a scenario with 2°C or less of warming.</p>	<ul style="list-style-type: none"> <li>■ In an initial step carried out in 2020, we analyzed a representative sample of Deutsche Telekom AG's locations in Germany, comprising 500 locations in all, with regard to their physical climate risks. The risks for the various locations were considered in light of various climate scenarios of the Intergovernmental Panel on Climate Change (IPCC): a business-as-usual scenario (RCP 4.5), with a global temperature increase of more two degrees, and a four-degree scenario (RCP 8.5). Also, the RCP 2.6 scenario, which entails a temperature increase of less than two degrees, was available for some climate risks, such as rising sea levels and intense rainfall. Further details are provided here in the CR report.</li> <li>■ Currently, we are extending our scenario analysis to additional international locations, with a view to a full assessment of our organization's long-term resilience. In a first step in this effort, we are bringing the largest national companies into the process: T-Mobile US in the United States and the OTE Group in Greece. With the help of comprehensive materiality assessments, the companies' key locations in this context are being identified and analyzed in terms of the physical risks they face. In each case, the same physical risks and climate scenarios are applied.</li> <li>■ In addition, the International Energy Agency's (IEA's) Sustainable Development Scenario (SDS), which is also a less-than-two-degrees scenario, is being applied with regard to transitory opportunities and risks. That scenario considers political, social and technological changes that the transition to a decarbonized economy would bring and that would lead to various risks and opportunities for our company. At the time of the analysis, the SDS scenario was the IEA's most ambitious scenario. Since then, it has been supplanted in this role by the Net Zero Scenario.</li> </ul> <p>Further information is available at:</p> <ul style="list-style-type: none"> <li>■ CDP questionnaire, C3.2, Business Strategy – Scenario Analysis</li> </ul>

## Risk management

Disclosures	Input
<p>a) Describe the organization's processes for identifying and evaluating climate-related risks.</p>	<ul style="list-style-type: none"> <li>■ In 2020, in the framework of various workshops with experts from the areas of technology, procurement, and strategy and risk management, we defined the main climate-related opportunities and risks and began weighting them. In the process, we considered the consequences, for our business operations, that could result from the physical impacts of progressing climate change. In addition, we analyzed the impacts resulting from political, technological, and social developments tied to the transition toward a low-carbon economy that has been initiated. Further details are provided here in the CR report.</li> <li>■ The process for identifying the opportunities and risks tied to climate change comprises the following: <ul style="list-style-type: none"> <li>■ Screening of media and NGO publications</li> <li>■ Actively supporting the work of various industry associations that are studying the issue of climate change, such as GeSI, econsense, Foundation 2°, ICC, GSMA, and ETNO</li> <li>■ Initiating and participating in stakeholder dialogs on the issue of climate change</li> <li>■ Analyzing responses to the CDP supply-chain program</li> <li>■ Analyzing relevant inquiries of rating agencies, such as RobecoSAM, CDP, Sustainalytics, etc.</li> </ul> </li> <li>■ The process for evaluating the opportunities and risks tied to climate change comprises the following: <ul style="list-style-type: none"> <li>■ Identifying and quantifying the important trends</li> <li>■ Calculating the impacts on operations</li> <li>■ Analyzing the impacts on the value chain</li> </ul> </li> <li>■ We financially quantified our transitory risks in 2022 in order to verify the qualitative materiality analysis from the workshops. The quantification for a number of risks was already published in the CDP questionnaire 2022. Climate-related opportunities are set to be quantified in 2023. The resulting financial impacts will then be taken into account in the company's planning. Management instruments for taking account of climate protection in investment decisions are regularly reviewed for feasibility and benefit (instruments such as an internal carbon price, for example).</li> </ul>
<p>b) Describe the organization's processes for addressing the climate-related risks.</p>	<ul style="list-style-type: none"> <li>■ On an expert-knowledge basis, opportunities and risks are evaluated in terms of their potential financial impacts (on EBITDA-AL) and of the probability of their occurrence. Where opportunities and risks cannot be quantified, their potential impacts can be reported in qualitative terms. Once risks and opportunities have been identified, they are analyzed and evaluated, in detail, in terms of the probability of their occurrence and their potential financial impacts. This can be done with the help of a scenario analysis, for example. Then we decide what concrete measures need to be taken in order to reduce the risks or exploit the opportunities. As a next step, in each case the relevant risk owner implements the measures, and monitors and evaluates their effectiveness. As necessary, the above steps are repeated and adjusted in light of the latest pertinent developments and decisions.</li> </ul> <p>Further information is available at:</p> <ul style="list-style-type: none"> <li>■ EBoard of Management's assessment of the aggregate risk and opportunity situation</li> <li>■ CDP questionnaire, C2.2 Risks and Opportunities – Description of processes</li> </ul>
<p>c) Describe how the processes for identification, evaluation, and management of climate-related risks are integrated within the organization's risk management.</p>	<ul style="list-style-type: none"> <li>■ Our processes for identification and evaluation of climate-related risks are completely integrated within company-wide, multidisciplinary processes for risk identification, evaluation, and management. On a quarterly basis, risks and opportunities (with impacts of over 100 million euros on EBITDA) are identified via a Group-wide risk-management process (RMP) that has been developed, and is managed, by the Group Risk Governance department. The RMP provides methods and systems for identification and evaluation of risks and opportunities. The responsibility for reporting on Group risks and opportunities is divided among the relevant business units; consequently, GCR is responsible for climate risks. Further information on the risk process is available in our annual report.</li> </ul> <p>The risk area also works closely with GCR to identify material climate-related opportunities and risks, and participates in internal workshops.</p> <p>Further information is available at:</p> <ul style="list-style-type: none"> <li>■ Risk and opportunity management system</li> <li>■ CDP questionnaire, C2.2 Risks and Opportunities – Description of processes</li> </ul>

## Performance indicators and goals

Disclosures	Input
<p>a) Disclose the types of measurements that your organization uses, in accordance with its strategy and risk management process, to evaluate climate-related opportunities and risks.</p>	<ul style="list-style-type: none"> <li>■ The most important performance indicators for measurement and management of climate-related opportunities and risks are as follows:               <ul style="list-style-type: none"> <li>■ Scope 1 to Scope 3 emissions</li> <li>■ Share of renewables</li> <li>■ Energy consumption</li> <li>■ Energy Intensity ESG KPI</li> <li>■ Carbon Intensity ESG KPI</li> <li>■ Enablement Factor</li> <li>■ Waste production, including e-waste</li> <li>■ Waste management and recycling</li> <li>■ Water consumption</li> <li>■ Land use</li> </ul> </li> <li>■ In addition, we calculate the share of our revenue that is sustainability-oriented, and we continually analyze the sustainability benefits of our products.</li> <li>■ Historical performance indicators of Deutsche Telekom and its national companies are published in the interactive benchmarking tool of the CR report.</li> </ul>
<p>b) Disclosure of greenhouse-gas (GHG) emissions (Scope 1, Scope 2 and, if applicable, Scope 3) and of the pertinent risks</p>	<ul style="list-style-type: none"> <li>■ Deutsche Telekom discloses its Scope 1–3 emissions annually, in its CR Report and Annual Report.</li> <li>■ The Scope 1 and Scope 2 emissions are calculated in accordance with the GHG Protocol. The calculation of Scope 3 emissions is based on the GHG Protocol.</li> <li>■ Deutsche Telekom’s carbon intensity is published annually in the company’s CR Report and its Annual Report (Carbon Intensity ESG KPI). This KPI shows carbon emissions in relation to managed data volumes.</li> </ul> <p>Further information is available at:</p> <ul style="list-style-type: none"> <li>■ Benchmarking tool</li> <li>■ CDP questionnaire, C4 Metrics and targets</li> </ul>
<p>c) Describe the goals the organization uses in the context of efforts to manage climate-related opportunities and risks, and performance, in relation to goals.</p>	<ul style="list-style-type: none"> <li>■ The two non-financial performance indicators “energy consumption” and “carbon emissions” (Scope 1 and 2) have been included as components of the variable remuneration of the members of the Board of Management since 2021. Since 2022, achievement of these ESG KPIs has also been a key element of the remuneration system for managers (excluding T-Mobile US). For selected important functions, achievement of targets oriented to specific areas of responsibility enters into the calculation of performance-based remuneration. This also applies to goals based on the Socially Responsible Investment (SRI) ESG KPI and on the goal “Listing of T-Shares in sustainability indexes/ratings”, which reflect climate-change issues and the Energy Intensity and Carbon Intensity CR KPIs, which are directly related to those issues.</li> <li>■ Deutsche Telekom AG’s climate targets are published in the CR Report.</li> <li>■ Our targets with regard to energy efficiency are disclosed here.</li> <li>■ Here, we also publish targets for sustainable procurement.</li> </ul>

**Progress in implementation of the TCFD recommendations**

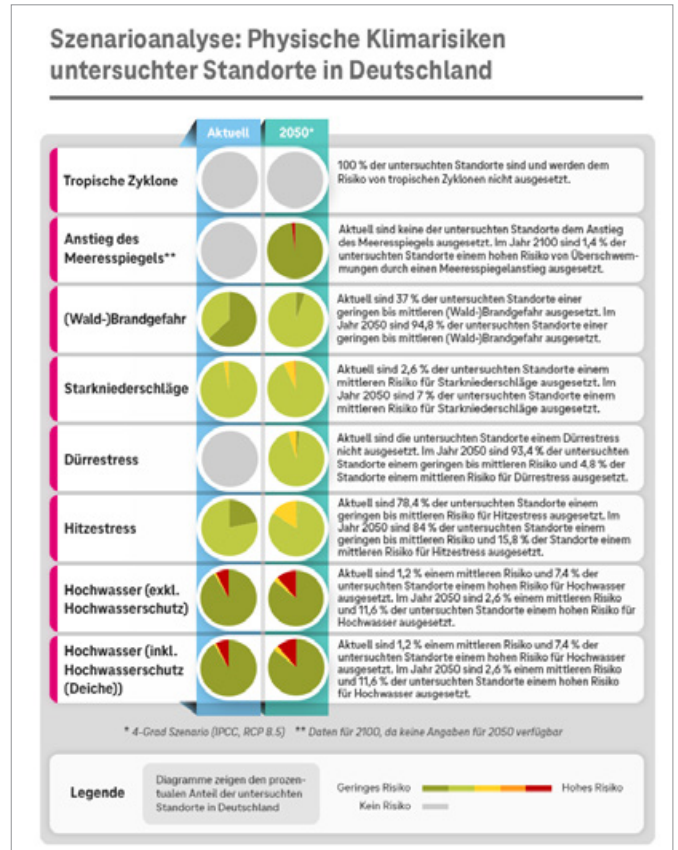
In 2020, we carried out a gap analysis to determine the extent to which our measures already conform to the TCFD recommendations (see here). In various workshops with experts from the areas of technology, procurement, strategy and risk management, we defined the main climate-related opportunities and risks and began weighting them. In the process, we considered the consequences, for our business operations, that could result from the physical impacts of progressing climate change. In addition, we analyzed the potential impacts resulting from political, technological, and social developments tied to the transition toward a low-carbon economy that has been initiated. In 2022, the analysis was extended to include a financial quantification of transitory risks.

The important climate-related risks include possible network-infrastructure failures as a result of damage to secondary infrastructure (involving power failures, for example) or failures of cooling systems. Another risk consists of possible network damage or failure as a result of network-infrastructure damage due to climate events or changes in climate conditions.

The important climate-related opportunities we have identified include the increasing use of energy-efficient technologies (in network operations, for example), and growing demand for climate-friendly products and services.

In a next step, we analyzed – by way of example, to begin with – 500 of Deutsche Telekom’s locations in Germany with regard to their physical climate risks. This climate-risk analysis was carried out using the Climate Change Edition of the Location Risk Intelligence software of the reinsurance company Munich Re. The analysis covers eight indexes (see graphic). We considered the risks for the various locations in light of two climate scenarios of the Intergovernmental Panel on Climate Change (IPCC): a business-as-usual scenario (RCP 4.5), with a global temperature increase of more two degrees, and a four-degree scenario (RCP 8.5). In addition to studying the climate scenarios, we looked at risks in various time frames: currently, for the year 2050 and for 2100.

The following graphic shows a simplified excerpt of the results: the risks for the year 2050, in keeping with the four-degree scenario:



The scenario analysis shows that only minor physical risks apply for the majority of the company’s locations in Germany. Nonetheless, we are prepared for the impacts of physical risks, such as changes in precipitation patterns and extreme weather variability. As shown by examples such as the storm “Friederike” in 2018, and the disastrous floods of July 2021, extreme weather events are already capable of causing local damage to our telecommunications infrastructure. Consequently, our risk management is based on multiple pillars – we structure Deutsche Telekom’s telecommunications networks with built-in resiliency. For example, we use ring structures to ensure that failures of individual network components do not affect the services we provide for our customers. For most of our critical locations, we use uninterruptible power supply (UPS) systems incorporating batteries and mobile and stationary diesel generators. Such systems can normally provide emergency power for several hours in the event of power failures. Our crisis management also helps with rapid recovery in the event of disruptions. The risks of damage to buildings and to Deutsche Telekom’s network infrastructure are covered by insurance policies. Further information is available in the chapters “Addressing climate risks” and “Risk and opportunity management”.

In 2022, we continued analyzing the most important opportunities and risks presented by the above-described climate scenarios. We now plan to extend our location analysis to additional countries – and we are already holding talks with further national companies to that end.

The continuing refinement of our risk management, in keeping with the TCFD requirements, is also important from a regulatory perspective, especially in light of the EU Taxonomy guidelines. The criteria for the environmental goal “Climate change adaptation” require – as does the TCFD – companies to study physical climate risks and to be aware of the potential impacts on their business activities. With our TCFD process, we have laid the foundation for the climate risk analysis that is needed to fulfil the taxonomy criteria. More information on the implementation and the results of the taxonomy-aligned climate risk analysis can be found in the “EU taxonomy: compliance” section and the non-financial statement in the 2022 annual report.

### Reporting against standards

#### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

### Addressing climate risks

In the context of our integrated climate strategy, we determine climate-related risks and opportunities for us as a company and for our stakeholders. Our Board of Management is informed quarterly about current climate risks in a Group Risk Report. Further information on risk management is provided in the “Risk and opportunity management” section of our annual report.

### Physical risks

Extreme weather conditions as a consequence of climate change will have a negative impact on our business processes and will inevitably lead to incidents or even network outages. Among the effects of such breakdowns is their massive impact on the management of rescue operations, for example, sometimes even rendering such emergency efforts entirely impossible. In order to be able to react appropriately in these cases, we have defined the necessary responsibilities, processes, and measures in our internal “Group Policy on Continuity and Situation Management”. Additionally, the policy outlines how to handle emergency and crisis situations like floods.

We also take possible consequences of climate change into account when planning our future business activities. For example, our network infrastructure is set up to be better protected from storm conditions, changes in temperature, and high winds and keep mobile supply infrastructure on hand for emergencies.

### Financial risks

Climate change also carries financial risks, whether from levies on carbon emissions or through an increase in energy costs. Our contribution to the mitigation of these risks includes measuring our own energy efficiency and developing measures for improvement. To prevent infrastructure failure due to extreme weather events, additional investment in a more robust infrastructure might be necessary.

### Prevention

We also help our customers reduce their own carbon footprint, thus helping to mitigate climate change, by providing them with innovative solutions. Examples include projects in the area of sustainable urban development and mobility, and also a real-time solution for agriculture (precise positioning). It can be used, for instance, to correct GPS data that is often too inaccurate for agricultural purposes and transmit precise location data in real time – using 5G mobile technology. Our low-threshold, comparatively inexpensive solution helps farmers deploy their machinery with greater precision, to reduce emissions, dose fertilizer and seeds more accurately, and increase their yields. That way we can also make an indirect contribution to achieving the second sustainable development goal (SDG) of “zero hunger.”

We also help our customers deal with the adverse effects of climate change (adaptation). In the event of an imminent catastrophe, our infrastructure can be used, for example, to send alerts via early warning apps. Climate change adaptation is part of the EU Taxonomy Regulation, which we discuss here.

### Reporting against standards

#### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

# Circular economy & resource conservation

## Our approach to circular economy

Consumption of natural resources continues to increase globally. According to the German Environment Agency (UBA), the use of non-renewable raw materials in particular is associated with significant intervention in ecosystems and the water balance, and gives rise to waste and pollution.

Our goal is to make our product portfolio increasingly sustainable. In this connection, we are taking a holistic approach to conserving resources and are working to ensure that resources are used responsibly throughout our entire value chain. We aim to make products and materials as durable as possible and to ensure they are always recycled at the end of their lifetimes. Also, by providing innovative, network-based solutions, we support our customers in reducing their own carbon emissions and contributing to climate protection. By 2030, we intend to ensure that all the products we bring into circulation are returned to the circular ecosystem. This also applies to the network technology we use. Additionally, we work to ensure that the products and services we use at the workstations in our office facilities, in our Telekom Shops and in our data centers are compatible with the circular economy. Office supplies and materials for marketing are one example of such products.

Our approach in this area is holistic, covering the areas “Resource efficiency in operations,” “Green products and services” and “Waste prevention and recycling” (see graphic).



## Resource efficiency in operations

Our efforts to enhance resource efficiency in operations focus on our IT infrastructure, our sustainable building, and our workplaces. They also include the switch to fully electric company cars and service vehicles, along with additional measures for promoting sustainable mobility.

## Waste prevention and recycling

We are committed to the reuse and proper recycling of electronic devices. This is why, for example, we offer products (our routers, for instance) for rental and accept returned used devices (such as cell phones). Wherever possible, we refurbish returned devices for resale and reuse, i.e., put them back into circulation. Products that cannot be reused are properly recycled as part of our waste management process. For recycling of copper cables, we have adopted a special guideline that is binding throughout the Group. Such cables are being partially replaced over the course of our fiber-optic rollout.

## Green products and services

We are constantly enhancing our range of sustainable offerings – throughout a spectrum from environmentally friendly products and services to our green shops. In addition, we strongly encourage our suppliers to use resources responsibly and to reuse materials wherever possible. This includes reducing the amount of plastic, paper and packaging they utilize, and using recycled materials.

## The basis: a certified management system

With our health, safety, and environmental management system (HSE), we have made a commitment to continually improving our performance in these areas. In 2021, it was successfully recertified, until the end of 2024, in accordance with the international standards ISO 45001 on occupational health and safety, ISO 14001 on environmental management, and ISO 9001 on quality management. Our environmental guideline summarizes all of the current voluntary ecological commitments in effect throughout the Group.

## European targets

In 2021, our European national companies (with the exception of our unit in Germany) set targets in the framework of our EU strategy for resource efficiency. Through 2024, the national companies plan to collect one million used mobile devices and keep them in the circular economy by refurbishing or recycling them. In addition, they are striving to ensure throughout Europe that no electronic waste produced by Deutsche Telekom's national companies, and no returned devices, such as smartphones, routers or laptops, wind up in landfills – and that such waste and devices (where not refurbishable) are properly disposed of or recycled as they would be in Germany (target: “Zero Waste for ICT to Landfill”). This target was achieved by the end of 2022.



### Sustainable packaging

As of mid-2022, Deutsche-Telekom-branded products launched on the market have been packaged sustainably throughout Europe, in keeping with our Sustainability Packaging Guideline. Additionally, nearly 90 percent of all smartphones currently sold by Deutsche Telekom throughout Europe that are sourced from our suppliers are packaged sustainably. Working with our suppliers, we intend to increase this rate to over 90 percent by the end of 2024 at the latest.

### Measurement of progress

We are continually working to improve our performance indicators, with a view to enhancing review of our Group-wide progress. In 2021, we developed a comprehensive new set of performance indicators. This has enabled us to set clear-cut goals and to report transparently on progress. The Take Back Mobile Devices ESG KPI existed prior to the overhaul of our set of performance indicators, and we have also been keeping records since 2021 of the numbers of items of Customer Premises Equipment (CPE) we have collected, for instance. We measure progress in copper cable recycling with the Recovered Copper Cables KPI.

### Impact assessment for our materiality analysis

Most resources for the manufacturing and use of our products and network infrastructure are consumed in both upstream and downstream stages of the value chain – with our suppliers and customers. It was here that a negative impact risk was identified as part of the impact assessment for our materiality analysis. Consumption of natural resources continues to increase globally, negatively affecting biodiversity and climate change, and giving rise to waste and pollution. We intend to counteract this with our ambitious circularity target and resulting initiatives.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 301 3–3 (Management of material topics)
- GRI 306 3–3 (Management of material topics)
- GRI 306–2 (Waste)

### Resource efficiency at the workplace

We also contribute to resource efficiency at the workplace by endeavoring to use as many green office supplies as possible. In 2022, over 65 percent of all of our catalog-based office supplies in Germany were sustainable. We also took the following measures in Germany:

- Our “IT Remarketing” project: Used IT hardware is refurbished so that it can be reused.
- Our partner, the charitable organization “AfB gemeinnützige GmbH” (only available in German), which offers jobs for people with limitations, receives some of our used IT hardware (e.g., laptops) for reconditioning and reselling.
- In our catalog of office supplies, over 65 percent of products are classified as sustainable, meaning they have been awarded a label recommended by the German Environment Agency (UBA). This is an increase of 15 percent from the previous year.

The labels in question include the EU Ecolabel, the Fairtrade seal, the Organic Farming seal, the Blue Angel eco-label, and the FSC® and PEFC environmental labels. Office supplies are delivered largely in accordance with the carbon neutrality certificate.

- The goal of our “Paperless Office” project is to increase the number of e-books and e-papers used in our company to save even more paper.
- Since 2018, we have worked with a paper wholesaler to purchase only environmentally certified paper that has been awarded the Blue Angel certificate.
- To reduce the amount of paper used throughout the Group, we ask our employees to opt out of having salary statements sent by post, and we provide them online instead. Many other apps digitize paper-based processes and thus contribute to paper avoidance such as sick leave via app, travel expense reporting, time booking, etc.
- On our “You and Me UNITED” social network, we also offer our employees a platform where they can exchange used office supplies instead of ordering new supplies.
- To meet the requirements of the Minamata Convention and curb mercury emissions, we are working to modernize the media technology used in our company.

### Less food waste in cafeterias

Since 2020, we have been offering our employees discounted items in the cafeterias after 4 p.m. at two locations in Germany. Employees can purchase items that would otherwise have to be thrown away, such as baked goods, salads, and muesli, at half price. In 2022, a large proportion of our employees worked from home, which is why there was a drop in take-up of the offer. For the spring of 2023, we expect our employees to take advantage of the offer of discounted items more frequently again.

In addition, our staff have had the option, since 2021, of getting their midday meal as a takeaway lunch in reusable containers (“REBOWL”) that have a 5 euro deposit. The containers can be returned to any REBOWL partner. Our employees have responded well to this offer: more than 10 000 of the reusable containers are now in circulation. Since 2022, containers with microwave-safe lids have been made available, with a second, smaller container due to be rolled out in 2023.

We have joined forces with Sodexo, the company running our cafeterias in Germany, to introduce the RECUP returnable cup at many Deutsche Telekom sites in Germany. More than 45 000 RECUP returnable cups have been purchased since the pilot. As a sustainable alternative, one reusable RECUP can replace around 500 disposable cups and can then simply be recycled. In return for a deposit of 1 euro, our employees get their coffee or tea in a reusable RECUP. This can be handed in to any participating partner, where the deposit is returned and the cup washed and reused.



### Resource efficiency in the network and IT infrastructure

We are currently carrying out projects in this area in various Board of Management departments. The common goal: we want to achieve our climate protection targets, implement the circularity requirement, and introduce a holistic total cost of ownership (TCO) approach for our network and IT infrastructure.

- Projects to promote energy efficiency and energy saving measures in Germany and Europe
- Group-wide innovation project for developing new approaches for optimization of energy use and costs
- Modernizing our network infrastructure
- Network circularity

### Promotion of resource efficiency in the national companies

Apart from the centrally controlled projects in this area, the national companies are implementing additional measures to promote circularity and resource efficiency in the network and IT infrastructure. In the United States, efficiency in data centers is being improved through cold aisle containment. We are also enhancing efficiency in Greece through the use of immersion cooling, a new method which involves immersing some of the hardware in a liquid that conducts heat, but not electricity. This delivers energy savings of up to 90 percent for cooling, boosts productivity generally and reduces the carbon footprint by up to 30 percent. Hungary is promoting the use of renewable energies: For a donation, employees sponsor solar modules that supply electricity to a training building. In return, employees receive various benefits, such as an extra day of vacation. Other examples include PC recycling at Magenta Telekom in Austria and the refurbishment of mobile masts in Romania.

### More sustainable Deutsche Telekom buildings

We want to make our buildings in Germany as sustainable as possible. To that end, we are implementing various measures to reduce their carbon emissions, improve their energy balance, optimize waste separation, and facilitate longer use of their furniture.

Reducing vacancy is one of the most effective ways to increase sustainability, since lower vacancy levels can lead to significant carbon-emissions and energy savings. We are currently examining our future office-space requirements, and developing plans that will enable us to use our office space in the best possible way. In the process, we are testing new, more-flexible space/office concepts. The overall aim is to optimize space utilization in our buildings. Also, we are reducing our unused office space – for example, by subletting it. Such efforts are enabling us to prevent vacancies and save energy.

Over 42 000 square meters of building space in Germany were certified to LEED or BREEAM standards in 2022. Additionally, approximately one million square meters of office space meet the criteria of a sustainable building standard, despite not being certified.

### Energy efficiency

In order to minimize the energy requirements of our buildings in Germany, we are carrying out a range of measures, including the following:

- To identify anomalies in energy consumption, we use specific indicators such as “kilowatt hours per square meter” to compare similar facilities. In addition, we analyze the course of energy consumption (load profile) of individual buildings. On the basis of the findings from such analysis, we initiate measures to prevent peak loads and optimize energy use, with the aim of reducing total energy requirements.
- We use communication measures, including a poster campaign in 2022, to raise awareness of energy consumption among our employees and motivate them to be energy-conscious in the workplace.
- We pay attention to energy efficiency during construction and renovation work on a building’s exterior.

We also implemented the German federal government’s Energy Saving Ordinance, introduced due to the critical energy supply situation, in 2022. This saw us switch off advertising equipment day and night, not only temporarily. We also turned down the room temperature of our office buildings to as low as 19 degrees Celsius, cutting consumption by around 6 percent for each degree. Through these measures, we contributed in the year under review to efforts to secure Germany’s energy supply and make up shortfalls in supply.

The Deutsche Telekom subsidiary Power & Air Solutions (PASM) procures energy for the Deutsche Telekom Group companies in Germany. Its energy management system is certified as per the ISO 50001 international standard. In addition, our office buildings undergo an energy audit pursuant to DIN standard 16247 every four years.

### Heating and hot water

We regularly assess the need for repairs at our properties in Germany and conduct cost-effectiveness analyses to further reduce our energy consumption for heating and hot water. Measures include:

- Energy optimization of heating systems (e.g., by replacing old burner technologies)
- Updating heat generators and related hydraulic components (such as pumps and valves)
- Using waste heat (e.g., by using heat recovery systems)
- Using combined heat and power (e.g., from cogeneration plants or district heating)
- Reducing supply losses when heating water (e.g., by switching to local hot water supply)

## Electricity

Building services account for the biggest share of electricity consumption in office buildings (e.g., pumps, ventilation and cooling systems, building automation systems, elevators, and lighting). To reduce electricity consumption, we are focusing on the following measures in Germany:

- Using LED lighting and motion sensors
- Turning off light sources (advertising pylons) at night
- Controlling the room temperature of our network infrastructure more accurately
- Using efficient building services (e.g., high-efficiency pumps, frequency-controlled motors for ventilation systems)
- Optimizing pre-programmed usage profiles (such as through absence profiles)
- Using efficient building automation systems
- We are also adding additional charging stations for electric cars to our parking areas in order to promote electromobility.

## Internet of Things (IoT) and innovations

In Germany, we are optimizing our facility management with the help of sensor technologies. This includes the following measures:

- Using sensor technology to actively control indoor temperatures in buildings in real time
- Using predictive maintenance in elevator maintenance and repair
- Using predictive weather-dependent building technology controls
- Using thermal and fluidic building simulation to increase the efficiency of buildings and their building services
- Using sensors to collect building usage data. We utilize this data to optimize the energy consumption and cost-effectiveness of our shops across the board.

## Sustainable Deutsche Telekom buildings outside Germany

Internationally, we are also implementing measures to reduce energy consumption, such as optimizing the energy efficiency of major sites and switching off advertising pylons at night. We carried out simulation tests in 2022 to identify energy-saving potential in technical buildings. The results showed that technical equipment can be designed with lower capacity in these cases, making it possible to improve power distribution readings. As a result, adjustments have been made to the internal planning process and the reading process has been digitalized. We also carry out campaigns to raise awareness among our employees of the need to save energy. For Earth Hour during the year under review, for

example, our national company in Croatia shut off the power in its buildings for one hour.

In Greece, three buildings of the OTE Group received LEED Gold (Leadership in Energy and Environmental Design) certification: the Kerameikos office building; the Cosmote TV Services building; and the Group's Solonos office building in central Athens, which was renovated in 2020. All three were certified to the Gold level under the U.S. Green Building Council's (USGBC) international LEED certification scheme for green and sustainable buildings. The Mill Park building of IT Services Hungary in Budapest also received LEED certification.

Over 150 000 square meters of our building space were certified to LEED or a comparable standard in 2022. Additionally, over 120 000 square meters of office space abroad meet the criteria of a sustainable building standard, despite not being certified.

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 302 3–3 (Management of material topics)

## T-Systems: Ecological sustainability (internal measures)

As part of Deutsche Telekom, T-Systems has also committed itself to the Group's Group-wide climate targets and integrated sustainability into its strategy. T-Systems set up its own program to these ends in 2020. The program spans all functions and areas at T-Systems. The fundamental internal measures and areas are:

**Reducing our own ecological footprint** With a view to reducing its carbon emissions in an effective way, T-Systems has determined a baseline figure for its company-wide carbon footprint for the base year 2019 and identified its largest emissions sources. In addition, it has initiated a range of further analyses, including assessments of product-related emissions during products' service lives, and including emissions generated on the customer side. These will identify areas that present particular potential for reducing the ecological footprint. To this end, T-Systems maintains close contact with suppliers and is working on zero-emission products. It has signed memoranda of understanding with key suppliers Lenovo and Cisco, facilitating joint work to address the topics of energy efficiency and climate neutrality. In this way, T-Systems is also contributing to the achievement of Deutsche Telekom's Group-wide climate goals.

## Carbon-emissions reductions in operations

The Group-wide conversion of all of the Group's own buildings to renewable energy by the end of 2021 also extended to T-Systems' data centers. The centers use electricity from renewable energies, and one data center in Spain is fitted with its own photovoltaic system. We are also gradually making the data centers more energy-efficient, with the aid of innovative technologies and artificial intelligence. For example, the well-water cooling system at the data center in Munich has been optimized with the help of an AI system. T-Systems joined the Climate Neutral Data Centre Pact back in 2021. With this move, it has committed to making all of its own data centers, and the externally operated data centers within

its sphere, climate neutral by 2030. Additionally, in the year under review, it launched a research initiative in cooperation with the Fraunhofer Institute for Factory Operation and Automation IFF, with the aim of developing measures to make its data-center operations more sustainable. This effort also extends to the overall aim of enabling data centers to become energy self-sufficient, via intelligent interaction between renewable energy generation, power storage and flexible management of current loads.

#### Data center energy efficiency

As an operator, T-Systems is careful to use energy-efficient server and storage hardware. It is also considering options for saving energy by raising the cooling temperature at its data centers. Software features which allow unused hardware to be switched off entirely without affecting currently running applications will be used for further optimizations. To this end, work will be carried out all the way down to the level of individual computer components and processors. The medium- to long-term goal is to refine the applications used in the cloud to meet energy efficiency requirements (green coding). We are working with suppliers to determine emissions-reduction targets and develop zero-emission products. Our partner Shell, for instance, installed new immersion cooling technology for boosting processing power and energy efficiency at a T-Systems data center in Amsterdam in 2022.

#### Raising employee awareness

Employees also play an important role in reducing our carbon footprint at T-Systems. For example, T-Systems is reducing business travel and relying on videoconferencing for meetings. In addition, the company's employees, at all of its production sites and in all countries in which it is located, are being made more aware of the need to think and act with sustainability in mind (the company is doing this, for instance, by promoting alternative mobility solutions, participating in "campaign days" focused on sustainability, participating in sustainability-oriented workshops, and providing information about ways to reduce power and resource consumption). These efforts are being supported by employee initiatives focused on sustainability, such as the T-Green Team in Brazil and a sustainability program in Hungary that has over 80 green volunteers. An employee training course was developed in 2022 to train up staff members as sustainability ambassadors. Over 300 employees have already completed the course, which has also now been rolled out throughout the Group. Additionally, the practice of mobile working in Germany has allowed us to reduce our building capacity in the country by 70 000 square meters, which has also cut heating and district-heating emissions.

#### Green fleet

T-Systems is aiming to make its fleet of vehicles more sustainable – by relying to a greater extent on e-mobility in particular. In February 2022, it published a revised "e-car-only car policy" that defines additional steps toward greener mobility. After switching to an electric vehicle fleet in May 2022, there has been an increase in orders for electric vehicles, which now account for 90 percent of all company car orders, up on the figure of approximately 33 percent prior to May 2022. T-Systems International had a total of 1 216 company cars in its fleet at the end of 2022, 164 of which

were electric vehicles. At this same time, almost all of our Meet & Connect Hubs had been fitted with charging stations, with installation work at the remaining hubs set to be completed in early 2023. Meet & Connect Hubs are the central locations of T-Systems and are designed to offer the ideal environment for working in teams. They provide collaboration rooms and innovative spaces that cover a whole range of requirements and uses.

#### T-Systems: Ecological sustainability (external measures)

##### Enablement of our customers

T-Systems seeks to support its customers in making purchasing decisions. To this end, it successively determines the ecological impacts of its solutions and provides this information transparently. For example, to determine the carbon footprints of solutions, T-Systems uses an impact measurement approach in accordance with the Group-wide Impact Measurement Blueprint, that also includes social and economic factors and looks at the entire value chain. An important factor in impact measurement consists of the positive carbon-footprint impacts our customers realize through the use of T-Systems' ICT solutions. To ensure that the carbon footprint of new and existing solutions is minimized, T-Systems created the Sustainability Design Guideline, which is currently being implemented and set to be observed in all product developments in future. Such efforts have been paying off: in 2022, a market analysis by the Information Services Group (ISG) found T-Systems to once again be a leader in sustainability and ESG services in Germany.

A sustainable digitalization strategy leverages the benefits of digital technology while at the same time meeting the requirements of sustainability. Adopting a holistic, end-to-end portfolio strategy, from strategy to implementation, T-Systems offers services in the following areas:

##### 1. Sustainability advisory services:

- T-Systems works with technology consulting provider Detecon to support business customers with developing an effective digital sustainability strategy that takes account of both the complexity of the technology and the ecosystem of its customers. The six key steps that are completed in the process are as follows: definition of scope and identification of data gaps, maturity assessment and environmental principles, ambition level, specific measures, governance, and change management.
- Since 2021, the portfolio has been successfully expanded to include additional ESG solutions that incorporate social and regulatory aspects, and refined further.
- Working with digital sustainability consulting services allows T-Systems to add a technical focus to this strategic advisory work. This includes providing advice on sustainability data, sustainability innovation, and sustainability system integration.

## 2. Sustainability management solutions:

T-Systems provides management solutions to help its customers collect, monitor, check, document and improve all sustainability-related data for their organization and beyond.

A number of offerings from T-Systems:

- Syrah SDG (Sustainable Development Goals) Dashboard: This tool creates a complete SDG dashboard with 50 KPIs in the space of three months. It shows the current state of a city or region's SDG performance, provides transparency as to the effects of sustainability measures, and enables comparison with other cities and regions.
- Supply Chain Transparency Suite: This tool provides a solution for meeting obligations under the German Supply Chain Act.
- Impact Measurement Tool: This tool serves to determine the environmental impact of a product or service along the entire supply chain.

## 3. Sustainability industry solutions:

T-Systems helps customers to implement the digital solutions best suited to their specific sustainability requirements.

Example products/services:

- Mobility and logistics: Low Carbon Mobility Management is a patented, app-based system for calculating the carbon emissions and energy consumption of vehicles, displaying current consumption/emission status in real time. The goal is to optimize driving behavior, including route selection.
- Automotive & manufacturing: CARbon Footprint Fleet Optimizer is a cloud-based solution for making vehicle fleets sustainable. It facilitates intelligent fleet design, using the pre-defined parameters of carbon budget (Scopes 1–3), number of vehicles, and planned usage in kilometers (for Scope 3 calculation) to recommend vehicle configurations and identifies potential for cutting carbon emissions.
- Public sector: Process automation/PEGA as a Service is an end-to-end procedure for process and service automation. It is designed to reduce business trips and paper use, and at the same time promote digitalization of administrative processes within public authorities.

## 4. Sustainable IT services:

T-Systems' data centers around the world have been running on 100 percent renewable energy since 2021. This means that renewable energy is sourced directly wherever it is available, and emissions are offset through the purchase of certificates whenever it is not available. Additionally, the susTain tool can be used to calculate how much our business customers could cut their carbon emissions by switching to our IT infrastructure and services.

## Partnerships in the ESG area

Customers also become downstream partners with whom we work on innovations and services. The goal is to accelerate customers' digital transformation processes and invest jointly with them in new business models that will focus on the decarbonization of society.

Since 2021, T-Systems has been a member of the Climate Neutral Data Centre Self-Regulatory Initiative, which is working to see data centers operating on a climate-neutral basis by 2030. Cooperation is also set to be stepped up with pioneering innovators from our successful start-up program TechBoost.

Additionally, T-Systems is an industry partner to legislators and the research sector. One example of this is our partnership with the Fraunhofer Institut, with whom we are developing innovative green technologies for cloud computing and our data center in Biere (Germany). Another example, this time at international level, is our partnership with the University of Granada, which sees us establishing a Chair of Innovations in Digital Sustainability to drive research activity.

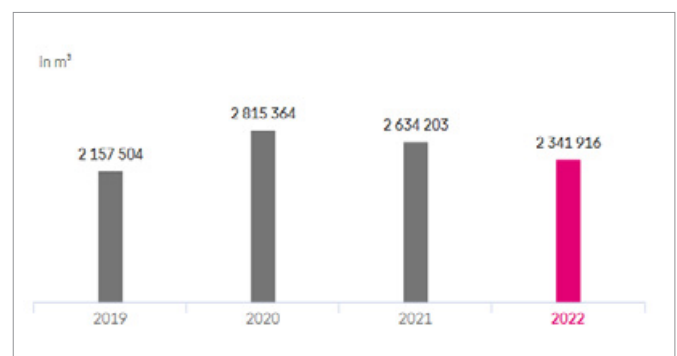
T-Systems is collaborating with Group subsidiary Comfort Change to offer a solution for any individual or company wishing to establish, operate or use an electric charging infrastructure. The complete package includes everything required to set up charging stations, including excavation work, full logistics, hardware and software installation, maintenance, and post-launch troubleshooting. Remote monitoring allows faults to be cleared swiftly, with support provided by local service teams if required.

## Water consumption

As a service provider, almost all of the water we use is consumed within the scope of our office activities. Similarly, water consumption only plays a minor role along our supply chain. For that reason, water is not a main focal area in our CR management activities. Nevertheless, our environmental guideline does call for reducing our water consumption. We measure our annual consumption by means of our water consumption indicator.

In the year under review there was a slight 11 percent decrease in Group-wide water consumption.

We provide detailed information on the figures for each individual company in our interactive benchmarking tool.



### Protecting biodiversity

One major cause of species extinction is the fact that more and more space is being taken up by industry, agriculture, and transportation. As a telecommunications company, we take up significantly less space compared to companies in many other industries. However, our business activities can also impact biodiversity in other areas of our value chain – particularly with our suppliers at the start of the chain. This is why our suppliers must also comply with our environmental principles. We verify this regularly during our on-site social audits.

We drew up a statement in 2022 specifying how we contribute to conserving biodiversity and protecting forests from clearance activities. Our commitment to biodiversity conservation and protection from deforestation sets out the measures we are implementing to this end along our value chain. This includes our approach to sustainable purchasing, our climate strategy and our practice of taking aspects of biodiversity into account in our network expansion work.

ICT solutions can help preserve biodiversity. In our “Bee and Me” project, intelligent sensors are being used to collect data from beehives and transmit them to beekeepers. The beekeeper simply needs to look at their smartphone or tablet app to find out whether their bees are healthy. They can then take action if they notice any anomalies. To date, we have established a total of 42 beehives in Europe (including 23 conventional hives and 19 “digital” ones that are equipped with sensors), providing a home to some 1.7 million bees in total. There was no change in the inventory of the hives in 2022.

We also cooperate with environmental and nature conservation organizations. Proceeds from our various cell phone collection campaigns (only available in German) in Germany have so far benefited the following organizations (only available in German), among others: Landesbund für Vogelschutz Bayern e.V.; Pro Wildlife e.V.; Frankfurt Zoological Society (projects for the protection of gorillas); and Hellabrunn Zoo, Munich (species protection projects).

The safety of the electromagnetic fields used in mobile communications is a publicly discussed issue. In 2022, the possible impacts of such fields on animals and plants continued to be debated. The Federal Office for Radiation Protection has determined that there is no scientific evidence (only available in German) that high-frequency fields below the legal limits endanger plant and animal life.

In the fight against climate change, we support international reforestation projects. Trees store carbon, produce oxygen, regulate the water balance, provide a habitat for countless species, and thereby promote biodiversity. In 2020, we officially terminated our active partnership with the Plant-for-the-Planet foundation, after its work was widely and publicly criticized. Many of our employees remain active within the foundation’s “Trillion Tree Campaign” initiative, however, with efforts such as organizing tree-sponsorship donations or tree-planting campaigns. For this reason, the number of planted seedlings shown in our interactive tree counter (only avail-

able in German) continues to grow. In our Magenta Forest campaign, we have now grouped the various projects underway throughout the Group in this context, thereby highlighting the fact that many small efforts can add up to make a big difference. One and all are welcome to participate in this campaign – by having trees planted, via an online site; making donations; or joining with others to plant trees in their local areas and have them registered, along with their geodata. Donors can also have their names displayed within the virtual Magenta Forest. In addition, we have asked our employees to use the Ecosia search engine for their internet searches wherever possible. Use of Ecosia contributes to global afforestation, and to our Magenta Forest: with the income it generates from search engine advertising, Ecosia plants trees in over 30 countries, in cooperation with local organizations. In 2022, our Ecosia searches financed over 60 530 tree plantings. Together with the trees we planted ourselves as well as donated trees, our Magenta Forest grew by over 1 030 trees in the year under review.

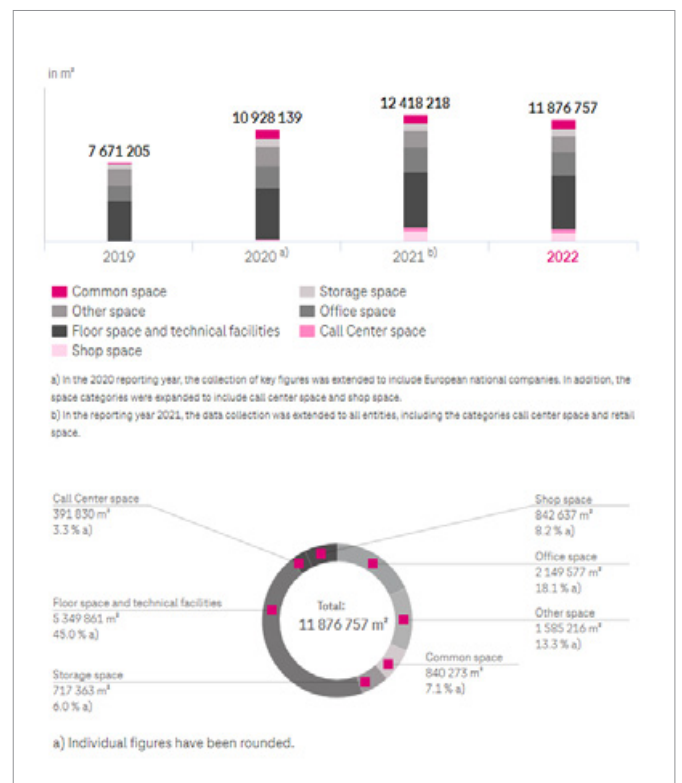
### Reporting against standards

#### Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Encourage the development and diffusion of environmentally friendly technologies)

#### Land use

The property used by Deutsche Telekom Group covers most of our demands for technology, office, common, call center, shop and storage space as well as providing space for other needs. Total take-up decreased year-on-year with a total of 11 876 757 square meters.



## Reporting against standards

### German Sustainability Code

- Criterion 11 (Usage of Natural Resources)

### Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)



# Environmentally friendly products & services

## Ecological product design

How can we make our products more sustainable and minimize their adverse environmental impacts throughout their entire life cycles? For each product, we begin answering this question very early on in the product's development. Our Sustainability by Design Guidelines give product developers specific information on how to proceed. The guidelines cover such aspects as sustainable packaging, hazardous substances, and sustainability-oriented device development.

This approach is in line with our aim of continually improving and expanding our range of sustainable products. It also answers to the growing consumer demand for more-sustainable products for mobile and fixed-network communications.

## Introduction of Eco Rating

In 2021, working in cooperation with the telecommunications companies Orange, Telefónica, Telia Company and Vodafone, we launched the Eco Rating initiative, a new sustainability-rating system for cell phones. There are now nine network operators in total participating in the initiative. By the end of 2022, over 300 different cell phones from 22 different manufacturers had been evaluated based on the Eco Rating method. The purpose of the rating system is to provide consumers with consistent, precise information about cell phones' environmental impacts throughout their entire life cycles, i.e., throughout their production, use, transport, and disposal. In the system, cell phones are evaluated on the basis of information provided by the manufacturers. The aspects taken into account include durability, reparability and recyclability, climate compatibility, and resource efficiency. With the system, we are improving transparency in the cell-phone industry and thereby helping to reduce its entire ecological footprint. In addition, the Eco Rating system is expected to motivate device manufacturers to develop products that are even more sustainable. The label has already been introduced in 36 countries worldwide since the initiative began, with launches currently taking place successively in further countries.

## Ecological responsibility in procurement

We work closely with our suppliers in order to be able to offer environmentally friendly products. In a sustainable procurement strategy that is valid throughout the Group, we have defined guidelines for our procurement processes.

Our principles in this area are also enshrined in various sets of rules and standards, such as our Supplier Code of Conduct and our procurement guide (Leitfaden für den Einkauf). Our Global Procurement Policy sets forth the sustainability criteria that apply to our

Procurement unit. These criteria are taken into account throughout the entire procurement process.

In 2022, we refined specific sustainability criteria for IT and network equipment and for passive products such as fiber-optic cable. On that basis, and in close cooperation with the telecommunications company Orange, we then developed a harmonized set of criteria. Since 2022, we have been applying these criteria in invitations to tender with budgets of over 10 million euros for IT/NT equipment and fiber-optic cable products, and with a 20 percent weighting factor in supplier-selection processes. In the latter, suppliers' carbon footprints, and their commitment to ambitious climate goals, are given especially high priority, in keeping with the fact that measures to reduce carbon emissions in our supply chain (Scope 3) play a key role in our efforts to become climate-neutral, throughout our entire value chain, by no later than 2040.

In cases in which a supplier does not satisfactorily fulfill the sustainability requirements set forth in our Supplier Code of Conduct, we initiate an escalation process. We use various control instruments, such as risk analyses and audits, to review compliance with our standards. In addition, our ESG KPIs serve as an important control element in our procurement.

More information on sustainability-oriented procurement is available here.

## Green shop

Using sustainable materials in our stores is an elementary component of our shop concept. In an initiative entitled "Green Point of Sale," we have brought together sustainability-oriented measures that we are gradually rolling out at our 1 600 shops in Europe.

To make the sustainability aspects of the products in our stores visible to our customers, we use our #GreenMagenta sustainability label and demonstrate our sustainability strategy through various communication campaigns. Also, we carry out sustainability training events for our shop employees to enable them to provide more-specific sustainability-oriented advice to customers. More than 4 000 employees have participated in such training to date.

Under the Green Point of Sale scheme, 100 percent of the electricity used by our shops in all national companies comes from renewable energies. We are also fitting out our shops in a more sustainable manner. Since 2019, all new or renovated major shops in Europe use recyclable LED lamps. We also use sustainable, ecologically certified, organically sourced flooring in our stores that has earned our #GreenMagenta label. Since 2019, green walls



covered with living plants have been a firm feature of our international shop concept. As of the end of 2022, we have installed over 70 green walls in various shops around Europe, with more set to be put up in 2023. Our green walls are also marked with the #GreenMagenta label. In addition, we have introduced energy-saving screens, and have banned all single-use plastic from stores across Europe since 2020. For example, we have replaced all of the plastic cups for our coffee machines with more sustainable alternatives. In Austria alone, this policy is saving around 6 000 plastic cups per month. In Germany, shops have introduced bags made of recycled PET plastic. Five recycled PET bottles go into the making of each bag. Plus, we are reducing our paper consumption, and have already introduced paperless stores in Austria, Slovakia, and the Netherlands. We have cut our paper usage in Germany, Poland, and Hungary by 85 percent since 2021, achieved in part by opting not to offer printed brochures and flyers in our shops. Digital invoices and online payment methods are offered across the board at all national companies. In some shops in Europe, we offer what we call repair bars, where we repair or replace displays, rechargeable batteries and back covers of Apple, Samsung, and Huawei devices.

Overall, we are aiming to apply sustainability criteria in the design and decor of our shops throughout Europe. At the beginning of 2021, we established a Europe-wide Green Point of Sale community to drive sustainability issues forward in regular virtual meetings. The topics included local green initiatives in the national companies, the visibility of our sustainability activities in the stores, and our sustainable cell-phone recycling scheme. The #GreenMagenta initiative is already being promoted in over 80 percent of our shops in Germany and Austria, with stores in Hungary, the Czech Republic, Poland, and Croatia to follow in 2023. In 2023, we also aim to make the furniture inventory and design of our stores even more sustainable and to have our shop furniture manufactured using recycled wood.

As with our shop design, we have also attached great importance to sustainability in the production of our company uniforms, not least in regard to the new uniform for Telekom Shop employees, released in January 2023. We set out to create more sustainable company uniforms for the 3 700 or so staff in our shops. Manufactured from organic wool and recycled polyester, most of these items have now been certified in accordance with the Global Organic Textile Standard (GOTS). The GOTS defines internationally recognized requirements for organic textiles, from raw-material harvesting to environmentally-friendly and socially-responsible manufacture. Old company uniforms that are no longer required are recycled and turned into new items such as bags and hair bands.

### Ecologically sustainable products

We are offering our customers more and more products and services that are sustainability oriented. The basis for them is Deutsche Telekom's "green network", which is 100 percent powered by renewable energies. We use the #GoodMagenta and #GreenMagenta labels to highlight products and services that are especially sustainable. Also, in 2021, and in cooperation with other network operators, we introduced the Eco Rating labelling system, which we use to highlight cell phones that are eco-friendly. In 2022, we further expanded our range of eco-friendly products and services. Now, along with more eco-friendly models of routers, media receivers and phones (the Fairphone), we also offer more eco-friendly accessories. In addition, we offer sustainability-oriented services, such as rental plans, and refurbishment and recycling of smartphones and fixed-network devices.

### The first eco-friendly 5G smartphone

In 2021, and in the framework of our cooperation with Fairphone, a manufacturer based in the Netherlands, we supported the launch of the first eco-friendly 5G smartphone, in Germany, Austria and the Netherlands. The phone in question, the Fairphone 4, is currently the only smartphone to have received the German "Blue Angel" ecolabel. The phone has a modular design that is resource-efficient and reduces emissions. As of the year under review, our employees are free to order the new Fairphone as a workplace phone, since it has been certified in keeping with Google's Android Enterprise Recommended (AER) initiative. By participating in this program, Fairphone is working to offer companies the best-possible, most-secure devices for mobile work settings. To date, about 11 percent of our new trainees have opted for the Fairphone 4.

### Conserving resources by refurbishing smartphones

In 2021, we added the cell-phone purchase, "ReUse MyMobile" and "Insure MyMobile" services to our portfolio of sustainable products and services. Under the cell-phone purchase scheme (only available in German), we buy used smartphones – including smartphones from both Deutsche Telekom and other providers. We provide guaranteed, certified erasure of all data. We refurbish, and make available for reuse, nearly all of the devices we purchase. And in our refurbishments, we try to avoid component replacements wherever possible. Instead of replacing defective components, we refurbish them with innovative procedures that minimize resources consumption. For example, we restore displays with a new, innovative deep-polish method that produces long-lasting results. Devices that simply cannot be reused are properly recycled. Prior to being sold, each refurbished device undergoes a total of 65 tests, covering the same functional standards that are applied to new devices. Then the devices are sustainably and securely packaged – and returned into circulation.

We offer refurbished devices, along with a 24-month guarantee, for sale via our "ReUse MyMobile" (only available in German) service – and thereby extend the devices' life cycles and help save resources. Our newly designed packaging, including the environmentally friendly labels and overprinting we use, is biodegradable. The inner packaging for our products is sealed and secure, with filmless, transparent viewing windows that make it easy for customers to inspect the products in our stores.

Our new “Insure MyMobile” cell phone insurance, including Apple Care service, is available both for new devices and for refurbished smartphones. This also helps to extend devices’ average lifetimes, since insured devices are repaired free of charge if they are damaged. By purchasing one of our “ReUse MyMobile” smartphones, customers can save up to 200 euros in comparison to the purchase of a new phone. These products receive our #GreenMagenta label.

**Similar efforts at our national companies (NatCos)**

Our national companies also offer ecologically sustainable products and services. For example, Magenta Telekom in Austria now offers refurbished cell phones under the #GreenMagenta “Magenta Refurbished” label, which it added to its portfolio in 2021. At our national companies in Romania and the Czech Republic, customers can rent routers and modems, and rental devices are made available for reuse when they are replaced. In Hungary, our customers may choose the “ExtraNet Green 1 GB” data-expansion option. With its own solar power plants, Magyar Telekom generates the green power needed for data transmission under the “ExtraNet Green 1 GB” option – enough green power to transport about 450 000 gigabytes of data per year.

At nearly all of our European national companies, we offer rental plans for various fixed-network devices, and devices exchanged within such programs can often be reused or refurbished for further use. On a European-wide basis, this has led to a return rate of over 55 percent. Also, at all of our national companies, customers have the option of returning their used smartphones to us, or of selling them to us for a fair price. The devices that we accept through such channels are professionally refurbished for resale, or are recycled. Such services have led to return rates of up to 24 percent, depending on the country involved.

**Offers for business customers**

We also want to help our business customers meet their sustainability goals and implement relevant regulatory requirements – such as those applying under the EU Green Deal. To date, more than twelve customer solutions of T-Systems International and Telekom Deutschland have already earned our #GreenMagenta label, and more solutions continue to be added to this group. Airport Collaborative Decision Making (A-CDM) is a good example. A-CDM, a resource for airport workforces, facilitates information-sharing and collaboration, and thereby helps make airport operations more efficient. This, in turn, enhances punctuality, and, by improving predictability, it also reduces fuel consumption and the related emissions. Telekom Deutschland’s cell-phone purchase portal (Handyankaufportal) for business customers is another successful service that has earned the #GreenMagenta label. Also, in cooperation with the “everphone” mobile device service, we offer our business customers “Device as a Service” plans. Under these plans, we assume complete responsibility for management of devices – including rentals, pickup of devices from employees, replacements, expert repairs of defective devices, and certified recycling and waste management. Numerous other Deutsche Telekom offers, and numerous products of other manufacturers,

help our customers reduce their carbon footprints. This is the case, for example, with the many home-office solutions we offer – and especially with our various videoconferencing and web-conferencing systems.

With our Internet of Things (IoT) solutions, we are now helping many of our business customers to make their processes more resource-efficient and energy-efficient and to establish innovative, sustainable business models. Companies seeking to use IoT solutions often find themselves having to deal with lengthy proof-of-concept trials, and costly test cycles, just to find out whether their products offer the desired performance and battery life. There is no guarantee of success, given that there are many sources of error and a multitude of design and provisioning aspects that can influence the outcomes. Our “IoT Solution Optimizer” service facilitates modeling of many different types of projects, for many different types of scenarios and components. It produces precise results within minutes. With this service, companies can significantly reduce their development costs, while still ensuring that their newly fielded IoT solutions will pay off in the long term.

**Measuring progress with key performance indicators**

We use various key performance indicators to measure our progress in expanding our range of sustainable products. For example, we track the numbers of sustainable and refurbished devices in our mobile and fixed-network communications segments. We also specify the ratio of more sustainable products sold and leased to total devices sold and leased. In 2022, more than 39 percent of the fixed-network devices sold or rented throughout the Group were eco-friendly.

**Eco-friendly products of the Deutsche Telekom Group**



In addition, we record KPIs on the collection of devices for recycling purposes and on products with sustainable packaging.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 301-1 (Materials)
- GRI 301-2 (Materials)

### Online billing for mobile and fixed-line customers in Germany

About 237 million online bills were sent out in 2022. This is the equivalent of around 85 percent of all bills and credit notes for mobile and fixed-line customers in Germany. Since 2017, the data has been collected using a more precise calculation method.



### Reporting against standards

#### German Sustainability Code

- Criterion 2 (Materiality)
- Criterion 10 (Innovation and Product Management)

#### Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

#### European Federation of Financial Analysts Societies (EFFAS)

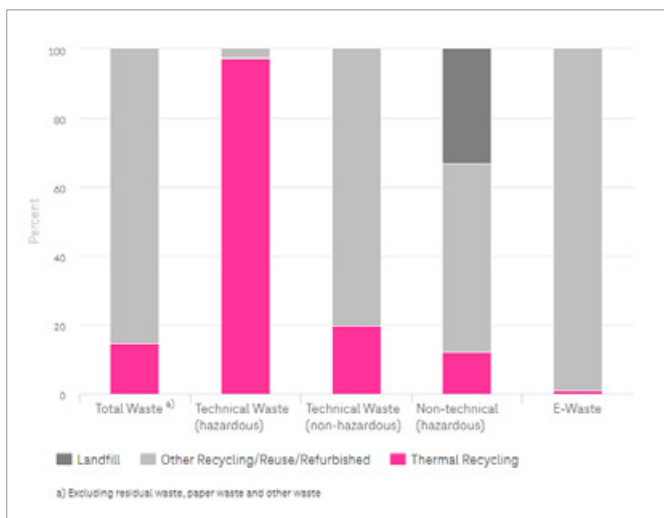
- V04-13 (Percentage of products or services for increasing eco-efficiency of own products or services)

# Waste prevention & recycling

## Waste management and recycling

We are careful with resources – and likewise with waste. Waste management throughout our entire Group is organized consistently in line with the International Waste Management Framework. On the basis of this framework, our national companies define their own measurable targets and monitor progress toward those targets. This enables them to flexibly comply with general conditions specific to each country and company.

We strive to avoid creating waste wherever possible and to recycle as much as possible of the waste we do produce. We are pursuing a range of approaches in this context to ensure that we manage electric waste in a controlled manner and avoid it ending up in landfills, where waste that is not properly disposed of poses a risk of contamination to soil and watercourses. In 2021, our European national companies defined the following common aim: to ensure, by 2024, that no electronic waste they produce, and no returned devices, such as smartphones, routers and laptops, wind up in landfills – and that such waste and devices are properly recycled as they would be in Germany. We achieved this goal by the end of 2022 and are planning to roll out implementation to T-Mobile US and T-Systems in future. Additionally, we are constantly working to refine our Group-wide set of performance indicators for waste management, and we now also collect data on recycling of technology and hazardous waste as well as monitoring quantities of waste produced.

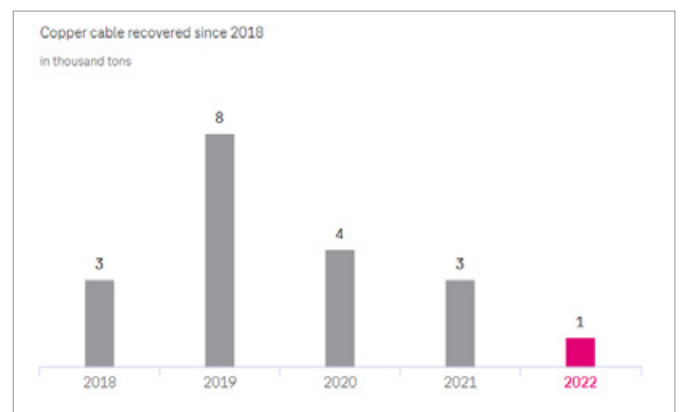


## Recovered copper cables

Copper cables were the main component of telephone lines for decades. Our fiber-optic build-out means that this type of cable is now gradually being replaced. In 2016, we therefore introduced a relevant Group-wide, mandatory policy. It provides a guideline to

our national companies when it comes to the recycling and disposal of legacy cables and also contains requirements for copper cable recycling.

In 2022, Deutsche Telekom removed around 1 313 metric tons of copper cable from cable ducts in Germany alone. Certified waste disposal facilities process the cables in accordance with environmental standards, and up to 90 percent of the material is then recycled.



## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 306 3–3 (Management of material topic)
- GRI 306–1 (Waste)
- GRI 306–2 (Waste)
- GRI 306–4 (Waste)
- GRI 306–5 (Waste)

### Sustainability Accounting Standards Board (SASB)

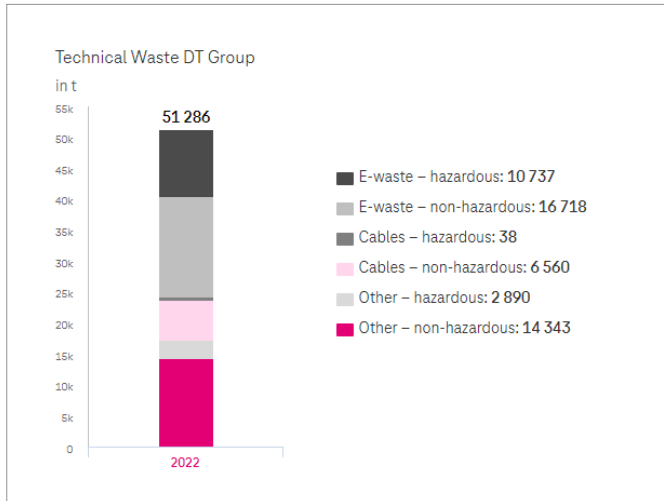
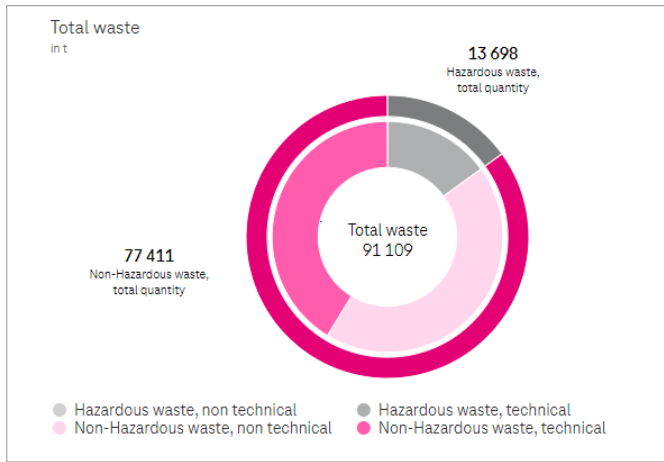
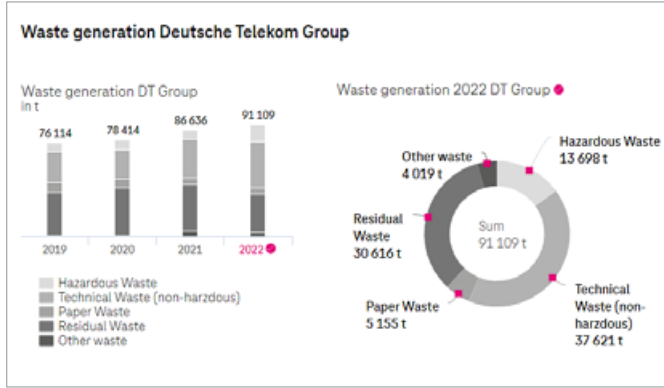
- Code TC-TL-440a.1 (Product End-of-life Management)

## Waste production (including e-waste)

As part of our waste management program, we transparently track our waste production. In 2021, we added a performance indicator for technology waste to our set of KPIs. As a result, we are now able, for the first time, to differentiate between electronic waste (e-waste), cable waste, and other technology waste. We have not defined Group-wide targets for the reduction of hazardous and non-hazardous waste. Instead, the national companies are guided by our “International Waste Management Framework”, which was adopted in 2013, using it as a basis for developing or revising their own waste management strategies. They are also setting their own targets, giving top priority to reducing hazardous waste such as lead batteries.

Group-wide waste increased by 5 percent compared to 2022. We provide detailed information on the figures for each individual company in our interactive benchmarking tool.

**Waste generation Deutsche Telekom Group**



**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 306 3–3 (Management of material topic)
- GRI 306–1 (Waste)
- GRI 306–3 (Waste)

**Sustainability Accounting Standards Board (SASB)**

- Code TC-TL-440a.1 (Product End-of-life Management)

**Global Compact**

- Principle 7 (Support a precautionary approach to environmental challenges)

**Paper-free and low-paper work**

Running a large company like Deutsche Telekom involves high paper consumption. For several years now, we have gradually been reducing our paper consumption. With our Paperless Office project, we aim to completely eliminate paper use by 2025.

Print on demand has many advantages. For example, quick reference guides can be printed as needed depending on orders and don't need to be preprinted, transported, and stored. Changes to information sheets for our customers can be made on short notice, eliminating large quantities of outdated documents that need to be destroyed. In 2021, we expanded this project, and print on demand is now available for printing quick reference guides for all the rate plans we offer in Germany (MagentaZuhause, MagentaTV, business-customer and hybrid plans). We also reviewed whether there are other materials suitable for print on demand – such as brochures and SIM cards. The process is not yet suitable for all of the materials we work with. This applies to the SIM cards for our hybrid plans, for example. Since March 2021, print-on-demand instructions have been marked with our #GreenMagenta label.

In 2022, we implemented various measures in Germany with a view to minimizing our consumption still further:

- Correspondence with our millions of customers is one of the biggest levers for saving paper. Despite online billing and increasing use of digital communication, we sent out around 3.9 million more items in 2022 than in 2021 – equivalent to 47 tons of paper. This was particularly due to the fact that we were obliged to inform a large number of our customers about a rate adjustment.
- A portion of each delivery note is provided in digital form. As a result of this conversion, our paper delivery notes now comprise only one page instead of two – a change that saves seven metric tons of paper per year.
- A growing number of employees are now working from home, with the result that fewer documents were printed out in the company's offices. Also, awareness campaigns and digitalization procedures have led to further reductions on printing – amounting to total savings of 3.5 metric tons of paper in 2022. Flipcharts, notebooks and the like are also increasingly being replaced with digital alternatives.
- A successful pilot project for reducing printing at Deutsche Telekom Headquarters in Bonn was launched in December 2021, followed by another project in Düsseldorf in May 2022. Both projects ran successfully and are currently being evaluated. As we look to the future, we plan to reduce Deutsche Telekom's printer fleet considerably at all locations.

- Our EmployeeApp (“MitarbeiterApp”) is used to handle HR and accounting processes – such as travel expense reports – digitally and paperlessly.
- We have also been able to save large quantities of paper in connection with our shops. The paper-based “Mehr Magenta Magazin” (“More Magenta Magazine”) has been discontinued, decreasing paper use by 92.3 metric tons.
- Until we reach our goal of going paperless, we will continue to use certified paper from sustainable sources. Furthermore, over 65 percent of the articles in our range of office products are currently sustainably certified – that’s 15 percent more than in 2021. By 2025, we plan to use certified alternatives for all products for which such alternatives are offered.
- We have discontinued most of the flyers available in our shops, keeping just a small selection for customers to take away with them. This has saved 55.14 metric tons of paper.

The next step is to network more closely with our national companies, who can already boast a number of successes:

- Slovak Telekom: Through greater reliance on online billing, the company is saving about 10 metric tons of paper per month. In addition, our Slovakian national company uses no paper flyers in its shops, and its customers are able to conclude their agreements entirely online.
- Makedonski Telekom: Paper bill use was cut by 10 percent between 2021 and 2022, saving 1.5 metric tons of paper.
- Croatia: Since 2021, Hrvatski Telekom’s business customers have been receiving online bills too; this has reduced paper use still further.
- Magenta Telekom in Austria: The company’s customers can also receive their monthly bills online if they so request. Furthermore, green receipts, made entirely from recycled paper, have been used in shops since 2020. Additional paper is being saved and resources conserved as a result of the switch from paper bags to rePET bags.
- T-Systems in Brazil: 90 percent of customers receive their bills online; supplier contracts are also processed paperlessly using digital signatures.
- T-Mobile Polska: For every two pages of paper saved via business customers’ switching to online bills, T-Mobile Polska plants one tree.
- T-Mobile US: In the United States, use of digital alternatives for printed bills and flyers is also increasing. Additionally, the company has reduced the numbers of printers in its office buildings in order to conserve resources.

- Greece/OTE: With the “MyNet.Go” app, employees can do such things as submit vacation requests online.
- Deutsche Telekom Services Europe (DTSE): Paper consumption is being cut through the “Let’s go paperless” project, which is digitalizing as many processes as possible. A digitalization community offers tips, ideas, workshops and digital tools for saving paper and reducing the number of printers.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 306–2 (Waste)

### Sustainable product packaging

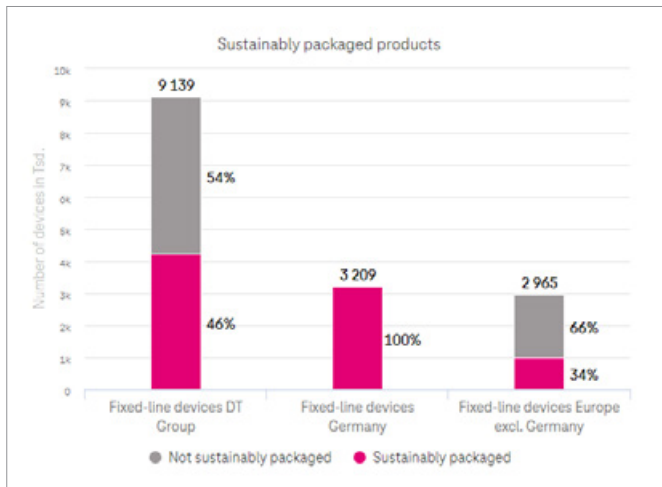
As of mid-2022, all Deutsche-Telekom-branded products launched on the German and European markets have been packaged sustainably. For this conversion, we have developed appropriate sustainability criteria, and enshrined them in a packaging guideline. Wherever possible, we use recyclable and biodegradable materials, recycled paper, and non-toxic labels and printing (e.g., using soy ink). In addition, we eliminate 100 percent of single-use plastic in our packaging. This packaging guideline is part of our Standard Design Specifications, which apply throughout the Group (with the exception of T-Mobile US), and which also include sustainability requirements for product components and design. All product manufacturers must meet these criteria when developing Deutsche Telekom devices.

For our product packaging we use materials such as PaperFoam, a biobased and biodegradable alternative to conventional packaging materials. PaperFoam is non-toxic, and recyclable in paper recycling streams, and it reduces the carbon footprint by up to 85 percent compared with other materials. As of 2021, the packaging of the Speedport Smart 4 router sold in Germany is made of this material, for instance. In addition, 95 percent of the router’s housing consists of recycled plastic.

We also use sustainable product packaging with non-Deutsche-Telekom-branded devices that we source from third-party providers. By the end of 2022, almost 90 percent of the third-party smartphones that we sold in Europe were sustainably packaged. As a result, the target of over 90 percent by the end of 2024 is realistically achievable. We enter into dialog with suppliers that are unable to meet our sustainability standards. Some manufacturers that do not yet fully meet our requirements have nonetheless introduced promising plans for sustainable packaging.

Since 2021, we have reported Group-wide figures on sustainably packaged devices, differentiating between our own sustainably packaged fixed-network devices and sustainably packaged mobile devices (e.g., mobile routers, smartphones, and tablets). The increase compared to the previous year is mainly due to the consistent application of the packaging directive for all newly launched own products and an improvement in the survey methodology.





We also want to make logistics more sustainable. To that end, we plan to optimize parcel packaging, for example. In particular, we plan to discontinue use of plastic in such packaging. Since 2021, we have been saving around 4 700 kilograms of plastic per year by dispensing with wrapping plastic in technical logistics in Germany alone. But we also optimize paper and cardboard consumption in our shipping logistics. In 2020, we began using a cardboard shredder. This has enabled us to reduce our use of paper as fill material – by 50 metric tons of paper per year. To make even greater use of optimization potential in this area, we are in discussion with the national companies outside of Germany and are working with them to develop relevant innovative concepts.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 301-1 (Materials)
- GRI 301-2 (Materials)
- GRI 301-3 (Materials)
- GRI 306-2 (Waste)

#### Used mobile device collection

The European national companies (with the exception of Germany) are aiming, by 2024, to collect one million used mobile devices and refurbish or recycle them to return them into circulation. In Germany, we are also doing more than the law requires in our efforts to collect used cell phones. Since 2003, we have collected over 3.4 million used phones.

Under our sustainable smartphone recycling scheme, users can sell used phones to Deutsche Telekom in Germany via the cell-phone purchase service (only available in German). Used phones that lend themselves to refurbishment and reuse are refurbished – and the results are certified. Via the ReUse MyMobile (only available in German) service, they are resold and returned into the smartphone ecosystem. By being reused, their ecological footprint is considerably improved. With our Insure MyMobile service, we also offer cell-phone insurance for new and refurbished smartphones.

Business customers can use the cell-phone purchase portal (only available in German) to return smartphones and tablets. In this way, we also offer a complete cell phone cycle for companies.

In Germany, used mobile devices can be sent to us by mail – without batteries, please! – or deposited in a Deutsche Telekom collection box. Overall in 2022, Deutsche Telekom took back or purchased a total of around 172 000 used cell phones in Germany. We offer an online portal (only available in German) via which anyone can get involved in cell phone collection and order a free collection box. Phones returned via this channel are also checked to see if they can be reused. Phones that are no longer suitable for refurbishment are recycled in Germany, by specialized companies, properly and environmentally safely. The metal resources thus recovered are also returned to the cell-phone ecosystem and reused. The cell-phone collection center published a mandatory training course for collectors in 2022 to ensure that devices with batteries continue to be collected in a legally compliant manner.

We work with collection specialist Teqcycle for our device collection processes. Together, we are committed to secure, state-of-the-art solutions for the collection and transport of used equipment and data deletion. Deutsche Telekom maintains high security standards for data privacy; data privacy throughout the entire collection process has been certified by the testing and certification company DEKRA. In addition, the joint collection system of Deutsche Telekom in Germany and Teqcycle, operating via the cell-phone collection center, has been awarded the official Blue Angel eco-label.

We use the proceeds from marketing and recycling to support nature-conservation and environmental-protection projects (only available in German), as well as social projects organized by the partners of the cell-phone collection center.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 301-3 (Materials)
- GRI 306 3-3 (Management des wesentlichen Themas)
- GRI 306-1 (Waste)
- GRI 306-2 (Waste)

#### Sustainability Accounting Standards Board (SASB)

- Code TC-TL-440a.1 (Product End-of-life Management)

#### Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)

#### Good Cause initiative – collecting cell phones for a good cause

Many of us have discarded or defective cell phones that contain valuable resources gathering dust in a drawer somewhere. We launched the Good Cause initiative in Europe in 2022 with the aim of returning these devices to the cell-phone ecosystem while doing some good at the same time. Almost all of our European national companies are involved in the initiative. The goal is to col-



lect discarded devices on an ongoing basis until 2024, returning the valuable resources they contain to the cell phone ecosystem. For every cell phone collected, we make a donation to local projects working in one of the following areas: marine conservation, forest conservation, or ICT solutions to tackle climate change. In addition to donations, each funded project receives a fixed sum of money annually from the Group or the respective national company to strengthen continuity and planning. Projects are also supported by a local NGO or local authorities.

Below you will find three examples of projects that have been launched under the umbrella of the Good Cause initiative:

**Cleaning up beaches with Mediterranean CleanUp (marine conservation)**

The OTE Group in Greece is working with NGO Enaleia to support and sponsor the Mediterranean CleanUp project. The goal is to curb plastic pollution in the coastal regions and seas of the islands of Corfu, Kefalonia, Skiathos and Agios Nikolaos (Crete). The project involves local stakeholders such as fishing communities and students in order to raise public awareness of the problems caused by plastic pollution.

**Reforestation at the Ottenstein Reservoir (forest conservation)**

Magenta Telekom in Austria has been working with NGO “Gut Ottenstein” since March 2022 to support reforestation work in the region around the Ottenstein Reservoir. It has become necessary to plant new trees following storm damage, the death of local ash trees, and felling as a result of a massive bark beetle infestation. The project also aims to promote sustainable agriculture, pond cultures and forestry, along with the production of regional produce.

**Clever Landscape project (ICT solutions to tackle climate change)**

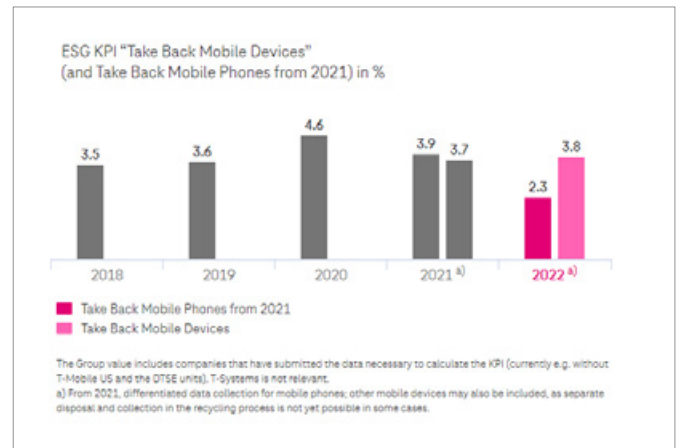
Clever Landscape is a long-term project by T-Mobile Czech Republic and the Czech University of Life Sciences Prague. It seeks to develop and implement measures for mitigating the negative impact of climate change and of extreme hydrological events on forests. The project is based in a model area over 1 700 hectares in size close to Prague in the Czech Republic. Sensors and measuring equipment have been installed in the area to enable researchers to monitor and analyze a range of parameters, including humidity, temperature, groundwater, and tree growth. The findings will be used to identify and model the potential impact of climate change, with a view to then adapting the landscape to the changes in natural conditions. It should be possible to apply the findings and methods to similar types of landscapes in future. T-Mobile Czech Republic is supporting the project through donations from the Good Cause initiative, most notably for the establishment of a campus data network to facilitate the mass deployment of sensors and faster data analysis, among other things.

**Take Back Mobile Devices ESG KPI (including cell phones)**

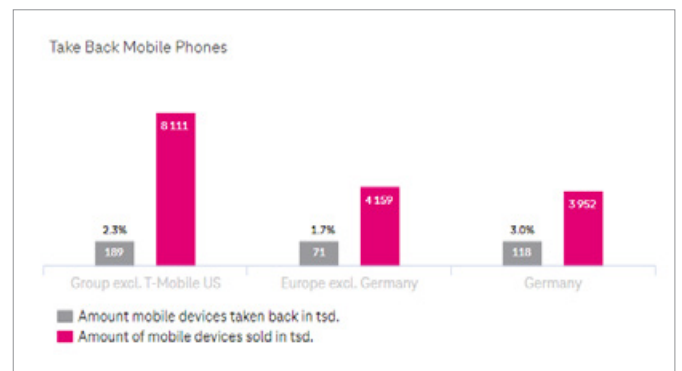
We report the Take Back Mobile Devices ESG KPI based on the reference value “number of devices in circulation.” This makes it possible to show the ratio of collected devices to the number of devices sold. When the devices are used for longer periods of time, the environment benefits and, as a result, this has a positive impact on the KPI.

In 2022, the value of the Take Back Mobile Devices ESG KPI was 3.8 percent for the Group (excluding T-Mobile US and DTSE units). This means, for every 100 devices put into circulation each year, we take back around 3.8 via collection campaigns. In 2021, we expanded our data collection and, in addition to the return of mobile devices, also report the return of mobile phones. The KPI for mobile phone take-back was 2.3 percent in 2022.

Our ambition in this connection: Increase the KPI



In 2022, over 150 000 million mobile phones were collected throughout the Group (excl. T-Mobile US). The corresponding KPI for the Group (excl. T-Mobile US) is 2.3 percent. The aim of the scheme for collection of used mobile devices is to give the devices a second life and, where that is not feasible, to properly recycle them, in order to recover the valuable raw materials they contain. With these efforts, over 3.4 million used mobile devices have been reused or recycled in Germany since 2003. This has conserved resources, and it has helped to improve the life cycle assessments for mobile devices overall.



The quantities of collected devices are reported in kilograms or in numbers of items. When using kilograms, we apply a Group-wide conversion factor of 7.25 items per kilogram, except where a different conversion factor is typically used in the country concerned. The mobile devices in circulation include smartphones, simple phones, tablets, and cordless phones. In the interest of data quality, numbers of items are reported by Procurement.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 301-3 (Materials)
- GRI 306-1 (Waste)

**Sustainability Accounting Standards Board (SASB)**

- Code TC-TL-440a.1 (Product End-of-life Management)

**German Sustainability Code**

- Criterion 7 (Support a precautionary approach to environmental challenges)
- Criterion 10 (Work against corruption in all its forms of, including extortion and bribery)
- Criterion 11 (Usage of Natural Resources)
- Criterion 12 (Resource Management)

**European Federation of Financial Analysts Societies (EFFAS)**

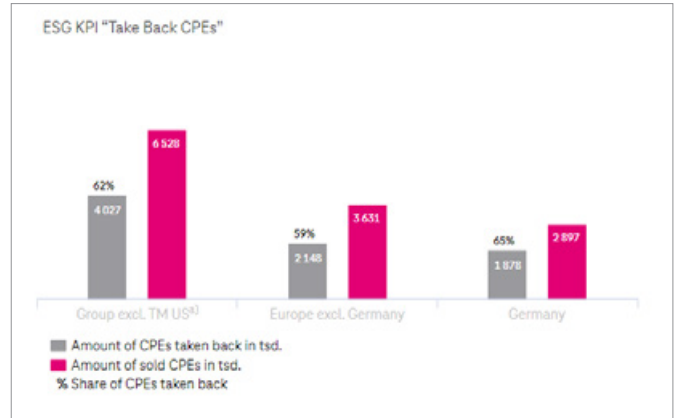
- E14-01 (Recycling Quota)

**Take Back CPEs ESG KPI (including fixed-line)**

In keeping with our circularity strategy, we also promote refurbishment and proper recycling of Customer Premises Equipment (CPE). The CPE category includes modems, routers, repeaters, and TV receivers. The aim of the scheme for collection of such devices is to give the devices a second life and, where that is not feasible, to properly recycle them, in order to recover the valuable raw materials they contain.

We have reported the Take Back CPEs ESG KPI and the numbers of refurbished CPE items involved since 2021. In 2022, more than 4 million CPE items were collected across the Group (excluding T-Mobile US), and 62 percent of that quantity were refurbished.

We are aiming to further improve the collection and refurbishment processes, and to achieve 100 percent sustainable management of collected CPE items. This would mean that all CPE items collected in Germany or by European national companies would either be refurbished, stored for future refurbishment, or recycled. Work on implementing relevant measures has already begun.



**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 301-3 (Materials)
- GRI 306-1 (Waste)

**Sustainability Accounting Standards Board (SASB)**

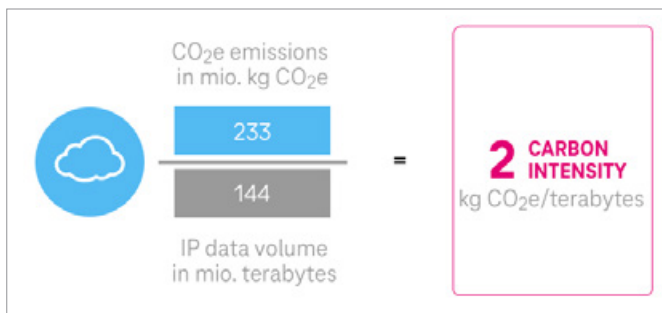
- Code TC-TL-440a.1 (Product End-of-life Management)

# CO<sub>2</sub>e emissions

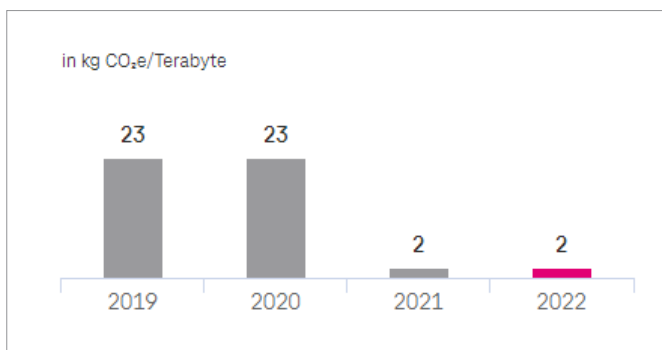
## ESG KPI “Carbon Intensity” DT Group

Since 2016, we have reported on the ESG KPI “Carbon Intensity.” In contrast to the ESG KPI “CO<sub>2</sub> emissions” used in previous years, this ESG KPI shows the CO<sub>2</sub>e emissions in proportion to the transmitted data volumes. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks.

Our ambition: decrease KPI



The ESG KPI figure also takes into account total CO<sub>2</sub> emissions for all energy sources – fuel, gas, district heating and electricity. The data volume is composed of the transmitted IP data volumes (including Voice over IP, Internet, IP-TV).



### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 305–4 (Emissions)

#### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

#### German Sustainability Code

- Criterion 13 (Climate-Relevant Emissions)

### Global Compact

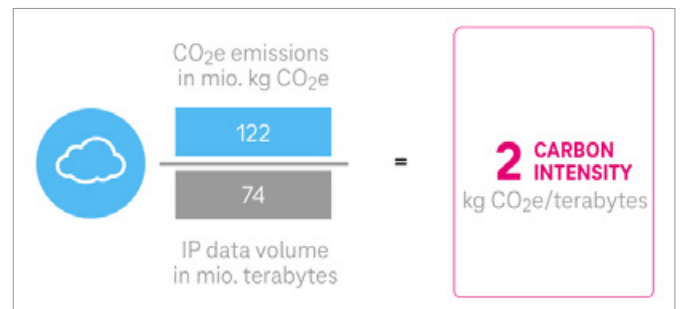
- Principle 7 (Support a precautionary approach to environmental challenges)

### European Federation of Financial Analysts Societies (EFFAS)

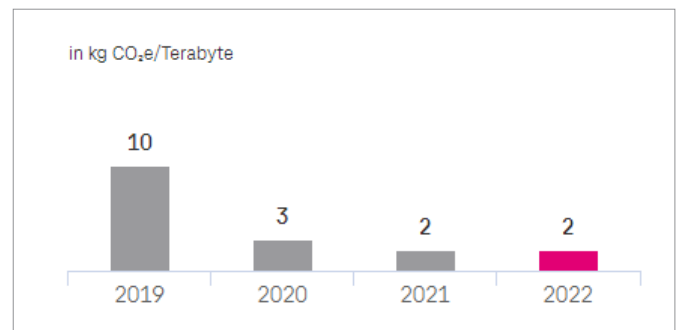
- E02–01 (GHG Emissions)

## ESG KPI “Carbon Intensity” DT Group in Germany

Since 2016, we have reported on the ESG KPI “Carbon Intensity.” In contrast to the ESG KPI “CO<sub>2</sub> emissions” used in previous years, this ESG KPI shows the CO<sub>2</sub>e emissions in proportion to the transmitted data volumes. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks.



The ESG KPI figure also takes into account total CO<sub>2</sub> emissions for all energy sources – fuel, gas, district heating and electricity. The data volume is composed of the transmitted IP data volumes (including Voice over IP, Internet, IP-TV).



### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 305–4 (Emissions)

#### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

**German Sustainability Code**

- Criterion 13 (Climate-Relevant Emissions)

**Global Compact**

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

**European Federation of Financial Analysts Societies (EFFAS)**

- E02-01 (GHG Emissions)

**Total CO<sub>2</sub>e emissions (Scopes 1 to 3) DT Group**

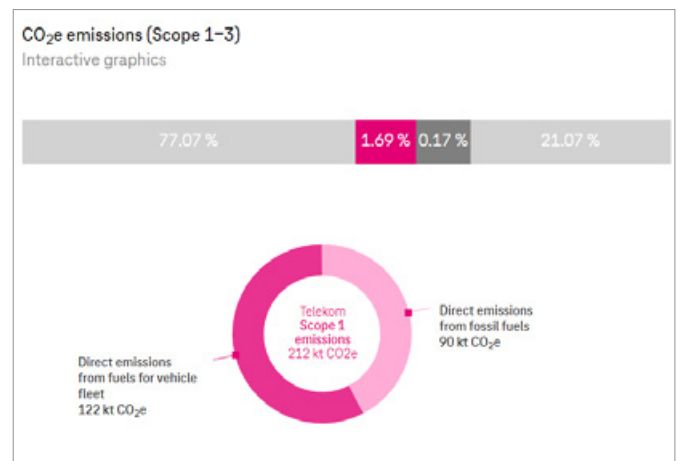
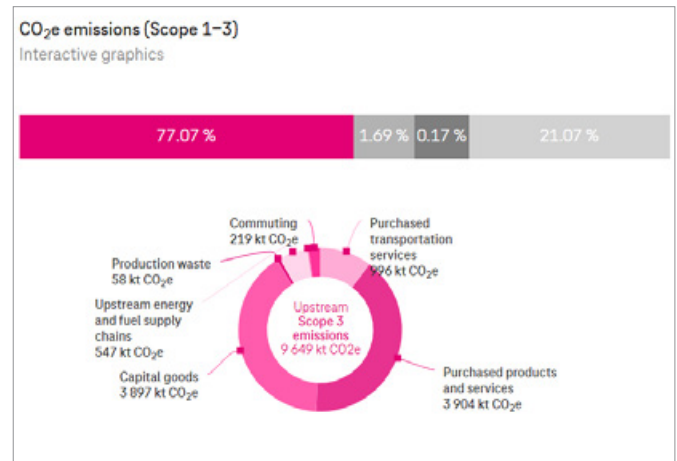
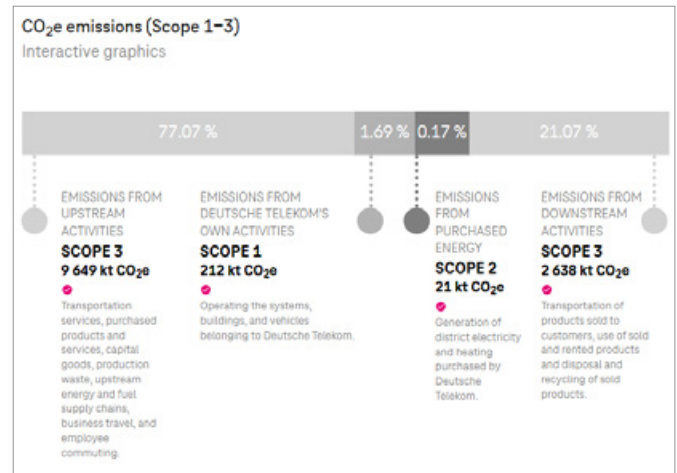
We present our Scope 1 to 3 greenhouse gas emissions uniformly so that they can be compared with each other. To that end, emissions are converted into metric kilotons of CO<sub>2</sub> equivalents (CO<sub>2</sub>e). In addition to CO<sub>2</sub>, we also consider CH<sub>4</sub> and N<sub>2</sub>O, and are working on integrating HFCs (refrigerants) into the calculation as well. Biogenic CO<sub>2</sub> emissions were not recorded separately for the year 2022, as they only occur to a small extent. We break down the emissions that occur along our value chain; this gives us an overview of where in the value chain the majority of them occur.

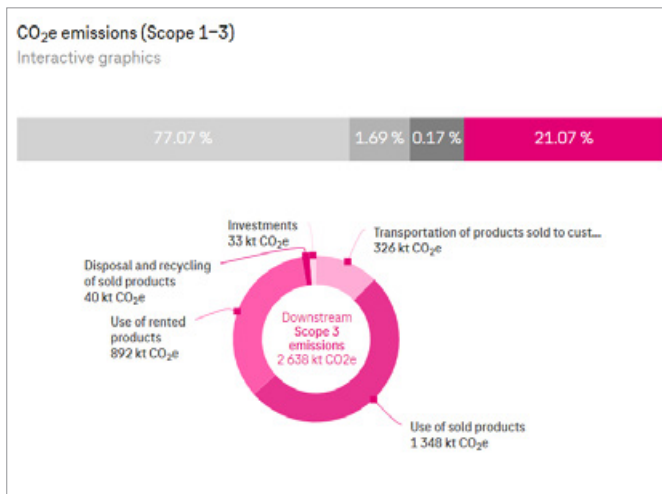
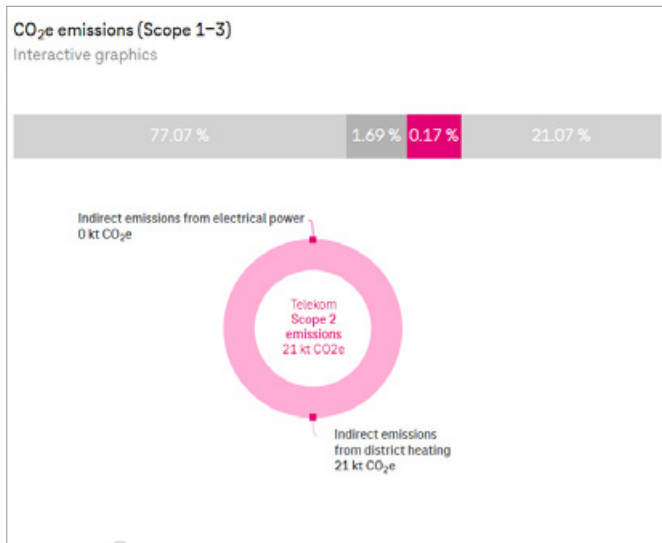
By making a complete transition to electricity from renewable energies, we were able to considerably reduce our Scope 2 emissions in the year under review. In 2022, market-based Scope 1 and 2 emissions throughout the Group amounted to around 233 000 metric tons of CO<sub>2</sub>e, or about 5.4 percent lower than in the previous year.

In 2022, Scope 3 emissions decreased in comparison with the previous year – from 14.8 million metric tons, to around 12.3 million metric tons of CO<sub>2</sub>e. Most of these emissions resulted from the manufacture of products and components (in particular devices and network technology), and from the use of our products and services (for example, sold or rented fixed-line and mobile phones, routers, and media receivers) by our customers. We also include emissions resulting from the use of our services by our customers' own devices, such as laptops or televisions. Emissions from the manufacture and transportation of technology required for establishing our networks are also taken into account.

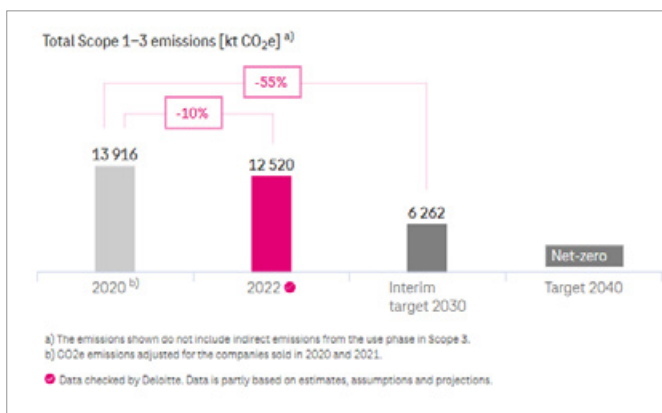
The main reason for the reduction in emissions is that, in accordance with the guidelines of the Science Based Targets initiative, the 2.6 million metric tons of indirect emissions resulting from the use of our services were removed from the calculation. These emissions come from the electricity consumed by terminal devices that customers have purchased from other providers, for example, smartphone manufacturers or other retailers. On the other hand, emissions caused by visits to Telekom Shops by our customers have been included for the first time for Germany and Europe. Emissions are still around 14.8 million metric tons, a figure comparable to the previous year, but emissions intensity, which is the level of emissions produced per euro of turnover, was reduced by around 6 percent with respect to the previous year due to the increase in turnover.

Currently, we are studying various factors that will influence the quantities of our future emissions (Scopes 1–3). For example, fewer emissions from our employees commuting to and from work, and our suppliers' climate-protection efforts, are having a positive impact. In addition, lower power mix factors, and improved energy efficiency in the devices used in connection with our products and services, can be expected to lower emissions. On the other hand, it is possible that higher numbers of (new) devices used in connection with our products and services will increase emissions. The switch to the new mobile communications standard 5G, wider network coverage, and higher-quality fixed lines are also expected to result in emissions increases.





🔴 Data assured by Deloitte. For detailed assurance comments see „DT Group in Germany“ and „T-Mobile US“. Includes offsets from purchased certificates.



### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 302-2 (Energy)
- GRI 305 3-3 (Management of material topics)
- GRI 305-1 (Emissions)
- GRI 305-2 (Emissions)
- GRI 305-3 (Emissions)

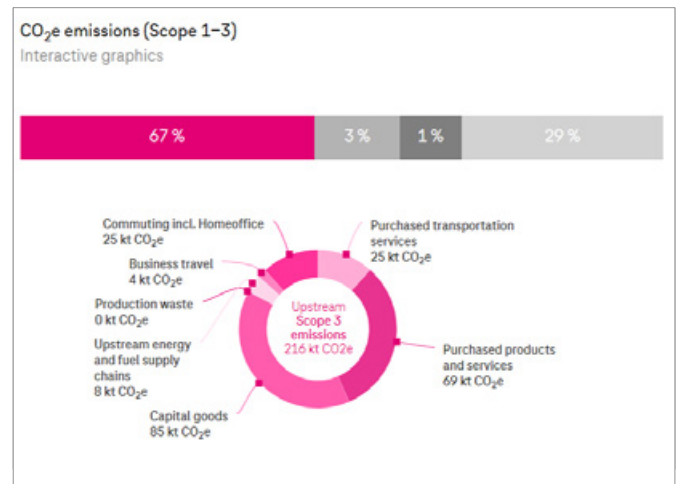
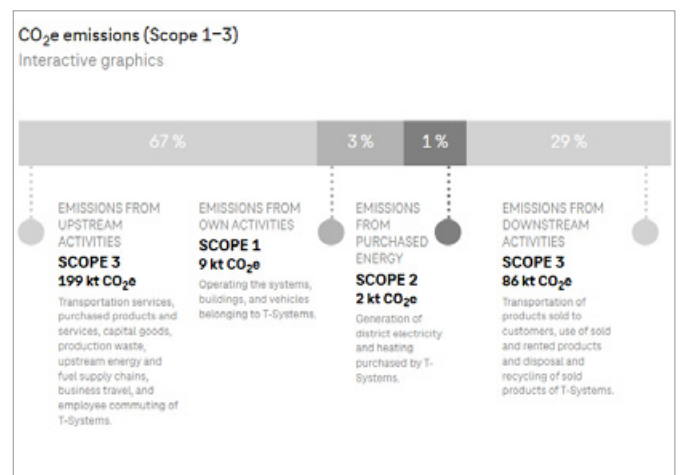
#### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

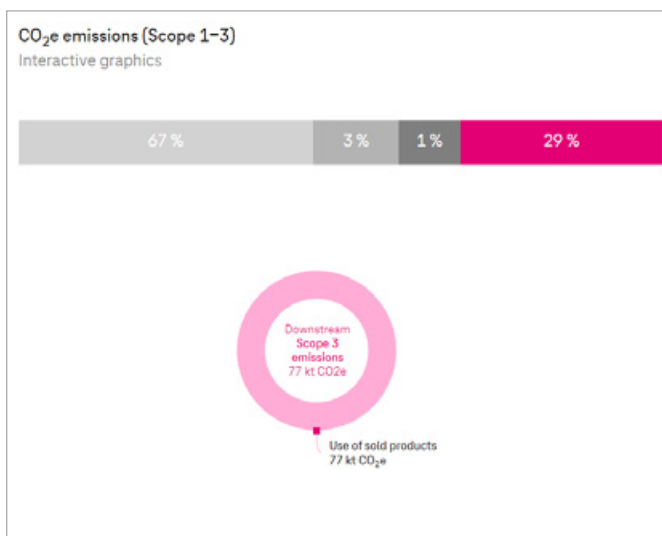
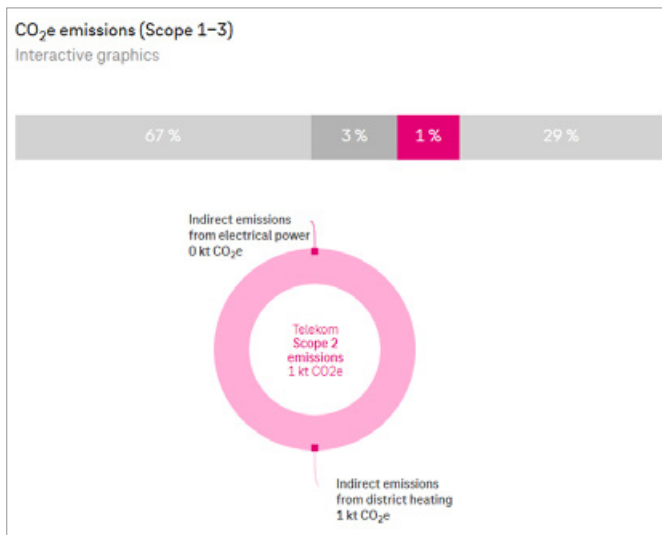
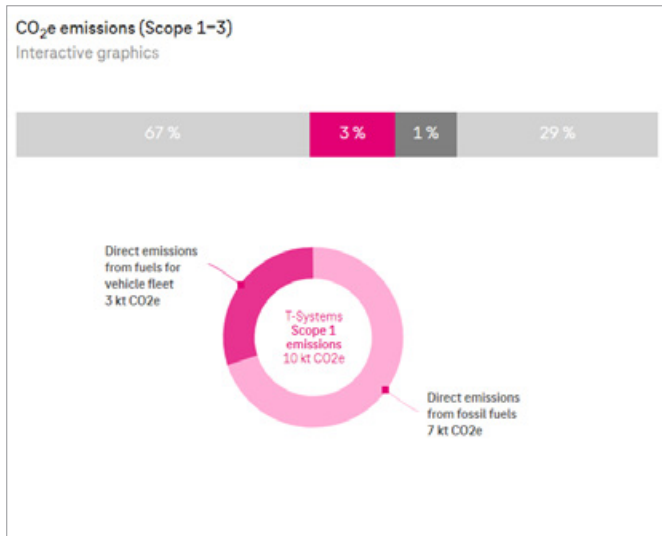
#### Total CO<sub>2</sub>e emissions (Scopes 1 to 3) T-Systems International

In addition to discussing the emissions of the Group as a whole, we provide separate information on Scope 1–3 emissions for T-Systems International. We present our Scope 1–3 greenhouse-gas emissions in a consistent manner, so that they can be compared with each other. To that end, emissions are converted into metric kilotons of CO<sub>2</sub> equivalents (CO<sub>2</sub>e). In addition to CO<sub>2</sub>, we also consider CH<sub>4</sub> and N<sub>2</sub>O, and are working on integrating HFCs (refrigerants) into the calculation as well. Biogenic CO<sub>2</sub> emissions were not recorded separately for the year 2022, as they only occur to a small extent. We also break down emissions along our value chain. This gives us an overview of where most of the emissions are produced in the chain.

In 2022, market-based Scope 1 and 2 emissions for T-Systems amounted to around 11 000 metric tons of CO<sub>2</sub>e. In the same year, the Scope 3 emissions were 285 000 metric tons of CO<sub>2</sub>e, thereby accounting for the largest emissions share. Most of these emissions occurred in the upstream value chain, as well as in our customers' use of T-Systems products and services. In those emissions, we also include emissions resulting from the use of our services by our customers' own devices, such as laptops or tablet computers.







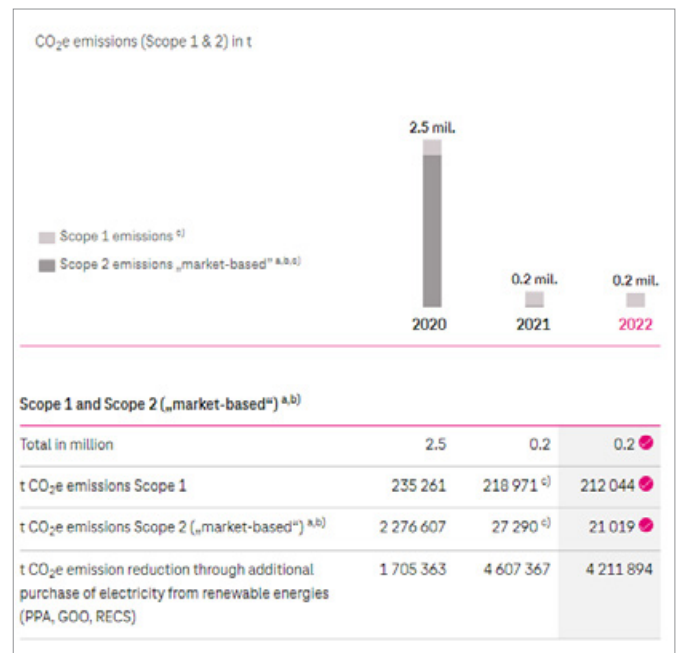
**Total CO<sub>2</sub>e emissions (Scope 1 & 2 emissions)**

Our CO<sub>2</sub> emissions are largely driven by our electricity consumption. That’s why the table below contains very detailed information about the Group numbers for the Scope 2 emissions resulting from our electricity consumption. We differentiate between the market-based and location-based methods, thereby adhering to the GHG Protocol Scope 2 Guidance. Market- and location-based emissions are reported in CO<sub>2</sub> equivalents (CO<sub>2</sub>e). This change was made in order to allow a transparent comparison between Scope 1 to 3 emissions and to be consistent with the requirements of the Science-Based Targets Initiative, to which the new target is also geared.

The leading reporting method is the market-based approach. This method is used to calculate emissions with a specific emissions factor (provider factor) per DT company. This factor depends on a company’s actual energy procurement (electricity mix); procuring renewable energy (direct purchase, certificates) reduces emissions.a)

In contrast to the market-based method, with the location-based method the emissions factors for the respective country are used (the country mix factor of the International Energy Agency (IEA)). A company’s actual energy procurement (electricity mix) is hence not taken into account, i.e., not even the procurement of renewable energy over and above the country mix.

Change compared to 2020: The Scope 2 emissions calculated according to the market-based method are about 99 percent lower. The significant change compared to 2020 results from the Group-wide use of green electricity, PPAs and certificates. Since 2021, we have covered 100 percent of our electricity consumption throughout the Group from renewable sources, thus achieving one of our climate targets.



**Reporting against standards**

Global Reporting Initiative (GRI)

- GRI 305–1 (Emissions)
- GRI 305–2 (Emissions)
- GRI 305–3 (Emissions)

Scope 2 („location-based“)			
t CO <sub>2</sub> e emissions (Scope 2, „location-based“)	4 815 423	4 634 657 <sup>1)</sup>	4 232 913 <sup>2)</sup>

<sup>1)</sup> If no provider factors are available for the market-based method, the country-related residual factor is used (based on the RE-DISS project of the European Commission, which assessed the national share of renewables). If there is no residual factor available either, the IEA factor is used (same as with the location-based method). As a rule, the value of the emission factor in the residual mix is higher than the IEA's country mix factor. Renewable energy certificates are included in all cases.

<sup>2)</sup> For the national company T-Mobile US, the market-based Scope 2 emissions were calculated using the eGRID emissions factors until 2020, which are reported by the American Environmental Protection Agency according to different grid regions in the USA. In addition, the quantities of electricity from renewable energy sources obtained under Power Purchase Agreements (PPAs) were taken into account in reducing emissions.

<sup>3)</sup> The 2021 value has been corrected compared to the publication of the previous year.

● Data verified by Deloitte. Data is partly based on estimates, assumptions and projections. Includes offsets from purchased certificates.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 305-1 (Emissions)
- GRI 305-2 (Emissions)

**Task Force on Climate-related Financial Disclosures (TCFD)**

- The most important key figures for measuring and managing climate-related opportunities and risks

**German Sustainability Code**

- Criterion 11 (Usage of Natural Resources)
- Criterion 12 (Resource Management)
- Criterion 13 (Climate-Relevant Emissions)

**Global Compact**

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

**European Federation of Financial Analysts Societies (EFFAS)**

- E02-01 (GHG Emissions)

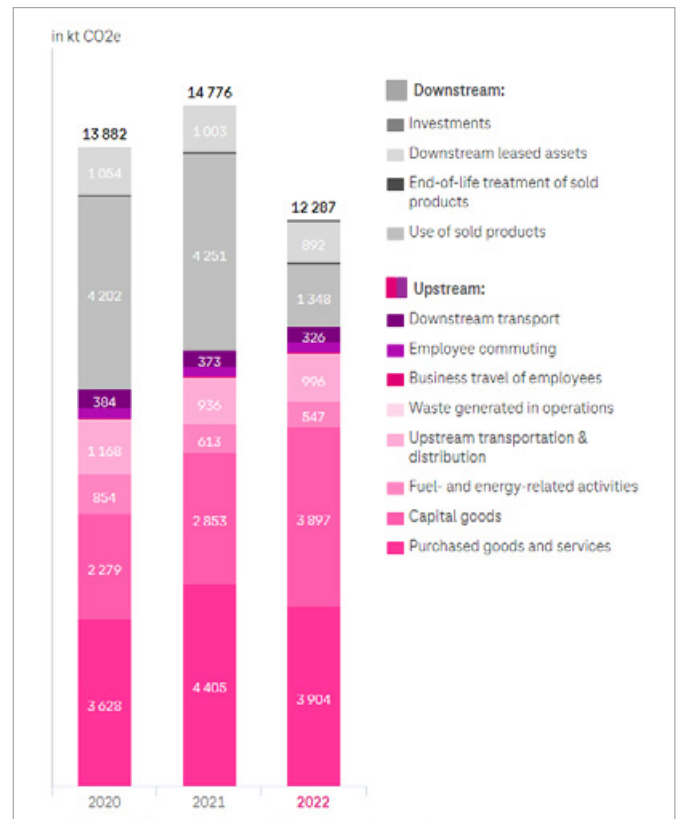
**Total CO<sub>2</sub>e emissions (Scope 3) DT Group**

The majority of our total emissions can be classified as Scope 3 emissions. Scope 3 emissions are all emissions from upstream or downstream value chains that are produced in supply chains, through business travel, through employee commuting (upstream) or through customers' use of products and services (downstream). They are determined in accordance with the globally accepted Greenhouse Gas (GHG) Protocol.

In order to reduce our Scope 3 emissions, we are placing increasing priority on climate-protection criteria in our supply chains. This commitment is reflected in our CDP Supplier Engagement Rating, which once again has given us a top grade of "A." Our CDP Supply Chain Program ESG KPI indicates the degree to which our procurement volume from carbon-intensive suppliers is covered by the

CDP Supply Chain Program. We are also leveraging the benefits of blockchain technology and the NFT approach as part of a research project that aims to create a decentralized application for making visible the impact of product manufacture and transport by suppliers on Scope 3 emissions. A blockchain infrastructure is being established for collecting data on carbon emissions along the entire supplier value chain. A unique NFT is being created for the data collected and will be handed over to suppliers in the form of a certificate of participation listing all relevant values.

The graphic presents our Scope 3 emissions from 2020–2022, broken down by emission source. In 2022, upstream emissions accounted for about 79 percent of our Scope 3 emissions, while downstream emissions accounted for about 21 percent. The basic data used to calculate Scope 3 emissions are reported in the performance-indicator tool. You will find more information on recording Scope 3 emissions along the value chain here.



**Reporting against standards**

**Global Reporting Initiative (GRI)**

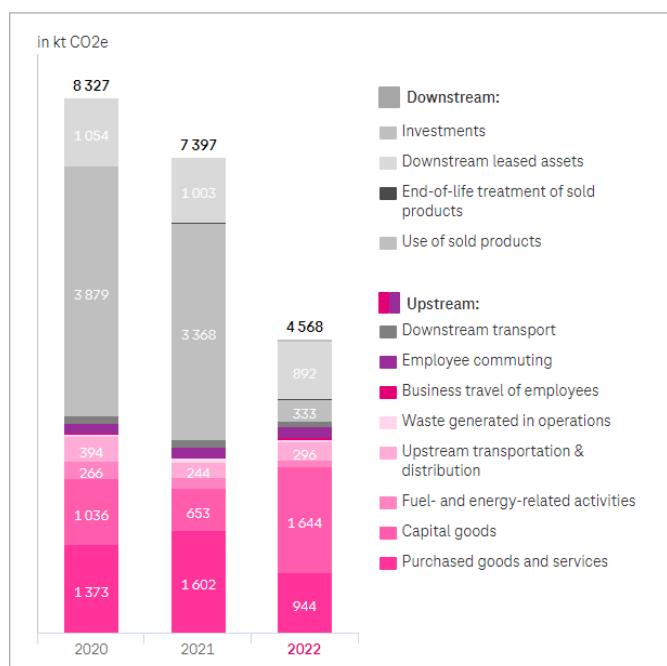
- GRI 302-2 (Energy)
- GRI 305-3 (Emissions)



### Total CO<sub>2</sub>e emissions (Scope 3) Deutsche Telekom EU\*

The majority of our total emissions can be classified as Scope 3 emissions. Scope 3 emissions are all emissions from the upstream and downstream value chain that are generated in the supply chain through business travel, commuter traffic (“upstream”) or at the customer’s premises by the use of products and services (“downstream”). They are determined in accordance with the globally accepted Greenhouse Gas (GHG) Protocol.

The graphic shows our Scope 3 emissions from 2020–2022, broken down by emission source. In 2022, upstream emissions accounted for about 70 percent of our Scope 3 emissions, while downstream emissions accounted for approximately 30 percent. The basic data used to calculate Scope 3 emissions are reported in the benchmarking tool. You will find more information on recording Scope 3 emissions along the value chain here.



\* DT Group in Germany plus European fixed /mobile network operators

#### Reporting against standards

##### Global Reporting Initiative (GRI)

- GRI 305–3 (Emissions)

##### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

##### German Sustainability Code

- Criterion 11 (Usage of Natural Resources)
- Criterion 12 (Resource Management)
- Criterion 13 (Climate-Relevant Emissions)

##### European Federation of Financial Analysts Societies (EFFAS)

- E02–01 (GHG Emissions)

### CO<sub>2</sub> offsets

Our efforts to prevent greenhouse gases include relying on renewable energies, and reducing our energy consumption through more energy-efficient technologies. So far, however, this has not allowed us to prevent all carbon emissions, which is why we offset those emissions by investing in certified climate protection projects.

Our Event Policy specifies the ways in which we offset emissions generated by events. In 2022, we offset almost 58 000 metric tons of carbon through various measures like renewable energy projects. Around 37 000 metric tons of CO<sub>2</sub> were compensated for through renewable energy projects. We offset a further 12 000 metric tons of CO<sub>2</sub> through carbon removal projects. The projects are designed to remove carbon from the atmosphere and store it on a permanent basis.

In t CO <sub>2</sub>	2021	2022
Carbon offsets total	18 494	57 939
Carbon removal projects	1 329	12 000
Renewable energy projects	17 165	37 293
Energy efficiency projects	0	8 646

We are aiming to reach climate neutrality by the end of 2025. We plan to achieve this goal by investing in measures for long-term capture of carbon emissions, and we are currently developing a strategy to this end.

# Enablement factor

## Enablement factor: Customers reducing carbon emissions

We enable our customers to reduce their emissions through our products and solutions. The enablement factor gives us the ratio between this savings potential for our customers and our own carbon footprint, allowing us to assess our overall performance – both positive and negative – when it comes to climate protection. Since 2014, we have been studying the potential savings that various products can achieve on the user side; we carried out 17 such assessments in 2022. Also, we again tracked emissions reductions resulting from installation of efficient wall-mounted charging stations for electric cars (wall boxes). The largest potential in this context has been leveraged for video conferencing with 4.5 million metric tons of carbon. Other savings potential lies with cloud computing, which enables our customers to reduce their carbon emissions by using our cloud services and outsourcing their existing infrastructure to our efficient data centers. Better servers, more energy-efficient data centers, and higher infrastructure capacity utilization can thus cut energy consumption and the associated emissions by up to 80 percent.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 305-5 (Emissions)

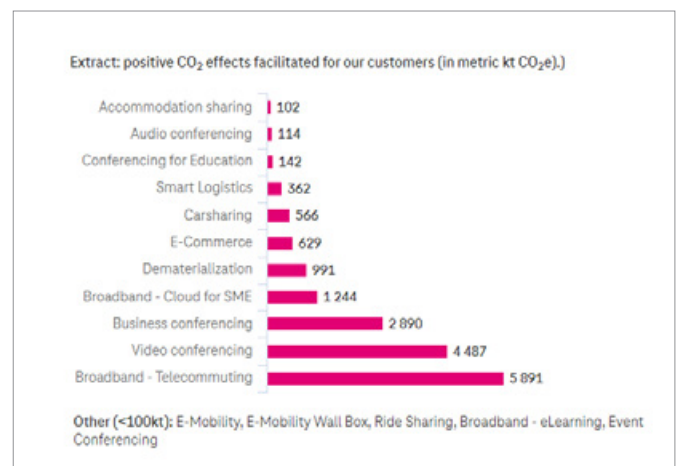
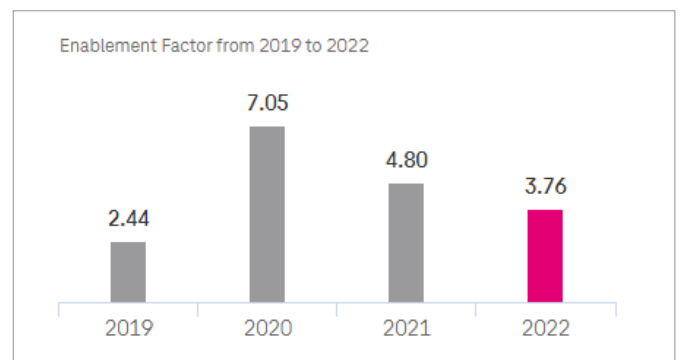
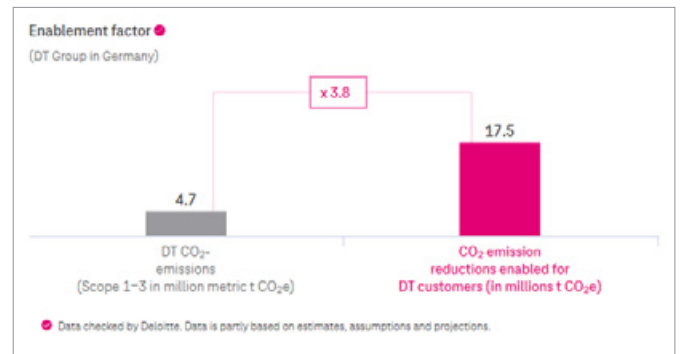
## ESG KPI “Enablement Factor” DT Group in Germany

We use the “Enablement Factor” to measure our overall performance in climate protection. According to this, in 2022 in Germany the positive CO<sub>2</sub> effects enabled by our customers were 280 percent higher than our own CO<sub>2</sub> emissions (enablement factor of 3.8 to 1). The decrease compared to the previous year (enablement factor of 4.8 to 1) results from a still differentiated survey methodology as well as a lower number of users of our conference solutions.

The positive CO<sub>2</sub> effects made possible on the customer side by using our products and solutions fell from 23.2 million to 17.5 million metric tons in the reporting year.

**With the ESG KPI “Enablement factor” we calculate the positive CO<sub>2</sub> effects that arise on the customer side through the use of our products.**

Our ambition: increase KPI



### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 305-5 (Emissions)

#### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

**German Sustainability Code**

- Criterion 13 (Climate-Relevant Emissions)

**Global Compact**

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

**European Federation of Financial Analysts Societies (EFFAS)**

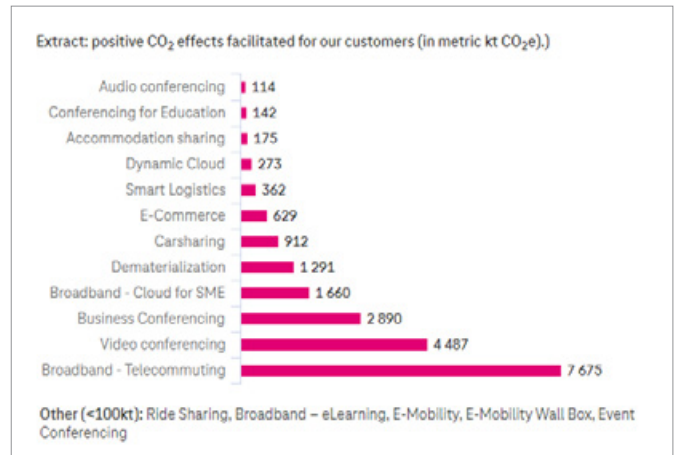
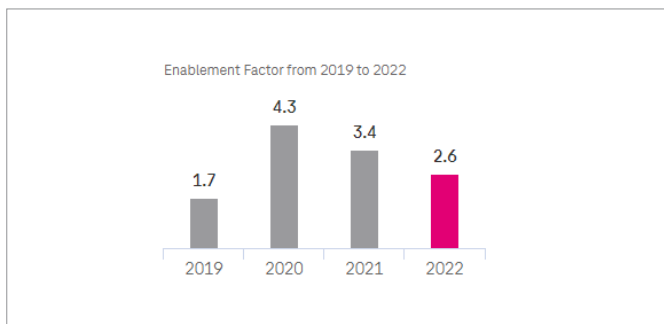
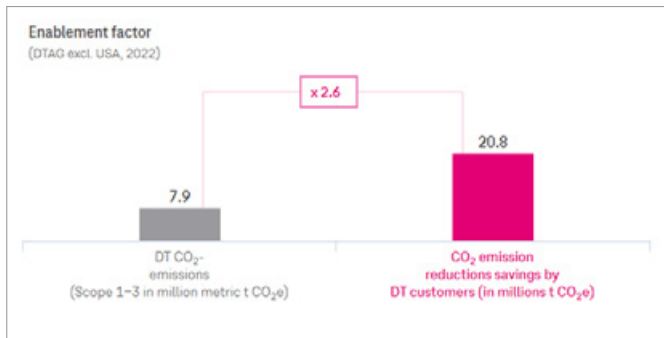
- S13-01 (Intermodality)

**ESG KPI “Enablement Factor” DT Group Europe**

In 2021, the positive CO<sub>2</sub> effects enabled by our customers across Europe were 160 percent higher than our own CO<sub>2</sub> emissions (enablement factor of 2.6 to 1).

The positive CO<sub>2</sub> effects made possible on the customer side by using our products and solutions amounted to almost 20.8 million tonnes in the reporting year.

**With the ESG KPI “Enablement Factor” we calculate the positive CO<sub>2</sub> effects that arise on the customer side through the use of our products.**



**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 305-5 (Emissionen)

**Task Force on Climate-related Financial Disclosures (TCFD)**

- The most important key figures for measuring and managing climate-related opportunities and risks

**German Sustainability Code**

- Criterion 13 (Climate-Relevant Emissions)

**Global Compact**

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

**European Federation of Financial Analysts Societies (EFFAS)**

- S13-01 (Intermodality)

# Energy consumption & efficiency

## Our approach to energy-efficient networks

We operate our own fixed-line and mobile networks in Europe and the United States. The majority of our energy requirements come from operating this network infrastructure. To handle growing amounts of data and improve the speed and quality of data transmission, we continuously increase the capacity and performance of our networks. To ensure that our energy consumption grows much less than the amounts of data transmitted, we are pursuing various approaches:

- We are updating our network infrastructure, e.g., by migrating the fixed network to IP technology and removing equipment we no longer need, such as 3G antennas. The 3G network was switched off in Germany on June 30, 2021.
- We have established specifications and requirements that firmly anchor energy efficiency in the architecture and design phase when selecting new technologies.
- We use more energy-efficient technology for our networks. This also applies to the lighting, monitoring and, above all, cooling of our plants.
- The energy management practices of our internal energy service provider Power & Air Solutions have been ISO 50001 certified since 2013.
- We are optimizing energy efficiency throughout the entire supply chain for all locations of Telekom Technik, thereby reducing our carbon footprint.
- We are expanding our use of photovoltaic systems at Deutsche Telekom locations. In the process, we are emphasizing use of power storage systems and intelligent load management. Power & Air Solutions is testing innovative technologies such as fuel cells; energy generation from waste heat, via gas turbines; and ice-storage systems for support of mechanical cooling systems.
- Also, in the framework of our energy management in Germany, we are working to reduce the energy requirements of our buildings. We continuously monitor consumption values and use this data to identify potential for improving efficiency.
- In 2020, we published an energy guideline applicable throughout the Group. It helps our national companies implement our Climate Strategy. The guideline compiles selected measures

and proposed solutions for better energy efficiency, including operational energy-saving functions, optimized energy management, decommissioning of legacy systems, and/or the use of more energy-efficient technologies. In the year under review, we reviewed how the energy guideline is being implemented in practice, by studying use cases involving individual projects. We found that marked positive effects are already being achieved.

We are also aiming to stabilize our energy consumption and increase our energy efficiency by 2024, in spite of growing data traffic and our network expansion. In a Group-wide technology-innovation project, we are studying and developing new ways of making our network operations even more energy-efficient and sustainable. In the process, we are looking especially carefully at the areas of energy transport, energy availability, and energy efficiency. For example, we plan to optimize energy consumption in our mobile- and fixed-network operations, and to develop innovative solutions for generating and storing renewable energy for use at mobile base stations. The results of these efforts will help us promote energy-efficiency and energy-saving measures in Germany and Europe. In the same vein, some of our European national companies have already been able to reduce their energy consumption via network modernizations.

We are working with a telecommunications supplier in the renewable energy sector to enhance the sustainability and efficiency of the energy generation activities at our mobile base stations. Making integrated use of solar energy at these mobile base stations allows us to optimize energy consumption, as confirmed by initial tests during the period under review. The first successful laboratory tests have also laid the foundation for using zero-emission fuel cells to supply climate-neutral energy to the mobile base stations. We are still in the pilot phase here.

Since 2020, we have been a member of the Solar Impulse Foundation (SIF) 1000+ Solutions Alliance. The aim of the SIF is to identify more than 1 000 solutions that tackle environmental problems – especially those resulting from climate change. For Deutsche Telekom, the focus is on developing technologies for the ICT industry that have a positive impact on reducing carbon emissions, on energy management and energy efficiency, and on the collection and recycling of digital devices. In addition, SIF not only supports the development of solutions like these; it also certifies them. In 2020, it recognized a solution used by Deutsche Telekom in Germany and its partner Cloud&Heat to cool servers using an innovative water-cooling system.

**Impact assessment for our materiality analysis**

In the impact assessment for our materiality analysis, we have identified energy-intensive processes along our value chain. The use of fossil-fuel energy in the upstream and downstream value chain is still widespread, making a particularly large contribution to global warming and placing additional pressures on humans and the environment. The disposal of electronic waste can also pose further problems for the environment and human health.

In order to address these risks, we involve our suppliers in our environmental initiatives as part of our supplier management process.

**Reporting against standards**

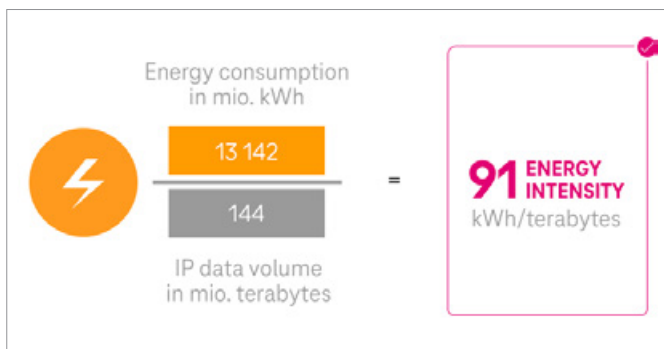
**Global Reporting Initiative (GRI)**

- GRI 302 3–3 (Management of material topic)
- GRI 305 3–3 (Management of material topic)

**ESG KPI “Energy Intensity” DT Group**

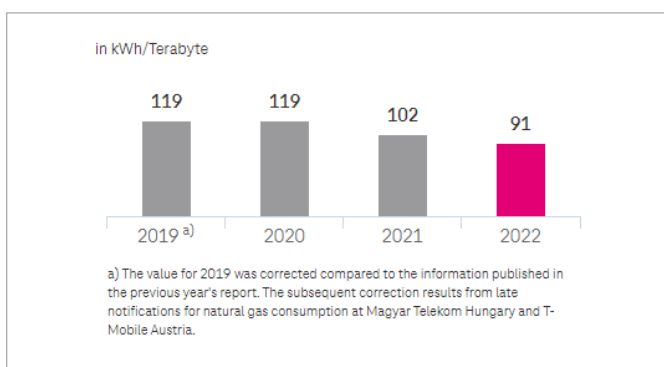
Since 2016, we have reported on the ESG KPI “Energy Intensity.” In contrast to the existing “Energy Consumption”, the new ESG KPI shows energy consumption in proportion to the transmitted data volumes. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks.

Our ambition: decrease KPI



📌 Data assured by Deloitte. Data is partly based on estimates, assumptions and projections.

The ESG KPI also takes into account total energy consumption for all energy sources – fuel, gas, district heating and electricity. The data volume is composed of the transmitted IP data volumes (including Voice over IP, Internet, IP-TV).



**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 302–3 (Energy)

**Task Force on Climate-related Financial Disclosures (TCFD)**

- The most important key figures for measuring and managing climate-related opportunities and risks

**German Sustainability Code**

- Criterion 12 (Resource Management)

**Global Compact**

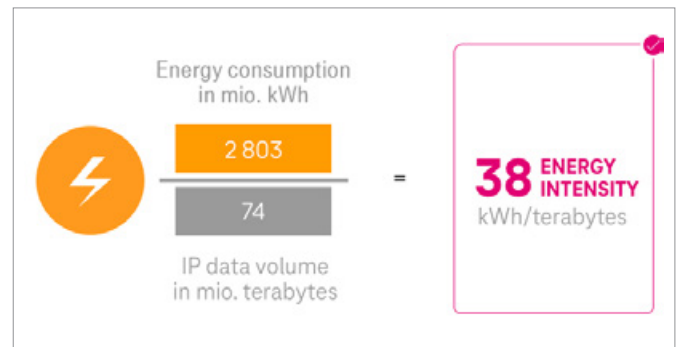
- Principle 7 (Support a precautionary approach to environmental challenges)

**European Federation of Financial Analysts Societies (EFFAS)**

- E01–01 (Energy consumption)

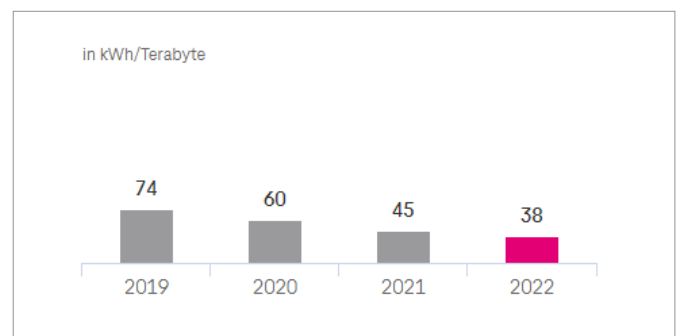
**ESG KPI “Energy Intensity” DT Group in Germany**

Since 2016, we have reported on the ESG KPI “Energy Intensity.” In contrast to the existing “Energy Consumption,” the new ESG KPI shows energy consumption in proportion to the transmitted data volumes. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks.



📌 Data assured by Deloitte. Data is partly based on estimates, assumptions and extrapolations.

The ESG KPI also takes into account total energy consumption for all energy sources – fuel, gas, district heating and electricity. The data volume is composed of the transported IP data volumes (including IP telephone, internet, IP-TV).



### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 302–3 (Energy)

#### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

#### German Sustainability Code

- Criterion 12 (Resource Management)

#### Global Compact

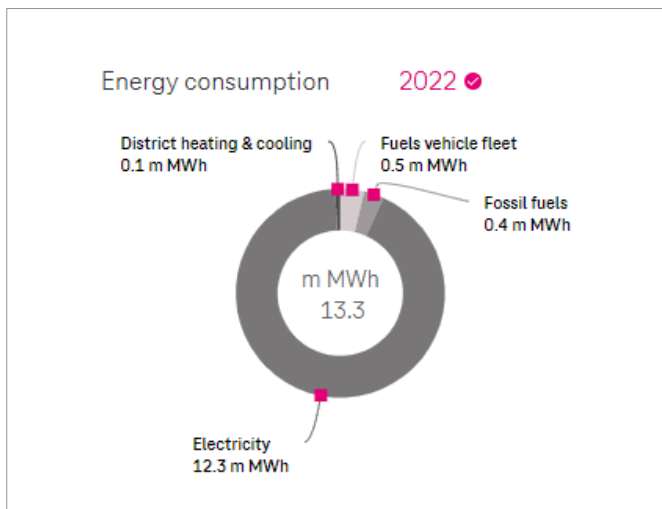
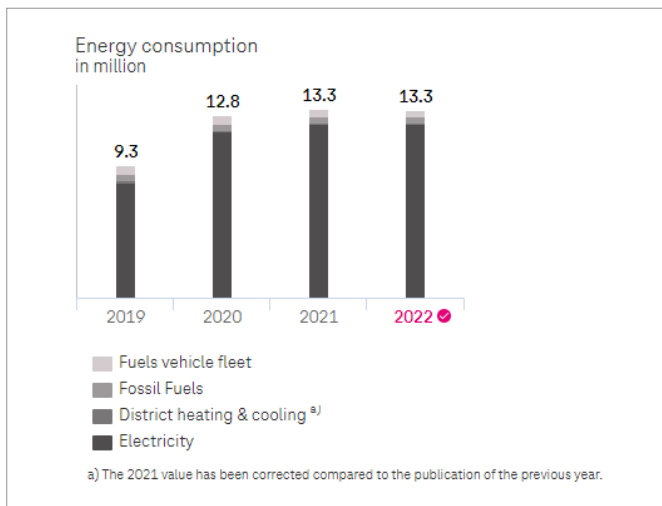
- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

#### European Federation of Financial Analysts Societies (EFFAS)

- E01–01 (Energy consumption)

### Total energy consumption

Total energy consumption increased by 0.5 percent year over year.



✔ Data verified by Deloitte. Data is partly based on estimates, assumptions and projections. Some of the data originates from external service providers.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 302–1 (Energy)
- GRI 302–2 (Energy)

#### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

#### Sustainability Accounting Standards Board (SASB)

- Code TC-TL-130a.1 (Environmental Footprint of Operations)

#### German Sustainability Code

- Criterion 11 (Usage of Natural Resources)

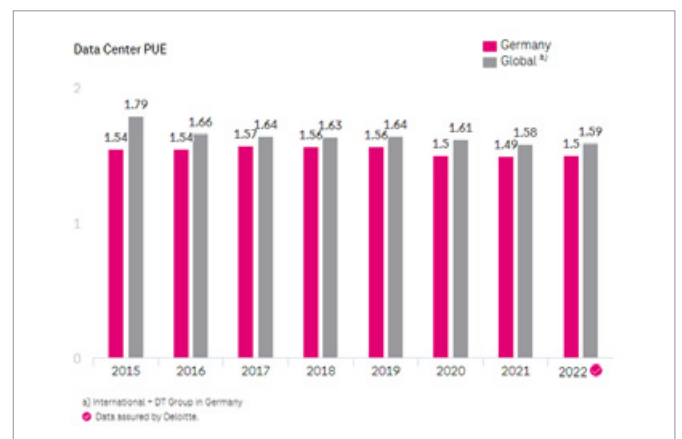
#### European Federation of Financial Analysts Societies (EFFAS)

- E01–01 (Energy consumption)

### PUE ESG KPI – lower carbon emissions in data centers

We are reducing the carbon emissions of our data centers by optimizing energy consumption and improving processes at the individual data center sites. The Power Usage Effectiveness (PUE) metric serves as one indicator for energy-efficiency enhancements in our data centers. We determine this metric using the method recommended by the standard EN50600 for data centers, which has to take the total energy consumed by data centers into account – and not only that used to operate the servers. The PUE factor is calculated using the ratio between the total electrical energy consumed by the data center and the amount of electrical energy consumed by IT.

In 2022, the average global PUE score for our T-Systems data centers was 1.59. For our data centers in Germany, we reduced the PUE from 1.85 in 2008 to 1.5 in 2022; this value is significantly below the average for all data centers in Germany, which is around 1.8. Our most-efficient high-availability data center has a PUE of 1.3. This will allow us to compensate, in part, for increases in IT systems' energy requirements as a result of growing volumes of data. Energy consumption is also reduced relative to the increasing processing power of the IT systems as a result of the positive effect on energy efficiency and, by extension, the PUE score. The energy needs of our T-Systems data centers are met entirely from renewable sources.





### Data centers are becoming more energy-efficient

As part of the DC11@2018 program, we worked until the end of 2018 to combine data center capacity worldwide in FMO (future mode of operation) data centers with the latest IT technology and hence improved energy efficiency. Physical data center consolidation (reducing data center space and sites) was combined with logical consolidation (virtualizing IT infrastructure). Within the scope of the physical consolidation, we decommissioned several old data centers in Germany.

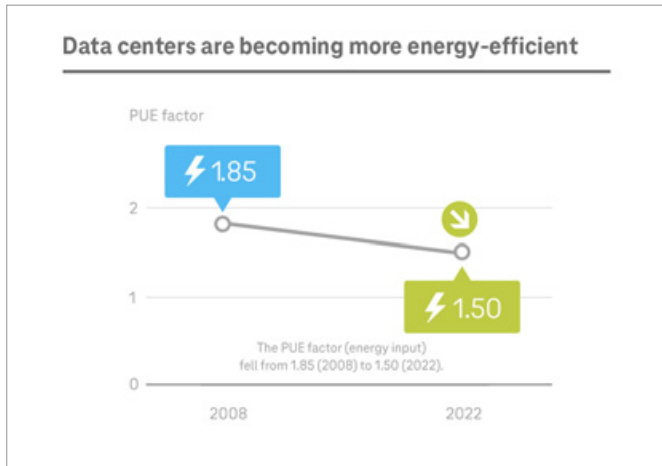
The follow-up program “Data Center Next” was launched in 2019. Our aim is to further homogenize and virtualize the IT landscape, and to optimize utilization of the data center infrastructure according to IT requirements. The Data Center Next program is making use of efficiency-enhancing options, such as selective cooling of individual areas, and temperature increases within allowed ranges – always in conformance with defined thresholds. With such efforts, we plan to achieve efficiency improvements across the board.

A majority of our high-availability, modern internal FMO twin-core data centers were included in the EU Code of Conduct on Data Centre Energy Efficiency (EU CoC) at the end of 2020. We therefore meet, to a large extent, one of the criteria of the European regulation for sustainable business (EU Taxonomy). At the same time, we are working to further optimize energy efficiency in all data centers.

### Compliance with the EU Code of Conduct on Data Centre Energy Efficiency

The European Union (EU) introduced the EU Code of Conduct on Data Centre Energy Efficiency in 2008. Its goal is to motivate operators and owners of data centers to reduce energy consumption and hence its negative impact on the environment, the economy, and energy supply security. Companies can join this voluntary initiative, which T-Systems did in 2014. The related EU Commission page provides transparent, detailed information about the participation of individual data centers.

We currently operate a total of 16 FMO twin-core data centers in Europe at eight FMO twin-core sites – eight internally and eight externally – in addition to four local customer-specific data centers. Six of our eight internal European FMO twin-core data centers, and one external FMO twin-core data center, have been included in the EU Code of Conduct list since 2021. The seventh internal European FMO twin-core data center is set to be added to the list in 2023. By taking part in the EU Code of Conduct, T-Systems meets an important criterion for achievement of Taxonomy-conformity under the regulatory initiative for sustainable business activities (EU Taxonomy). More information about our commitment within the framework of the EU Taxonomy is available here.



#### Reporting against standards

##### Sustainability Accounting Standards Board (SASB)

- Code TC-TL-130a.1 (Environmental Footprint of Operations)

# Renewable energy

## Our approach to more renewable energy

We had set ourselves the following goal for the end of 2021: for the Group as a whole to meet all of its electricity requirements, and more than 90 percent of its total energy requirements, with renewable energy sources. And we have achieved this goal. To underscore this commitment, we have joined the global RE100 initiative, which aims to advance the purchase of electricity from renewable sources.

In this context, we are sourcing more green electricity directly, acquiring corresponding guarantees of origin, or concluding special power purchase agreements (PPAs), as is the case in the United States. As of the end of 2022, 27.7 percent of the power used throughout the Group was obtained via PPAs. We aim to increase this figure to 50 percent by 2025 in Germany and Europe. Whenever possible and practicable, we invest in our own power plants, such as cogeneration plants or photovoltaic systems. In 2022, we further expanded our own generation and commissioned 20 photovoltaic systems, with more already in planning.

We use the Renewable Energies ESG KPI to measure our progress. In addition, we have also introduced parameters throughout the Group that are used to assess electricity procurement at all of our national companies in terms of sustainability.

Since 2019, we have been testing a climate-neutral power supply for cellular base stations (only available in German) in which we use fuel cells instead of diesel generators. Fuel cells are economical, silent, low-maintenance and, most importantly, thanks to the use of bio-methanol, carbon neutral.

## ESG KPI “Renewable Energy”

The ESG KPI “Renewable Energy” is calculated as renewable energy’s share in meeting the Group’s total electricity requirements. Since 2021, we have been sourcing 100 percent of the electricity we use, throughout the Group, from renewable energy sources. By reaching this milestone, we have achieved one of our climate targets.

We are working to reduce our energy consumption overall, by improving our energy efficiency and implementing energy-saving measures. The electricity requirements that remain are met with renewable energy. Also, we are aiming to increase our own electricity generation, and to have Power Purchase Agreements (PPAs) meet larger and larger shares of our power use. As of the end of 2022, 28 percent of the power we used throughout the Group was obtained via PPAs. By 2025, this figure is expected to reach 50 percent. Although we meet our power requirements wherever pos-

sible via PPAs, our own power generation and direct purchases, capacity limitations require us to also depend on sources for which guarantees of origin (GOs) come into play. GOs are an important element in our efforts to meet 100 percent of our electricity requirements via renewable energy sources and thereby achieve our climate target in this area.

## Share of renewable energy in the total electricity consumption (in percent)



## Reporting against standards

### Global Reporting Initiative (GRI)

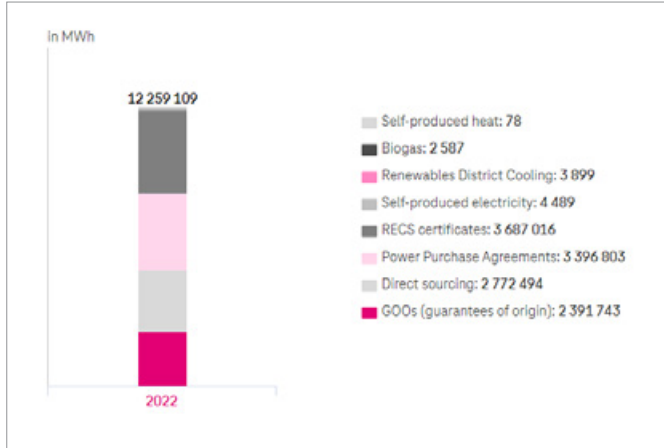
- GRI 302-1 (Energy)

### Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

**Renewable energy in the Group**

Group-wide, we cover 100 percent of our electricity consumption from renewable energies. To this end, all European national companies can also purchase renewable energy certificates (guarantees of origin) if needed.



**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 302-1 (Energy)

**Renewable energy in the national companies**

In the year under review, every one of our national companies met its energy needs entirely from renewable sources. In determining the amount, the national companies can also include certificates (guarantees of origin) and power purchase agreements (PPAs) for electricity obtained from renewable energy.

Deutsche Telekom in Germany purchases its electricity as part of a green tariff (generated under the German Renewable Energy Sources Act (EEG). 23 percent comes directly from renewable energies. The rest is covered by guarantees of origin, power purchase agreements (PPAs), and a small proportion by in-house generation.

T-Mobile US has reached our Group target primarily with wind power, but also with solar energy. To that end, the American national company has concluded long-term contracts (12–15 years) with wind and solar farm operators, which gives the power producers security of investment. We are also aiming to conclude such long-term electricity purchase agreements in other countries. As of the end of 2022, 28 percent of the power we used throughout the Group was obtained via PPAs.

We use the Renewable Energies ESG KPI to measure our progress. It is calculated based on the share of renewable energy in total electricity consumption, and is compared here, for all national companies, to the share of renewable energy in the national energy mix (country mix)a).

**Reporting against standards**

**Task Force on Climate-related Financial Disclosures (TCFD)**

- The most important key figures for measuring and managing climate-related opportunities and risks

# Mobility

## Our strategy for climate-friendly mobility in Germany

From 2017 to 2021, we were able to reduce the carbon emissions of our vehicle fleet – which includes around 18 600 vehicles – by 40 percent. The remaining emissions have been offset via CO<sub>2</sub> certificates since 2021. The main factors affecting the level of mobility-related carbon emissions are the average number of internal combustion vehicles, annual mileage and the associated fuel consumption. We introduced a policy for business vehicles in Germany in January 2023 in order to further reduce mobility-related carbon emissions. It sees us commit to only ordering company cars with electric drive systems in Germany from 2023. As soon as charging infrastructure has been rolled out across the board and there is a sufficient supply of suitable electric vehicles, then we will also be able to switch our service vehicles entirely to e-mobility.

Along with use of environmentally friendly drive systems, the transition to climate-friendly mobility calls for expansion and support of the charging-station infrastructure and intelligent linking of new and existing forms of mobility. Our goal is to make it a matter of fact that alternative forms of mobility are used at the Group; any decision about a particular means of transportation should be scrutinized and awareness raised on a sustainable basis. Consequently, in addition to investing in our fleet, we are also promoting more sustainable forms of travel and commuting for our employees. In 2022, for instance, we set up bike service points at 36 locations and electric bicycle charging stations in five locations. There were also five additional bike service stations and eight combined repair and electric charging stations due for delivery in early 2023. Additionally, the EcoShift app was launched in Germany in 2022, allowing commuting employees to track their carbon footprint.

All of these efforts are based on the three pillars of our DT mobility strategy:

- Diversified portfolio: Building a more efficient, increasingly sustainable fleet with climate-neutral drive systems and integrating micro-mobility (e.g., bicycles, e-scooters)
- Digital services: Pooling and sharing solutions, mobility app (E2E digitalization of life cycle services for company cars and service vehicles)
- Connected mobility: Linking existing and new forms of mobility and mobility services with the help of a digital platform

### Interconnecting transport services

Interconnection between different modes of transport will become increasingly important in future. For this reason, we plan to offer the Mobility as a Service (MaaS) platform in 2023. The platform

combines various different modes of transport, including public transportation, privately shared vehicles and Deutsche Telekom vehicles (including services such as “Shuttle on Demand” and car-sharing). MaaS will give our employees added convenience and flexibility in their commuting options. The MaaS platform and app were developed by Telekom MobilitySolutions and Hacon, a Siemens subsidiary. For the launch of the service, we have entered into a cooperation agreement with a public-transportation operator (and thereby become the first non-transport company to do so) – VRS. The resulting service will become available to Deutsche Telekom employees, and their friends and families, as part of a pilot project in the Cologne/Bonn region in the first half of 2023. We plan to expand the service gradually to incorporate other mobility partners, regions, and third-party offerings.

### Carbon offsets

When it comes to carbon emissions, our mobility strategy prioritizes reduction over offsetting. In the transition phase to zero-emission mobility, we are using carbon offsets to reach our climate protection targets. In 2022, we offset 100 percent of the carbon emissions from business operations of Deutsche Telekom’s vehicle fleet in Germany. In this context, oil companies make an annual contribution to the fuel purchased, and the deficit is covered by CO<sub>2</sub> certificates. This carbon offset aids projects that are certified according to recognized standards and ensures that our vehicle fleet is largely climate-neutral while we transition to zero-emission mobility in line with our climate neutrality target by 2025. In future, we will gear our carbon offsets to real carbon removal certificates in our emissions accounting according to the Greenhouse Gas (GHG) Protocol.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 302 3–3 (Management of material topics)

#### Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)

### Promoting green mobility at Deutsche Telekom

#### Green fleet

A new policy for business vehicles has been in effect in Germany since January 2023, establishing a key foundation for the transformation of our company car fleet. It will help us on our way to achieving climate neutrality in our own business operations (Scope 1 and 2) by 2025 at the latest. One component of the new policy concerns the full electrification of our company car portfolio. It sees us commit to only ordering company cars with electric drive systems in Germany from 2023. At the same time, the usage life-

time will be extended from 36 to 48 months to increase resource efficiency.

The process of electrifying our service vehicle fleet, which includes vehicles used by field service technicians, requires more extensive preparations. It necessitates a suitable range of available cars and small and large vans that meet the relevant requirements, in particular those concerning range and loading space. A suitable range of vans is not expected to come onto the market until 2023 onwards. Preparations must also be made for rolling out workplace and home charging infrastructure so that employees have a fully charged vehicle when starting work in the morning.

At the end of 2022, we had around 1 180 electric company cars in our inventory or on order. The strained supply chain situation continues to result in unplanned changes to deliveries of the electric vehicles we have ordered.

E-scooters were introduced as service vehicles throughout Germany in 2022 following successful testing in 2021 as part of our micromobility concept. Some 300 e-scooters have been put into service for our service technicians and engineers. These vehicles are used in a day-to-day work context for traveling short to medium distances, for instance, for setting up internet connections in large cities with limited parking space. Other usage scenarios will be tested in 2023 with a view to expanding e-scooter use to other business areas.

#### **Salary sacrificing scheme: bicycles or e-bikes**

Since 2015, our salary sacrificing scheme has enabled our employees to sacrifice some of their salary for the purchase of resource-conserving and health-promoting bicycles or e-bikes, which they can lease from their employer for three years. The monthly payments are deducted from the employee's gross salary. Orders may be placed year-round, via an external leasing partner. In addition to ordering from that partner's own portfolio, employees have the option of ordering from a bicycle dealer of their own choosing. Deliveries and a local service are available for all of Deutsche Telekom's locations in Germany. Currently, over 9 000 bicycles are being leased via this scheme.

#### **Expansion of the e-mobility charging infrastructure**

Cities, companies and households alike are all benefiting from the expansion of the charging infrastructure for electric cars, an effort that is facilitating the transition to environmentally responsible mobility. Electric mobility will help make living and working spaces greener, more sustainable and more modern – and thereby more attractive for the public and for working people.

The transition to e-mobility will succeed only if a suitably smart, convenient charging infrastructure is in place. Deutsche Telekom has extensive expertise and experience in the planning, procurement, construction and operation of charging stations, and it plans to use these strengths in the coming years to support the transition to e-mobility. In the process, it will look beyond its own immediate needs and offer complete infrastructure packages for customers.

For example, Deutsche Telekom will offer smart solutions for cities, regions and companies seeking to install and operate charging infrastructures. As part of its complete-system approach, Deutsche Telekom will offer business customers a full range of services, including planning, construction, installation, and service/operation. Along with the necessary equipment, such solutions will include software for the operation of charging stations and for customer administration.

#### **The company's activities in this area are organized as follows:**

##### **Comfort Charge GmbH**

Comfort Charge GmbH has been constructing and operating charging infrastructure at Deutsche Telekom locations nationwide since 2018.

Within two years, Comfort Charge's expansion plans call for it to be providing and operating up to 300 fast-charging stations, and several hundred additional charging systems for electric vehicles (service vehicles, company cars and employees' cars), at Deutsche Telekom Group locations.

The fast-charging stations at the locations will also be available to the public. With the charging speed the stations will offer, drivers will be able to add about 100 kilometers of range to their electric vehicles within 10 minutes.

Comfort Charge's expertise as a charge point operator will also benefit the services provided by Deutsche Telekom's business customer sales in this connection.

##### **Deutsche Telekom's Technical Service has been active in planning, constructing, and servicing charging infrastructure since 2010.**

The quality service that Deutsche Telekom's field service offers nationwide includes a range of e-mobility services provided at customer sites. With the support of its technical services, over 50 partners now offer various e-mobility services, including location scouting, installation of charging stations, and repair and service of charging stations. Deutsche Telekom is also one of the largest service providers for charging solutions for private households, with over 25 000 service contracts carried out overall throughout Germany. Our partners and customers in this area include energy suppliers, electronics retailers, charging-equipment manufacturers, automakers, and providers of fleet solutions.

With its large technician workforce, and its high quality standards, Deutsche Telekom is well-placed to serve the growing nationwide demand for infrastructure solutions – and thereby make a valuable contribution to the transition to sustainable mobility.

##### **Deutsche Telekom Geschäftskunden GmbH**

Over the past year, Deutsche Telekom Geschäftskunden GmbH has also been helping to boost sustainability, by supporting its business customers in addressing their various interests, roles, and goals in the area of e-mobility. As part of these efforts, it has installed more than 100 normal-charging stations (AC) and fast-

charging stations (DC) at public and non-public customer locations in Germany, in the framework of holistic, end-to-end solutions including planning, construction, installation, service, and the necessary equipment and software.

E-mobility is also being promoted at our national companies. Our company in Croatia, for example, has been offering an app-based digital charging service for electric vehicles since 2020. Customers use the app, which is known as “espoTs,” to search for and use charging stations. No subscription or contract is required. T-Mobile US is also investing in EV-charging stations at its locations. Yet another example: Our national company in Hungary launched a pilot project in 2021 to determine availabilities in the area of electric cars and charging stations, with a view to adding more electric cars to its vehicle fleet in the future.

We measure our activities to promote greener mobility at Deutsche Telekom using various KPIs, and we have been collecting data for them since 2020.

Number	2020	2021	2022
<b>eMobility charging stations sold</b>	<b>2 111</b>	<b>627</b>	<b>854</b>
<b>Standard charging stations (≤ 22 kW)</b>	<b>1 542</b>	<b>426</b>	<b>653</b>
Wall-mounted standard eCharging stations	1 407	233	296
Detached mounted standard eCharging stations (outdoor)	135	193	357
<b>HighPower charging stations (&gt; 22 kW)</b>	<b>569</b>	<b>201</b>	<b>201</b>
Detached mounted high power eCharging stations (outdoor)	569	201	201

By operating 161 fast-charging stations in Germany, we were able to save over 180 metric tons of CO<sub>2</sub>e. This is equivalent to the CO<sub>2</sub> emissions of a car traveling approximately 985 000 kilometers.

**Number of vehicles**

The total number of vehicles at our company decreased slightly with respect to the previous year. While the majority of our vehicles still have diesel engines, their share of our overall fleet decreased in the year under review. To accelerate our transition to greener mobility, we have intensified the expansion of our charging-station infrastructure. Also, we continue to focus on green alternatives to gasoline/diesel-powered engines, and on fuel-efficient engines – subject to cost-effectiveness criteria – when purchasing new company cars and service vehicles. This has enabled us to increase the total number of our fleet vehicles with green alternatives to gasoline/diesel-powered engines by 50 percent, with respect to the corresponding figure in 2021.

	2020	2021	2022
<b>Total number</b>	<b>39 503</b>	<b>32 297<sup>a)</sup></b>	<b>30 816</b>
Number of vehicles with diesel engines	30 416	25 098 <sup>a)</sup>	23 256
Number of vehicles with gas engines	7 984	5 628 <sup>a)</sup>	5 197
Number of alternative fuel vehicles	1 103	1 571	2 363
Number of company cars	12 721	10 040 <sup>a)</sup>	9 497
Number of service vehicles	26 782	22 257 <sup>a)</sup>	21 319

a) The value was corrected compared to the information published in the previous year's report.

For detailed comments on the performance indicators for each individual company, please refer to the interactive performance-indicator tool in our company comparison. More information about our Green Car Policy, alternative engines and our goals for climate-friendly mobility is available here.

**Reporting against standards**

**German Sustainability Code**

- Criterion 11 (Usage of Natural Resources)

**Fuel consumption**

Overall fuel consumption fell by approximately 2 percent. For company cars, it fell by 5 percent, while for service vehicles consumption rose by 6 percent. For detailed comments on the figures for each individual company, please refer to the interactive benchmarking tool.

In liter	2020	2021	2022
<b>Fuel consumption (total)</b>	<b>55 252 535</b>	<b>49 167 373<sup>a)</sup></b>	<b>48 423 063</b>
Fuel consumption by diesel-powered vehicles	35 819 699	31 612 742 <sup>a)</sup>	30 886 569
Fuel consumption by gasoline-powered vehicles	19 038 604	17 025 709 <sup>a)</sup>	17 005 345
Fuel consumption by vehicles with alternative drives	394 232	528 923	531 150
Fuel consumption by company cars	17 552 364	13 760 425 <sup>a)</sup>	14 634 852
Fuel consumption by service vehicles	37 700 172	35 406 948 <sup>a)</sup>	33 788 211

• Data audited by Deloitte. Data is partly based on estimates, assumptions and projections. Some of the data originates from external service providers.

a) The value was corrected compared to the information published in the previous year's report.

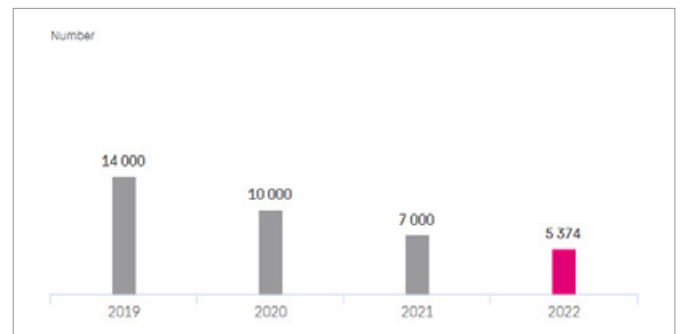
**Reporting against standards**

**German Sustainability Code**

- Criterion 11 (Usage of Natural Resources)

**Job ticket**

In 2022, about 5 000 employees of the Deutsche Telekom Group in Germany used a discount season ticket provided by their employer to commute by public transport.



We offer regional discount season tickets (monthly or annually) to our employees at many of our German Deutsche Telekom sites, especially in high-density population areas. The offer encourages our employees to use climate-friendly public transportation and helps them keep their commuting costs down.



## Reporting against standards

### German Sustainability Code

- Criterion 2 (Materiality)
- Criterion 10 (Innovation and Product Management)

### Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

### European Federation of Financial Analysts Societies (EFFAS)

- V04-13 (Percentage of products or services for offsetting climate change)

# Employee initiatives

## Green Pioneers in Germany

Internal sustainability ambassadors around the world are dedicated to promoting a sustainable corporate culture. With their efforts, they support implementation of our CR strategy.

The internal Green Pioneers ambassador program was launched in Germany in 2018. Its aim is to promote and expand responsible management and conduct among the workforce. Group Corporate Responsibility (GCR) creates suitable conditions for the Green Pioneers' work. Community Management, which is part of GCR, organizes regular meetings to share information and experience, offers internal and external expert talks, and helps plan activities. In addition, it also provides up-to-date information about the initiative on the internal social network You and Me UNITED (YAM UNITED). As of the end of 2022, the Green Pioneers groups had about 1 665 members and subscribers on YAM UNITED (1 400 in 2021). This shows a growing interest in the initiative and in Deutsche Telekom's sustainability activities.

Depending on their location, interests and expertise, the Green Pioneers come together to form subject-related or regional hubs. They act as internal multipliers for change by motivating employees to be involved in numerous resource conservation campaigns, such as an exchange for office supplies, clothing exchange campaigns, tree-planting and waste collection campaigns, and an internal company ride-sharing agency.

There are now 333 Green Pioneers in Germany. Active at 53 locations and in 19 departments, they seek out improvement potential and initiate appropriate measures. The introduction of RECUP returnable cups in our cafeterias, for example, can be traced back to impetus from the Green Pioneers. They were also involved in developing packaging machines that create tailor-made packaging for the technicians' equipment and the field service and cause hardly any waste.

On the initiative of the Green Pioneers, smart textile containers were installed at our locations in North Rhine-Westphalia in 2022 to collect old company uniforms and worn-out jeans and cotton towels and put them back into circulation in the textile ecosystem. The upcycling containers use Internet of Things (IoT) technology and their contents are collected independently, thanks to fill-level sensors that send a notification to the Deutsche Telekom iCloud when they are ready to be emptied. This saves unnecessary trips and thus reduces carbon emissions and fuel consumption. The cotton textiles collected are sent on to be upcycled, where they are combined with new fibers and turned into new garments.

In 2022, we collected and recycled 2 380 kilograms of clothing. This saves numerous liters of water, since less cotton needs to be grown.

With a view to boosting our employees' motivation and commitment, we seek to offer them additional leeway and options for structuring their working lives. The flexible work arrangements we make available to all employees, such as our "job visits," are one example of this policy. In addition to their core activities, our employees can also gain cross-departmental experience and apply their knowledge and skills. For example, the Green Pioneers take advantage of these opportunities to work on sustainability activities.

## Green employee networks at our national companies

Numerous employee initiatives aimed at sustainability and environmental protection are also running at the national companies of Deutsche Telekom AG:

### T-Systems Iberia (Spain)

Founded by T-Systems ITC Iberia at the end of 2019, the T-OGETHER community started its work at the beginning of 2020. T-OGETHER is a group of volunteers dedicated to promoting sustainable initiatives. At the heart of this community is an Executive Committee. It is supported by an internal advisory committee made up of some 15 experts in environmental issues, corporate responsibility, and communications. The aim of T-OGETHER is to develop ideas for sustainability in line with the company's ecological and social goals. The members develop initiatives and propose them to the company management. Once an initiative and budget have been approved, the board of management initiates the implementation process. In the year under review, one of T-OGETHER's initiatives involved creating a poster to raise employees' awareness of sustainability.

### Deutsche Telekom IT Solutions Hungary

At DT IT Solutions Hungary, seven experts within a Sustainability Core Team are working to raise employee awareness about the need to reduce electricity, water and paper consumption; to promote waste recycling; and to encourage more-efficient use of the company's vehicle fleet. Environmentally-friendly photocopying and printing techniques, and the use of paperless communication were two focal areas in the year under review. In addition, a 90-member strong Green Activists Community is working to make it easier for employees to contact colleagues with regard to environmental concerns – for example, via a dedicated site within our YAM UNITED internal social network.

### Magyar Telekom (Hungary)

In 2019, Magyar Telekom became the first company in Hungary to launch a community solar project. As part of the project, Magyar Telekom employees can rent a solar panel from the company for one year. As a reward for their contribution to Deutsche Telekom's climate protection activities, the donors receive benefits such as an additional day off. The solar modules have been installed on Magyar Telekom's training facility; the energy generated is used on site. The panels cover a quarter of the building's energy consumption. The project was continued again in 2022, with a total of 200 employees making use of this offer in the year under review.

Other national companies committed to a more sustainable corporate culture include:

- T-Mobile US (USA): Employees of this U.S. company have formed an online community focused on sustainability. In it, around 100 employees regularly discuss and keep up-to-date with T-Mobile's environmental initiatives.
- Magenta Telekom: About 30 employees of this company in Austria served as Climate Rangers in the year under review, using joint initiatives and workshops to make the issue of climate protection more tangible.
- T-Systems Limited (UK): An interdepartmental team reviews, discusses and promotes sustainability issues within the company.
- OTE Group (Greece): The Green Ambassadors, founded in 2019, are working to create a green culture, inspire OTE Group employees, collect ideas and provide information about projects such as #ZEROPLASTIC and recycling programs.
- T-Systems do Brasil Ltda.: The T-Green Team is committed to recycling and donation campaigns as well as to communicating ways to save energy and cut waste both inside and outside the company.
- Employee communities are also active, or in the process of being established, at other national companies such as T-Mobile Czech Republic, Hrvatski Telekom (Croatia), T-Systems Mexico, and DT IT Solutions Slovakia.

To find out more about corporate responsibility at our national companies and the involvement of their employees, please visit the relevant company profiles.

# Social commitment

## Our approach to social responsibility

### In focus: Building digital participation

As the digital society takes shape, we at Deutsche Telekom are working hard to ensure that everyone can participate. That's why, as part of our social commitment, we are working on enabling digital participation.

The internet offers a wealth of opportunities for education, work, networking, and cultural life. In an equitable society, everyone – regardless of their age, disability, education, income, or place of residence – has access to the technology necessary for accessing the internet, and to the digital opportunities available online. When people do not take part in the online world, that should happen solely as the result of free choice – and not due to a lack of financial means or requisite know-how.

We believe there are three crucial factors that allow people to participate equally in the digital society: technical access to fast networks, the affordability of equipment and services, and the ability and motivation to use digital media competently.

- **Access:** We are continuously expanding and upgrading our network with a view to enabling access. To this end, we cooperate with various partners – especially in more remote areas. Also, we are pressing ahead with the development of equipment and products for various demographics. The “nora” Notruf App (“nora” emergency-call app), for example, which offers one-tap emergency calling – and is intended especially for people with hearing and speech impairments – is based on a patent of Deutsche Telekom.
- **Affordability:** Our range of rate plans includes plans for just about any budget. We also offer a subsidized rate (only available in German) and reduced basic charges – for schools, for example. With this approach, we strive to make digital access affordable for everyone.
- **Ability/Competent use of digital media:** We help people to use media in a competent, responsible, and critical manner, and in line with basic democratic values. Our No Hate Speech campaign, which has been underway since 2020, serves as a good example in this regard.

We want everyone to be able to participate in digital society. In this spirit, we not only stand for access to the internet, but are also committed to diversity, tolerance, and joy in interpersonal interaction. We believe digital participation requires not only the ability to

use digital media competently, but also the willingness to act responsibly when online. This orientation highlights how our social commitment is closely interrelated with our core business. And it allows us to put our expertise as a telecommunications company to the best possible use for the benefit of society. Our commitment to fair and equitable digital participation also plays an important role in our positioning as an attractive employer.

Our commitment to sustainable economic activity is explicitly enshrined in our Group strategy, in our exhortation “Act responsibly.” It covers the following topics:

- Aiming for climate neutrality in our business
- Developing circular products and services
- Promoting diversity, equity, and inclusion, as well as investing in the continuous skilling of our employees
- Enabling digital participation

### Voluntary commitment, financial support, and international connectedness

As part of our social commitment, we carry out our own projects and initiatives. In addition, we promote voluntary commitment on the part of our employees. For example, we provide financial support for associations in which our employees are active. We also give them time off for volunteer work – to help Ukrainian refugees in the spring of 2022, for example.

In addition, we provide financial support – for example, via donations to, and collaborative efforts with, non-profit organizations that work to promote more harmonious coexistence and combat marginalization.

Also, we collaborate closely in this regard, and across national borders, with our national companies, sharing experience and best practices. In many cases, we invite our national companies to regionally implement, under their own responsibility, initiatives that we launch centrally.

Close cooperation with social players such as NGOs, associations, and initiatives also plays an important role. The reasons why we place priority on such interaction, across organizational and national boundaries, include the opportunities that it provides for mutual impetus and for the development of new ideas.

### Measuring our success

We measure the impact of our social commitment on a Group-wide basis, with a set of ESG KPIs. Since 2021, we have enshrined all aspects of digital participation – which is a central aim of our CR and company strategy – in our KPIs:

- The Community Contribution ESG KPI maps our social commitment in terms of financial, human, and material resources.
- The Beneficiaries – Focus Topics ESG KPI reflects the number of people who have benefited from our commitment to digital participation and to a society that protects the climate and conserves resources.
- The Reach ESG KPI indicates the number of people and media contacts that we have reached with our communication on digital participation and about a society that protects the climate and conserves resources.

Our measures are also based on the Sustainable Development Goals (SDGs) of the United Nations. We have listed the activities with which we are pursuing SDGs in an overview.

### Promoting media literacy and democratic competence

Societal and political developments in 2022 made it abundantly clear how important the internet has become to our everyday lives – it allows us to work, attend school classes, and shop from home. And its importance has reached entirely new dimensions during the war in Ukraine – for many refugees and other victims, it represents the only way to communicate with their families and receive warnings against impending attacks. But online communication also has its downsides. In uncertain times, fake news and conspiracy theories spread even more widely, and more and more people find themselves facing hate speech and marginalization.

For us, media literacy is the key to safe and competent use of digital media. But media literacy alone cannot ensure that people interact harmoniously, and treat each other with respect, in the digital world. For this reason, we believe that media literacy has to go hand-in-hand with democratic competence. We therefore work, through a wide range of projects and initiatives, to promote trust and informed formation of opinion, and to combat marginalization and online hate speech.

### Teachtoday

Our Teachtoday" initiative supports children, young people, parents and grandparents, and educational staff by providing hands-on tips and materials about safe, proficient media usage. The materials are available at [www.teachtoday.de](http://www.teachtoday.de) in seven languages (German, English, Croatian, Montenegrin, Polish, Romanian, and Hungarian).

Digital learning plays a particularly important role now that digital schooling and remote learning have become an even bigger part of students' day-to-day lives. The continually expanding digital toolbox, which was published in 2020 and now comprises over 100 different formats, including product ideas, video tutorials, and

fascinating quizzes, is designed for adults who have contact – either in schools, in learning groups, or in their own private lives – with children and young people between the ages of 9 and 16.

Teachtoday also has its own YouTube channel, on which it presents short, catchy videos about safe, proficient internet use, along with complete workshops on subjects such as how to use the toolbox.

### SCROLLER

SCROLLER, an online magazine for children aged nine to twelve, teaches media literacy using age-appropriate language. With its new, interactive web format, the magazine has a completely up-to-date look and feel, and it is suitable, as a learning and reading tool, both for solitary use and for group exercises. Via the additional SCROLLER EDU+ area, which links directly with the magazine's features, teachers can access background information and learning resources for classroom and online instruction.

In June 2022, both the Teachtoday initiative and the SCROLLER online magazine for kids were each awarded the Comenius EduMedia seal in the "Primary education" category. The Comenius EduMedia distinction has been awarded since 1995 by the Society for Education, Information, and Media (Gesellschaft für Pädagogik, Information und Medien e.V., GPI) to recognize didactic multimedia products that are outstanding in terms of their educational approach, content, and design.

### #TAKEPART stories

Our #TAKEPART stories initiative highlights socially relevant aspects of digitalization, from a practical perspective, and transforms them into modules that multipliers can use in workshops. The stories/modules are aimed at adults of all ages, from young adult to senior. The initiative highlights ways to use the internet responsibly, and it encourages critical discussion about this subject.

A special feature of the initiative is that the multipliers who use it do not have to be experts on the subjects concerned; we provide presentation resources for all workshops, along with moderators' guides and background information. As a result, the workshops are easy to carry out. Consequently, the initiative supports our aim of ensuring that everyone can participate in the opportunities that digitalization provides. The content is developed in didactic formats, implemented in innovative modules. The modules are available in German, English, and simplified language, and are tailored to various workshop durations.

The #TAKEPART stories include various modules on the focus topics gaming and civil courage, along with modules on other digital-world topics, such as digital friendships, life in the city of the future, as well as data protection and security.

### Promoting digital competence

As part of EU Code Week (only available in German), and in cooperation with Apple, we invite young people and teachers to immerse themselves in the world of app development. In workshops and interactive events, participants learn how to develop

and implement app ideas. Code Week, which is supported by the European Commission, took place for the 10th time from October 7 to 24, 2022.

We cooperate with various universities, with a view to supporting current research and promoting digital literacy. For example, via Telekom Laboratories (T-Labs), we finance several endowed chairs at TU Berlin which are oriented to the teaching of digital topics. Also, at the CODE University of Applied Sciences in Berlin, we have established a professorship for software engineering (with a focus on blockchain technology).

Startupnight is one of the largest annual events in Europe at which startups can network and present their ideas and business models to companies, investors, and potential customers. Startupnight, an initiative of Deutsche Telekom, is promoted primarily by hubraum, Deutsche Telekom's technology incubator. hubraum also offers a periodic event: in our "meetups", we meet every month with industry experts, startups, and investors to talk about an innovative, technology-related topic. In the framework of our TechBoost program, we support startups (especially in connection with financing issues), offer expert knowledge, and provide access to our technical resources and customers.

During the reporting year, T-Mobile Polska launched a nationwide awareness campaign called "Confident on the Net." Topics of the campaign include threats in cyberspace, such as phishing, fake news, and disinformation. It also explores the topics of data security, privacy, and security on the internet.

### **DIGITAL@School**

In our Group-wide DIGITAL@School initiative, we support children engaged in active, self-reliant efforts to help shape the digital age. Some 500 DIGITAL@School volunteers are giving their time to schools, and other educational institutions, in a range of in-person and online assistance formats. With age-appropriate approaches, they are helping to inspire children to take an interest in STEM (science, technology, engineering, mathematics) subjects and in programming languages. In addition, they teach skills that children need in order to use digital media responsibly. At the end of 2021, the initiative received the #GoodMagenta label for its work. The initiative was launched in 2017 as IT@School. It then grew throughout the Group, and was renamed DIGITAL@School at the end of 2021. In the reporting year, the initiative was recognized by the IT Executive Club with the ITEC Cares award in the category "Corporate commitment."

### **Seniors with good online skills**

As part of our efforts to ensure that everyone can take part in digital society, regardless of their age, we offer special equipment and products for seniors. The resources available for facilitating seniors' use of digital technologies include big keyboards, uncluttered displays, with large fonts and icons, and emergency-call buttons. In addition, we are working, in cooperation with the German National Association of Senior Citizens' Organisations (BAGSO) to promote media literacy among seniors and have lent our support as a partner to the Goldener Internetpreis (Golden Internet Prize; only avail-

able in German), which has been awarded since 2012. The prize is awarded to committed individuals, initiatives, and municipalities that are working to inspire seniors to go online – and to assist them in doing so.

In another effort in this context, we are serving on the advisory board of Digital-Kompass (only available in German), a joint project of BAGSO and the association DsiN (Deutschland sicher im Netz e.V. – Germany secure online). Digital-Kompass provides resources and digital "round table" meeting formats for internet guides who help seniors navigate the online world.

In cooperation with the German Senior Citizens League (DSL), we have produced a guidebook entitled "Digital inclusion – age is not an issue" ("Digital dabei sein – Keine Frage des Alters"; only available in German). In clear, straightforward language, the brochure covers a range of relevant topics, such as "How to set up a fast, secure internet/Wi-Fi connection," "What rates are available?" and "How can I ensure that my data is safe?" The guidebook also explains where one can find support – including learning resources, and pertinent services – and it provides tips on how to use digital media.

In addition to our online activities, we also organize offerings locally. Within the framework of our Seniors' Academy, for example, we hold seminars and workshops on using digital devices on the premises of cooperating associations, to help seniors who are unfamiliar with the technology to get started in the digital world.

During the reporting year, our national companies also made efforts to help seniors share in the benefits of digitalization. As part of the ENTER digital education program, Slovak Telekom launched a support program called "Ready for the digital age", which focuses on developing digital literacy among senior citizens. It covers subjects like using smartphones and computers, digital communications, and teaching of programming skills.

T-Mobile Czech Republic teamed up with Czech police organizations and the ministry of the interior to initiate a project called "Click for Peace," which is intended primarily for seniors. As one of the project elements, information material on using the internet was developed and distributed in libraries, hospitals, and doctors' offices. It also produced short videos that can be seen on social media, on the project's website, and on monitors in doctors' offices and waiting rooms.

### **United against hate speech**

Our No Hate Speech campaign, which we launched in the summer of 2020, continued in 2022. Our goal with the campaign is to send a signal and promote an internet in which everyone can enjoy the vast opportunities of the digital world – without having to fear marginalization or hate speech.

During the reporting year, the campaign focused on being "Louder than the hate" (only available in German). Studies show that only around five percent of online users account for the massive spread of online hate. That's why we developed a TV ad in the reporting



year to address the other 95 percent. With the messages “Let’s be louder than the hate!” and “When love is loud, hate doesn’t stand a chance,” we focused on civil courage online and called upon everyone to stand up for an internet where everyone is respectful with one another. The TV ad was supported by partners like the Amadeu Antonio Foundation, CORRECTIV, #ichbinhier, and Gesicht Zeigen! Für ein weltoffenes Deutschland e.V.

In 2022, at the Mobile World Congress (MWC) in Barcelona, under the hashtag #Unhate we used artificial intelligence to turn online hate speech into aesthetic works of art, thus depriving it of its toxicity. The result is a peaceful statement for more respectful interaction with one another.

To lend additional visibility to this topic, Magenta Telekom from Austria used the most recent amendments to its General Terms and Conditions in May 2022 to embed a clear stand against online hate speech within it. Customers are now warned about potential criminal penalties for spreading hate speech directly in the General Terms and Conditions. It also contains information about recommended measures for victims of hate speech and where to report it.

During the reporting year, we also continued our commitment to promoting civil courage and constructive dialog on gaming platforms. Together with the esports organization SK Gaming and the esports player foundation, we launched the initiative #equalesports in 2021 to promote greater diversity in esports and gaming. The initiative aims to support the participation women and non-binary people, who are particularly frequent targets of hostility, in professional and amateur sports. The two-day Equal eSports Festival, which took place in the fall of 2022, addressed the topics of diversity, esports, and gaming. After its successful premiere in Berlin in 2021, the Equal eSports Festival took place as part of Digital X (only available in German) in Cologne this year. Our contribution included organizing workshops and panel discussions.

In addition, we support initiatives that work to combat marginalization and cooperate with NGOs that are working in support of our aim of strengthening democracy and embracing diversity in society. Also, with our own measures aimed at online civil courage, we call on society to support us in this commitment.

In 2020, we founded an internal network with the aim of making our aspiration “we have no room for marginalization and racism” come alive within our company. Within this network, representatives from various areas, such as “internal communications,” “threat management,” “compliance,” and “human rights,” are working together to ensure that preventive measures are implemented, and that potential incidents in the company are taken seriously and transparently scrutinized. We also help to ensure that a solution in the best interests of those involved is always found quickly.

We also carried out various workshops for our employees on the subject of “online hate speech” – including workshops for apprentices and dual students. School students taking part in the digital internships that we introduced in 2021, as the only company to do

so, were also invited to take part in our workshops. These addressed the topics of digital democracy, civil courage, and racism. Due to the pandemic, some of the workshops were held online.

### Digital Crime – When Words Become Weapons

In 2021, in an effort to reach relevant new target audiences, we published the six-part podcast series Digital Crime – When Words Become Weapons (Digital Crime – Wenn Worte zur Waffe werden) on all leading podcast channels. In each episode, we hear from a person who has experienced hate speech online and describes what that was like. Also, experts put the cases in proper perspective, and – as is customary in true crime podcasts – discuss the legal issues the cases raise. In the first episode, we hear from Jay (who also stars in our spot for the No Hate Speech campaign) about sexual self-determination and hate speech. Other episodes focus on topics such as hate speech in local politics, in gaming, and against women. And the episode “When customers become haters” (Wenn Kunden zum Hater werden) discusses this issue in the context of our own customer service. In 2022, the second season of Digital Crime won the audio prize of the Media Authority of North Rhine-Westphalia in the category “Respectful interaction on the internet” (Respektvoller Umgang im Netz).

With our No Hate Speech campaign, we generated around 1 040 million media contacts in 2022, and reached more than 4 million people – either directly or via multipliers such as parents and educators, for example, in workshops (2021: 3.8 million).

### Digitalization in schools

For more than 20 years now, we have been offering free 16 Mbit/s broadband lines to all general and vocational schools in Germany as part of the Telekom@School initiative. As of fall 2022, more than 19 000 schools were making use of our offer. In the reporting year, nearly 8 500 additional schools took advantage of our subsidized prices to upgrade to bandwidths of up to 250 Mbit/s. This is easily possible with an upgrade from ADSL to VDSL.

Since 2020, school authorities may opt for a flat rate for education (only available in German), which provides pupils with an unlimited data allowance for educational content, for a low monthly charge. In addition, school authorities can provide tablets, laptops, and other means to disadvantaged students, also with the help of funds from the Federal Government’s Digital Compact for Schools campaign. This gives children and young people the opportunity, irrespective of their family background, to learn how to use digital media. We consolidate our commitment to schools in our Group-wide Digital Education and School program.

Together with Microsoft, we have been supporting schools in Germany with an extensive digital education package (only available in German) since 2021. The package includes laptops or tablet PCs and special educational licenses for Microsoft 365 software. A team of Deutsche Telekom experts – specially certified by Microsoft – provides the service and helps set up the devices. Schools can test the package free of charge and without obligation.

What technical needs does a school have? Who will commission laptops and smart boards? How can teachers secure and manage the new technology? With our Magenta Classroom (only available in German), we accompany schools and school authorities on their way toward digital education. Our TI service offers everything, including the needs assessment for technical infrastructure, installation and operations management, and even training courses and support – on site and remote. Working together with selected schools, we developed standards to ensure that classes are a positive experience for everyone involved – whether on a smart board or tablet PC. In addition, teachers do not have as many technical issues to deal with and gain more time to concentrate on didactic matters.

#### Education Report 2022: „Digital school“.

With our first education report (only available in German), we illustrate the current situation and the challenges in the German education market. The report focuses on supporting learners and presents our holistic digitalization concept.

#### Digital education at Digital X

The evolution of the digital education was one of our key topics at Digital X (only available in German) in Cologne once again in 2022. The two-day digitalization trade fair featured a themed pavilion dedicated to the aspects of technology and knowledge culture when it comes to the megatrend of digital education. In 2022, Digital X attracted more than 70 000 visitors – including members of the general public for the first time. Digital X 2022 won a total of five awards in the renowned international Best Event Awards World (BEA World) competition, including two gold awards.

#### International support for school digitalization

In the United States, T-Mobile US is also committed to connecting schools and students. The company’s Project 10Million initiative, which was launched in 2020, was continued in the reporting year. This program offers free internet services and mobile hotspots for underserved households with school-age children. It aims to reach up to 10 million eligible households within five years. By the end of 2022, T-Mobile US worked with school districts, extracurricular programs, and local authorities to offer affordable internet access to more than 5.3 million students nationwide.

In the reporting year, other national companies, such as those in Greece, Slovakia, and the Czech Republic, continued their efforts on behalf of school students’ digital participation. The OTE Group in Greece, for instance, sought to promote students’ digital literacy. Over the last nine years, the national company has served as a strategic partner to WRO Hellas, a non-profit organization for robotics and the sciences: Together, they supported a number of initiatives for disseminating robotics and STEM educational methods in the Greek education system. More than 30 000 school students participated in these initiatives to date. In addition, the OTE Museum held online and classroom STEM programs for programming and coding in 2022, aimed at children aged six to twelve. 600 young students attended these courses.

Slovak Telekom launched its ENTER program in 2020, whose objective is to promote innovation in education and the development of digital literacy among children. This initiative aims to improve computer science instruction at schools and to awaken interest in technology and programming among children. To enable digital education, Slovak Telekom also teams with non-profit organizations to donate technical equipment to schools. In 2022, students of elementary schools and high schools that were supported by ENTER developed their own prototypes built on Micro Bit solutions.

In 2022, T-Mobile Czech Republic launched its Keys to Media project, which aims to improve media literacy among children and young people in elementary and high schools, as well as fight the spread of disinformation on the internet. Keys to Media provides teachers with educational content in the form of videos and podcasts. The project gives students the opportunity to try their hand at journalism through public debates and competitions.

Further information about Deutsche Telekom’s international commitment in this area is available in the Profiles of the national companies.

#### Deutsche Telekom Stiftung’s commitment

The educational foundation Deutsche Telekom Stiftung is working, via numerous programs and projects, to help improve education in STEM subjects (science, technology, engineering, and mathematics). It supports children and young people aged 10 to 16 in learning important skills for their educational and career paths both in and out of school. Along with STEM-related skills, the skills in question include critical thinking, good judgment and discernment, creativity, and communication and teamworking skills. The foundation provides such support out of the conviction that a modern education system must give young people the best possible preparation for meeting global challenges such as digital transformation, climate change, electromobility, and biodiversity.

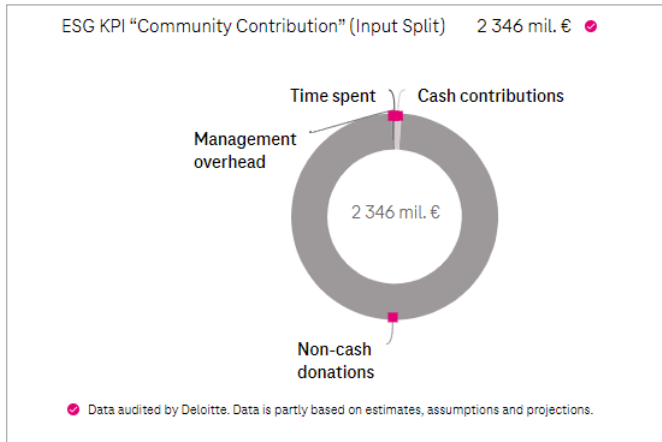
#### ESG KPIs “Community Contribution,” “Beneficiaries – Focus topics” and “Reach”

As part of our assessment of the impacts of our social commitment, we report a set of three ESG KPIs: “Community Contribution,” “Beneficiaries – Focus topics” and “Reach.” In using these KPIs, we rely on methods employed by the organization Business for Societal Impact (B4SI), which incorporate the aspects “input,” “output” and “impact.” In 2020, Deutsche Telekom’s KPIs were oriented especially to the topic of media literacy. In 2021, we then turned their main focus to digital inclusion – because that is a central aim of our CR and corporate strategy.

#### Community Contribution

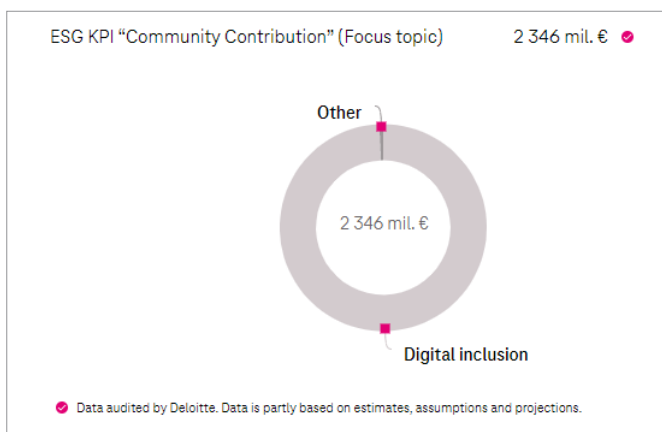
The ESG KPI “Community Contribution” reflects activities in which Deutsche Telekom was involved in the community either financially, through its employees, or through donation of materials. The “input” (effort/commitment) was communicated from 2017 to 2020 under the name “Community Investment.” In 2021, the KPI was adjusted and the focus was sharpened.

Our ambition in this connection: Increase the KPI

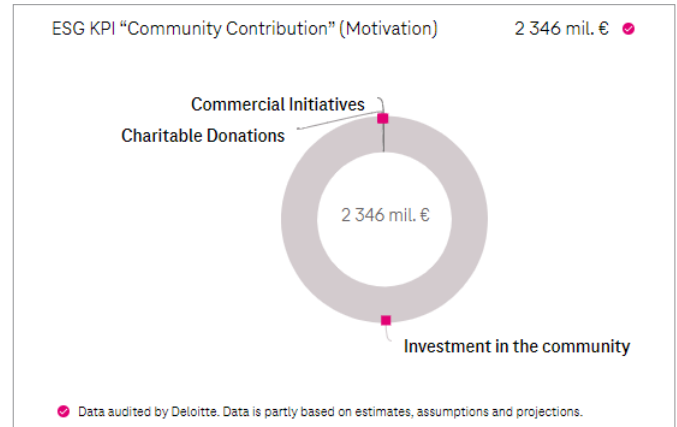


In 2022, 99 percent of our engagement focused on "Digital Inclusion." 1 percent paid in on other topics, such as "Low Carbon and Circular Society" or "Disaster Relief."

The large proportion of the "digital participation" field is primarily influenced by two factors: Firstly, the international Community Contribution to support the Ukrainian refugees with telecommunication services was around 554 million euros and, secondly, the in-kind donations from T-Mobile US totaled around 1 724 million euros in 2022. This value increased greatly at T-Mobile US (compared to the value for 2021 of around 211 million) because the method used for calculation was amended. Now, not only the value for free items and services is taken into account; the value for subsidized items and services is also taken into consideration.



In addition to the longer-term commitment to our focus topics "Digital Inclusion" and "Low Carbon and Circular Society" (social investments), we also contribute through charitable donations and social sponsorship (e.g., of cultural events).



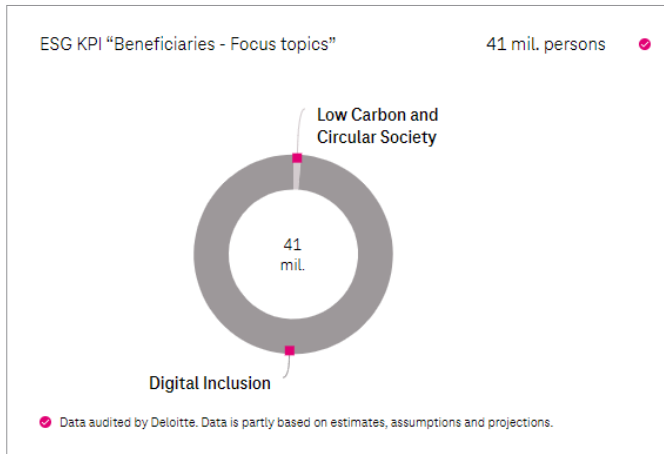
To determine the overall commitment of our employees, we look at the number of hours our employees have put in under our Corporate Volunteering program. In 2021, we adjusted the calculation basis and, in addition to volunteer hours performed during working hours, also collect volunteer hours otherwise supported by us (e.g., through premises, insurance, or donations). In 2022, for example, employees again volunteered at the "Ein Herz für Kinder" ("A heart for children") fundraising gala or participated in handing out SIM cards to refugees from Ukraine. In Germany alone, we provided around 175 000 volunteer hours in 2022. Internationally, the total was around 256 000 volunteer hours.

Also, efforts we make in the context of the Community Contribution ESG KPI contribute significantly toward achievement of the Sustainable Development Goals. In 2022, about 598 million euros of our Community Contributions in Germany alone contributed to digital inclusion and thus to the achievement of SDG 4 (Ensure inclusive and equitable quality education). Internationally, the figure was around 2 331 million euros.

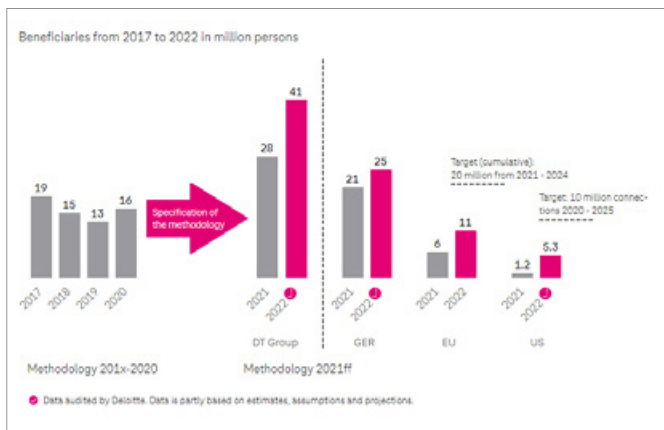
**Beneficiaries – Focus topics**

The ESG KPI "Beneficiaries – Focus topics" shows the number of people who have benefited from our commitment to digital inclusion and to a society that protects the climate and conserves resources (this includes efforts such as providing media-literacy training, providing broadband accesses for schools, and supporting counseling hotlines). In 2022, our media literacy measures reached 41 million people. In contrast to the years 2017 to 2020, in the year under review only beneficiaries in the focus topics "Digital Inclusion" and "Low Carbon and Circular Society" were included. Besides direct beneficiaries, indirect beneficiaries are also taken into account according to a fixed key if, for example, a multiplier concept is involved or a discounted connection is used by several people.

Our ambition in this connection: Increase the KPI



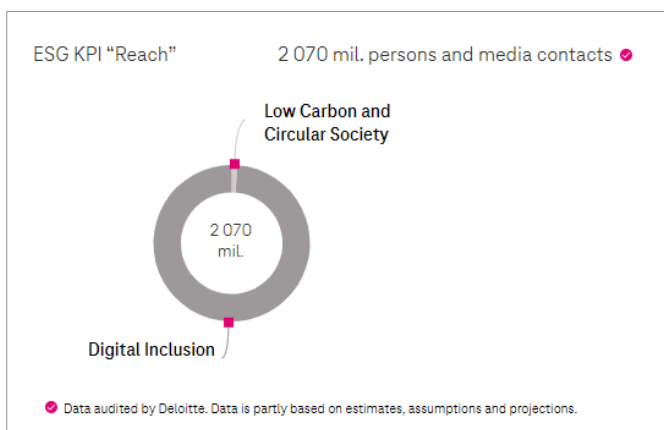
Our ambition is to increase the ESG KPI Beneficiaries. In the graphic below you see the historic development of this ESG KPI and our international ambition level.



### Reach

The ESG KPI "Reach" shows the number of persons and media contacts that we have reached via our messaging on digital inclusion, and on societal efforts to protect the climate and conserve resources – and that thereby have become more aware of the issues involved and of our pertinent activities. As of the end of 2022, this KPI reached a value of 2 070 million people and media contacts.

Our ambition in this connection: Increase the KPI



Our investments in network expansion are making an important contribution to facilitating broadband access for large sections of the public. On a Group-wide basis, our investments in our network infrastructure overall amounted to 21 billion euros in 2022 (of which about 4.4 billion euros were made in Germany). Also, we are already providing LTE service to 98 percent of the total population of the countries in which our national companies are active. What's more, we operate the largest fiber-optic network in Germany, with more than 690 000 kilometers of cables, and are driving the expansion of a large-scale NB-IoT infrastructure for the cities of the future.

### engagement@telekom

Our range of corporate volunteering opportunities supports our employees' social commitment. Through their commitment, our employees play a major role in strengthening social cohesion, broadening their own horizons, and boosting their social skills. This in turn has a positive impact on teamwork at the company.

Our engagement@telekom corporate citizenship program pursues three aims – to support our employees' current commitment, to provide impetus for new commitment, and to provide space for networking. To that end, we give our employees opportunities to volunteer. For example, numerous Social Days provide an opportunity to get involved on behalf of society. Our employees volunteered more than 256 000 hours of their time in 2022.

Projects that promote media literacy are one focus of engagement@telekom. With such projects, our employees help people better understand digital phenomena, thus laying the groundwork for participation in the digital world. One example is the Group-wide initiative DIGITAL@School (known as IT@School until the end of 2021). Using age-appropriate strategies and language, the committed employees in that initiative help children in schools and other educational institutions become acquainted with STEM (science, technology, engineering, mathematics) subjects and help teachers and parents gain and expand their knowledge. In addition, they teach skills that children need in order to use digital media responsibly.

Environmental issues also play an important role in the framework of engagement@telekom. As part of our commitment in this area, employees active in our Green Pioneers movement in Germany have initiated efforts to help reduce our carbon footprint. These efforts contribute to our Group efforts in the area of sustainability. Employees also volunteered once again at the annual "Ein Herz für Kinder" ("A heart for children") charity gala and participated in handing out SIM cards to refugees from Ukraine.

### Joint commitment with partners

We have taken on the task of driving forward the social discussion on digital responsibility. To do this, we participate in various alliances and partnerships such as the Corporate Digital Responsibility initiative run by the Federal Ministry for the Environment and Consumer Protection. In 2021, we signed the code of conduct of the initiative, thereby committing ourselves to upholding specific principles. We also published our own Corporate Digital Responsibility framework in 2022.

We signed the Charter of Digital Networking back in 2014. With our involvement in its sponsoring association, we are also underscoring our commitment to responsibility in shaping the digital society.

We have longstanding partnerships with many organizations, associations, and initiatives with whom we work as part of our social commitment.

During the reporting year, we supported Helpline Ukraine, the free phone hotline for refugees from Ukraine, by donating line capacity for additional voice traffic. The project was supported by Nummer gegen Kummer e.V., a youth counseling line and long-standing partner of ours, in cooperation with the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ).

Other partnerships in which we are involved include the following:

- The esports player foundation which promotes democratic game rules and diversity in gaming
- Digitale Helden (Digital heroes), which promotes media literacy
- #ichbinhier (#Iamhere) and Diskutier Mit Mir (Discuss with me), which carry out workshops on more constructive communication on digital platforms
- The TelefonSeelsorge crisis line
- Deutschland sicher im Netz e.V. (DsiN) (Germany secure online), which supports efforts aimed at IT security and data privacy (among other initiatives, we support the Digital Neighborhood project, which provides tips and advice on digital opportunities and data security in connection with volunteering)
- The German National Association of Senior Citizens' Organizations, which promotes media literacy among the older generation
- The German Senior Citizens League (DSL), which promotes age-appropriate provision of information, especially information about fixed-network accesses for private citizens
- The Bundesnetzwerk Bürgerschaftliches Engagement (National Network for Civil Society) participates in the Civic Engagement Week (Woche des bürgerschaftlichen Engagements)

In addition to urging society to stand up against online hate speech, our No Hate Speech campaign focuses strongly on providing support for those victimized by hate speech. We have entered into additional partnerships to this end. And we present additional partners in our Topic special.

We promote various initiatives and programs aimed at protecting children and young people in cyberspace. For example, we are a member of the association fragFINN, which provides a safe online surfing environment for children between the ages of six and

twelve. The search engine on fragFINN.de and its pertinent browser app turn up only websites that are suitable for children and have been reviewed by media educators. We also support JusProg e.V., a non-profit association that works to improve protection for children and young people online. Its youth-protection program JusProg, which is available for download and use free of charge, filters out age-inappropriate online content.

### Financial commitment and sponsorships

In Germany, we are involved in the fields of sport, culture, and social issues. In addition to providing funding, we help artists, athletes, event organizers, and associations with their communication and marketing activities. Our Sponsorship Policy provides the framework for sponsoring activities. Being involved in the regions where we are based is another important aspect. Examples of our involvement include:

- Music sponsorship
- Competitive sport sponsorship with partners such as the DFB (German Football Association), FC Bayern München, Telekom Baskets Bonn, and Deutsche Sporthilfe, DFB's Sepp Herberger Foundation, and the German National Paralympic Committee
- Recreational sports sponsorship
- Sponsorship of social activities within partnerships

Additional information on the sponsorship activities of Deutsche Telekom AG is available here. Our national companies are also engaged in these areas.

### Corporate Giving

Through our Corporate Giving program, we support the work of aid organizations worldwide – preferably in the form of long-standing partnerships – and provide rapid assistance in disaster situations. Our Group Donation Policy lays out the guidelines for these activities.

### Living and working during the coronavirus pandemic

The coronavirus pandemic has shown just how important digitalization is in meeting social challenges. Digitalization has made it possible for many people to switch to working from home; online shopping and contactless payments have been reducing the risk of infection; physicians have been offering online consultations; contact tracing apps have been helping contain the pandemic; digital proofs of vaccination have been opening doors – and people throughout the world have been communicating via video chat.

Containing the coronavirus pandemic continued to be a priority for us during the reporting year. Even in times of crisis, we remained committed to keeping everyone connected.

### Breaking chains of infection, with the Corona-Warn-App

Under commission to the Federal Government, and in cooperation with SAP, we developed our contact tracing app, the Corona-Warn-App, in 2020 and have introduced regular upgrades with



additional features since then. The app can help track infection chains throughout Europe and quickly break them. It is an effective digital complement to the behavioral guidelines. We continue to enhance this app. Comprehensive information features, such as features reporting on incidence rates, are being included. With more than 48 million downloads to date, the Corona-Warn-App is considered to be one of the most successful apps of its type in the world.

### **Improving vaccination and verification processes with the help of digital solutions**

With the help of suitable IT infrastructure and smart systems, such as access management systems and vaccination capacity monitors, we supported the establishment of vaccination centers in Germany and helped simplify vaccination processes – and thereby helped implement the country's national vaccination strategy.

### **Enabling working from home**

Working from home offers opportunities, but also presents special challenges. The Deutsche Telekom guide for working from home (Homeoffice Ratgeber der Telekom; only available in German) helps companies and their employees deal with the challenges. In short videos, our experts provide helpful tips and explain such things as how to manage and structure home working arrangements in effective, healthy ways.

### **Protecting employees**

At Deutsche Telekom, we have introduced detailed hygiene concepts, flexible rules for working from home, and other support measures such as free rapid tests to fulfill our responsibility as an employer. We have taken special precautions for our Telekom Shop and field employees, who cannot work from home. With the expiry of the coronavirus occupational health and safety ordinance workplace restrictions were eased in Germany in late May 2022 and we enabled our employees to return to the office – as social distancing rules and blocked workplaces were discontinued. Managers talked with their employees to determine how their respective teams would handle the return to the office and hybrid working. In addition, during our Germany-wide New Work Tour, experts showed how hybrid collaboration can work and demonstrated helpful supporting tools and methods. In addition, our Health & Safety Management continues to track developments regarding the coronavirus situation. The hygiene concept that protects our workforce is adjusted as needed, in line with the requirements of the coronavirus occupational health and safety ordinance issued by the Federal Ministry of Labour and Social Affairs.

To thank our employees for their outstanding work in maintaining operations during the coronavirus lockdown, we held the AWAK3 employee festival in June of the reporting year on the Telekom campus in Bonn-Beuel. Around 12 000 employees celebrated during the three-day festival, which featured a total of 12 concerts on two stages. On top of that, more than 100 workshops were offered, for example on the topic of sustainability.

### **Free entertainment**

To make the time people had to spend at home pass more quickly, we have expanded our range of free entertainment and cultural programs. On our MagentaMusik streaming platform, for example, we presented numerous concerts and thus brought the music directly into people's homes. During the reporting year, we broadcast Wacken Open Air, the world's largest heavy metal concert, on MagentaTV and as a free live stream on MagentaMusik. Most of the concerts we offer on the platform become available for streaming within just a few days after the relevant live event, and they stay available for up to twelve months.

### **Emergency assistance in crisis situations**

After Russia's attack on Ukraine in February 2022, we responded quickly and introduced extensive emergency aid services for refugees from Ukraine throughout Europe. The Deutsche Telekom Board of Management devised an extensive set of measures to this end.

In Germany, in coordination with the Federal Agency of Migration and Refugees (BAMF), we provided free pre-paid SIM cards to refugees in the spring of 2022. The SIM cards, which include free phone calls and data volume, were distributed to refugees through our Telekom Shops and through official aid organizations. The offer was valid until June 30, 2022. Starting June 10, 2022, the free SIM cards were incrementally replaced with a new, low-cost rate plan, MagentaMobil Prepaid Ukraine. All users of the existing SIM cards received a text message (SMS) to notify them of the option to switch to the new rate plan. All calls and texts by our consumers and business customers to and from Ukraine were made free of charge retrospectively from February 22, 2022 – for both the fixed and mobile networks, as well as for public phones. Roaming charges for customers who were in Ukraine were also suspended. This offer was also available until the end of June 2022. Overall, we provided telecommunications services worth around half a billion euros in Germany.

Our national companies in Poland, Slovakia, Hungary, and Romania also distributed free prepaid SIM cards to refugees. In total, we donated more than 1.5 million SIM cards in Europe. T-Mobile US made phone calls to Ukrainian area codes free of charge for months and also equipped shelters for refugees with broadband lines and routers.

We helped aid organizations to establish call centers to provide helpline advice to refugees in all matters. Nummer gegen Kummer e.V. launched Helpline Ukraine, which gives refugees free, telephone counseling for all concerns, problems, and other relevant topics, on June 1, 2022. Helpline Ukraine is a joint project of the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ) and Nummer gegen Kummer e.V., and operates with our support. We give Nummer gegen Kummer e.V. the technical infrastructure for this nationwide counseling service free of charge. We also pay for the call charges to the helpline.



We also provided free Wi-Fi access in shelters for Ukraine refugees in Germany and supplied vehicles for aid convoys heading toward the Poland-Ukraine border. We offered jobs in technical and non-technical areas to refugees in many European countries. New employees were also given help to find accommodation, open bank accounts, and organize child care.

Our employees also demonstrated a great sense of solidarity with refugees from Ukraine. Several hundred Deutsche Telekom employees got together in the spring of 2022 to coordinate the aid. Employees at our national companies, for example, in Poland, Hungary, and Slovakia, volunteered their time, working at borders first and foremost. In Hungary, Magyar Telekom provided a building near the border as accommodation for volunteers. We also donated money to help with aid activities in Ukraine. For example, we have donated one million euros to the German Red Cross (DRK). Many employees in the Czech Republic responded to the call to collect donations. T-Mobile Czech Republic doubled the total collected, which meant the final amount was more than 300 thousand euros.

We discontinued our development activities in Russia during the reporting year. At the same time, we offered our team of software developers, which is based primarily in St. Petersburg and provides services to customers outside of Russia, the opportunity to work outside of Russia. Many employees have accepted this offer in the meantime.

#### **Deutsche Telekom provides calls to Turkey and Syria for free**

After the devastating earthquake in the border region between Turkey and Syria, Deutsche Telekom made all phone calls and text messages from Germany to Turkey and Syria for Telekom and congstar customers via Deutsche Telekom's mobile and fixed-networks free retroactively from February 6, 2023 to February 15, 2023. What's more, the Deutsche Telekom Group enabled free roaming for data, text message, and voice services for Telekom and congstar customers in Turkey and Syria up to February 15, 2023. Prepaid customers have already been recredited accordingly for the credit they had already used. The Group also donated one million euros to Germany's Relief Coalition.

# Corporate culture & the workplace

## Our corporate culture

A company's culture is its DNA. As such, it influences not only its ways of working, but also its very success. Its culture is primarily shaped by the people who work for the company. We at Deutsche Telekom promote a culture of trust that makes people satisfied and the company successful. We encourage this in several ways – for example, by providing a suitable environment in which our employees feel comfortable and can work effectively. Our culture is characterized by mutual trust and respect, entrepreneurial thinking, and collaborative working. We give our employees room to grow personally and professionally and to make a positive contribution to our company and society through their work. Our corporate culture provides the “guardrails” for this. It is based on our corporate values, which we have formulated in six Guiding Principles. The Guiding Principles are the basis for our cooperation with each other – and with our customers, shareholders, and the general public. Our Code of Conduct, which is founded on the Guiding Principles, makes our Guiding Principles come alive in tangible ways. It defines the rules for our daily work, including both internal and external work.

A fundamental part of our corporate culture is our Diversity, Equity and Inclusion Group Policy, which defines the course for decisions at all levels of our company. Our goal is to promote a culture of belonging in which everyone gets what they need to capture their full potential. We are firmly convinced that this will contribute to our success as a global telecommunications provider and employer.

In September of each year, we celebrate our Living Culture Day. The Living Culture Day provides an opportunity to reflect on our corporate culture and to make it perceptible for all of our employees around the world. In the reporting year, our celebration had the motto The Power of WE. The topics it highlighted included teamwork and cohesion. The hybrid, live-streamed event was held at Magenta Telekom in Vienna in 2022. Also, each year we bestow our Team Award, to honor outstanding teams that uphold our Guiding Principles in their work in exemplary ways. In addition, we invite all employees to take part in an ongoing cultural dialog, in order to help us all integrate our Guiding Principles within our daily work even more effectively. Again and again, this dialog leads to specific measures that make our culture come alive.

## A new world of work

The workplace is changing rapidly, and the pace of the changes is constantly increasing. Chatbots support our customer service, videoconferences can take the place of business travel, and artificial intelligence helps out with data analysis. Not surprisingly, employ-

ees' job profiles are changing as well. The half-life of knowledge keeps shortening, and core competencies for employees now include a readiness to change, and to learn.

At the same time, employees' expectations with regard to their employers are also changing, in corresponding ways. Employees expect employers to offer them more personal freedom, greater flexibility, and less limitation to specific workplace locations. From such changes, a new balance between trust and responsibility is emerging. Strict controls and rigid office-time schedules will become things of the past. Today's competent, committed, and entrepreneurially oriented employees are taking greater responsibility for their work than past employees did. They are also assuming greater responsibility for themselves overall.

As we become the “Leading Digital Telco”, the ways in which we collaborate are changing. At Deutsche Telekom, we call the results of this development New Work. This is about more than simply whether employees work in the office or from their homes. It's also about the essence of our work – about whether it is meaningful, and of use to society, and about how it helps take us, as a company, toward our common success.

Our journey toward a new, more flexible, more intelligent, more individual workplace began over a decade ago. Rather than focusing on structures, this journey emphasizes attitudes and relationships – including relationships among ourselves and with our customers – and is directed at a changed understanding of what leadership should be. Such topics are also a central focus of our corporate culture, which we are developing jointly, as a Living Culture. This culture supports a transformation process that calls on employees to be willing to change and acquire new skills. This, in turn, presents challenges – challenges that we are addressing with comprehensive skills management and precisely tailored training options. Our Guiding Principle “Act with respect and integrity,” for example, entails that everyone should feel like they belong and be given the opportunity to capture their full potential. To achieve this goal, we support our managers and employees, for example, with training courses on all aspects of diversity.

We examine the transformation of the workplace in detail with our “NewWork@Telekom” magazine, which we publish several times per year. In the issue “From today to tomorrow” (only available in German) from October 2022, we explored how our labor market will change and identified the cultural and technological drivers that will characterize our jobs of tomorrow, among other topics.

We also examined changes in the world of work during the reporting year in our New Work podcast “Frohes Schaffen. Neues Schaffen” (Pleasant work. New work.- only available in German). In it, we talked about what it means to work in a digital world, what new opportunities are arising in the labor market, and how competencies and job profiles are changing.

Currently, the framework for our collaboration is defined by five pillars. We invite and expect our employees, in the context of their teams, to help flesh out the specific details of how this framework is applied. With this approach, we can combine the best of both worlds – the physical and the virtual worlds, or the analog and digital worlds.

To this end, and working in cooperation with the Group Works Council, we have produced the New Work manifesto. It serves as the basis for interaction characterized by trust and respect.

Our Digital@Work program facilitates our employees’ collaboration – with suitable tools and technologies. Also, we are continuously working to make the new world of work visible through the design and further optimization of our office spaces. We want our offices to invite and inspire employees to collaborate, interact, and carry out hybrid meetings and workshops. Throughout our locations in Germany and abroad, we are setting up spaces for digital collaboration and creativity in which employees can work together on projects and across units.

**Digital collaboration**

For effective collaboration in the new world of work, simple, fast and virtual communication is a fundamental requirement. In the pandemic year 2020, the volume of online conferences more than doubled. In 2022, the 11.8 percent decline in conference minutes shows that there were more face-to-face meetings again. Surpassing the 2 billion mark last year, our employees spent around 1.9 billion minutes in virtual conferences in 2022. Still a high figure compared to previous years. The number of accounts of telephony and messaging services have not been reported since 2021.

For global exchange, we also use our internal social network “You and Me UNITED” (YAM UNITED) - under the name “You and Me” until 2020. In the reporting year, 128 609 users were registered here.

	2018	2019	2020	2021	2022
Conference minutes (in mio.)	835.10	883.88	1 787.15	2 153.52	1 899.14
You-and-Me UNITED (Number of created user profiles)	125 670	133 306	130 788	138 071	128 609

**Corporate culture and the new workplace at T-Systems  
The #peoplemakeithappen cultural transformation**

In 2022, a great many of the goings-on at T-Systems had to do with “culture and change”. T-Systems launched its “#peoplemakeithappen” cultural initiative back in 2018. #peoplemakeithappen is aimed at the thought and behavior patterns of the company’s employees and managers. It is about delegating

responsibility, and engaging in collaboration and self-reflection, on the basis of a common mindset – the “T Mindset.” In this context, the first issue of the culture magazine People Make It Happen was published in English and German at the start of the reporting year. In this issue, employees from all over the world reported on what the T Mindset means for them and how it helps them with their everyday work.

In June 2022, the “Change & Transformation (C&T)” leadership team met to develop approaches to align corporate culture more closely with the company’s success in the long term. Together with other teams at T-Systems, 140 ideas for achieving a better balance between corporate culture and performance were developed. A screening process reduced this lengthy list to ten proposals, from which the C&T leadership team selected three and implemented them during the reporting year. What managers should do:

- Take enough time to make the purpose of their individual tasks transparent to employees
- Organize regular “Let’s talk” sessions within the teams, ensuring that there is enough room and time for an open exchange regarding employees’ concerns
- Set priorities and thus gain time for effective, customer-centric work

**We.Work.New.**

With its We.Work.New. program, T-Systems has made use of the Covid-19 crisis as an opportunity for change. Also, its new hybrid work concept, “activity-based work,” combines the best of two worlds – the home office and the regular office. The basic principle for the concept is “What you do determines where and how you do it.” Teams should have the freedom to decide which activities should take place in which environment.

The company’s offices have also been modified in keeping with the new modes of working. The company opened ten “Meet & Connect Hubs” in Germany in September 2021 and finalized them in the reporting year. Concurrently, the number of standard desk-sharing workplaces was reduced. Individual offices have been done away with completely – even for the company’s top management. Since then, each employee has been assigned to a booking zone, which means they can book desk workplaces within this zone flexibly and on demand, instead of having dedicated offices. This is an ideal prerequisite for seamless, cross-unit collaboration. State-of-the-art hardware and software, as well as new tools for international collaboration, are rounding out the transformation.

In the framework of the “Return to Office” program, many employees started returning to the offices from March 2022 onward. On this occasion, the T-System teams at the ten “Meet & Connect Hubs” celebrated the “Reconnect Days” with many special events.

After these “Reconnect Days”, T-Systems conducted a global employee survey to measure satisfaction with the events and facilities of the “Meet & Connect Hubs”. Questions included the frequency of office visits and potential reasons why employees prefer to work from home. Over 1 000 employees participated in the sur-

vey. The analysis of the survey revealed that aside from informal discussions, events and meetings with colleagues are the main reason why many T-Systems employees come to the office locations.

The “We.Work.New” project was officially concluded in late September 2022. The activity-based new way of working has become well established in the meantime.

### Agile transformation

Agile transformation at T-Systems continued to play a major role in 2022. To put the entire company on an agile footing, T-Systems established lean portfolio management during the reporting year, another element of enterprise agility. In contrast to classic project management, this method makes it possible to align the portfolio and strategy in such a way as to ensure that the “right solution” can always be provided at the “right time,” helping to increase the efficiency of the processes. The number of employees who use agile principles in their different methods and forms increased by 30 percent after the new approach was introduced. In addition, the flexible organization, which was already established across the board in Germany, was incrementally rolled out worldwide in the reporting year. To this end, managers and T-Systems were given training and reinforcement with regard to their role and that of collaboration within a flexible organization. Over 90 percent of managers at international level took part in this training in 2022. What’s more, T-Systems embedded the Objectives by Key Results (OKR) method throughout its organization, following its introduction in 2021. Among other elements, experts developed training formats for teaching agile work methods.

### Flexible working models for a wide range of needs at Deutsche Telekom in Germany

In order to help our employees achieve a good work-life balance, and avoid burn-out, we explicitly promote flexible work models. We have set out this orientation in our Diversity, Equity and Inclusion Group Policy. The options we offer our employees in Germany range from flexitime and part-time to lifetime work accounts.

### Promoting part-time work

We support the establishment of part-time jobs and guarantee employees in Germany the possibility to return to their original weekly working hours. Subject to operational requirements, employees are permitted to reduce their working hours as they wish. In addition, they may terminate their part-time work at any time, even earlier than originally planned. About 14 percent of employees covered by collective agreements, and 17.7 percent of civil servants, are making use of part-time arrangements (as of Dec. 31, 2022). In addition, a total of 29 executives are working part-time (as of Dec, 31, 2022).

### Mobile working

Thanks to modern communications technology, in many different fields we can work when and where we wish. Mobile working has been firmly established at Deutsche Telekom. Our employees can organize their work locations flexibly, a right we enshrined in our collective agreement on mobile working concluded with the ver.di union back in 2016. Needless to say, they do not have to be available to the company at all times, meaning they do not have to stay

reachable after working hours, during vacation, or on weekends. Mobile working is also possible in many of our national companies.

### Part-time training

Under certain circumstances, apprentices at Deutsche Telekom can take their training on a part-time basis. Also, dual students, including students who are single parents, have the option of completing their cooperative study program on a part-time basis.

### Remaining in contact during parental leave

Via our “Stay in contact” parental-leave process, we give employees the option to stay in contact with the company and their colleagues. They thus stay abreast of what’s happening at Deutsche Telekom, and they continue to feel connected to their team. In addition, their re-entry into the workplace becomes easier to plan. Via the “Stay in contact” online network, they can discuss and learn about topics such as work-life balance and re-entry into the workplace.

### Lifetime work accounts and leave of absence

The majority of employees in Germany can set up a lifetime work account in order to implement their personal life plan. Such accounts can be used to accumulate credit by means of gross deferred compensation or by conversion of up to 80 overtime hours per year. In total, we have set up 15 000 accounts for employees and 740 accounts for civil servants (as of Dec. 31, 2022). The credit can be used for a sabbatical, earlier retirement, or a top-up for a part-time salary. Employees also have the option of taking unpaid leave – for example, in order to care for their children, or to accept paid work with a different employer.

### Leave of absence for personal reasons

Employees have the option of requesting leave of absence at short notice for special reasons, after consulting with, and obtaining the approval of, their manager. This option is available, for example, for employees who need to serve as caregivers for family members or to take care of sick children. During the individually agreed period, employees are exempted from the performance of their duties. Pay is suspended after five days at the latest. All other aspects of the employment relationship remain unaffected.

### Time off for education

Time off for education is based on the current offer of unpaid leave and makes it possible for employees in Germany to take up to four years off for a degree course or a doctorate. The employment contract is put on hold during this time and the employee does not receive any pay. Civil servants employed at the company can also take advantage of this offer in the form of a “leave of absence without pay for reasons of private interest.” This time does not apply to their pension and no remuneration is paid.

### The 80:20 model

Since 2017, we have been using the 80:20 model to give our employees the opportunity to spend part of their working time on projects outside of their usual remit. This allows them to work with teams from other units. Use of the model is voluntary and is tied to a specific Group project.

### Phased retirement

We offer a phased retirement model to our employees in Germany who are 55 or older. Separate regulations apply to employees and to civil servants. There are two options for phased retirement: the block model or the part-time model. During the reporting year, a total of 1 766 phased retirement contracts were concluded with employees both covered and not covered by collective agreements. For civil servants, 523 such contracts were signed (as of Dec. 31, 2022).

### Underlying regulations

Our working time models are based on the laws and regulations applicable in the individual countries. Working hours at Deutsche Telekom in Germany are governed by collective agreements and works agreements. We document the daily working hours of our employees covered by collective agreements by means of electronic time recording in MyPortal or via the EmployeeApp. This guarantees compliance with legal and company regulations; for example, it ensures that the weekly working hours for a specific flexitime balancing period are complied with. At a large corporation like Deutsche Telekom, regulations are diverse and cannot be fully specified for all the Group companies.

### FreiRaum – better quality of life through flexible working

**hours**The FreiRaum (leeway) working time model at T-Systems was extended through the year 2023 as part of the 2022 collective bargaining negotiations. The ver.di union and T-Systems reached agreement on this model in the previous year, which is offered to all employees at T-Systems International GmbH: Employees who work a five-day week can get up to 12 additional days off per calendar year. For employees who use this option, the employee's salary is reduced proportionately, and T-Systems provides partial compensation for the reduction. FreiRaum, which complements existing flexible working-time models, thus gives employees more time to invest in their quality of life. Some 500 employees made use of this model in the reporting year.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 2–7 (General Disclosures)

### Achieving a good work-life balance at Deutsche Telekom

We offer our employees attractive solutions to help them achieve a better work-life balance. Our efforts in this area include providing flexible family-friendly options, carrying out effective health promotion, and establishing work-life balance as a permanent part of our corporate culture. In Germany, the range of options and services includes the following:

- **Childcare:** At a number of locations with large numbers of employees, we provide childcare facilities, holiday childcare programs, and parent-and-child offices.
- **Free advisory and referral services:** Through our cooperating partner “awo lifebalance GmbH” and an online service, we support our employees in the areas of childcare (including emergency care), caregiving for family members, and household services.

- **Employee networks:** Through various networks, such as the “Fathers’ Network” and “Stay in contact”, we provide tips on balancing work and family life, as well as contacts and discussion forums.
- **Family fund:** We support employee projects that help them improve their work-life balance.
- **Social fund:** We provide fast financial aid to employees who find themselves in financial difficulties through no fault of their own. We also offer subsidies for recreational activities for severely disabled children.
- **Welfare service:** Through this foundation, we support employees in emergency situations, such as deaths in the family, serious illness, social crises, and natural disasters. For example, we offer special courses for women suffering from cancer. We also provide assistance for employees’ children who are studying at a university.
- **Recreation Service:** Working through this service, we offer our employees access to reasonably priced vacations at attractive destinations in Germany and Europe – for example, at one of 18 company-owned resorts.

Our complete range of options and services for helping employees achieve a better work-life balance at Deutsche Telekom in Germany can be found at [www.telekom.com/work-life](http://www.telekom.com/work-life).

Work-life balance is also promoted at our national companies. In addition to general options such as mobile-working and flexitime arrangements, individualized arrangements and measures are offered, such as the SmartWork model available at our national company in Croatia. It enables all employees to individually structure their working environment and working conditions. In Hungary, employees can also receive support upon re-entry into working life following parental leave. In Austria, there are company childcare facilities and holiday childcare programs for the employees’ children.

In 2019, T-Mobile US established the “Returnship Program”, an initiative that assists employees in returning to the workplace following leaves of absence. Initially, it was aimed solely at women in tech-centric fields who had taken leaves of absence in order to provide care to family members or stay at home with their children. In 2020, the “Returnship Program” was opened to veterans, in recognition of the difficulties that veterans often encounter in entering (or returning to) the civilian workplace following their military service. This program was expanded further in 2022, with a focus on people who, during the pandemic, have been forced to leave the workplace due to factors such as a lack of childcare for their children. A total of 19 women and four men completed this paid, full-time program between January 2022 and June 2022. Around 70 percent of the participants subsequently found a position at T-Mobile US.

# Employee relations

## Our approach to shaping employee relations

We pursue dialog-oriented employee relations throughout the Group and engage in trust-based, constructive collaboration with employee representatives and unions. Our works councils, central works councils, and Group Works Council represent the interests of our employees at our Group in Germany.

Our partner representing the employees' interests on a European level is the European Works Council (EWC). We also have executive staff representation committees and representatives for people with disabilities at works, company, and Group levels. Even in non-European nations like the United States, all of our employees enjoy the right to form and join labor unions. As the underlying laws and contracts vary from country to country, co-determination matters are managed locally, and always together with trade unions and employees' representatives. Group management is generally involved in all major issues.

We have set Group-wide uniform standards for managing employee relations, which have been enshrined in our Guiding Principles, in our Code of Human Rights & Social Principles policy statement, in our Diversity, Equity and Inclusion Group Policy, and our Group Policy on Employee Relations. Comprehensive information about compliance with human rights at our Group is provided in the section on "Human rights" and on a separate page under "Experiencing sustainability".

Not all of our suppliers offer their employees the option of collective bargaining. This is also the case in our downstream value chain, for example, at recycling companies for electronic scrap. The impact assessment of our materiality analysis showed that in the upstream value chain stages of the global electronics industry, there are only limited opportunities for union representation. We have implemented a comprehensive supplier management system to address risks to human rights in our upstream value chain.

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 407 3-3 (Management of material topics)

## Dialog and cooperation with employee representatives

During the reporting year, the company concluded 99 collective agreements with the ver.di union in Germany. As part of harmonizing the remuneration systems within the Group, we also concluded collective agreements on a global, uniform job architecture.

Responsible collective bargaining plays an important role and has a long tradition at our company. The percentage of employees

covered by collective agreements is published in the non-financial statement in our Annual Report.

## Constructive dialog

In 2022, we continued our constructive dialog with our works councils. As the underlying laws and contracts vary from country to country, co-determination matters are managed locally with trade unions and employees' representatives. Group management is generally involved in all major issues. Further information can be found in our Annual Report.

## Reporting against standards

### Global Compact

- Principle 3 (Uphold freedom of association and the right to collective bargaining)

## Employee Relations Policy

The Group-wide Policy on Employee Relations (Employee Relations Policy, ERP) sets out twelve core elements describing what Deutsche Telekom stands for worldwide as an employer. It outlines our commitment to trust-based collaboration with employee representatives and covers topics such as employee health, fair pay, and prohibition on discrimination. The ERP is a framework that employees throughout the Group can refer to. Its aim is to enable them to contribute personally to the company targets and enhance shareholder value. The framework refers to our Code of Human Rights & Social Principles policy statement, along with our "Diversity, Equity and Inclusion" Group Policy, and explains which tools we use to ensure compliance.

In 2020, we revised and updated the ERP and had it approved by the Board of Management. The basic character and core content remained unchanged. In a move designed to address changes in the working world and in our processes, we jointly support topics such as digitalization, freedom of speech and virtual working. The new version of the policy addresses the following topics:



- Set of values
- Recruitment and development
- Responsible management of organizational change
- Health, safety, and sustainability
- Remuneration and recognition
- Work-life
- Virtual working
- Leadership
- Diversity
- Prohibition on discrimination
- Commitment and communication
- Collaboration with employees' representatives

We verify implementation of and compliance with the ERP through specific reviews. Two to three national companies are subject to such a review every year. They use the results of the review to further improve their relations with employees. The reviews also help us conduct a Group-wide assessment of employer/employee relations and any human rights-related risks in our business activities. During the reporting year, reviews were conducted as part of human rights impact assessments (HRIAs) at the three DTSE companies in Romania, Slovakia, and the Czech Republic.

If a review indicates that our voluntary commitments are not adequately implemented, we follow up on these indications and initiate corrective measures. We publish reviews of the reports of our national companies on our Group portal, under "Responsible employer".

### Fair pay and benefits

We offer our employees competitive, performance-based remuneration oriented to the relevant national labor market. Our remuneration policies are structured to guarantee equal pay for all employees; they do not discriminate.

With our "Global Compensation Guideline" for executives, collective agreements and works agreements, we ensure a transparent and gender-neutral payment structure and remuneration for our employees at the Group. Under this guideline, pay is based on the degree of difficulty and complexity of the specific task, and not on the individual person. We thereby ensure that remuneration at the Deutsche Telekom Group is based on the type and scope of the work performed and the requirements of the relevant position, irrespective of diversity aspects such as gender, age, and nationality. In addition, we offer our employees additional benefits, such as contributions to the company pension scheme, and subsidized share purchasing in the framework of our "Shares2you" program.

As part of our Group-wide employee survey, we regularly ascertain how satisfied our employees are with their pay. We also conduct other surveys on specific topics and in specific units.

In 2018, we compiled a report on equal pay and equality for the first time in order to comply with the new legal requirements of the Transparency in Wage Structures Act. It is published every five years. The current report is available [here](#).

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 405-2 (Diversity and Equal Opportunity)

#### Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)

### Salary development at Deutsche Telekom in Germany

In the collective bargaining round in May 2022, a salary increase in two steps for around 55 000 Telekom employees, apprentices, and dual students was agreed. The first step was implemented on August 1, 2022. The second will follow on June 1, 2023. Salaries increase by 5.2 percent in pay groups 1 to 5, by 5 percent in pay group 6, and by 4.8 percent in pay groups 7 to 10. The collective wage agreements have a term of 24 months. They may be terminated for the first time as of March 31, 2024.

For apprentices and dual students, the negotiating parties agreed on a salary increase in two steps: by 3.1 percent as of August 1, 2022 and by 35 euros as of June 1, 2023. Subsistence allowance for apprentices not living with their parents increased by 30 euros to 300 euros as of August 1, 2022.

To soften the impacts of inflation, additional one-time payments of 1 000 euros were granted to employees in the lower and middle pay groups. Additional one-time payments totaling 200 euros were agreed for apprentices and dual students. The first installment of these payments was paid out in July 2022, with the second being paid out in February 2023.

### Salary development and remuneration systems at T-Systems in Germany

The negotiations on salary development coincided with a tense economic phase. The negotiating parties began salary talks in the fourth quarter of 2022 for the nearly 8 000 employees who are covered by collective agreements in Germany.

In early 2022, all T-Systems employees covered by collective agreements received a special one-time payment of 1 000 euros for the 2021 financial year, due to the coronavirus pandemic. The coronavirus bonus acknowledges the significant burden and strong commitment of all employees during the pandemic. In addition, the respective annual salaries at the companies Deutsche Telekom Security GmbH and T-Systems Multimedia Solutions GmbH were increased by 2 percent with effect as of July 1, 2022.

Also, T-Systems agreed to continue refraining from imposing any compulsory redundancies until December 31, 2022. With this move, the social compatibility of the company's transformation was assured for an additional year.

# Employee satisfaction

## Our employee survey

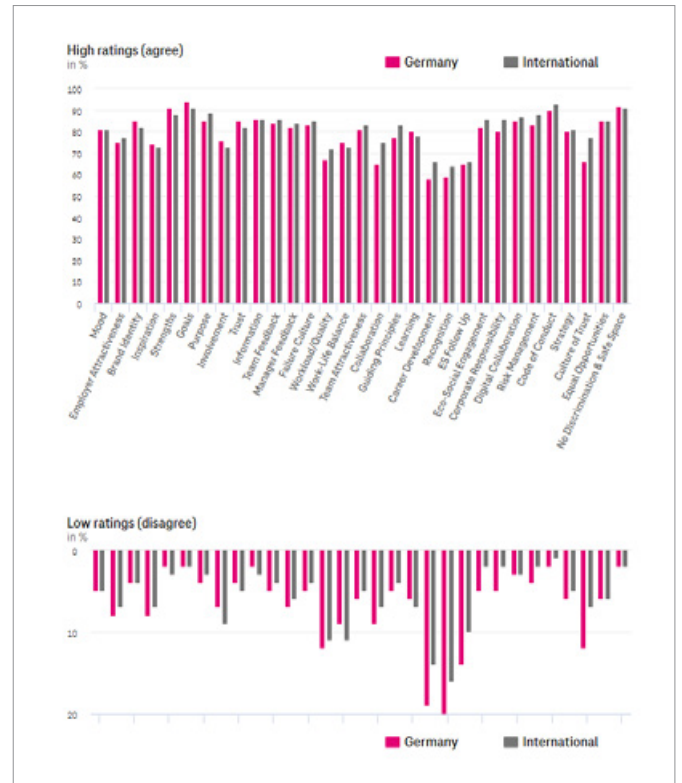
Every two years we ask our employees across the Group (excluding T-Mobile US) how satisfied they are with their work at Deutsche Telekom. This helps us to identify weaknesses and eliminate them. We use the responses to calculate the engagement score, a gauge for employee satisfaction.

During the 2021 employee survey, the questionnaire and the measurement model were revised and updated based on feedback and the latest scientific findings: New questions were added and some of the existing questions were adapted. In addition, the scale used for the engagement score (formerly, the “commitment index”) was changed from “1 to 5” to “1 to 100.” The engagement score is calculated based on questions on the following aspects: mood, employer attractiveness, brand identity, and inspiration.

A total of 80 percent of all employees throughout the Group took part in the 2021 employee survey. The engagement score amounted to 77 points.

## Twice a year: The pulse survey

In addition to the employee survey, which we conduct every two years, we also conduct regular pulse surveys to measure employee satisfaction – usually twice a year. If the employee survey and pulse survey both occur in the same year, the pulse survey is only carried out once. The most recent pulse survey in November 2022 saw a 76 percent response rate among employees. The engagement score reached a high value of 78 points.



High ratings = very good, good/agree fully, agree. Low ratings = poor, very poor/do not agree, do not agree at all. “Neither agree nor disagree” ratings are not shown.

### Explanations of questions asked:

- Mood = How do I feel at Deutsche Telekom.
- Employer attractiveness = I would recommend our company as a great place to work.
- Brand identity = I am proud of the Telekom brand.
- Inspiration = Our company inspires me to do my best every day.
- Strengths = My job is a good fit for my abilities, knowledge, and experience.
- Goals = I know what is expected of me at work.
- Purpose = I perceive my work as meaningful.

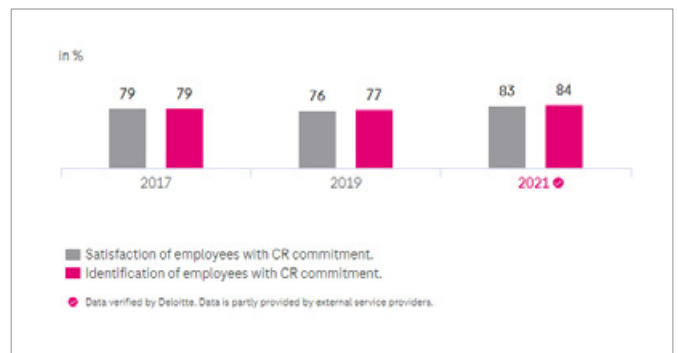
- Involvement = I have influence on decisions regarding my work
- Trust = I have freedom to act in order to get my job done.
- Information = I can get the information I need to do my job.
- Team feedback = We give each other feedback in order to improve as a team.
- Manager feedback = I receive feedback from my line manager that helps me to improve my performance and grow.
- Failure culture = In my team, mistakes are used as a chance to improve and learn.
- Workload/quality = In my team, the workload and quality requirements are compatible with one another.
- Work-life balance = My current working hours allow a good balance between private and (family, hobby) job-related interests.
- Team attractiveness = I would recommend my team as a great community to work.
- Collaboration = We collaborate effectively with others across our company.
- Guiding Principles = I experience the Guiding Principles being lived in my day-to-day work.
- Learning = Our company offers sufficient learning opportunities to enhance my professional skills.
- Career development = I see motivating development opportunities for my career in our company.
- Recognition = Considering all my efforts and achievements, I feel that I have received the appropriate amount of recognition at work.
- Eco-social engagement = I can identify with the environmental and social engagement of our company.
- Corporate responsibility = Our company acts responsibly towards the environment and society.
- Digital collaboration = Digital collaboration tools facilitate our day-to-day work.
- Risk management = In my team, we consistently manage potential risks affecting our business.
- Strategy = I know and understand the strategy of our company.
- Culture of trust = In our company, I experience a culture of trust across all hierarchies.

- Equal opportunities = In our company, everyone has the same opportunities for hiring and career development – regardless of age, gender and gender identity, sexual orientation, physical and mental abilities, nationality, social and ethnic origin, political opinion, religion and belief.
- No discrimination and safe space = Our company provides a safe and supportive work environment for all – we do not tolerate inappropriate behavior or comments related to: age, gender and gender identity, sexual orientation, physical and mental abilities, nationality, social and ethnic origin, political opinion, religion and belief.
- Open question on engagement = What would make your engagement at work even stronger?
- Follow-up to the employee survey = In my unit, we discussed the Employee Survey results and derived concrete actions for improvement.

#### Employee identification with ESG KPI “CR commitment”

We use the Employee Identification with ESG KPI “CR commitment” to determine the degree to which our staff identify with, or how satisfied they are, with our CR commitment. This is based on the Group employee survey (excluding T-Mobile US), which we conduct every two to three years. The last survey has been conducted in 2021. The vast majority of our employees believe that Deutsche Telekom acts responsibly towards the environment and society, and 84 percent identify with our commitment.

Our ambition: increase KPI



#### Reporting against standards

##### German Sustainability Code

- Criterion 7 (Control)
- Criterion 14 (Employee Rights)

##### Global Compact

- Principle 3 (Uphold freedom of association and the right to collective bargaining)
- Principle 6 (Elimination of discrimination in respect of employment and occupation)

### Satisfaction and commitment score

As measures of employee satisfaction, we collect the satisfaction rate and the engagement score. We base this on the employee survey carried out every two years and monitor how effective these measures are through the half-yearly pulse survey. This allows us to continuously analyze and optimize our processes. It gives us the opportunity to continually improve employee satisfaction. The Group-wide satisfaction rate of our employees fell to 81 percent in the year under review.

The engagement score of the 2022 employee survey shows a value of 78 on a scale of 0 to 100 at Group level. In the 2019 survey, the score (formerly “engagement index”) was displayed as an average value on a scale of 1 to 5 and achieved a value of 4.0, which corresponds to 80 points after conversion to the new scale. Compared to the previous year, the engagement score increased by one point in the reporting year.

Satisfaction rate	2019	2020	2021	2022
Germany	85%	90%	91%	81%
International	82%	87%	89%	81%
Group (total)	83%	89%	90%	81%

Commitment-Score, scale of 0 to 100 <sup>1)</sup>	2019	2020 <sup>2)</sup>	2021	2022
All employees	4.0	4.0	77	78 ●
All managers	4.4	4.4	86	89
Employees excl. managers	4.0	4.0	76	77

The calculated values are taken from the pulse and employee survey results current at the time. The most recent pulse survey was conducted in November 2022, the most recent employee survey were conducted in November 2021.

<sup>1)</sup> From prior year's employee survey.  
<sup>2)</sup> Commitment score determined on the basis of the employee surveys carried out in 2022, 2021, and 2019. In 2021, we changed from a scale of 1 to 5 for the commitment score (previously the “commitment index”) to a scale of 0 to 100.

● Data assured by Deloitte.

# Diversity

## Our approach to diversity and equal opportunity

### Diversity makes us strong

More than 206 000 people work at Deutsche Telekom – and every one of them is unique. This diversity is our strength. For us, diversity means offering our employees numerous opportunities to grow professionally and to develop personally – regardless of their age, ethnic background and nationality, gender and gender identity, mental and physical abilities, religion and world view, sexual orientation or social origin. We are clearly committed to diversity and have a Group-wide approach for upholding that commitment. It is based on our Diversity, Equity and Inclusion Group Policy (formerly “Diversity Policy”), our six Guiding Principles, our Employee Relations Policy, and our Code of Human Rights & Social Principles policy statement.

In one important step towards a corporate culture of inclusiveness, we published a Transgender Handbook in the reporting year that supports an inclusive workplace. The handbook is suitable for everyone and answers questions such as “What support is available regarding transition, coming out, changes at work?” and “What if discrimination is experienced or witnessed?” At the same time, the handbook also serves as a source of inspiration to all employees who want to learn more about this topic or provide support.

We again participated in the German Diversity Day in 2022. The reporting year marked the 10th anniversary of the German Diversity Day which had been initiated by the Charta der Vielfalt (Diversity Charter) association and this time took place under the slogan “Let’s celebrate diversity.” On this occasion, we live streamed a presentation on the subject of social origin, together with other DAX-listed companies from the Rhine-Ruhr region – along with the subsequent panel discussion. Diversity also played an important role at the Digital X digitalization trade fair in 2022: Among other subjects, several presentations were given on the topic “Gender shift and opportunities for gender equality.”

We have been experiencing many changes since 2020 due to the global pandemic and digitalization – including changes in both the workplace and in society. Consequently, we have completely revised our Diversity Policy and implemented it globally in 2022 as our Diversity, Equity and Inclusion Group Policy. It reflects the ambitions that our company has in promoting diversity, equity, and inclusion (DE&I), and also expands our focus to include additional dimensions of diversity – such as health conditions and gender identity. We are working hard to ensure that all people receive the same opportunities, regardless of their personal circumstances. In December 2022, we launched the internal campaign “Connected As One” to roll out the Policy. With this campaign, we want to

encourage all employees to enter into dialog with their colleagues and become involved in relevant activities and networks.

Right during the process for hiring new colleagues, we emphasize diversity and consider options other than just traditional educational and life paths. Good examples of such options include our entry-level training scheme for disadvantaged young people and our part-time apprenticeship program. Also, students, including students who are single parents, have the option of completing their cooperative study program on a part-time basis. To ensure that all employees can make the best-possible use of their abilities, we support employees’ work-life balance with an extensive work-life portfolio – with options such as family caregiver leave, lifetime work accounts, time off for education, job-sharing, mobile working, and working from home.

Our commitment to diversity also includes our efforts to promote digital participation through our network operations. We take a number of approaches here to make our networks as accessible as possible. As a founding member of the Diversity Charter business initiative, we want to promote diversity outside the company as well as within it. Unfortunately, diversity efforts are unevenly distributed. The impact assessment of our materiality analysis identified a significant risk of discrimination incidents due to origin, sexual orientation, and gender identity in countries in our upstream and downstream value chains. Violations of our Guiding Principles and corporate values can be reported at any time to our anonymous whistleblower portal “TellMe”, to our threat-management unit, and to our Contact Point for Human Rights. We follow up on every tip-off on violations. We have also implemented a comprehensive supplier management system to address these and other risks in our upstream value chain.

### Diversity in figures

People from some 125 countries work successfully together at Deutsche Telekom. The average age of our employees was 41.8 years in the reporting year. At the end of 2022, 13.7 percent of employees covered by collective agreements and 17.7 percent of Deutsche Telekom civil servants throughout Germany were working part-time.

All in all in the reporting year, 35.7 percent of our total workforce were women. We have a particularly strong commitment to gender equality, and we have made it a priority for more than two decades. One of our central goals is to increase the share of women in expert and managerial positions; by 2025, we want to have women in at least 30 percent of our leadership positions worldwide. With regard to our legal entities in Germany, we have already

achieved this goal on our Supervisory Board (as of Dec. 31, 2022: 42.4 percent) and on the Board of Management of Deutsche Telekom AG (as of Dec. 31, 2022: 37.5 percent). Our middle and upper management positions in Germany are now occupied by women to a degree of 20.8 percent and 24.6 percent, respectively (as of Dec. 31, 2022). Worldwide, the women's share of our management positions is 28.1 percent (as of Dec. 31, 2022). We have enacted various measures in order to achieve our defined goal of 30 percent.

7.7 percent (as of Dec. 31, 2022) of our employees in Germany are disabled, putting us well over the statutory quota of 5 percent. Almost 2 percent of our apprentices and dual students in Germany are young people with disabilities – that figure, in comparison to the total share of young people with disabilities in our society, shows that we train above-average numbers of young people in this segment as well.

In 2022, our Group Representatives for Persons with Disabilities once again awarded the Inclusion Award within the company for the sixth time. This award honors projects within the company that were carried out in the previous year with the aim of supporting employees with disabilities, and helping to retain them in the company.

### Recognition for our performance

In the Gender Diversity Index of the Boston Consulting Group (BCG), we were once again among the “Diversity Champions” in 2022 and achieved a place among the top five DAX companies for the fourth time in a row. The criteria for the honor included the share of women, and the relevant remuneration ratio, on our Board of Management and our Supervisory Board. In addition, we were included in the Bloomberg Gender-Equality Index (GEI), with top ratings. The Index tracks the performance of listed companies that have committed themselves to transparency in use of gender-specific indicators. The GEI measures and evaluates gender-equality performance in a total of five areas: Female leadership and talent pipeline; equal pay and gender pay parity; inclusive culture; anti-sexual harassment policies; and pro-women brand. In addition, we were again honored as one of the best companies for women: in an employer study carried out by the magazine Brigitte, looking at aspects such as work-life balance, career advancement, transparency, and gender equality, we were named one of the best companies for women – and received five stars, the highest ranking. In addition, in 2021 – after our first participation in 2013 – we once again took part in the equal pay check of the Federal Anti-Discrimination Agency and were awarded the “eg-check” certificate. This certificate documents that the same or equivalent work by men and women is paid in the same amount: salaries at the company are based solely on the type of work being performed. Aspects such as gender, ethnic origin, and sexual orientation do not factor in at all. Other awards for their commitment to diversity in the reporting year were won by the OTE Group (Bronze prize of the Hellenic Responsible Business Awards for its initiative “A better world for everyone, without discrimination” in the category “diversity, integration, equal opportunity”) and by T-Mobile US (Disability:IN award Employer of the Year, Forbes recognition Best Employers for Diversity 2022, Fortune recognition 100 Best Companies to Work For).

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 2–10 (General Disclosures)
- GRI 405 3–3 (Management of material topics)

#### Diversity Charter

The Diversity Charter is an independent business initiative that is supported by around 4 500 companies and institutions in Germany. Its aim is to create a work environment in which diversity among employees, and their many different abilities and talents, is valued. Such an environment opens up opportunities for innovative and creative solutions. Deutsche Telekom is a founding member of the Diversity Charter association. In addition, a number of our national companies are also members of this initiative – including T-Systems ITC Iberia and Magyar Telekom in Hungary.

In the reporting year, we worked together with the Diversity Charter, the Stifterverband für die Deutsche Wissenschaft (Donors' Association for the Promotion of Humanities and Sciences in Germany), and representatives of other companies to further develop the Diversity Audit, established in the higher education sector in 2013 under the name “Vielfalt gestalten” (Create diversity) to become the “Diversity Kompass” (Diversity Compass). The aim of this effort is to adapt the audit to the specific requirements and interests of companies. This will enable companies – including Deutsche Telekom – to use the audit in future to review and refine their own measures in the area of diversity. The Diversity Compass was rolled out as a pilot phase in January 2023 in Deutsche Telekom's Germany operating segment, among other units.

#### Commitment to a larger share of women

We are aiming to increase the share of women on our Supervisory Board and our Board of Management, and in middle or upper management positions. Specifically, we plan to increase the percentage of women on these levels, worldwide, to 30. We are implementing numerous measures to this end:

- Our opportunities to achieve a good work-life balance through parental leave arrangements, flexible working hours, and child-care services
- The mentoring program Child and Career for managers, junior managers, and expert staff at Deutsche Telekom
- Specifically addressing female talent through cooperative activities and at events
- Filling more management positions with female talents
- Promoting the generation shift between male executives due to leave the company in the near future and female junior staff (mentoring)
- Maintaining or increasing the diversity score, also in transformation processes, especially when filling management positions



- Additional support and networking services, such as training courses and workshops on unconscious bias for employees and executives; exchanges with Employee Resource Groups; and the “Connected As One” communication campaign for the launch of our revised “Diversity, Equity and Inclusion” Group Policy.
- The systematic review of the “Employee Lifecycle” to identify and reduce systemic barriers - for example, by asking questions about inclusion in exit interviews.

Together with the heads of our segments, we reached agreement on implementation plans for increasing our women’s quota. Our diverse range of measures has allowed us to continuously increase the share of women in management positions – worldwide, from 12.5 percent in 2010 to 28.1 percent as of December 31, 2022.

At 50 percent, we have already exceeded our 30 percent target for the Group Supervisory Board. We have also been successful with regard to the statutory gender quota for supervisory boards in Germany since January 1, 2016; in this area, at 42.4 percent, we are within the overall average for all legal entities in Germany. With a share of women of 37.5 percent (as of Dec. 31, 2022), the Deutsche Telekom Board of Management also exceeds our own and statutory requirements. However, further efforts are needed to meet the target mentioned above for the remaining management positions on the two levels beneath the Board of Management, in the management of the national companies, and the internal supervisory boards in Germany.

We are also working to increase the number of women participating in dual study programs in technical fields. Although the number of technical study places at universities increased, we have succeeded in maintaining the share of women at around 15 percent in the last five years (as of Dec: 31, 2022).

**Networking for success**

In Germany, our locally organized women’s networks helps women reach management positions by providing support and counseling, and facilitating interaction with other women. In addition, we joined with Global Digital Women, an international network of women shaping the digital sector, to organize an after-work event on female transformation. Nearly 40 women from different industries attended. During the event, they shared opinions on the potential of digital transformation and provided insights into their own professional journeys.

**Promoting female STEM specialists**

With carefully targeted messaging, we are seeking to attract talented women to our company. In particular, we support women in STEM (science, technology, engineering, mathematics) subjects and careers: As part of our partnership with Femtec, we once again organized an innovation workshop in 2022. Femtec, a cooperative effort being undertaken by major companies, the Fraunhofer-Gesellschaft, leading German technical universities, and ETH Zürich, is aimed at finding young female talent for STEM professions and developing it. During the five-month innovation work-

shop, 20 international women fellows developed technically innovative and green solutions for intelligent, energy-independent cell sites in Germany and the EU. In addition, we also teamed up with the Femtec Alumnae Network on a pilot project in the reporting year – a six-week further education program on artificial intelligence, leadership, and agile working. Around 60 IT experts and young female managers took part in the virtual expert sessions.

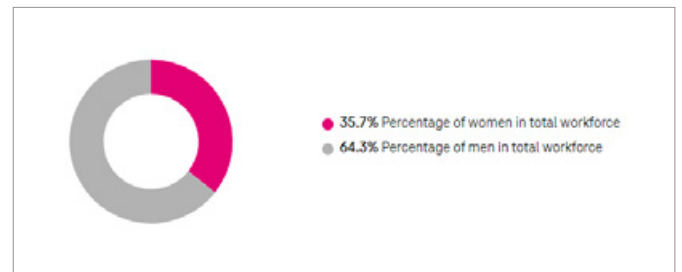
**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 405-1 (Diversity and Equal Opportunity)

**Percentage of women in total workforce**

In recent years, we have succeeded in maintaining the proportion of women in the total workforce at over a third and expect a slight upward trend in the future.



**Reporting against standards**

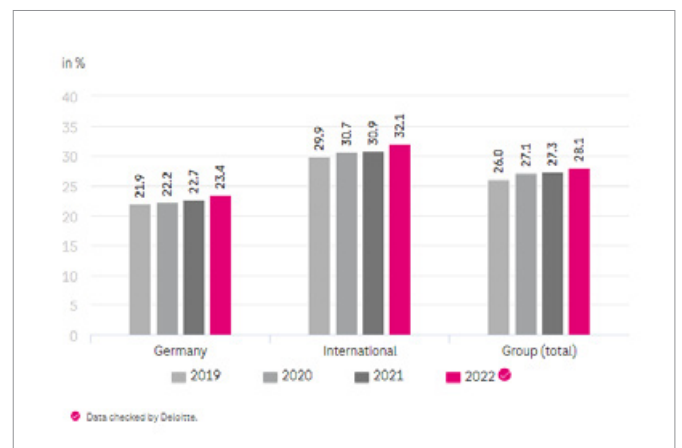
**Global Reporting Initiative (GRI)**

- GRI 2-7 (General Disclosures)
- GRI 405-1 (Diversity and Equal Opportunity)

**Percentage of women in middle and upper management**

In 2022, as well, we continued pursuing the goal of achieving 30 percent women in management positions.

In Germany, the percentage of women in middle and upper management increased from 22.7 percent to 23.4 percent in 2021. The figure for the entire Group also increased and now stands at 28.1 percent.



**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 405-1 (Diversity and Equal Opportunity)

**German Sustainability Code**

- Criterion 15 (Equal Opportunity)

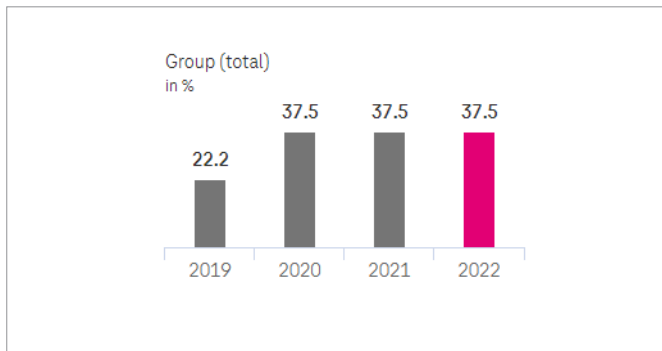
**European Federation of Financial Analysts Societies (EFFAS)**

- S10-01 (Percentage of female employees in relation to total employees)
- S10-02 (Percentage of female FTEs in senior positions in relation to total FTEs in senior positions)

**Percentage of women on the management board**

In 2020 we achieved the goal of 30 percent women in management positions. Since November 2020, a third woman has been appointed to the Board of Management. We continue to be at the top of all DAX Groups with a female share of 37.5 percent.

Deutsche Telekom is one of the few DAX Groups where women have been part of the Board of Management for several years now. In addition, more and more women are working in international management teams below the Board of Management level.



**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 405-1 (Diversity and Equal Opportunity)

**German Sustainability Code**

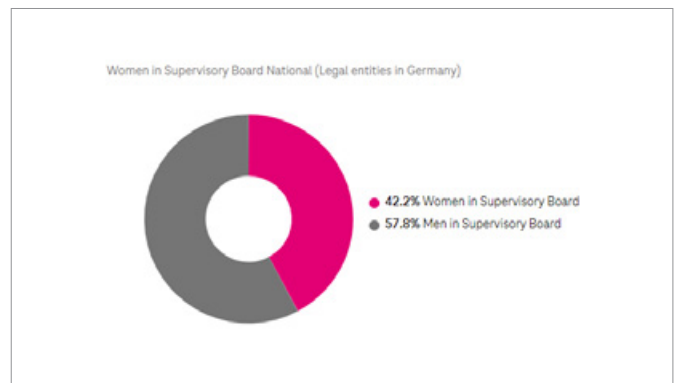
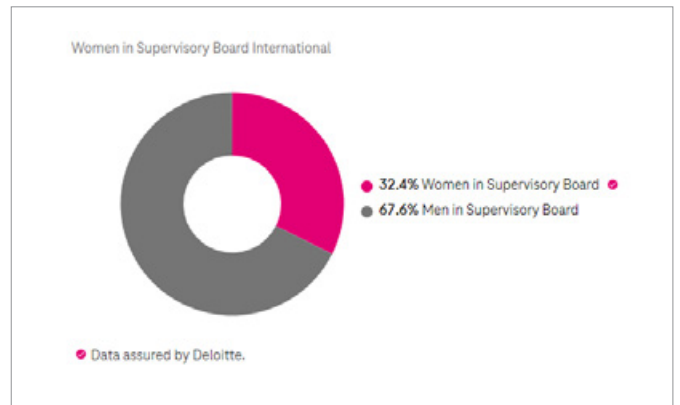
- Criterion 15 (Equal Opportunity)

**European Federation of Financial Analysts Societies (EFFAS)**

- S10-01 (Percentage of female employees in relation to total employees)
- S10-02 (Percentage of female FTEs in senior positions in relation to total FTEs in senior positions)

**Percentage of women on the Supervisory Boards**

In the supervisory boards of our fully-consolidated European subsidiaries, the percentage of women totals 32.4 percent (in Germany: 42.2 percent).



**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 405-1 (Diversity and Equal Opportunity)

**German Sustainability Code**

- Criterion 15 (Equal Opportunity)

**European Federation of Financial Analysts Societies (EFFAS)**

- S10-01 (Percentage of female employees in relation to total employees)
- S10-02 (Percentage of female FTEs in senior positions in relation to total FTEs in senior positions)

**Employees with disabilities**

Deutsche Telekom has already exceeded the prescribed minimum rate of 5 percent of disabled employees for a good many years, so that it heads the list of DAX 30 companies on this count. In 2022, the proportion of severely disabled people at Deutsche Telekom stayed constant at 7.7 percent.

in %	2015	2016 <sup>a)</sup>	2017 <sup>b)</sup>	2018 <sup>b)</sup>	2019 <sup>c)</sup>	2020 <sup>c)</sup>	2021 <sup>c)</sup>	2022 <sup>c)</sup>
Group (total) in Germany	7.2	7.5	7.5	7.6	7.6	7.5	7.7	7.7

<sup>a)</sup> excl. Deutsche Telekom Capital Partners Management GmbH, Detecon International GmbH, Cronon AG, Strato AG, Deutsche Telekom Clinical Solutions GmbH, Orbit GmbH, operational services GmbH & Co. KG

<sup>b)</sup> excl. Deutsche Telekom Capital Partners Management GmbH, Detecon International GmbH, Deutsche Telekom Clinical Solutions GmbH, Orbit GmbH, operational services GmbH & Co. KG, HÄVG GmbH

<sup>c)</sup> excl. Deutsche Telekom Capital Partners Management GmbH, Detecon International GmbH, Deutsche Telekom Clinical Solutions GmbH, Orbit GmbH, operational services GmbH & Co. KG, HÄVG, goingsoft Deutschland, Toll4Europe GmbH

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 405-1 (Diversity and Equal Opportunity)

### German Sustainability Code

- Criterion 15 (Equal Opportunity)

### Global Compact

- Principle 6 (Elimination of discrimination in respect of employment and occupation)

## Promoting the diversity of our young talent in Germany

We make targeted efforts to promote diversity among our junior staff. To this end, we analyze and promote the diverse potential of young people. Under certain circumstances, apprentices at Deutsche Telekom can take their training on a part-time basis. Dual students also have the option of completing their cooperative study program on a part-time basis under certain circumstances – if they are single parents, for example. Young people without a school-leaving certificate who have not found apprenticeships yet or do not yet have the maturity to do so can take part in an entry-level training scheme we offer, funded by the Employment Agency (Agentur für Arbeit). The trainini scheme introduces them to suitable professions and helps them prepare for an apprenticeship. In addition, we offered DiscoverMINT@telekom (only available in German), a one-year orientation program, for the first time in 2022. This program targets young people with university entrance qualifications who are still unsure what to do with respect to their further training. In close cooperation with their instructors, participants are supported and coached for twelve months during the program at Deutsche Telekom, experience professional practice, and attend courses and events at the university. The program is intended to help participants to get acquainted with the dual-study STEM environment and make a sound decision for the next step in their development. We also continue to offer young refugees opportunities to start their careers with entry-level training, the DiscoverMINT program, an apprenticeship, or a dual study program. We generally ensure that all applicants who wish to start a career at Deutsche Telekom, can enjoy a non-discriminatory application process. As of December 31, 2022, 6.2 percent of the apprentices and dual students we employed were of non-German nationality; in total, 54 nations were represented.

## More diversity and inclusion for T-Mobile US

In the fall of 2020, the Board of Directors of our national company in the United States adopted a new memorandum of understanding (MOU) for more diversity and inclusion. The MOU was also signed by six major American DE&I advocacy organizations with whom T-Mobile US plans more intensive collaboration. To that end, T-Mobile US has established an External Diversity and Inclusion Council on which each of the organizations that signed the MOU has a seat. Other organizations are also members of the council; a complete list is published on the T-Mobile US website. The council, which has a total of twelve members, advises T-Mobile US with regard to diversity, equity and inclusion issues. In addition, it assists the company in defining relevant priorities and goals and it provides support for implementation of the company's strategic

diversity plan. The council convened for the first time in 2020. As of 2021, its meetings take place on a quarterly to semiannual basis.

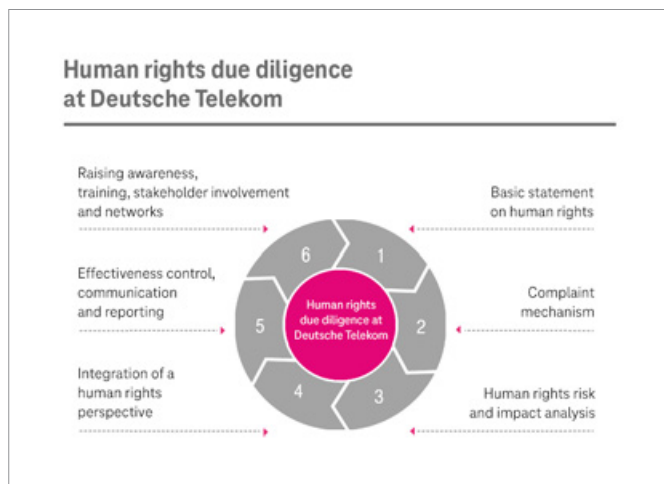
In addition to the new council, T-Mobile US also has an internal diversity, equity and Inclusion (D&I) network. Participants meet to address current issues, question prejudices, and learn from each other. Tens of thousands of employees participate in the D&I network. It includes a group for people with disabilities (Accessibility Community), a multicultural group (Multicultural Alliance), an intergenerational network (Multigenerational Network), an LGBTQI\* community (Pride), a network for veterans and active military personnel (Veterans & Allies Network), and a women's network (Women & Allies Network).

T-Mobile US has received a number of awards for its efforts in these areas. In 2022, for example, it received Disability:IN's Employer of the Year award, as well as the prestigious Forbes honor America's "Best Employers for Diversity 2022".

# Human rights

## Our approach to protecting human rights

Deutsche Telekom has made an explicit commitment to the UN Guiding Principles on Business and Human Rights published by the United Nations Human Rights Council in 2011. These guiding principles require that we systematically identify the impact our operations have on human rights; prevent and mitigate adverse impacts; and make restitution as necessary. In order to meet these requirements, we have developed an extensive program for the entire Group: We implement the UN Guiding Principles in an ongoing process that includes several interconnected measures and tools (see diagram).



## Policy statement on human rights

In several basic policies, Deutsche Telekom commits itself to respecting human rights, the rights to privacy of the individual, and freedom of speech – and to safeguarding the right to conclude collective and works agreements and to guaranteeing diversity, equity and inclusion:

- Guiding Principles
- “Code of Human Rights & Social Principles”
- “Employee Relations Policy”
- “Diversity, Equity and Inclusion Group Policy”

## Addressing complaints about potential human-rights violations

Anyone can use our Contact Point for Human Rights [human-rights@telekom.com](mailto:human-rights@telekom.com) and our anonymous whistleblower portal “TellMe” to report tip-offs and make complaints. We look into every tip-off and report we receive and introduce countermeasures as soon as the information is identified as plausible.

Information on how we handled the reports we received in 2022 can be found here. In addition, since 2013 we have also taken account of human rights aspects in due diligence activities conducted in the context of mergers and acquisitions.

## Human-rights risk and impact analysis

In 2022, we continued the process, at Group Headquarters, of enshrining due diligence obligations pertaining to human rights within our various governance processes. This process included inclusion of human-rights and environmental risks within our annual Compliance Risk Assessment (CRA) – in preparation for the risk analysis that we will carry out in 2023, for the first time, in accordance with the Act on Corporate Due Diligence in Supply Chains (Lieferkettensorgfaltspflichtengesetz – LkSG). In addition, numerous workshops with Group Headquarters departments were carried out with a view to ensuring conformance – via suitable measures, and in all relevant business workflows – with new legal requirements such as the Supply Chain Due Diligence Act. In the 2022 financial year, we included a total of 68 units (61 companies and seven Group Headquarters units; not including T-Mobile US) within the CRA. The CRA enables us to identify human rights risks within our own business area, at early stages. All in all, we achieved a coverage rate of 91 percent (by FTE/full-time equivalents) of our fully consolidated companies. A total of 56 units confirmed that human rights issues have “medium to high relevance” for their business operations. Two national companies conceded that the Group’s “Code of Human Rights & Social Principles” regulation had not yet been promulgated throughout their workforces. One of the two companies has since initiated measures to enshrine the regulation throughout its operations, in a process that is to be completed in 2023. At the other of the two companies, the need for such measures was eliminated when it was converted, under company law, and in February 2023, into a non-controlling interest. In addition, T-Mobile US uses a different system for its risk assessment.

## Human rights and employee relations at our national companies

As necessary, we carry out special auditing processes to assess employer-employee relations at our national companies. We do so to verify compliance with our Group Policy on Employee Relations and our “Code of Human Rights & Social Principles” policy statement. In this context, we also take into account the results provided by our Human Rights & Employee Relations Cockpit. We use the Cockpit to measure progress at our national companies on the basis of five indicators pertaining to human rights:

- Employee satisfaction (source: semi-annual pulse survey)
- Willingness to recommend Deutsche Telekom as an employer (source: semi-annual pulse survey)
- Health rate (source: Health, Safety, Environment (HSE) cockpit)
- Number of employees giving notice (source: HSE cockpit)
- Country-specific human rights risks (according to the Human Rights Risk Index from Maplecroft)

Based on each indicator, we classify the respective national company according to a traffic light system. The results are then discussed with the regional managers of the respective national company; if necessary, measures are agreed – such as “Human Rights Impact Assessments” (procedures that assess the actual and potential impact of corporate actions on human rights) or the “Employee Relations Policy Reviews” (reviews of compliance with the Group Policy on Employee Relations).

#### Effectiveness control regarding human rights in the supply chain

In order to ensure that human rights are also protected within our sphere of influence outside of our Group, we expressly require our suppliers to assume responsibility in this context. To this end, we supplemented our sustainable procurement strategy with supplier management, to improve sustainability performance in our supply chain and ensure respect for human rights. Among other activities, this includes audits of our suppliers. Detailed results of our Group-wide auditing program are available here.

#### Raising awareness; training; stakeholder engagement; and networks

To ensure that human rights are safeguarded in accordance with our Guiding Principles and our Code of Human Rights, we offer all employees, worldwide, suitable online training courses. These courses cover topics such as sexual harassment, freedom of speech, and corporate digital responsibility. We also use internal communication campaigns to provide information on important aspects of human rights, such as the aspect of anti-discrimination. Our Transgender Handbook, published in 2022, aims to encourage employees to simply be themselves at work. It points out ways to stand up against discrimination and helps us to strengthen diversity and inclusion in our corporate culture.

We are also involved in numerous networks such as Global Compact and econsense. Together with other companies, policymakers, and civil society, we can draw attention to existing grievances and press ahead with solutions.

In 2022, we further intensified our public communication about our human-rights-related activities.

#### Reporting against standards

##### Global Reporting Initiative (GRI)

- GRI 406 3–3 (Management of material topic)
- GRI 407 3–3 (Management of material topic)

#### Code of Human Rights & Social Principles

At Deutsche Telekom, the protection of human rights is firmly and formally established. In 2017, we revised our Social Charter, and developed it into the Code of Human Rights & Social Principles policy statement. The policy statement was adopted by our Board of Management in the same year. This update underscores our commitment to the aims set forth in the Federal Government’s 2016 National Action Plan on Business and Human Rights.

With the policy statement, we also underscore our commitment to

- The International Labour Organization’s (ILO’s) Tripartite declaration of principles concerning multinational enterprises and social policy (MNE Declaration)
- The Convention on the Organisation for Economic Co-operation and Development (OECD)
- The UN Universal Declaration of Human Rights
- The UN Guiding Principles on Business and Human Rights and the United Nations Global Compact, and
- The UN Standards of Conduct for Business Tackling Discrimination against LGBTQI\* people

Our Business Principles, Supplier Code of Conduct, guidelines on using artificial intelligence, our definition of digital responsibility formulated in 2022, our new Diversity, Equity and Inclusion Group Policy, and our New Work manifesto all pay heed to the respect of human rights in line with our policy statement. We also advocate for a pan-European supply chain act.

#### Reporting against standards

##### Global Reporting Initiative (GRI)

- GRI 2–23 (General Disclosures)
- GRI 2–24 (General Disclosures)

##### Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)

#### Reports and inquiries regarding human rights

In the period from January 1 to December 31, 2022, we received five human-rights-related tip-offs through our Contact Point for Human Rights, our “TellMe” whistleblower system, and our reviews of compliance with our “Employee Relations Policy”.

- The inquiries and tip-offs received related to topics such as discrimination, sexual harassment, and employment conditions.
- Of course, all tip-offs were treated confidentially.

#### Reporting against standards

##### Global Reporting Initiative (GRI)

- GRI 406–1 (Non-discrimination)

### Comprehensive human rights audits at the national companies

A key element of the assessment process for employer-employee relations at our national companies involves regular audits in the framework of the Human Rights Impact Assessment (HRIA), a process for estimating the actual and potential effects of our business activities on human rights. It covers working conditions in our own business area and at our suppliers'. These comprehensive, systematic audits ensure that human-rights-related risks are identified and violations can be avoided. In 2022, we conducted HRIsAs on site at three Deutsche Telekom Services Europe (DTSE) companies in Romania, Slovakia, and the Czech Republic. As part of these audits, we also included a digital ethics dimension for the first time, based on a framework that we formulated on the occasion of our Digital Responsibility initiative in 2022. It focuses on the development of human-centered technology, building on a humanistic system of values. With this step, we have created an additional framework for satisfying human-rights-related requirements in our products and services, alongside our existing policies and guidelines (such as those governing the use of artificial intelligence, for example). Since 2019, we have also been holding local workshops at our national companies to provide training and raise awareness about human rights issues.

### Human rights and risk assessment

Deutsche Telekom has made an express commitment to the UN Guiding Principles on Business and Human Rights adopted by the United Nations Human Rights Council in 2011, and it has enshrined these principles in its Code of Human Rights & Social Principles.

### Compliance Risk Assessment

In 2022, we added human-rights-oriented and environmentally oriented risk assessment to our annual Compliance Risk Assessment (CRA). In the 2022 financial year, a total of 68 units (61 companies and seven Group Headquarters units; not including T-Mobile US) took part in human-rights-oriented risk assessment. This corresponds to a coverage rate of 91 percent (in terms of full-time equivalents (FTE)) of our fully consolidated companies. 56 units confirmed "medium to high relevance" of human rights topics for their business activities. Two national companies conceded that they had not yet announced the Group-wide Code of Human Rights & Social Principles policy statement within their companies. One of the two companies has since initiated measures to enshrine the regulation throughout its operations, in a process that is to be completed in 2023. At the other of the two companies, the need for such measures was eliminated when it was converted, under company law, and in February 2023, into a non-controlling interest. In addition, T-Mobile US uses a different system for its risk assessment.

### Human-rights-related tip-offs

In 2022, we received five human-rights-related tip-offs through our Contact Point for Human Rights, our "TellMe" whistleblower system, and our reviews of compliance with our "Employee Relations Policy".

### Assessments & Review

- In 2022, a "Human Rights Risk Assessment" was carried out at three companies, located in Romania, Slovakia and the Czech Republic, of Deutsche Telekom Services Europe (DTSE).
- Also in 2022, "Employee Relations Policy" reviews were carried out, in connection with "Human Rights Impact Assessments," at DTSE companies in Romania, Slovakia and the Czech Republic.

Impacts on human rights are also measured with our Human Rights & Employee Relations Policy Cockpit. To this end, the national companies collect data related to five human rights indicators and evaluate them according to a traffic light system.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 406-1 (Non-discrimination)

#### German Sustainability Code

- Criterion 17 (Human Rights)

#### Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)
- Principle 2 (No complicity in human rights abuses)

#### European Federation of Financial Analysts Societies (EFFAS)

- S07-02 (Percentage of total facilities certificated according to SA 8000 standard)

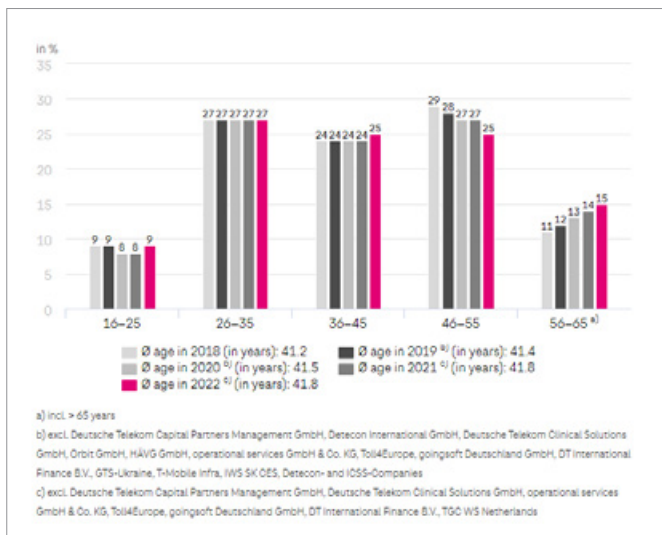


# Demography and company pension scheme

## Age structure at the Deutsche Telekom Group

For the first time in the reporting period, the average age in the Group did not increase this year, but fell by 0.1 to 41.7 years. The reported figures support this trend and there is a slight shift in the proportions in the age groups.

About half of the workforce is in the 36–45 and 46–55 age groups. Here, since 2018, we have seen the trend of the share of 46–55 year olds steadily decreasing, from 29.0 percent to 25.1 percent. Conversely, the share of 36–45 year olds has been steadily increasing, with one exception in 2021, from 23.5 percent to 25.3 percent. Although the 56–65 age group increases by 0.3 percent-age points, we can report an overall decline in the 46–65 age group. The two oldest groups have a share of 39.8 percent in 2022. In 2021, this was still 41.2 percent. We are well on the way to rejuvenating the workforce and thus counteracting demographic change.



### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 405–1 (Diversity and Equal Opportunity)

#### German Sustainability Code

- Criterion 15 (Equal Opportunity)

#### Global Compact

- Principle 6 (Elimination of discrimination in respect of employment and occupation)

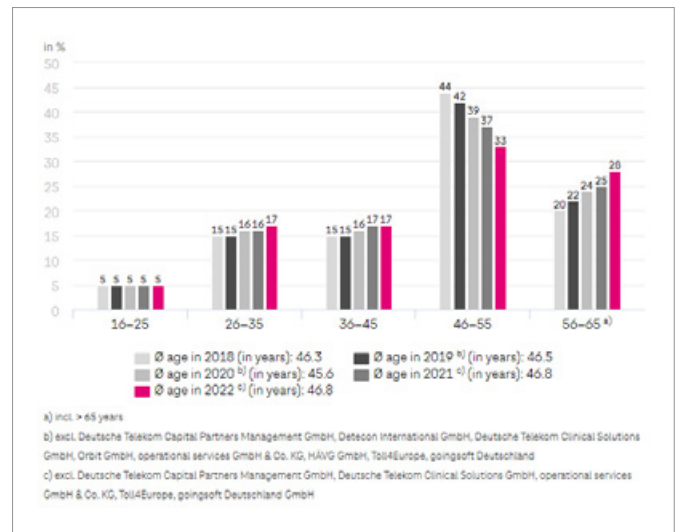
#### European Federation of Financial Analysts Societies (EFFAS)

- S03–01 (Age structure)

## Age structure in the Deutsche Telekom Group in Germany

Demographic shifts and low natural attrition explain why the proportion of employees over 55 has risen from 20 to 27.6 percent in the past five years.

Despite this, the national average age has remained stable compared with last year. The increase in the 16–45 age group contributes to this balance.



### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 405–1 (Diversity and Equal Opportunity)

#### German Sustainability Code

- Criterion 15 (Equal Opportunity)

#### Global Compact

- Principle 6 (Elimination of discrimination in respect of employment and occupation)

#### European Federation of Financial Analysts Societies (EFFAS)

- S03–01 (Age structure)

### Company pension schemes



# Training and development

## Our approach to training and development

We offer our employees a wide range of specific training and development programs. Important principles for this are defined in our Group Policy on Employee Relations and in our Guiding Principles. For many units at Deutsche Telekom, specific agreements were also reached with the employees' representatives on the subject of training. The training we offer our employees pays off. In 2022, for example, we were able to fill 33 percent of our open positions with internal candidates. (2021: 51 percent; 2020: 66 percent; 2019: 51 percent)

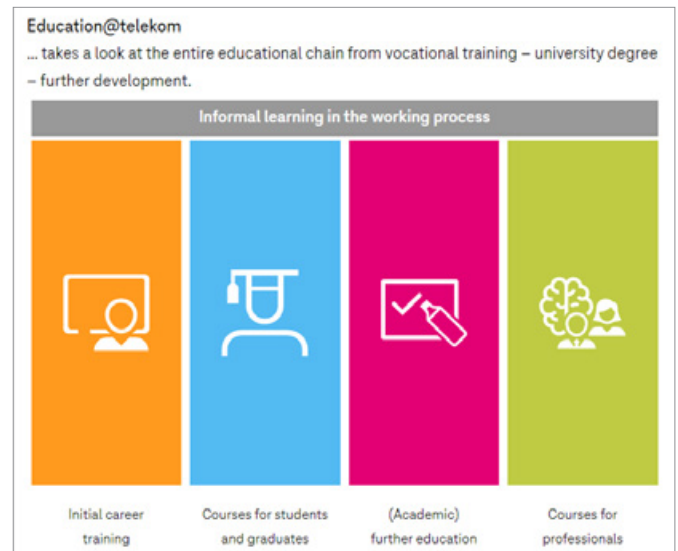
## Training the experts of tomorrow

We offer many young people an opportunity to enter the working world. For example, we have a comprehensive range of technical and commercial apprenticeship programs to train our skilled workers of tomorrow. The Group offered around 1 820 training positions in 2022: 1 220 positions for apprenticeships and up to 600 spaces for dual bachelor students. In addition, 100 young people took part in our 12-month DiscoverMINT program, which gives them the chance to get to know the prospects offered by the digital working world and to find orientation with respect to their career path. This makes us one of the largest training providers in Germany. During our training programs, we lay the foundations for digital skills, and thereby enable our apprentices to make a seamless transition into the digital working world.

During our annual CMD+O campus tour, we invite students and recent graduates to enter into dialog with experts at interactive workshops and "tech talks", and to drive forward exciting digital developments. After two years of virtual-only campus tours, due to the pandemic, we were able to visit a total of 10 universities during the reporting year – and get to know the professionals of tomorrow. We plan to expand our university cooperations further in 2023.

## Promoting lifelong learning

We promote lifelong learning and support our employees on their individual learning paths. We start by reviewing the skills our employees have now and those they will need in the future. On this basis, we offer our employees tailored training and development programs. These can also include stays abroad or studies parallel to their jobs. For example, Bologna@Telekom gives employees access to part-time bachelor's and master's degree programs. Since its introduction more than ten years ago, over 2 000 employees in Germany have taken advantage of this opportunity.



### Initial career training

- Cooperative Bachelors' degree courses
- Vocational training
- Entry-level training scheme
- DiscoverMINT@Telekom

### Courses for students and graduates

- Start up!
- Theses
- Student internship/Flexikum scheme

### (Academic) further education

- Part-time Master's degree
- Part-time Bachelors' degree

### Courses for professionals

- Talent development
- Expert development
- Leadership development
- Youlearn

### Training: Self-managed, digital learning

Since 2019, we have been carrying out the "youlearn" initiative, which is aimed at turning Deutsche Telekom into a learning organization. We offer our employees worldwide (excluding T-Mobile US) the ability to largely manage their own training by means of digital offerings and to make learning an integral part of everyday working life. For example, "youlearn" invites employees to take part in voluntary, informal learning challenges. We held our Group-wide "youlearn days" in November 2022 – a global, digital learning

event by Deutsche Telekom that concentrates fully on technical and digital skills. After the major success of this event in previous years, we outdid ourselves in 2022: With more than 5,400 registered attendees – 10 percent more than in 2021 – from 29 countries, we set a new record in the reporting year.

Also, we continued to expand our online education and training programs at the global level (excluding T-Mobile US) – most notably, via the Percipio learning platform, which we introduced in 2019. In addition to a desktop solution, the Percipio app lets users access content anytime and anywhere. It offers a wide range of courses, videos, books, and audio books on topics such as leadership, technology and development, and digital transformation, and it conveys the learning content in an entertaining way. Content is offered in 18 languages – with the help of dubbing and subtitling. In 2022, some 179 000 Deutsche Telekom employees were registered on this platform. Via Percipio, our employees can access training materials offered by Coursera, the world's largest provider of online courses at university level. The courses, on issues such as big data, cybersecurity, cloud computing, and artificial intelligence, are provided by a network of around 200 universities.

The employees' initiative Learning from Experts (LEX), which was launched in 2018 and is now successfully established at Deutsche Telekom, provides another example of opportunities for self-managed, self-guided learning. In LEX, experts from the Group share knowledge with their colleagues via a range of different channels. LEX is one of our fastest-growing employee communities. Its LEX sessions, lasting 30 to 60 minutes, are especially popular. More than 5 400 LEX sessions had been held by the end of 2022.

Our employees around the globe spent some 3.8 million hours on training and skills development in 2022. Overall, LEX users completed a total of 3 million hours of online learning in 2022 – and the comparable figure for 2019 was only 1.8 million. In 2022, 85 percent of the training courses available for registration throughout the Group were available online. During the coronavirus pandemic, when large numbers of employees have been working from home, and no classroom courses have been available, this extensive range of online courses has been very helpful in keeping training available to employees.

### **Boosting leadership skills in the digital age**

We are also increasing the use of virtual solutions in our leadership development programs. The aim of such programs is to strengthen virtual leadership skills. In 2021, at Deutsche Telekom in Germany, and at the Local Business Units (LBUs) of T-Systems, we introduced WeGrow, a new approach to performance development. This process will help us increase the commitment of each employee through regular feedback, create clarity about tasks and expected results, and strengthen trust-based relationships between managers and employees. In addition, this approach will enable close integration with other HR processes such as skills management, talent management, and succession planning, and it will help us meet our business targets. We used "Compass" career development meetings for the final time for employees covered by collective agreements and for civil servants, on a Germany-wide

basis. "Compass" served as a means of providing feedback about performance and skills and of identifying talents. Starting in 2023, we will also apply the "WeGrow" approach for development meetings with these two groups of employees.

### **Talent management at Deutsche Telekom**

Deutsche Telekom completely overhauled its approach to talent management in 2022. The aim was to garner a holistic, Group-wide view of talents at Deutsche Telekom. This will enable us to develop centralized talent initiatives for all employees, which are supplemented with local initiatives tailored to the specific requirements of the particular business unit. We view talents across all employee groups: from those covered by collective agreements and those not covered by collective agreements, through to executives. The Group-wide WeGrow performance management forms the basis for identifying talent. This ongoing dialog between manager and employee is focused on further developing employees and identifying talents. To this end, we have developed common, clearly defined and comparable talent criteria – our "4 As" stand for Achievement, Ambition, Attitude, and Ability. Besides previous achievements and existing skills, we therefore also analyze whether employees have the necessary ambition and attitude for inclusion in talent initiatives.

All our initiatives aim to develop suitable talents towards positions that add value to the Group. To this end, we network talents and managers, create transparency regarding our talent pool, and promote direct contact with prospective hiring managers.

The Global Talent Hub is a global talent initiative addressing executives and prospective executives. It includes up to 200 talents with immediate suitability and ambition for an executive position in the company along with – and that was new in the reporting year – up to 100 talents that have already shown early on in their career the potential for reaching executive level and are being accompanied over several career steps. In the reporting year, 20 percent of the executive positions were filled with talents from the Global Talent Hub (excluding T-Mobile US).

### **Talent management at Telekom Deutschland**

Telekom Deutschland also promotes talented employees – both in groups covered by and not covered by collective agreements – in a talent program at business segment level. This enables us to ensure a consistent, transparent talent pipeline from the level covered by collective agreements through to the executive level. To this end, we offer three development programs tailored to talents that are at various points in their career: for expert and project roles, in preparation for an initial management function, and for experienced managers to prepare for their next career step. The program also includes increased visibility of talents, tailored training courses for the next career step, and cross-divisional matching rounds that match vacancies with suitable talents. 860 employees covered by and not covered by collective agreements are taking part in the talent programs in the current 2022/23 program cycle.

### Careers at Deutsche Telekom

With some 206 000 employees in 34 countries, Deutsche Telekom is one of the leading telecommunication companies worldwide. Our employees are shaping the digital world of tomorrow, often performing pioneering work.

We constantly monitor the increasing demand for skilled workers, particularly IT and tech experts, and compete for the best talents. Targeted recruitment programs give high school and university students, graduates, and experienced hires a variety of options for immersing themselves in the Magenta world, including apprenticeships, dual study programs, internships, trainee programs, and expert entry. Our development programs are designed to give our employees new prospects at the company. We also get them in shape for the future with a variety of further training options.

We underscore our goal of becoming the “Leading Digital Telco” with modern labor concepts and extensive co-determination options, along with opportunities for further education and training.

We offer our employees a broad, flexible benefits package that lets them shape their careers and personal lives according to their specific needs and achieve their objectives. Examples include flexible working hours, hybrid working models, and part-time employment, as well as lifetime work accounts, risk cover, and support with caregiving for family members. Our mission as a responsible employer also includes fair, competitive remuneration, with options for performance-based variable components, as well as a generous pension scheme. In addition, our “Share2you” program gives employees the option to purchase employee shares at special conditions: when they buy two employee shares, they receive a third one free of charge. Other benefits, such as sustainable mobility solutions and extensive health promotion, round out our offerings. More information is available on our careers website.

We have special offers for career starters, such as the “Start up!” trainee program and the Graduate program at T-Systems. Our Start up! trainees spend 15 to 18 months getting to know the different units at Deutsche Telekom, giving them comprehensive insights into this multinational corporation. The program can be tailored to the needs of the trainee by defining a focus topic. The six to nine-month Graduate program at T-Systems targets recent university graduates and starts in May and October of each year. Participants go through different learning phases and also have exciting, varied practical assignments. We work together with renowned universities to design this program. Mentors support the participants in developing skills that give them ideal preparation to start their careers. On top of that, the reskilling program at our Software Academy, launched in 2022, gives participants the possibility to be trained as a software developer, even without prior IT experience. Our 12-month “DiscoverMINT” (only available in German) orientation program gives young people an opportunity to familiarize themselves with the prospects offered by the digital working world and to find orientation with respect to their career path.

Numerous awards confirm the direction of our HR work.

We also work on promoting STEM competencies outside the company. For instance, T-Systems is a founding partner to 42 Berlin, a coding academy that opened in Berlin in early December 2022. The academy follows an innovative concept that does not involve professors, exams, or lectures. Instead, it creates a framework in which students can develop their own projects, individually and in groups. Age, origin, and previous education are explicitly ignored; everyone gets a chance to start programming.

In order to prepare our employees for the future requirements of the job market and best guarantee their employability, we offer them various development programs to expand their digital capabilities. With the “Explorer journeys,” our employees can pick up basic skills in the areas of data analytics, software development, digital marketing, user experience design (UX design), artificial intelligence (AI), and, as of 2023, cloud and DevOps technologies. The learning journeys are open to both beginners and experts. For example, our global upskilling programs in the areas of data science, data engineering, and data visualization help experts broaden their specialist knowledge. Thanks to retraining programs such as the Junior Software Development Academy, our employees also have the opportunity to develop themselves in an entirely new area – with customer advisors retraining as software developers, for example. As a result, the programs also help us expand our own pool of candidates.

### New learning concepts at T-Systems

In the reporting year, the Group-wide “youlearn” initiative, which was launched in 2020, was also continued at T-Systems, with a continued focus on the company-wide “Digitize!” skilling campaign. The company’s management is giving the initiative top strategic priority for the next few years. “Digitize!” comprises several skills development programs that teach employees highly relevant technology skills that they need in order to implement the digital transformation for their customers. The programs include digital training on topics such as artificial intelligence (AI) and big data, as well as the part-time programs “Digital Engineer”, “Data Scientist”, “Digital Consultant”, and “Digital Expert of Tomorrow”, which are offered in cooperation with RWTH Aachen University. In addition, the “Career Shifter” module supports the complex reskilling of employees in IT – to become a “Cloud Backend Engineer” or “Cloud Architect Hyperscaler”, for example. The programs target beginners, experienced people with solid tech knowledge, and digitalization pioneers. Wherever possible, the courses are offered internationally, include large virtual sections, and consist of a mixture of self-guided learning and in-person training on site. While all of these reskilling and upskilling measures are managed centrally, they are carried out in close cooperation with the relevant business units (departments, teams of experts). A key aim is for T-Systems to increasingly become a self-learning organization. For this reason, the company welcomes and supports self-organized initiatives of the various units in the area of learning and development. More than 2 300 employees were awarded certifications in the reporting year. More than 650 employees have set off on various learning journeys. We have carried out around 4 000 skilling measures since the start of “Digitize!”

In addition, the first T-Systems hackathon was held in June 2022, focusing on the “Metaverse”. Some 60 employees from different business units at T-Systems took part in this two-day event and made an important contribution to the development of the T-Systems portfolio. This format strengthened both our innovation mindset and our culture of learning.

To further promote this culture of learning at T-Systems, the reporting year was made the Year of Learning. T-Systems presented the Learning Hero Award for the first time, for example – an award for leaning heroes at the company, who implemented exciting, value-generating learning and teaching initiatives in the reporting year. Among the more than 169 candidates, nine winners were selected in the categories “Individual,” “Multiplier,” and “Teams.” The winners received prizes of between 2 000 and 5 000 euros. The contributions by the “Learning Heroes” were shared both within and outside the company in 2022.

### Training program for cybersecurity professionals

IT security experts are still in short supply on the German labor market, which is why we developed our part-time training program for cybersecurity professionals (certified by the Chamber of Commerce and Industry) in 2014. The program is integrated into regular work processes and supplemented by subject-related and general modules in a variety of formats (classroom courses, e-learning, blended learning). After successfully passing the examination at the relevant Chamber of Industry and Commerce (IHK), participants receive an IHK certificate as a cybersecurity professional. For the skills they have acquired as part of the training, they can obtain credits that can be used in bachelor’s or master’s programs. During the reporting year, 16 participants passed the exams to be become certified cybersecurity professionals at the Cologne Chamber of Industry and Commerce (IHK Köln).

We are continuously developing our training programs, taking into account current and future IT security requirements. During the reporting year, we completely revised and updated the module “Programming with IT security tools: Python.” The specialist modules on cryptography, web and application security, and network security were revised in 2020 and 2021. In addition, the catalog for the selection of the elective module was expanded to include the subject “computer criminal law”.

In 2018, in response to considerable demand, we opened up our training to employees from other organizations, including employees of other companies and of government agencies. Now in its ninth year, this year’s program was started with 28 participants, three of whom came from external organizations. Of the remaining participants, 21 came from Deutsche Telekom Security GmbH and four from Deutsche Telekom IT GmbH.

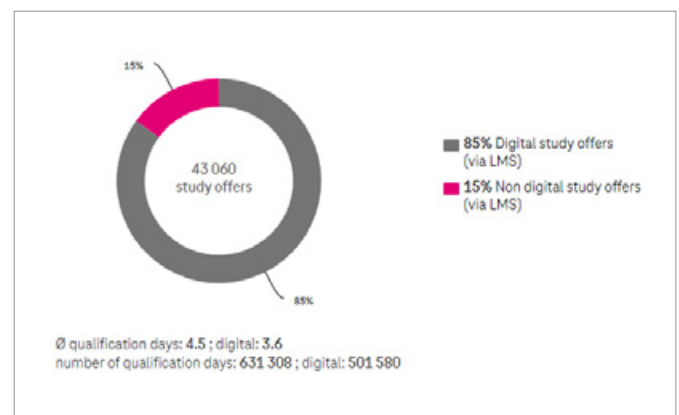
Graduates of the program are increasingly taking on the role of expert coaches for the new participants, documenting the positive rating of the program and supporting its development. The expert coaches from the sixth year were certified in the reporting year. They were able to expand their skills through a course entitled “Fit for expert coaching” and even put them to the test in the practical implementation of the program.

After nine years of the program, we can give it a positive verdict: Six classes had completed the training in full by May 2022 and were certified accordingly. The average age of the graduates was approximately 25. At 3.6 percent, the dropout rate among participants was low. The course was described as challenging, but manageable in the context of the growing requirements of everyday working life. In total, we have had 143 program participant in nine classes. All 62 internal graduates from the 2014 to 2019 intake were kept on by Deutsche Telekom. Only two graduates decided to leave the company, and one of those returned after one year.

### Skills development at Telekom Training

Deutsche Telekom offers its employees a range of advanced training measures, which enable them to develop and brush up their skills.

In 2022, we provided 43 060 learning opportunities via our global Learning Management System (LMS). – 85 percent of the Group learning portfolio was available digitally. Our employees in Germany and the European national companies invested an average of 4.5 working days in their continuing education, 3.6 days of which were spent digitally. The digital learning rate decreased to 79 percent in the year under review (2021: 89 percent).



### Reporting against standards

#### German Sustainability Code

- Criterion 16 (Qualifications)

#### European Federation of Financial Analysts Societies (EFFAS)

- S02-02 (Average expenses on training per FTE p.a)

### International development and leadership programs

The object of our international development and leadership programs is for high potentials and high achievers to gain a foothold in the Group, to keep them loyal to the company and to position them in suitable jobs. These programs focus on development of the upcoming leader generation and on support in coping with the challenges they face now and in the future. At the same time, the programs aim to enhance their sense of belonging, increase knowledge exchange and promote personal responsibility.

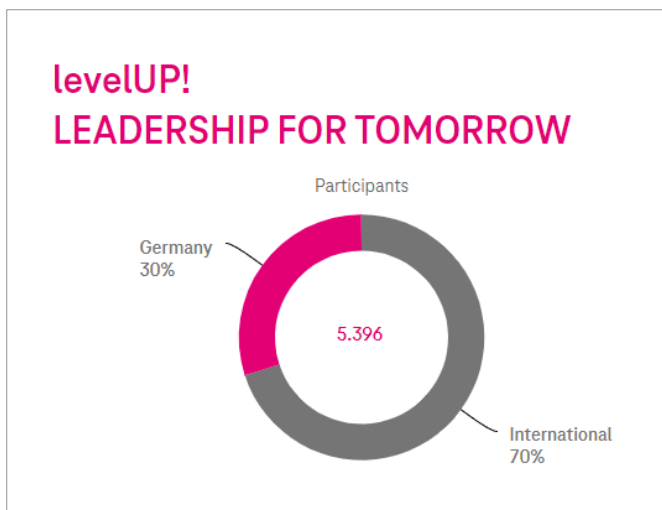
The Global Talent Pool was closed to new entrants in June 2020. A revised global approach “Talent Hub” has been developed and was launched in 2021.



		2019	2020	2021	2022
Participants Trainee-Programm Start up! <sup>a)</sup>	total	71	44	39	38
Participants Trainee-Programm Start up! <sup>a)</sup>	of which women	44%	59%	49%	53%
Participants Global Talent Hub <sup>b)</sup>	total	952	-	365	237
Participants Global Talent Hub <sup>b)</sup>	of which women	26%	-	30%	30%

<sup>a)</sup> The program lasts 15–18 months. The numbers listed are annual new hires.  
<sup>b)</sup> Group-wide program for top talents. Replaces the former „Global Talent Pool“ program.

In 2021 the levelUP! platform changed the approach and became a leadership hub. In 2022, LevelUP! will be accessible to all leaders, also non-executives across Deutsche Telekom group, at any time, from anywhere and from any device. Content-wise it focuses on following learning journeys: Leading in transformation, Leading hybrid teams, Leading digital telco. Joining any of the learning paths helps to gain a new arsenal of powerful tools and skills, insights, reflections and improves personal leadership style while upskilling for digital literacy.

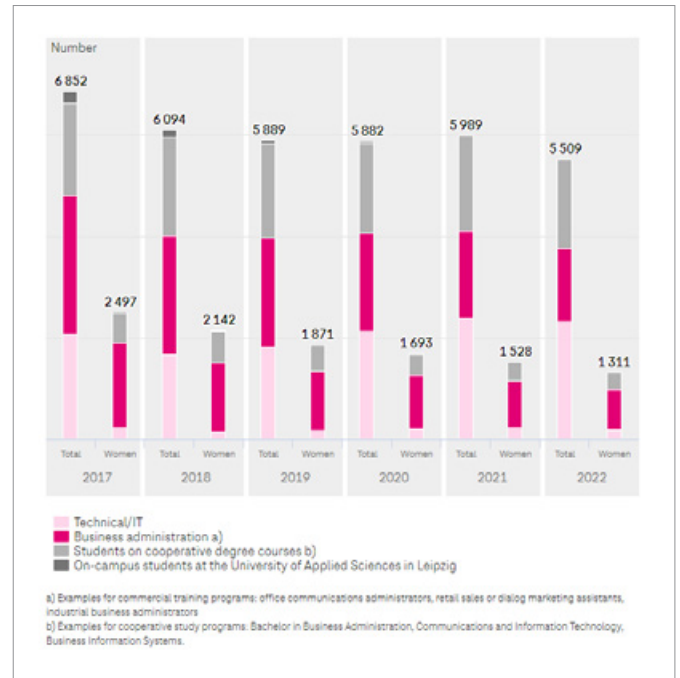


Worldwide, 5 396 employees went through this 4-month development programme, which is aimed at motivated employees and is characterised by the teaching of innovative, inspiring and tangible leadership topics and skills.

You can find further information in the HR Factbook.

### Apprentices and training programs Deutsche Telekom Group in Germany

In 2022, a total of around 5 500 junior employees were employed for training or a cooperative degree program. 24 percent of them were women.



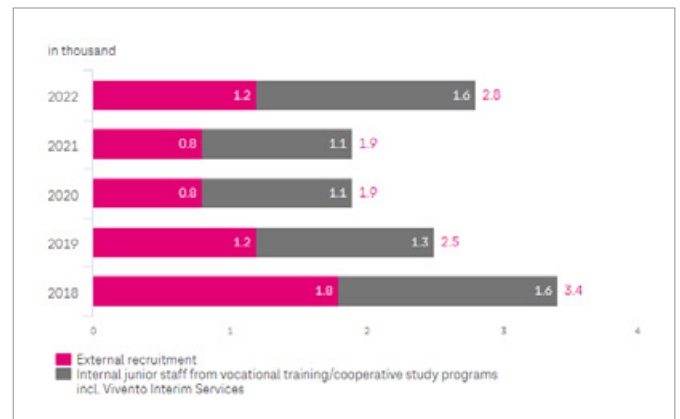
### Reporting against standards

German Sustainability Code

- Criterion 15 (Equal Opportunity)

### Employee recruitment Deutsche Telekom Group in Germany

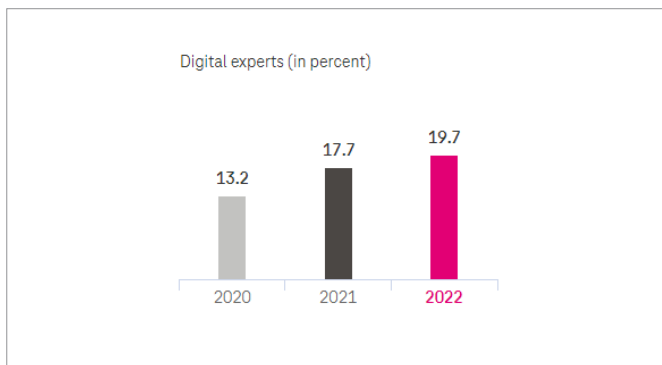
In 2022, Deutsche Telekom hired about 1 200 new employees from the external labor market in Germany. In addition, again we gave around 1 600 internal junior staff permanent jobs on completion of their vocational training or cooperative study courses.



You can find further information in the HR Factbook.

### Share of digital experts

The in-depth knowledge and future-oriented skills of our employees are among the most important corporate resources and are therefore crucial for business success. At Deutsche Telekom, future-oriented digital skills are of particular importance: In order to prepare as many employees as possible for future skill requirements and optimally secure their employability, specific programs focused on future topics, known as “Explorer Journeys,” were again increasingly offered in 2022. Around 5 200 employees registered in 2022 for learning programs lasting several weeks on topics such as big data, digital marketing, artificial intelligence and software development.



# Occupational health and safety

## Our approach to health and occupational safety

We take our obligation to ensure the health and safety of our employees very seriously. The Board of Management assumes overall responsibility for occupational health and safety, as well as for environmental protection. We bundle and manage our occupational health and safety programs at Group level; health and safety managers (H&S managers) are responsible for implementing these programs locally. The general responsibilities, duties and programs for health and safety management are outlined in the Management System Manual for Quality, Health, Safety and Environmental Protection. The manual serves to harmonize and align our management systems with common targets across the Group. Our Conditions for Purchasing also include agreements on occupational health and safety, which our suppliers must fulfill.

Occupational health and safety in the Group is firmly anchored in our structures through certified management systems and through suitable policies and guidelines. We conform to the ISO 45001 standard in this connection. In 2018, we were one of the first DAX-listed companies to have our H&S management system certified according to the standard. Before that, we had been certified to OHSAS 18001 from 2011. In 2022, we successfully completed the audits for recertification pursuant to ISO 45001, ISO 14001, and ISO 9001. As a result, Deutsche Telekom AG's umbrella certificates for occupational health and safety, environmental protection, and quality are valid through September 2024. They cover Deutsche Telekom sites both in Germany and internationally. At the end of the 2022 financial year, 18 sites were certified pursuant to ISO 9001, 86 sites pursuant to ISO 14001, and 79 sites pursuant to ISO 45001. The certificates certify that we have systematic procedures and processes in place to ensure and continually improve occupational health and safety as well as environmental protection.

We promote health awareness and health literacy among our employees, with targeted measures and comprehensive programs. At the same time, safety in the workplace is our highest priority. We view legally mandated occupational health and safety standards as minimum requirements. Awareness-raising, prevention, and personal responsibility are of particular importance to us. As such, we offer training courses on all relevant topics, such as for first-aiders and driver safety training.

We regularly determine risks to health and safety. We produce risk assessments for all activities and use them to derive appropriate measures – for example, mandatory fire safety instructions for all employees. When we collaborate with external service providers, it is important that our safety standards be met.

Our portfolio of occupational health and safety measures also includes many voluntary measures to promote health within the company. These include, for example:

- An annual, comprehensive health check by company doctors
- Vaccinations and hygiene measures
- Colon cancer screening
- Exercise/fitness activities
- Programs for recovery and resilience, mindfulness, health-oriented leadership
- Increasingly, digital training

The impact assessment of our materiality analysis identified potential risks to health and safety in the work and process steps of Deutsche Telekom's upstream and downstream value chains. Insufficient hygienic measures, deficient safeguards, and a lack of preventive measures can result in accidents or damage to employee health. Our measures to improve occupational health and safety are aimed at reducing these risks. They also have a positive effect on the environment. A structured occupational safety process for handling hazardous materials, for example, ensures that hazardous materials cannot leak out or pose a risk to the environment.

We also work together with certified waste disposal companies, to ensure that the disposal of our electronics products does not harm the environment or the health of the local population.

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 403 3–3 (Management of material topics)
- GRI 403–1 (Occupational Health and Safety)
- GRI 403–4 (Occupational Health and Safety)
- GRI 403–5 (Occupational Health and Safety)
- GRI 403–6 (Occupational Health and Safety)
- GRI 403–7 (Occupational Health and Safety)
- GRI 403–8 (Occupational Health and Safety)

## Effectiveness of our occupational health and safety measures

In line with the PDCA cycle (plan, do, check, act), we systematically investigate and measure the effectiveness of our measures. We endeavor to continuously develop our management system. To this end, we regularly investigate how occupational health and safety are integrated in management and leadership activities and derive improvement strategies as needed. This includes reviewing the results of our employee survey, evaluating stress prevention measures under collective agreements, competitor analyses, and other indicators. We analyze this information on an ongoing basis

and use it to develop suitable measures to promote the health and well-being of our employees. In addition, all employees can actively help shape our measures for occupational health and safety, in line with the requirements of ISO 45001.

Different indicators reflect the effectiveness of our corporate health management activities:

- At Deutsche Telekom in Germany, the health rate for 2022 (including long-term illnesses) was 93.8 percent (prior year: 95.3 percent). Excluding long-term illnesses, the health rate in 2022 stood at 95.2 percent (prior year: 95.3 percent). The worsening of the figure in 2022 is presumably a result of the gradual return to normality as pandemic protection and hygiene measures came to an end. The health rate is reported to the Board of Management at the end of each quarter.
- The total number of work-related accidents increased in the reporting year in comparison with the previous year. The accident rate in Germany for 2022 was 5.5 accidents (resulting in over three days of absence) per thousand employees (prior year: 4.2). This figure includes occupational accidents associated with the COVID-19 pandemic. Without these COVID-19 cases, the accident rate in Germany was 4.4.
- The Group-wide health index – which was last measured as part of the 2021 employee survey in almost all countries with Telekom employees – stood at 69 (on a scale from 0 to 100). This represents a slight increase of four points with respect to the previous survey in 2019. Preparations for determining the next health index will take place in 2023.

#### Measures during the COVID-19 pandemic

At the onset of the COVID-19 pandemic, we provided the opportunity to work from home, whenever possible, to protect our employees. Together with the Bonn Hygiene Institute, we also developed a comprehensive hygiene concept. It enabled employees to return to their offices – when the numbers of infections so permitted. Our Chief Human Resources Officer Birgit Bohle regularly informed employees about our extensive safety measures. To maintain vaccination protection against Covid-19, employees in Germany were offered booster vaccinations (a third vaccination dose) at the turn of the year 2021/2022. In this context, 4 908 vaccination doses were given in the first quarter of the reporting year. The vaccination program has been discontinued in the interim. Although we do not offer coronavirus vaccinations presently, we monitor and assess the situation continually, which means a needs-based resumption of the vaccination program is possible anytime, at short notice.

Also, the company once again held its annual flu-vaccination campaign in fall 2022. We completed our flu-vaccination campaign for the turn of the year 2021/2022 in the first quarter of the reporting year, with 9,593 flu shots. Between October and December 2022, 7 140 of our employees in Germany had received their flu shots as part of the campaign.

#### The My Health Journey health program

In the reporting year, we continued our “My Health Journey” company health program for emotional and mental fortitude, which is available to all employees in Germany. In addition to workshop series on mental resilience, mindfulness, and self-care in the digital environment – with tips and exercises for shaping everyday virtual life – it also offers scientifically based mindfulness training for executives and managers. Its aims include promoting self-reflection and self-organization. We expanded our existing offers in 2022 with programs from all fields of prevention. In addition to the focus topic “Emotional and mental fortitude,” we now also offer courses on good nutrition, regular exercise, and relaxing sleep. Among other elements, we organize action days such as Sleep Day, Nutrition Day, Mindfulness Day, and Mental Health Day. We have also established a series of open lectures and targeted individual offerings such as sleep or nutrition consultation.

#### Awards in the occupational health and safety area

We once again won multiple awards for our occupational health management in the reporting year. T-Systems in Germany, for example, won a BBGM Best Practice Award from the Federal Association of Occupational Health Management for its #ausruhezeichen sleep campaign. Among our national companies, the OTE Group won several awards for its “health and safety” initiatives.

#### Reporting against standards

##### Global Reporting Initiative (GRI)

- GRI 403–2 (Occupational Health and Safety)
- GRI 403–3 (Occupational Health and Safety)
- GRI 403–6 (Occupational Health and Safety)
- GRI 403–9 (Occupational Health and Safety)
- GRI 403–10 (Occupational Health and Safety)

#### Psychosocial counseling as part of change management

We attach great importance to the psychosocial support that the Employee and Executive Advisory Service (MFB) provides for various transformation processes across the Group. The goal is to help affected employees, managers, and teams deal with professional and private changes, and to prevent psychosocial crises. In the event of an acute crisis, our crisis intervention takes action: The party concerned, along with family members when needed, can make use of professional counseling from an experienced team of experts.

In Germany, we also offer free and anonymous personal counseling and consultation hours. Employees can obtain personal counseling from experts. Immediate phone counseling is available through the “TALK TIME” hotline from 8 a.m. to 8 p.m., Monday through Friday. If necessary, employees seeking help are referred directly to local experts or specialist agencies. The counselors have a duty to maintain confidentiality and are familiar with the specifics of the company.

During the coronavirus pandemic, they counseled our employees on problems resulting from reduced social contacts, as well as coping with burdens caused by closed schools and care facilities,

among other subjects. A selected team of occupational health specialists also offered immediate counseling for health issues from March 2020 through the end of December 2022, for instance, on pandemic-related processes and rules. The percentage of COVID-19-related concerns declined from 10 percent in the previous year to 3.8 percent in the reporting year, however. Overall, a total of 2 755 queries from Deutsche Telekom employees were processed. Compared to 2021, call volumes declined by around 36 percent (as of December 2022), nearly matching the pre-pandemic level between 2016 and 2019.

With this in mind, and in the face of new crises, we defined new focuses for our “TALK TIME” hotline in the reporting year. For example, we offered special psychosocial counseling to our international employees and helpers who were exposed to the extreme events of Russia's war of aggression on Ukraine.

Also, for many years now we have provided special additional support to managers, in the form of presentations and workshops on healthy leadership, conflict management, mindfulness, and self-leadership, as well as on strategies for dealing with changes and mental stress. Courses on virtual leadership are also part of these offerings. Working in hybrid or distributed teams has long been part of everyday life for some parts of Deutsche Telekom. Nevertheless, the increasing shift of workplaces to home offices poses an additional challenge: executives have to be sensitive to changes in teams and individuals and provide enough time for personal exchange, for instance, by planning regular video conferences.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 403–3 (Occupational Health and Safety)
- GRI 403–6 (Occupational Health and Safety)
- GRI 403–10 (Occupational Health and Safety)

### Digitalization and health

In 2017, and in cooperation with one of our health partners, the BARMER health insurance company, we launched the “Digitalization and Health” model project, with the University of St. Gallen and the Institute for Organizational Diagnostics and Social Research (IfOS) in Cologne, among others, providing scientific support. In this effort, and in the context of digitalization, we have developed solutions that can improve employee health and enhance their motivation and performance. Also, we have introduced various measures in the cooperation project and tested them together with Deutsche Telekom staff. The model project is now being continued on a regular operational basis.

In 2019, the pilot project “Healthy and mindful leadership” was launched. This is a multimodal course designed to improve the digital health literacy of employees. The course was initially aimed at executives, who are important multipliers. In the course of the pilot project, we were able to scientifically demonstrate the positive training effects on health, stress perception, and mindfulness. For this reason, in 2020 we expanded the project to the national level, under the “My Health Journey” program. To date, the course has been proven to have additional positive effects that remain significant three months after the end of the training period.

The effects for participants included improved performance, a better sense of well-being, and enhanced health literacy. In light of these results, we made the training course available to the managers of nearly all German entities in 2021 and continued the project in 2022.

The “My Health Journey” program was expanded in 2022 to include additional elements involving resilience and mindfulness: The virtual sessions of the series “Kopfsalat und Bauchgefühl” (Brain Turbulance and Gut Feeling) give our employees positive food for thought and practical assistance for strengthening their own resilience. The one-hour sessions are hosted by a neuroscientist and also give our employees a space where they can interact and share with one another.

In addition, since 2020 our employees in Germany have access to the FITMIT5 (fitwith5) app which is also integrated in the annual “My Health Journey” program. The training app includes an algorithm that puts together 5-minute workout programs tailored to users' needs. In addition, it provides further exercise and meditation resources, as well as a nutritional tips. In light of the positive feedback received, this offer was continued in the reporting year and is now available to all company employees free of charge. We also launched a collaboration with SHENTISPORTS in 2022 that enables our business customers to offer the FITMIT5 app to their own employees.

The topic of mindfulness attracted particular interest on our Mindfulness Day in 2022. During this action day in September 2022, our employees had the opportunity to take part in online meditation and virtual yoga sessions, as well as follow presentations on non-violent communication and emotional labor. Our employees in Germany can also attend regularly held live workshops as well access online videos and handouts under the motto #myMoment that help them integrate mindfulness practices in their everyday (working) life.

Virtual 3D parkour courses on the health topics “stress and digital balance,” “sleep,” and “nutrition,” which we offered our employees for the first time in 2021, were continued in 2022. Moreover, the T-Systems segment offered additional resources in this context, such as podcasts and workshops on the topic of “sleep” as part of the company health management. This took place as part of the #ausruhezeichen sleep campaign, which was launched in 2020 and developed by the BARMER health insurance company, the Institut für Betriebliche Gesundheitsberatung (IFBG; Institute for in-company health counseling), and Deutsche Telekom. Our Gesunder Schlaf (healthy sleep) campaign once again give our employees tips from sleep research during the reporting year. In addition, we opened a sleep and relaxation room at our Bonn headquarters in 2022. This concept, which we developed for our employees the previous year as part of innovation scouting, includes a relaxation corner and a day bed for power naps. Evaluations of usage figures showed that our employees used the relaxation corner more often than the day bed. The pilot phase has been extended through February 2023, to gather further insights on how this offer is used.

With support from BARMER, we also continued to address the topic of nutrition in 2022. In 2020, we sponsored a pilot project that offered virtual presentations by nutritionists and top athletes, team workshops, and additional offers such as Weight Watchers Online. Following the Group-wide rollout of the project in 2021, we continued it in the reporting year and added additional campaigns and offerings.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 403-6 (Occupational Health and Safety)

**Health rate**

Nationally, the health rate for the Deutsche Telekom Group in 2022 slightly decreased by 1.5 percent year-on-year, and stood at an average of 93.8 percent (including the long-term sick). Musculo-skeletal disorders, respiratory diseases, and mental health problems account for the bulk of illness-related absenteeism at Deutsche Telekom AG.

The health rate is reported to the Board of Management at the end of each quarter. The 2022 health rate excluding the long-term sick is 95.2 percent. The worsening of the figure in 2022 is presumably a result of the gradual return to normality as pandemic protection and hygiene measures came to an end. Our aim is to improve the health rate.

Targeted health protection programs were implemented in the individual companies. Across all segments, management training courses on the topic of “healthy leadership” were either introduced or continued. The aim is to raise managers’ awareness of this issue and train them accordingly. Additionally, a structured absence management system will be put in place to ensure that employees and managers regularly communicate about illness-related absences so that appropriate action can be taken early on.



You can find further information in the HR Factbook.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 403-9 (Occupational Health and Safety)
- GRI 403-10 (Occupational Health and Safety)

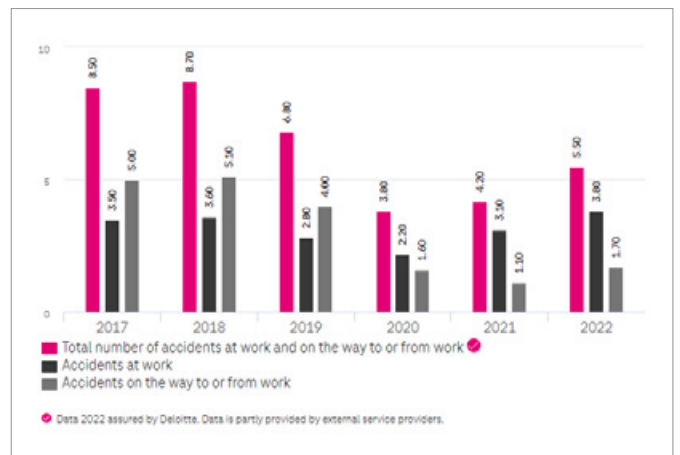
**German Sustainability Code**

- Criterion 15 (Equal Opportunity)

**Work-related accidents in Germany**

In 2022, the accident rate remains at a low level overall. The accident rate in Germany for 2022 was 5.5 accidents (resulting in over three days of absence) per thousand employees, which is well below the industry average. This figure also includes occupational accidents associated with the coronavirus pandemic. Excluding these Covid-19 cases, the accident rate in Germany was 4.4.

Deutsche Telekom has a health and safety management system in place to reduce the number of work-related accidents. This certified system makes it possible to map the entire health and safety process and to develop sets of measures to further improve employee safety.



You can find further information in the HR Factbook.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 403-9 (Occupational Health and Safety)
- GRI 403-10 (Occupational Health and Safety)



# Headcount and part-time work

## Workforce development worldwide

The Group's headcount fell by 4.5 percent compared with the end of the prior year. The number of employees in our Germany operating segment decreased by 4.5 percent against year-end 2021, mainly as a result of the reassignment of employees to the Group Headquarters & Group Services segment in connection with reorganization measures at Deutsche Telekom IT. Employees also continued to take up socially responsible instruments as part of staff restructuring activities, such as dedicated retirement and phased retirement.

The total number of employees in our United States operating segment decreased by 5.6 percent. In our Europe operating segment, the headcount was down 3.5 percent compared with the end of the prior year. In particular, the headcount decreased in Greece, Slovakia, Poland and Croatia. The number of employees in our operating segment Systems Solutions increased by 4.6 percent compared with the end of 2021. The impact of our global efficiency measures on headcount was offset by additional requirements in our growth areas. In the Group Development operating segment, the headcount was significantly lower year-on-year, decreasing by 69 percent, mainly due to the divestment of T-Mobile Netherlands effective March 31, 2022. The headcount in the Segment Group Headquarters & Group Services decreased by 5.9 percent compared with year-end 2021. This is mainly due to further staff restructuring in the "Technology & Innovation" unit, mainly in connection with a transformation program in Deutsche Telekom IT, and continued staff restructuring at Vivento.

Number	2015	2016	2017 <sup>a)</sup>	2018 <sup>b)</sup>	2019 <sup>b)</sup>	2020 <sup>b)</sup>	2021 <sup>b)</sup>	2022
Germany	67 927	66 410	64 798	71 549	69 117	67 956	61 768	59 014
USA	44 229	44 820	45 888	46 871	47 312	71 304	71 094	67 088
Europe	48 920	46 808	47 421	47 964	44 410	41 272	35 319	34 083
Systems Solutions	37 850	37 472	37 924	28 945	29 800	26 490	26 175	27 392
Group Headquarters and Group Services	23 548	20 258	19 351	18 370	17 292	16 585	19 498	18 353
Group Development	2 768	2 572	1 967	1 976	2 603	2 684	2 674	828
Group (total)	225 243	218 341	217 349	215 675	210 533	226 291	216 528	206 759

<sup>a)</sup> Since January 1st 2017 we report the Board division technology and innovation via the segment Group Development and the segments Group Headquarters & Group Services. Year on year data has been adjusted accordingly.  
<sup>b)</sup> Values for 2018–2021 restated.

You can find further information in the HR Factbook.

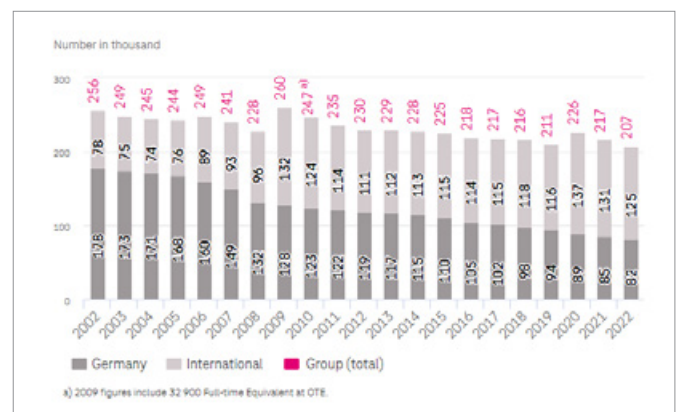
## Reporting against standards

### European Federation of Financial Analysts Societies (EFFAS)

- S01-01 (Staff turnover)

## Deutsche Telekom workforce 2002–2022

Our strategy to become the leading telecommunications provider in Europe is reflected in the trend in our international employee headcount. The domestic workforce has been steadily declining since 2003, and measured in terms of the total number of employees, amounted to around 39.4 percent at the end of 2022. There is hardly any change compared with the previous year, as the international workforce also continues to decrease. The sale of T-Mobile Netherlands and a 5.6 percent reduction in the workforce in the United States are to be mentioned here.



## Reporting against standards

### German Sustainability Code

- Criterion 15 (Equal Opportunity)

## Number of employees by country



<sup>1)</sup> Transition: headcount formerly in Russia that is now outside Russia but not yet reported in the final organizational unit.

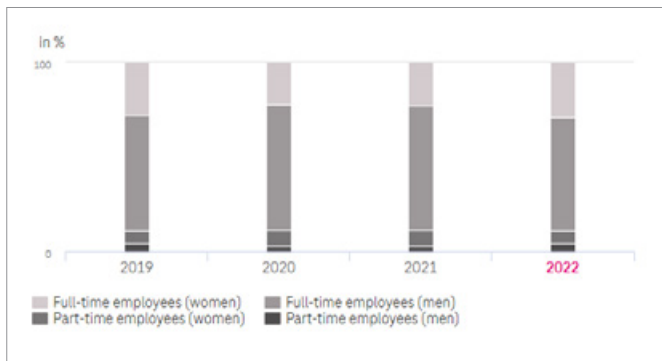
## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 2-7 (General Disclosures)

**Part-time employees Deutsche Telekom Group**

We believe it is important to offer our staff flexible working conditions that fit their needs at every stage of their lives. This includes the opportunity to work part-time, but also the guaranteed option of returning to work when the employee no longer wants to work part-time. We also offer this to young parents so that they can balance starting their career through training or a part-time cooperative study course with the demands of family life as a single parent. Part-time training is available in all of our training programs, and means apprentices spend 25 hours per week either in the company, in school, or in the training center. The highlight: like all apprentices, part-time apprentices can cut their training to two and a half years and therefore apply for a job earlier than would have otherwise been possible. A success model all round, since Deutsche Telekom also benefits from the young people's commitment.



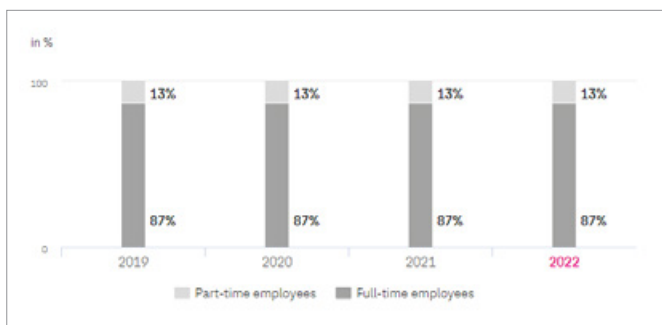
**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 2-7 (General Disclosures)

**Part-time employees Deutsche Telekom Group in Germany**

The percentage of part-time employees came to around 13 percent in 2022, and thus remained stable compared to the previous year.



**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 2-7 (General Disclosures)

**German Sustainability Code**

- Criterion 14 (Employee Rights)
- Criterion 15 (Equal Opportunity)

**Global Compact**

- Principle 3 (Uphold freedom of association and the right to collective bargaining)
- Principle 6 (Elimination of discrimination in respect of employment and occupation)

# Staff restructuring

## Socially responsible staff restructuring

With a view to remaining strong and competitive in our dynamic and global market environment, in the long term, we support and assist our employees in growing with the evolving digitalized working world.

These inevitable changes are also accompanied by complex personnel restructuring. We are creating new jobs in growth areas and finding qualified personnel to fill these positions. In other areas, we are restructuring, and reducing our workforce in the process. We make sure that all staff restructuring measures are implemented in a socially responsible way for our employees.

HR service provider Vivento has provided us with support and placement services for employees in Germany since 2013. In close collaboration with the new “next.JOB” unit founded at the start of 2022, 69 employees (civil servants and non-civil servants) at Deutsche Telekom in Germany decided to transfer to positions with federal, state, or local authorities. “next.JOB” provides new opportunities in the public sector for interested employees from across the entire Group. In 2022, a large number of these employees went to the armed forces (Bundeswehr), the Federal Employment Agency, the Federal Office for Migration and Refugees, Deutsche Rentenversicherung Bund, and other federal authorities. Employees were also assisted in finding positions in public administration. Since Vivento’s founding, it has helped more than 53 100 employees (full-time equivalents – FTEs; as of December 31, 2021) find viable new options.

For some years now, various segments, including Group Headquarters and Telekom Deutschland, have offered assistance to surplus personnel, including individual counseling for professional reorientation. Employees in the change process are given prompt and comprehensive support, with the goal of finding permanent new employment for them.

## Holistic staff restructuring and transfer management at Telekom Deutschland GmbH

Telekom Deutschland GmbH implemented a holistic staff restructuring and transfer management system in mid-2017. Its aim is to win employees over to the idea of a career change early on. In cases where tasks are being eliminated in the near or medium term, or different skills are required, the affected employees will be given advice proactively regarding opportunities for a professional reorientation. Managers are also actively involved in the change process. Together with them, internal and external employment options are considered and personal labor market profiles developed. In addition, assistance is provided for individualized application processes and – where necessary – training offered.

Since 2018, around 2 100 employees nationwide in the Germany segment have received counseling via this system. Approximately 70 percent of them were able to find new options through these measures.

## Tools for socially responsible staff restructuring Deutsche Telekom Group in Germany

We continued our efforts to engage in socially acceptable staff restructuring. To this end, the Group continued to rely on the already proven tools of early retirement, severance pay and partial retirement in 2022.

Personnel cuts (FTEs)	2016	2017	2018	2019	2020	2021	2022
Early retirement (civil servants)	3 849	27	1 711	1 242	1 917	630	1 183
Early retirement (non-civil servants)	47	61	63	71	77	66	79
Severance payments	726	1 081	972	763	745	526	619
Partial retirement (start of passive phase)	1 393	1 687	1 890	1 692	1 899	2 444	2 086
Other socially responsible tools	<6	15	-	-	-	-	-
Transfers to public authorities (final <sup>a)</sup> )	418	417	326	321	146	70	49

<sup>a)</sup> Permanent transfers; civil servants are not entitled to return to the Deutsche Telekom Group – established as a cluster in 2015.

You can find further information in the HR Factbook.

## Reporting against standards

### German Sustainability Code

- Criterion 6 (Rules and Processes)
- Criterion 14 (Employee Rights)

## Fluctuation rate

The fluctuation rate in Germany increased slightly compared to 2021 and was 2.5 percent. Internationally it increased significantly and was over 10 percent in 2022. At Group level, it also increased slightly due to the increase in Germany and internationally and stood at 5.9 percent in 2022.

In %	2019	2020	2021	2022
Germany	2.28	1.98	2.10	2.50
International <sup>a)</sup>	9.55	6.61	9.30	10.70
Group (total) <sup>a)</sup>	5.32	3.94	5.20	5.90

<sup>a)</sup> excluding T-Mobile US

You can find further information in the HR Factbook.

## Reporting against standards

### Global Reporting Initiative (GRI)

- GRI 2-7 (General Disclosures)

### Proportion of civil servants in Group workforce

The proportion of civil servants employed in the company fell once again in 2022. The reason for this is that Deutsche Telekom has not recruited any new civil servant staff since the company was privatized. In addition to civil servants leaving the company when they reach retirement age, others also took advantage of dedicated retirement or moved to other agencies. This led to a continuous drop in the number of civil servants in our workforce.

	2015	2016	2017	2018	2019	2020	2021	2022
Active civil servants	18 483	15 999	15 482	13 507	12 153	10 583	9 653	8 381
Civil servants on temporary leave from civil servant status <sup>*)</sup>	1 220	889	731	657	553	405	311	256
Civil servants at affiliated companies	12 292	10 827	10 486	9 785	8 720	7 423	6 773	5 836
<b>Civil servants (total)</b>	<b>31 995</b>	<b>27 716</b>	<b>26 699</b>	<b>23 950</b>	<b>21 426</b>	<b>18 412</b>	<b>16 736</b>	<b>14 474</b>
Number of non-civil servants in Germany	78 360	76 946	75 202	74 143	72 685	70 620	68 424	66 995
<b>Total number of employees in Germany</b>	<b>110 354</b>	<b>104 662</b>	<b>101 901</b>	<b>98 092</b>	<b>94 111</b>	<b>89 032</b>	<b>85 160</b>	<b>81 469</b>
Percentage of civil servants in Germany (in %)	28.99	26.48	26.20	24.42	22.77	20.68	19.7	17.8

<sup>\*)</sup> Civil servants whose status as such is currently suspended. They have temporarily switched to an employee relationship not covered by collective agreements.

# Ideas management

## Heading for success – with our ideas management

Our employees come up with creative ideas for ways to improve our processes, products, and services – and thereby strengthen Deutsche Telekom’s competitiveness. We promote a corporate culture in which we encourage our employees to take an active role. We trust in the competency and will of every individual to move our company forward. Our Idea Management unit develops concepts and measures for making the most of our employees’ potential.

Also, in Germany, we maintain an “ideas portal,” and invite any and all of our employees to submit ideas through it – acting either alone or as part of a team. And to ensure that no ideas, no matter how nascent, are ever lost, our Idea Management unit offers all employees an “ideas garden” – a dedicated platform for their creativity. On this platform, employees have the opportunity to play with and refine their emerging ideas and bring them to full maturity. The submitted ideas are reviewed by Idea Management based on a variety of criteria. New ideas are also assessed by the responsible functional unit and implemented when approved. The process, which is extensive overall, ensures that each and every idea can be individually considered and promoted. Our employees are paid a reward for each submitted idea that is pursued.

In 2022, we received a total of 4 016 submissions from our employees in Germany (2021: 4 420). These ideas led to savings and new business potential worth about 82.7 million euros (2021: 169.3 million euros). This achievement also shows that we value and implement ideas from our employees.

In the 2022 Deutscher Ideenmanagement Preis (German Idea Management Awards), Deutsche Telekom came first in the category for the best idea in administration and service. The winning idea is a survey tool called “Vote,” which was developed and programmed by Andre Artmann and Adreas Steffl on their own initiative. An external tool was previously used for in-house surveys, but this was associated with high license costs, which can now be avoided. The innovative “Vote” survey tool is now used throughout the Group, in over 24 countries.

## Better and better – thanks also to some ideas from outside the company

Via our Ideenschmiede (think tank; only available in German), which has been in place since 2018, we invite persons from outside the company, including both customers and non-customers, to actively help us design our products, services, and processes. Around 18 000 users have registered for the site in order to contribute ideas and impetus. Users also have the opportunity to take

part in surveys, polls, and discussions, and to place suggestions in our digital suggestion box. Workshops, both online and in person, also give them an opportunity to exchange information with one another and with Deutsche Telekom experts, contribute ideas, and develop suggestions further. The Ideenschmiede has conducted 550 surveys on 280 different topics since January 2018. The results are impressive: customer feedback on 177 different topics has resulted in the implementation of a product or measurable improvements.

## How customers are changing Deutsche Telekom

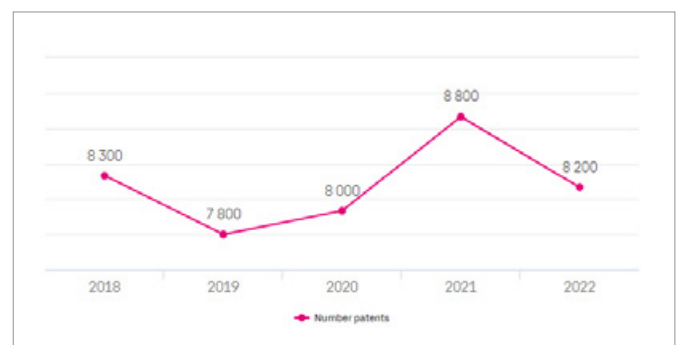
The Ideenschmiede primarily serves to solicit requests and requirements from customers, elaborate them further, and structure and document them. All the same, we sometimes let users vote on alternative solutions, too. One example involved finding a name for the “MagentaTV MegaStream” rate plan, which was decided by a majority vote among users.

Another example of the influence of user feedback involves the help website for the new topic Cell Broadcast. A targeted survey on the Ideenschmiede platform helped us make the texts more understandable and answer open questions.

In addition, the Ideenschmiede regularly provides suggestions regarding activities and service offerings specifically for older people. To make it easier for them to participate in the digital world, we developed the initial content for a “Tablet for beginners” seminar there, which we now offer regularly in the Telekom Seniors’ Academy framework.

## Portfolio of Intellectual Property Rights

By the end of 2022, we owned around 8 200 intellectual property rights (IPRs). We take a targeted approach to managing these IPRs in consideration of cost-benefit aspects. We regularly take stock of our IPRs and eliminate those that are no longer relevant.



Patents are gaining more and more significance in the telecommunications industry. Market players and their areas of activity are changing, with a knock-on effect on our IPR (intellectual property rights) agenda. On the one hand, our Group's scope for action must be maintained. On the other hand and alongside our own research and development activities, we want to pave the way to open innovation through collaboration projects and partnerships. National and international IPRs are vital for these types of activity. We are strongly dedicated to generating our own property rights. Industrial property rights include inventions, patent applications, patents, utility models and design patents.

Thanks to our intense efforts to develop and structure our IPR portfolio, the rights we hold are highly valuable and firmly in line with our Group's strategic objectives. We have put in place a professional patent law management process to keep our IPR assets safe. Additionally, we are represented on various standardization bodies in our industry. We manage our IPRs on the basis of cost/benefit aspects, filing only selected applications and de-registering patents systematically.

#### **Reporting against standards**

##### **European Federation of Financial Analysts Societies (EFFAS)**

- V04-05 (Number of patents registered within last 12 month)
- V04-06 (Percentage of patents registered within last 12 month in relation to total number of patents)



## Activities Digital Inclusion

The following figure presents an overview of the most important initiatives at the project level. General descriptions are provided in the sections on the ESG Social KPIs.

### Children and young people

Activity	Description	Community Contribution	Reach	Beneficiaries
Telekom@School	Since 2000, Deutsche Telekom's Telekom@School project has been providing general and vocational schools nationwide with internet accesses for teaching purposes. Participating schools receive the accesses either free of charge or at a considerably reduced price, depending on the access bandwidth.	12.4 mil. €		6.95 mil.
Flat rate for education	With the flat rate for education, students can access digital learning content on mobile devices, transmit their homework and take part in video chats (for example, in home-schooling settings). In addition, the service can provide schools with temporary internet accesses that can serve as viable substitutes until permanent fiber-optic accesses / in-house coverage is available. Such accesses are provided free of charge, and they offer unlimited data. The relevant ongoing costs for the school authorities amount to 10 euros per month and contract.	13.1 mil. €	1.5 mil.	500 thous.
Telekom 4 the University of Montenegro  (Crnogorski Telekom) Montenegro (Crnogorski Telekom)	Telekom provides a 1Gbps Internet connection free of charge for the University of Montenegro, so staff and students in all faculties, institutes, and colleges can become part of a larger scientific network, exchange data and information more easily, and join the gigabit society.	143 thous. €		42 thous.
„Teachtoday“ and „SCROLLER“	„Teachtoday“ is a practically oriented online learning and teaching resource, with something to offer for just about anyone, including children, young people, parents, grandparents – and teachers. Available in a total of seven languages, „Teachtoday“ is internationally oriented, and it covers best-practice projects in many different countries. In a Toolbox section, „Teachtoday“ offers all kinds of interesting project ideas, video tutorials, exciting quizzes and tasty learning “tidbits” and “morsels.” In 2022, its content focus was on how to deal with online hate speech.  „SCROLLER“ is a digital magazine for children between the ages of nine and 12. It promotes safe, competent use of digital media via a range of features, including fascinating and inspiring stories; a diverse range of audio and video pieces; puzzles; and interactive content.	421.8 thous. €	831.8 thous.	3.7 mil.
#WhatWeValue	According to a Vice Media Group study carried out in 2022, some 82 percent of all young people worldwide between the ages of 18 and 30 work in some sort of volunteer capacity. Deutsche Telekom wants to promote volunteer efforts to help other people and make the world a better place. With its #WhatWeValue campaign, it is now working to promote social commitment on the part of young people throughout Europe.  On a platform developed especially for this purpose, <a href="https://whatwevalue.telekom.com">whatwevalue.telekom.com</a> , volunteers can present their projects and connect with others with similar interests and focuses – and attract additional supporters. In addition, platform users can support the featured projects (100 to date) by sharing, liking, and/or following them. The ten projects that the #WhatWeValue community shows it appreciates the most, via its interactions, will receive special Deutsche Telekom project subsidies of 35 000 euros.  The Initiative is being promoted on the leading social media platforms for Gen Z, including Twitch, Snapchat, and TikTok. The relevant campaign is now underway in Deutsche Telekom's nine European footprint countries in – Austria, Croatia, Hungary, Poland, Slovakia, Romania, Czech Republic, North Macedonia, and Montenegro	950 thous. €	776.6 mil. <sup>c)</sup>	1.6 mil. <sup>c)</sup>

## Children and young people

Activity	Description	Community Contribution	Reach	Beneficiaries
MINT Zukunft schaffen (STEM – Creating the future)	<p>A lack of young people entering STEM (science, technology, engineering, mathematics) fields is presenting risks for Germany’s economic future. If the numbers of qualified applicants for vocational training careers and study programs in STEM fields are to be significantly increased – with a view to safeguarding our future prosperity – we need to be looking at all potential sources of talent, and working to eliminate barriers to learning and education. The MINT Zukunft schaffen (STEM – Creating the future) initiative is working to quantitatively and qualitatively improve teaching and learning in STEM subjects at schools and universities. In addition, it is promoting digitalization in education, and honoring schools that emphasize STEM education.</p> <p>The MINT Zukunft schaffen (STEM – Creating the future) association is working publicly to help young people, parents, teachers, and the public at large form positive opinions of STEM fields and their potential. Deutsche Telekom AG is one of its founding members. Its main target audiences include school students of all ages, and students in higher education, including new enrollees.</p>	286.7 thous. €	506.1 thous.	1.3 mil.
Smart School and “erlebe IT” (experience IT)	<p>Smart School and “erlebe IT” (experience IT) are initiatives of the German digital association Bitkom e.V. (Federal Association for Information Technology, Telecommunications and New Media) that are supported by Deutsche Telekom.</p> <p>With Smart School, Bitkom is working to promote modern education, and to advance the digital transformation at Germany’s schools. Each year, the initiative honors “smart schools” that are leading the way in digital education, and showing what schools might look like in the future.</p> <p>Since 2009, the association’s “erlebe IT” (experience IT) initiative has been working to strengthen digital competence at schools. The initiative provides interactive instruction materials aimed at helping school students use digital technologies competently and at helping teachers teach with digital tools.</p>	53.4 thous. €	-	-
DIGITAL@School	<p>DIGITAL@School is a corporate community of Deutsche Telekom. Its aim is to prepare children to help shape our digital age, by promoting competence, activity, and self-determination. In this vein, the committed staff of DIGITAL@School work to give children a fascinating and close-up look at STEM (science, technology, engineering, mathematics) subjects. With age-appropriate language and resources, DIGITAL@School introduces children to STEM subjects, and to programming languages (offerings include programming workshops led by Deutsche Telekom staff). In addition, it teaches skills that children need in order to use digital media responsibly. In the process, it draws on materials available in the „Teachtoday“ tool box.</p>	427.6 thous. €	2.1 mil.	2.3 thous.
Code Week for teachers, and Code Week / App Design Days for school students	<p>The workshops held during the Code Week events introduced participants to the basics of app design – from idea to prototype.</p> <p>The Code Week events provide a perfect opportunity for teachers to try their hand at programming. From October 7 to 24, 2022, Deutsche Telekom opened selected stores for these events, which included 90-minute workshops on programming with the „Swift Playgrounds“ app.</p> <p>By learning to program, students can learn valuable skills that can help them put their own ideas into action and enact real change in the world. Apple developed „Swift Playgrounds“ as a tool that supports learners throughout the entire app-creation process, from the first line of code to the final app.</p>	8 thous. €	280	152

<sup>a)</sup> Does not include the management overhead.

<sup>b)</sup> The value is not published at the project level.

<sup>c)</sup> Europe-wide.

## Civil society and non-governmental organizations (NGOs)

Activity	Description	Community Contribution	Reach	Beneficiaries
Subsidized rates	Deutsche Telekom offers customers with low incomes, and people with disabilities, subsidized rates on certain connections within the Deutsche Telekom fixed network.	3.7 mil. €		85.6 thous.
Network Stories	On a weekly basis, the Netzgeschichten – Network Stories – present news from the worlds of telecommunications and technology. In the Network Stories' interesting, and entertaining, short video clips, podcasts, and talks, Deutsche Telekom presents information about people and things relating to the online world.	588.3 thous. €	8.3 mil.	7.5 mil.
No hate speech; media literacy workshops, including „Teachtoday“ and „SCROLLER“; and the #TAKEPART stories	With its No Hate Speech initiative, and in cooperation with many partners, Deutsche Telekom is working to bring about an online world in which all users treat each other with respect. In addition to carrying out a media campaign to raise awareness, the initiative provides information and promotes competence, via workshops, with regard to this issue. It also provides training materials for multipliers on its Teachtoday and #DABEL-Geschichten (#TAKEPART stories) platforms.	786.8 thous. €	1 040.4 mil.	4 mil.
#TAKEPART stories	Deutsche Telekom's #DABEL-Geschichten (#TAKEPART stories) initiative is designed to help people learn about the digital world. It is aimed at multipliers who wish – as non-experts – to inform groups of young people or adults about digital phenomena. In the year under review, it focused especially on the topic of online hate speech.	32.5 thous. €	25 thous.	275 thous.
Firefighters' rates	Firefighters' rates (Feuerwehrtarif) is a discount-rate program that Deutsche Telekom offers, on the basis of a framework agreement, for all fire-department personnel nationwide (about 1.3 million). It is available for all the different kinds of fire departments that operate in the country, including professional fire departments, works fire brigades, volunteer fire departments, and youth fire brigades. The discount rates available under the program include discounts on the company's current Business Mobil rates, and a specific rate stipulated in the framework agreement.	1.9 mil. €		20 thous.
Deutschland Sicher im Netz (Making Germany safe on the Net)	<p>The association Deutschland Sicher im Netz e.V. (DsiN) was established in 2006, at the first National IT summit (now: Digital Summit). DsiN is a non-profit alliance that helps consumers and small companies to use digital solutions with confidence and skill. In cooperation with its members and partners, DsiN offers concrete assistance, and interactive learning resources, for people in private settings and in the workplace.</p> <p>In 2022, DsiN began offering training leading to a “digital driver's license” (Digitalführerschein – DiFu) certification. The training, which is suitable for all age groups and social groups, teaches and reinforces online media literacy and security skills. DiFu certification, which is now recognized nationwide, attests to the ability to use online media and services securely and competently, in both private and workplace contexts.</p> <p>Right from the beginning, Deutsche Telekom has supported DsiN in implementing and designing projects, and it has served on the organization's executive board.</p>	50 thous. €		13.5 thous.
Nummer gegen Kummer (youth counseling line) and TelefonSeelsorge (crisis line)	<p>The association Nummer gegen Kummer e.V. is a competent point of contact that children, young people, and parents can turn to in connection with large and small problems, concerns, and fears. All calls to its helplines are free of charge. The relevant call charges are borne by Deutsche Telekom, which has been a cooperating partner of Nummer gegen Kummer e.V. since 1991.</p> <p>The TelefonSeelsorge® crisis line is available to everyone, regardless of age, including working people, housewives and househusbands, apprentices and retired people. It is open to people of all religions, as well as for people with no church affiliation. Each year, working around the clock, and free of charge, it handles about a million calls. Deutsche Telekom assumes all the charges for calls made via the crisis line's two 0800 numbers.</p>	- <sup>b)</sup>		1.7 mil.
Telekom Stiftung	Deutsche Telekom Stiftung is one of the largest educational foundations in Germany. For nearly 20 years now, it has supported projects focusing on topics in STEM (science, technology, engineering, mathematics) fields. It does so because it is convinced that a modern education system must give children and young people the best possible preparation for meeting global challenges such as digital transformation, climate change, electromobility, and biodiversity. In its projects, it initiates and promotes cooperation between different learning sites, with the aim of creating an optimal education ecosystem for young people.	6 mil. €	-	-

<sup>a)</sup> Does not include the management overhead.

<sup>b)</sup> The value is not published at the project level.

<sup>c)</sup> Europe-wide.

## Disaster Recovery

Activity	Description	Community Contribution	Reach	Beneficiaries
Ukraine relief campaign: Telephone and Internet services	In response to Russia's war on Ukraine, which began in February 2022, Deutsche Telekom has resolved to help Ukrainians, including refugees, stay in contact with their families and friends. To that end, it has made some 420 000 SIM cards available for refugees, free of charge, along with Wi-Fi and internet access. In addition, it made calls to Ukraine free of charge from the end of February to the end of June. The SIM cards for refugees were issued by employees of Telekom Deutschland and Congstar.	549.4 mil. €	-	1 mil.

<sup>a)</sup> Does not include the management overhead.

<sup>b)</sup> The value is not published at the project level.

<sup>c)</sup> Europe-wide.

## People with disabilities

Activity	Description	Community Contribution	Reach	Beneficiaries
Special tariff for people with disabilities and for NGOs caring for people with disabilities  (Crnogorski Telekom)	Crnogorski Telekom committed to support all vulnerable groups in Montenegro based on the conviction that no individual should be left behind and excluded from the world of digital opportunities. This motivated us to help people with disabilities and NGOs caring for people with disabilities by providing significant discounts and free Internet.	93 thous. €		3.6 thous.
Inclusion program for people with hearing impairment  (T-Mobile Czech Republic)	Online speech transcription is a service that exerts a hugely positive impact on the quality of life of people who have lost their hearing or are losing it, and who are unable to use sign language. These people have to contend with huge communication barriers. T-Mobile Czech Republic makes all shops accessible to hearing-impaired people. Shop assistants are equipped with a mobile App providing online speech transcription. Moreover, we also made our infoline accessible with speech transcription. Based on our experience, online speech transcription is not only used by hearing-impaired people, but also by elderly people and foreigners who are more confident if communication is simultaneously transcribed as well. Our financial support enables a social enterprise to provide these services and employ visually impaired typists.	18.9 thous. €	100 thous.	3.1 thous.
Deaf-Hotline	Deutsche Telekom has operated its Deaf Hotline for many years now. In sign language via videochat, the hotline provides information and advice, on all Deutsche Telekom products, for persons who are deaf or have hearing disorders. Customers can also use the hotline if they have questions regarding bills or contracts. Calls are taken by three hearing-impaired Deutsche Telekom employees.	261.9 thous. €		13.5 thous.

<sup>a)</sup> Does not include the management overhead.

<sup>b)</sup> The value is not published at the project level.

<sup>c)</sup> Europe-wide.

## Senior citizens

Activity	Description	Community Contribution	Reach	Beneficiaries
Generations Together  (Hrvatski Telekom)	<p>The digital education program “Generations Together” was launched in cooperation with the Volunteer Center Zagreb and it aims to enable senior citizens to acquire useful digital skills.</p> <p>It was developed in response to the pandemic that hit the elderly population the hardest, especially residents of nursing homes who were not able to meet family members during that period.</p> <p>Over the past three years, Hrvatski Telekom has donated tablets and free Internet, and organized training sessions so seniors could learn how to use digital tools, for example setting up WhatsApp video calls.</p> <p>In addition to the basic tools, they also acquired further knowledge about various Apps of interest to them, updating data, and similar issues.</p> <p>More than 1 500 retirees have been covered by the program so far, and members of the Hrvatski Telekom Group Volunteer Club have also participated.</p>	45 thous.€	3.4 mil.	4.9 thous.
Network of Generations  (T-Mobile Polska)	<p>The majority of seniors in Poland do not use the Internet. More than half of those aged between 65 and 74 (54.4 percent) have never used a computer, while as many as 71.2 percent of seniors don't use the Internet and only one in five people aged 60 plus (21.4 percent) use the Internet systematically. On top of this, there are huge problems at facilities such as nursing homes and retirees' homes. T-Mobile Poland did not want to accept this situation and came up with the idea for the Network of Generations initiative. Over the course of two years, T-Mobile Poland has already equipped more than 30 facilities for seniors with laptops and provided them with free tailored video courses, showing retirees how to use the technology in a step-by-step approach. The company also developed a special website, <a href="http://www.siecpokolen.pl">www.siecpokolen.pl</a> where educational materials are posted. The entire campaign is also supported by activities in the media that are read and watched by older people.</p>	27.5 thous. €	260 thous.	2.3 thous.
Telekom-Seniors'-Academy	<p>The aim of the Telekom-Seniors'-Academy for 2022 was to hold workshops in Deutsche Telekom's flagship stores, and at facilities of relevant associations, aimed at supporting seniors in going online successfully and in using digital devices such as tablets.</p> <p>The project staff definitely have a heart for seniors, and they bring empathy and competence to their work! With this format, and applying a concept of its own design, Deutsche Telekom has been carrying out workshops for seniors since March 2022. The events are offered at the company's stores (T-Shops) and in cooperation with senior citizens' associations. From March through December 2022, the Telekom-Seniors'-Academy held over 30 workshops, and all were well-received by the senior citizens' associations and by the seniors themselves. As of early December 2022, more than 30 requests for workshops in the first quarter of 2023 had been received, from a total of over 20 senior citizens' associations. This excellent response is due in large measure to the successful work and newsletter communication carried out by the German National Association of Senior Citizens' Organisations (BAGSO), as well as to relevant publicity provided via the newsletter from Wege aus der Einsamkeit e. V. (Getting in touch with other people).</p>	- <sup>b)</sup>	3.8 thous.	232
Courses for digital skills at senior centers  (T-Mobile Czech Republic)	<p>Expert volunteers from T-Mobile Czech Republic visited senior centers and led courses on digital skills (smartphones, useful Apps, cyber security, etc.) for groups of seniors. The patience and enthusiasm of the volunteers helped seniors to become more independent and confident users of technologies. Similar courses were held at the Magenta Experience Center.</p>	1.1 thous. €		140

<sup>a)</sup> Does not include the management overhead.

<sup>b)</sup> The value is not published at the project level.

<sup>c)</sup> Europe-wide.



## Startups

Activity	Description	Community Contribution	Reach	Beneficiaries
Hello Biznisz (Magyar Telekom)	<p>The goal of the Hello Biznisz (Hello Business) program is to help domestic small businesses navigate the maze of business administration, workforce management, marketing, sales and finance. Magyar Telekom helps businesses to process issues by providing practical news and information in written and video format on the program's website.</p> <p>In the summer of 2021, the Plan D program (D terv) to support the digital development of domestic SMBs (small and medium-sized businesses) was launched on the Hello Business educational platform. In 2020, the epidemic situation demonstrated that digitalization can be an easier way to prosper, indeed often the only way. Entrepreneurs are now well aware of the importance of digital tools and solutions, but not all small businesses are still confident about using them. And other businesses remain averse to deploying them at all. When businesses receive assistance from the Telekom Hello Business D plans, they have access to easy-to-use, copyable, practical guides. Businesses are also given ready-made digital case studies with a proven track record. These materials are available to anyone free of charge on the program's website.</p>	217.6 thous. €	23 mil.	681.1 thous.
CODIGOS (T-Systems Mexico)	<p>CODIGOS (Digital Constellations with a Social Objective) came into being as an initiative of T-Systems Mexico, in collaboration with other telecoms-sector companies, to promote Social Impact Ventures. These are based on information technologies and aim to achieve one of the United Nations Sustainable Development Goals.</p> <p>It is an initiative of T-Systems Mexico driven by support from important information and digital technology companies. The project seeks to identify, strengthen and promote ventures with social objectives and a technological base to create solutions for a new, more digital, accessible and inclusive reality. The objective is to generate digital solutions that contribute to building a better society and help reduce inequality gaps without leaving anyone behind. Digital-based ventures promoted by CODIGOS are helping to address some of the most urgent challenges for society.</p> <p>CODIGOS seeks to identify the energy, talent, and creativity of entrepreneurs and their startups in Mexico in order to promote digital-based social impact projects in the areas of health, education, employment, sustainability, renewable energy, industry, innovation, infrastructure, reduction of inequalities, and finance for the benefit of the most vulnerable members of the population.</p>	- <sup>b)</sup>	2.3 thous.	14.3 thous.
TechBoost	<p>„TechBoost“ is Deutsche Telekom's startup program. For startups, it offers scouting and people-matching services, (digital) innovation workshops, and a large platform for networking. In addition, Deutsche Telekom provides assistance in the areas of sales and marketing, offers access to its own customer network and provides support in the form of up to 100 000 euros of credit for use of the Open Telekom Cloud.</p>	2 mil. <sup>a)</sup>	548.8 thous.	1 thous.

<sup>a)</sup> Does not include the management overhead.

<sup>b)</sup> The value is not published at the project level.

<sup>c)</sup> Europe-wide.

Women and girls

Activity	Description	Community Contribution	Reach	Beneficiaries
Equal eSports	<p>The Equal eSports initiative is a joint project of Deutsche Telekom, SK Gaming, and the esports player foundation. It was launched in 2021. The initiative works to promote equity and equal opportunity for female and non-binary players in esports and gaming. The main aim of the Equal eSports initiative is to create positive role models – and thereby bring about positive changes in society as a whole. Its mission statement is “We drive equality by creating role models in esports that enable a movement in society.”</p> <p>In 2022, the initiative provided holistic support (coaching, sports program, psychological support, nutrition counseling, etc.) for some 30 female and non-binary talents. In addition, it was involved in the following: the Equal eSports Festival, Vol. 2; eight boot camps held by our partners; workshops at Telekom Shops; a mentoring program with female role models for esports talents; and a selection camp at Deutsche Telekom Headquarters in which 20 new talents were selected from a total of 35 candidates.</p>	- <sup>b)</sup>	50,5 Mio.	75 thous.
ENTER 2022 (Slovak Telekom)	Slovak Telekom enriches the content of IT lessons and highlights the new possibilities offered by IT for studies and careers. It also holds workshops and regular clubs for girls in primary and secondary schools focused on working with micro:bit. The aim is to help girls discover the world of IT.	671 thous. €	3.2 thous.	21.3 thous.
Girls' Day	„Girls' Day“ is a nationwide project for vocational and educational orientation, aimed especially at girls at secondary schools. Each year, like other participating companies, institutions, and organizations, Deutsche Telekom conducts workshops and other events aimed at introducing girls between the ages of 11 and 16 to scientific, technical, and commercial professions.	11.3 thous. €	1.7 mil.	433
FemTec	„Femtec“ is an initiative that supports female IT talents, with various funding measures. To participants, it offers special training courses, and access to the initiative's large contact network. Deutsche Telekom is a cooperating partner, and it is working to promote the „Femtec“ vision.	96.6 thous. €		100
FemTec.Alumnae	In 2021, in a pilot project with „FemTec.Alumnae“, Deutsche Telekom put together a six-week training program in the areas of artificial intelligence, leadership, and agile work. Female IT experts and managers with two to six years of professional experience took part in its virtual sessions for experts.	11.2 thous. €		60
Global Digital Women	Deutsche Telekom supports the „Global Digital Women“ initiative, an international network of female founders and leaders in the digital sector. In 2022, the initiative held an afterwork event on the subject of „Female Transformation“. Some 40 women, from a range of different industries, accepted Deutsche Telekom's invitation and took part in the event.	- <sup>b)</sup>		40

<sup>a)</sup> Does not include the management overhead.

<sup>b)</sup> The value is not published at the project level.

<sup>c)</sup> Europe-wide.

# About this report

Our stakeholders expect us to report transparently and solidly about our operations. We want to meet these expectations and, at the same time, also inspire the general public to take an interest in our sustainability focuses. With our 2022 Corporate Responsibility Report, we have also sought to make the best of available options in the areas of content, multimedia, and technology – and produce something that CR experts and non-experts will find fun and fascinating to read and explore.

Deutsche Telekom has been committed to CR reporting for more than 25 years. We now publish both an annual CR report and a non-financial statement in our annual report every year to fulfill the requirements set out in §§ 315c in conjunction with 289c to 289e of the German Commercial Code [Handelsgesetzbuch – HGB] and the EU taxonomy for sustainable activities.

To identify the key reporting topics for our company and stakeholders, we carry out a comprehensive materiality process each year. Our reporting is supplemented by updates in the Corporate Responsibility section of our website.

## Structure of the online report

The 2022 CR Report is a Communication on Progress that looks at the key developments during the reporting period and provides additional information about the latest developments. We use different formats to reach the various target groups:

- The homepage lists the most important messages from our 2022 Sustainability Day under the motto of “We walk the talk”. The entire Board of Management took this opportunity to present the updated sustainability strategy as well as the targets and measures which will guide us on our journey to becoming one of the most sustainable telecommunications companies. Readers can access comprehensive information about our sustainability topics by following the links to the pages that follow. Readers who are only interested in Deutsche Telekom’s progress during the reporting period can follow a link to access our “Management & Facts” Communication on Progress directly.
- A news ticker provides continual updates on the latest events and activities, which can be reached via the homepage. Individual news stories specific to each topic can be found on the in-depth themed pages or in the national company profiles.
- At “Experiencing sustainability”, we look at key sustainability issues, from various perspectives, and in multimedia presentations. With plain, clear language, Experiencing sustainability is aimed at a general audience. The in-depth themed pages are grouped in keeping with the four societal trends, “Green future,” “Digital life,” “New way of working,” and “Green stewardship.” We take a look at a new topic on a regular basis. Some of the themed pages are also available in simplified language.
- In our “Management & Facts” Communication on Progress, we provide information, in the four main categories (“pillars”) Strategy, Economy, Environment, and Social, about Deutsche Telekom’s sustainability-oriented management structures and about its progress in the year under review. In some topic areas, we invite interested readers to engage in direct discussion with Deutsche Telekom experts. With the report, we meet requirements pertaining to conventional accountability reporting.
- In our national companies section, the majority of our national companies whose CR activities are described in this report also present their own CR profile.
- The Management & Facts progress report also includes a section on key figures. In addition, we offer an interactive KPI tool that lets users pick and choose key figures to create a customized compilation.
- The report also includes search, “read-aloud” (text-to-speech) and “share” functionality, for added user convenience. What’s more, an “info cart” lets readers select different content and create a customized PDF file.
- The report is supplemented by the new CR facts format, which individual Deutsche Telekom departments use to report directly on their sustainability-related projects and measures. Readers can access the CR facts section at any time by clicking on the link in the report’s footer.
- The report’s footer includes links to a download center, dialog functions, a glossary, and other relevant websites.

## Scope, reporting period, and target groups

As a Group report, Deutsche Telekom’s “Management & Facts” Communication on Progress and the section on key figures include many national companies. It covers – like the annual report – the period from January 1, 2022 to December 31, 2022. CR reporting is carried out each year, with the 2022 Communication on Pro-

gress following up on that of 2021. Any deviations are marked accordingly. The publication date is March 28, 2023. The Communication on Progress was compiled in line with the 2021 GRI Standards.

The CR Report pertains to the Group with its 63 domestic and 290 international, fully consolidated subsidiaries; any deviations are marked accordingly.

Our supplementary themed pages under “Experiencing sustainability” are oriented to current social trends, and they are updated and/or supplemented throughout the year as necessary.

The current report is specifically addressed to Deutsche Telekom stakeholders. These include analysts and investors; CR ranking and rating agencies; NGOs; customers, employees, and business partners; and representatives from the worlds of business, science, research, education, and politics.

### Reporting against standards

#### Global Reporting Initiative (GRI)

- GRI 102–48 (General Disclosures)
- GRI 102–49 (General Disclosures)
- GRI 102–50 (General Disclosures)
- GRI 102–51 (General Disclosures)
- GRI 102–52 (General Disclosures)

### Implementation of high international reporting standards



The “Management & Facts” Communication on Progress and section on key figures comply with the internationally recognized guidelines (GRI Standards) of the Global Reporting Initiative (GRI). We also highlight our contribution to achieving the SDGs in many places. This year we also show, with the help of a special index img, which content in the 2022 report contributes to meeting the criteria established by the Sustainability Accounting Standards Board (SASB). The 2022 CR Report also serves as a Communication on Progress (CoP) from Deutsche Telekom as part of the United Nations Global Compact. Deutsche Telekom also issues an annual, detailed Declaration of Conformity with the German Sustainability Code.


### Independent assurance report

#### Limited Assurance Report of the Independent Practitioner Regarding Sustainability Information<sup>1</sup>

To Deutsche Telekom AG, Bonn

#### Engagement

We have performed a limited assurance engagement on the disclosures marked with the symbol  in the Corporate Responsibility Report of Deutsche Telekom AG, Bonn/Germany (“the Company”), for the period from 1 January to 31 December 2022 (“sustainability report”). Our engagement solely covers the disclosures marked with the symbol .

Our engagement does not cover the paragraphs not marked with the symbol , or other disclosures in the sustainability report of the Company.

### Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the sustainability report in accordance with the principles stated in the Sustainability Reporting Standards of the Global Reporting Initiative (hereafter referred to as “GRI Criteria”) and for the selection of the disclosures to be assessed.

These responsibilities of the Company’s executive directors include the selection and application of appropriate methods for sustainability reporting and the use of assumptions and estimates for individual sustainability disclosures which are reasonable under the given circumstances. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of a sustainability report that is free from material misstatement, whether due to fraud (fraudulent non-financial reporting) or error.


The preciseness and completeness of environmental data of the sustainability reporting is subject to inherent restrictions resulting from the way how the data was collected and calculated and from assumptions made.


### Independence and Quality Control of the Audit Firm


We have fulfilled the requirements of German professional law on independence and further professional rules of conduct.

Our audit firm applies the national statutory rules and professional announcements – particularly of the “Professional Charter for German Public Auditors and German Sworn Auditors” (BS WP/vBP) and of the IDW Quality Assurance Standard: Quality Assurance Requirements in Audit Practices (IDW QS 1) promulgated by the Institut der Wirtschaftsprüfer (IDW) and does therefore maintain a comprehensive quality assurance system comprising documented regulations and measures in respect of compliance with professional rules of conduct, professional standards, as well as relevant statutory and other legal requirements.

### Responsibilities of the Independent Practitioner

Our responsibility is to express a conclusion on the disclosures marked with the symbol  in the sustainability report based on our work performed within our limited assurance engagement.

Our engagement does not cover the paragraphs not marked with the symbol , or other disclosures in the sustainability report of the Company.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This standard requires that we plan and perform the assurance engagement so that we can conclude with limited assurance whether matters have come to our attention that cause us to believe that the disclosures marked with the symbol  in the Company’s sustainability report for the period from 1 January to 31 December 2022 have not been prepared, in all material respects, in accordance with the relevant GRI Criteria. However, we do not issue a separate conclusion on each marked disclosure.

The procedures performed in a limited assurance engagement are less in extent than for a reasonable assurance engagement; consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. The choice of assurance work is subject to the practitioner's professional judgement.

Within the scope of our limited assurance engagement, which we mostly performed between October 2022 and March 2023, we performed, among others, the following procedures and other work:

- Obtaining an understanding of the structure of the sustainability organisation of the Group, and of the stakeholders' engagement,
- Inquiries of relevant personnel involved in the preparation process of the sustainability report about the preparation process, about the internal control relating to this process and about disclosures in the sustainability report,
- Identification of potential risks of material misstatement in the sustainability report,
- Analytical assessment of selected disclosures in the sustainability report,
- Examination of processes to collect, control, analyse and aggregate selected data at different sites of the Company on a sample basis,
- Comparison of selected disclosures with corresponding data in the consolidated financial statements and the combined management report,
- Assessment of the overall presentation of the selected disclosures in the sustainability report.

#### Practitioner's Conclusion

Based on the work performed and the evidence obtained, nothing has come to our attention that causes us to believe that the disclosures marked with the symbol Inhalt durch PWC geprüft in the Company's sustainability report for the period from 1 January to 31 December 2022 have not been prepared, in all material respects, in accordance with the relevant GRI Criteria.

#### Restriction of Use

We issue this report as stipulated in the engagement letter agreed with the Company (including the "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (German Public Auditors and Public Audit Firms)" as of 1 January 2017 promulgated by the Institut der Wirtschaftsprüfer (IDW)). We draw attention to the fact that the assurance engagement was performed for the purposes of the Company and the report is solely designed for informing the Company about the findings of the assurance engagement. Therefore, it may not be suitable for another than the aforementioned purpose. Hence, this report

should not be used by third parties as a basis for any (asset) decision.

We are liable solely to the Company. However, we do not assume any responsibility to third parties. Our conclusion was not modified in this respect.

Düsseldorf/Germany, 30 March 2023

#### Deloitte GmbH

Wirtschaftsprüfungsgesellschaft

Dr Tim Hoffmann  
Wirtschaftsprüfer  
(German Public Auditor)

Dr Matthias Schmidt

<sup>1</sup>Translation: German version prevails

#### Reporting against standards

##### Global Reporting Initiative (GRI)

- GRI 102-56 (General Disclosures)

#### Independent assurance report Non-financial Reporting Independent practitioner's report on a limited assurance engagement on Non-financial reporting

To Deutsche Telekom AG, Bonn

#### Engagement

We have performed an assurance engagement on the consolidated non-financial statement of Deutsche Telekom AG, Bonn/Germany, (hereafter referred to as "the Company"), which has been combined with the non-financial statement of the Company, and which is contained in the combined management report of the parent and the group, for the financial year from January 1 to December 31, 2022 (hereafter referred to as "combined non-financial statement"). As requested, we have performed a reasonable assurance engagement on the indicators "energy consumption" and "CO<sub>2</sub> emissions (Scope 1 and 2)" presented in the combined non-financial statement (hereafter referred to as the "indicators") and a limited assurance engagement on all other disclosures contained in the combined non-financial statement.

Our engagement does not cover the external sources of documentation and expert opinions stated in the combined non-financial statement nor the references to the United Nations Sustainable Development Goals (SDG) marked with the SDG symbol.

#### Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the combined non-financial statement in accordance with Sections 289c to 289e, 315c in conjunction with 289c to 289e German Commercial Code (HGB) and Article 8 of Regulation (EU) 2020/852 of the European Parliament and the Council of June 18, 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (hereafter referred to as "EU Taxonomy Regulation") and the delegated acts adopted thereon, as well as with the inter-

pretation of the wording and terminology contained in the EU Taxonomy Regulation and the delegated acts adopted thereon by the executive directors, as is presented in section “Compliance with the EU taxonomy transparency requirements” of the combined non-financial statement (hereafter referred to as “interpretation”).

These responsibilities of the executive directors of the Company include the selection and application of appropriate methods regarding the combined non-financial statement and the use of assumptions and estimates for individual non-financial presentations and disclosures of the Group which are reasonable under the given circumstances. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of a combined non-financial statement that is free from material misstatement, whether due to fraud (i.e. fraudulent combined non-financial statement) or error.

Some of the wording and terminology contained in the EU Taxonomy Regulation and the delegated acts adopted thereon are still subject to considerable interpretation uncertainty and have not yet been officially clarified. Therefore, the executive directors have laid down their own interpretation of the EU Taxonomy Regulation and of the delegated acts adopted thereon in section “Compliance with the EU taxonomy transparency requirements” of the combined non-financial statement. They are responsible for the reasonableness of this interpretation. As there is the immanent risk that indefinite legal concepts may allow for various interpretations, the legal conformity of the interpretation is prone to uncertainty.

The preciseness and completeness of environmental data of the combined non-financial statement, which include the indicators, is subject to inherent restrictions resulting from the way in which the data was collected and calculated and from the assumptions made.

#### **Independence and Quality Assurance of the Audit Firm**

We have fulfilled the requirements of German professional law on independence and further professional rules of conduct.

Our audit firm applies the national statutory rules and professional pronouncement – especially the Professional Charter for German Public Auditors and Sworn Auditors (BS WP/vBP) as well as the Quality Assurance Standard: Quality Assurance Requirements in Audit Practices (IDW QS 1) promulgated by the Institut der Wirtschaftsprüfer (IDW) – and therefore maintains an extensive quality assurance system comprising documented rules and measures in respect of compliance with professional rules of conduct, professional standards and relevant statutory and other legal requirements.

#### **Responsibilities of the Independent Practitioner**

Our responsibility in each case is to express a conclusion on the indicators “energy consumption” and “CO<sub>2</sub> emissions (Scope 1 and 2)” presented in the combined non-financial statement based on our work performed within our reasonable assurance engagement as well as to express a conclusion on all other disclosures contained in the combined non-financial statement based on our work

performed within our limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements 3000 (Revised): “Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000 (Revised))”, issued by the IAASB. This standard requires that we plan and perform the assurance engagement so that we

- obtain reasonable assurance to conclude whether the indicators presented in the combined non-financial statement of the Company for the period from January 1 to December 31, 2022 have been stated by the executive directors, in all material respects, in accordance with Sections 315c in conjunction with 289c to 289e HGB, and
- obtain limited assurance to conclude whether matters have come to our attention to cause us to believe that all other disclosures contained in the combined non-financial statement of the Company, with the exception of the external sources of documentation and expert opinions stated therein and the references to the United Nations Sustainable Development Goals (SDG) marked with the SDG symbol, have not been prepared, in all material respects, in accordance with Sections 289c to 289e, 315c in conjunction with 289c to 289e HGB, and the EU Taxonomy Regulation and the delegated acts adopted thereon, as well as with the interpretation by the executive directors presented in section “Compliance with the EU taxonomy transparency requirements” of the combined non-financial statement.

The procedures performed in that part of our engagement to obtain limited assurance are less in extent than for a reasonable assurance engagement; consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. The choice of assurance work is subject to the practitioner’s professional judgement.

Within the scope of our assurance engagement, which we mostly performed between October 2022 and February 2023, we performed, among others, the following procedures and other work:

- Gaining an understanding of the structure of the sustainability organisation of the Group, and of the stakeholders’ engagement,
- Inquiries of relevant personnel involved in the preparation process about the preparation process, about the internal controls relating to this process and about disclosures in the combined non-financial statement,
- Identification of potential risks of material misstatement in the combined non-financial statement,
- Analytical evaluation of selected disclosures in the combined non-financial statement,



- Comparison of selected disclosures with corresponding data in the consolidated and annual financial statements and the combined management report,
- Evaluation of the presentation of the combined non-financial statement,
- Evaluation of the process to identify taxonomy-eligible and taxonomy-aligned economic activities and the corresponding disclosures in the combined non-financial statement.

In addition to the above, we performed the following procedures and other work within the scope of that part of our assurance engagement performed to obtain reasonable assurance regarding the indicators presented in the combined non-financial statement of the Company:

- Evaluation of the design and implementation of the systems and processes for determining, processing and monitoring the disclosures relating to the indicators,
- Risk evaluation,
- Tests of details on a sample basis.

The determination of the disclosures in accordance with Article 8 of the EU Taxonomy Regulation requires the executive directors to interpret indefinite legal concepts. As there is the immanent risk that indefinite legal concepts may allow for various interpretations, the legal conformity of the interpretation, and hence our related examination, is prone to uncertainty. This uncertainty, in particular, also affects the quantification of performance indicators in measuring and/or evaluating these performance indicators.

#### Practitioner's Conclusion

We conclude that the indicators "energy consumption" and "CO<sub>2</sub> emissions (Scope 1 and 2)" presented in the combined non-financial statement of the Company for the period from January 1 to December 31, 2022 have been stated by the executive directors, in all material respects, in accordance with Sections 315c in conjunction with 289c to 289e HGB.

Based on the work performed and the evidence obtained, nothing has come to our attention that causes us to believe that all other disclosures in the combined non-financial statement of the Company for the financial year from January 1 to December 31, 2022 have not been prepared, in all material respects, in accordance with the Sections 289c to 289e, 315c in conjunction with 289c to 289e HGB as well as the EU Taxonomy Regulation and the delegated acts adopted thereon, as well as with the interpretation by the executive directors presented in section "Compliance with the EU taxonomy transparency requirements" of the combined non-financial statement.

We do not express a conclusion on the external sources of documentation and expert opinions stated in the combined non-financial statement nor on the references to the United Nations Sustainable Development Goals (SDG) marked with the SDG symbol.

#### Restriction of Use

We issue this report as stipulated in the engagement letter agreed with the Company (including the "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (German Public Auditors and Public Audit Firms)" as of January 1, 2017 promulgated by the Institut der Wirtschaftsprüfer (IDW)). We draw attention to the fact that the assurance engagement was performed for the purposes of the Company and the report is solely designed for informing the Company about the findings of the assurance engagement. Therefore, it may not be suitable for another than the aforementioned purpose. Hence, this report should not be used by third parties as a basis for any (asset) decision.

We are responsible solely to the Company. However, we do not accept or assume any responsibility to third parties. Our conclusion was not modified in this respect.

Düsseldorf, February 21, 2023

#### Deloitte GmbH

Wirtschaftsprüfungsgesellschaft

Signed:  
Dr. Tim Hoffmann  
Wirtschaftsprüfer  
(German Public Auditor)

Signed:  
Dr. Matthias Schmidt

# Imprint

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The 2022 CR Report is available in German and English.  
The English version of the CR Report is a translation of the German version of the CR Report. The German version of this CR Report is legally binding.

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