

SDG7 Energy Compact of Adani Green Energy Limited

A next Decade Action Agenda to advance SDG7 on sustainable energy for all, in line with the goals of the Paris Agreement on Climate Change

CTION 1: AMBITION	
1. Ambitions to achieve SDG7 by 2030. [Please set I I ember States targets could be based on their NDC	lect all that apply, and make sure to state the baseline of each target] Cs, energy policies, national five-year plans etc. targets for companies/organizations could be based on their corporate strategy)
7.1. By 2030, ensure universal access to affordable, reliable, and modern energy	Target(s): 45 GW renewable energy capacity by 2030, with average tariff below Average Power Purchase Cost (APPC) at the national statement of the second statement of the seco
services.	Time frame: Five years
	Baseline: By 31 March 2021, Adani Green Energy Limited had ~ 3.5 GW installed capacity with average PPA rate of ₹ 3.26/ kW 2020-21, pg. 43) compared to APPC ₹ 3.85 / kWh (<u>https://cercind.gov.in/2021/orders/01-SM-2021.pdf</u>)
	Context for the ambition(s):
	India is expected to rise from the seventh largest economy in the world to the third largest by 2030. This growth is likely to be can number of other products including steel, cement, fertilizers and automobiles which are presently consumed well below well be as the increase in incomes translates into enhanced product offtake, there could be a corresponding increase in the demand for ow energy in the total mix due to cost of production of renewable energy coming down by the time and technological developments
	At Adani Green Energy Limited (AGEL), we are driven by a commitment to democratise the use of renewable energy across is capacity building, cost moderation, increased awareness and local employment generation. We are servicing the growing need electricity consumption is a fraction of the corresponding consumption in developed economies, representing decades of prosper are addressing the opportunity to transform the Quality of Life of the people by making renewable energy available and leading can have a cascading impact on health, incomes, well-being and choices of the community.
7.2. By 2030, increase substantially the	We believe that greater domestic renewable energy generation and consumption could strengthen the national economy back domestic manufacture, reduce energy costs and the corresponding delivered costs of all services and products, initiating a virtuo Target(s): 45 GW renewable energy capacity by 2030
share of renewable energy in the global energy mix.	Time frame: Five years
	Baseline: By 31 March 2021, Adani Green Energy Limited had operating capacity of ~ 3 GW from solar and 0.5 GW from wind
	Context for the ambition(s): As per the IEA Energy Outlook 2021, India has seen extraordinary successes in its recent energy development, but many cha pandemic has been a major disruption. In recent years, India has brought electricity connections to hundreds of millions of its c highly-efficient LED lighting by most households; and prompted a massive expansion in renewable sources of energy, led by solar p and their quality of life have been tangible.
	However, the Covid-19 crisis has complicated efforts to resolve other pressing problems. These include a lack of reliable electric continued reliance on solid biomass, mainly firewood, as a cooking fuel for some 660 million people; financially ailing electric quality that puts some Indian cities in the list of most polluted cities in the world. (https://www.iea.org/reports/india-energy-out
	At AGEL, we believe that green energy projects will not just create economic value through lower energy costs for consumers; th as well. The Ministry of New and Renewable Energy, Government of India has set an ambitious target to commission 225 GW ren

onal level

Vh (Reference AGEL Annual Report

atalyzed by a growing appetite for elow the prevailing global average. verall energy and mainly renewable 5.

income and social classes through s of a nation where the per capita ective growth. We believe that we to the cleaner environments that

bone by helping grow the case for ous cycle.

allenges remain, and the Covid-19 itizens; promoted the adoption of power. The gains for Indian citizens

city supply for many consumers; a ity distribution companies, and air tlook-2021).

ney will catalyse rural employment newable energy capacities by 2022

	(114 GW solar and 67 GW wind) and 450 GW by 2030. In line with this ambitious national vision, AGEL is already the largest solar way to become the largest renewable company in India and amongst the most formidable renewable energy players in the world
□ 7.3. By 2030, double the global rate of improvement in energy efficiency.	Target(s): Time frame: Baseline: Context for the ambition(s):
7.a. By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.	Target(s): Time frame: Baseline: Context for the ambition(s):
7.b. By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programs of support.	Target(s): Time frame: Baseline: Context for the ambition(s):

1.2. Other ambitions in support of SDG7 by 2030 and net-zero emissions by 2050. [Please describe below e.g., coal phase out or reforming fossil fuel subsidies etc.]

Target(s): Time frame: Baseline:

Context for the ambition(s):

SECTION 2: ACTIONS TO ACHIEVE THE AMBITION

2.1. Please add at least one key action for each of the elaborated ambition(s) from section 1. [Please add rows as needed].

Description of action (please specify for which ambition from Section 1)	Start
45 GW renewable energy capacity by 2030, with average tariff below Average Power Purchase Cost (APPC) at the national level:	
	01/04
development projects, ~84% of the capacity had been tied up in PPAs with sovereign counterparties (like NTPC and SECI) and the rest with state distribution companies by the close of FY 20-21.	
As the India's largest renewable company with a pan-country presence, AGEL sustained its capacity-accretive momentum into FY 20-21. The Company added close to a gigawatt (525 MW by commissioning and 350 MW by inorganic acquisition) in capacity during the challenging pandemic when project commissioning schedules were extensively affected for all players. Besides, the Company continued to set benchmarks in asset monitoring, maintenance, and cost economies. The result is that the Company did not just emerge larger during the year under review, but also more competitive.	
The Company's average negotiated tariff of ₹ 3.26/ kWh or per unit at the close of FY 20-21 (Reference AGEL Annual Report 2020-21, pg. 43). The company will continue to invest in renewable energy capacity addition using state of the art technology and keep the tariff competitive to increase the energy access.	
Description of action (please specify for which ambition from Section 1) 45 GW renewable energy capacity by 2020:	Start
43 GW Tenewable energy capacity by 2030.	01/04

ar developer in the world and on its ld.	
rt and end date	
04/2021 to 31/03/2025	
rt and end date	-
/04/2021 to 31/03/2025	

At AGEL, a critical determinant in building the Company for a '25 GW by 2025' is the need to build people first. This aggressive agenda means that whatever has been achieved by the Company until a particular year will need to be replicated within the following financial year, the sequence continuing in a perpetual manner until the overall target has been achieved. At AGEL, this aggressive growth agenda puts a premium on people recruitment, training and retention - a sustainable multi-year platform of talent management.

In line with the Company's commitment to aggressive greenfield capacity creation, it strengthened its responsiveness to inorganic opportunities. In addition to 525 MW of greenfield capacity that was added during the year under review, the Company added 350 MW of brownfield capacity. The Company is now at an advanced stage of implementing ~1,700 MW of a wind-solar hybrid portfolio in Rajasthan in addition to 580 MW of wind projects under various implementation stages. Besides, about 9 GW of renewable energy projects are under various planning stages and expected to be commissioned in three to four years. The result is that AGEL's consolidated portfolio and pipeline were a sizable ~19 MW as on 31st March, 2021 with considerable optimism of achieving its stated aspiration of 25 GW in renewable energy capacity by 2025. *Description of action (please specify for which ambition from Section 1)*

Description of action (please specify for which ambition from Section 1)

SECTION 3: OUTCOMES

3.1. Please add at least one measurable and time-based outcome for **<u>each</u>** of the actions from section 2. [Please add rows as needed].

Outcome	Date
1) 45 GW installed renewable energy capacity (solar, wind and hybrid) by 2030	31/12/2030
2) Average tariff below the APPC	31/12/2025

SECTION 4: REQUIRED RESOURCES AND SUPPORT

4.1. Please specify required finance and investments for <u>each</u> of the actions in section 2.

With a baseline installed capacity ~ 3.5 GW in Mar-2021 and 45 GW target capacity in 2030, AGEL will need to have additional 41.5 GW or 41,500 MW. At an average ₹ 4 Cr per MW new capacity will require a capex of ₹ 166,000 Crore or US \$ 22.13 billion (@₹ 75 per US \$).

4.2. [For countries only] In case support is required for the actions in section 2, please select from below and describe the required support and specify for which action. [Examples of support for Member States could include: Access to low-cost affordable debt through strategic de-risking instruments, capacity building in data collection; developmen energy transition pathways; technical assistance, etc.]

□Financing	Description
□ In-Kind contribution	Description
□ Technical Support	Description
□ Other/Please specify	Description

SECTION 5: IMPACT

5.1. Countries planned for implementation including number of people potentially impacted.

AGEL plans to implement these initiatives in India only.

Start and end date	
Start and end date	
r MW capital cost (as in 2021), this	

At estimated 25,000 MW and 24% average PLF, AGEL is likely to generate 52.56 TWh in 2026. This electricity at the India's 2018-19 national average per capita consumption of 1,2 of 44.5 million people. The basis of per capita electricity consumption is taken from CEA study quoted in this PIB press release: <u>https://pib.gov.in/Pressreleaseshare.aspx?PRID=15</u>

5.2. Alignment with the 2030 Agenda for Sustainable Development – Please describe how <u>each</u> of the actions from section 2 impact advancing the SDGs by 2030. [up to 500 words, please upload supporting strategy documents as needed]

The size and growth of a country's population significantly affects the demand for energy. With 1.368 billion citizens, India is ranked second, of the most populous countries as of January 2019 [31]. The yearly growth rate is 1.18% and represents almost 17.74% of the world's population. The country is expected to have more than 1.383 billion, 1.512 billion, 1.605 billion, 1.658 billion people by the end of 2020, 2030, 2040, and 2050, respectively. Each year, India adds a higher number of people to the world than any other nation and the specific population of some of the states in India is equal to the population of many countries. (Reference: https://energsustainsoc.biomedcentral.com/articles/10.1186/s13705-019-0232-1)

The growth of India's energy consumption will be the fastest among all significant economies by 2040, with coal meeting most of this demand followed by renewable energy. Renewables became the second most significant source of domestic power production, overtaking gas and then oil, by 2020. The demand for renewables in India will have a tremendous growth of 256 Mtoe in 2040 from 17 Mtoe in 2016, with an annual increase of 12%.

Even though India has achieved a fast and remarkable economic growth, energy is still scarce. Strong economic growth in India is escalating the demand for energy, and more energy sources are required to cover this demand. At the same time, due to the increasing population and environmental deterioration, the country faces the challenge of sustainable development. The gap between demand and supply of power is expected to rise in the future.

Addressing India's commitment to deep decarbonization of the energy sector, AGEL operates responsibly, guaranteeing reliability, and permanence to build a fully sustainable energy system based on renewables. AGEL is highly proactive in identifying and responding to the challenges and diverse value pools emerging as a result of the rapidly changing energy landscape. To harness value pools and cope with challenges, AGEL is practicing an operating model that is characterized by excellence, agility, and resilience.

At estimated 45,000 MW and 24% average PLF, AGEL is likely to generate 94.60 TWh in 2030. This electricity at the India's 2018-19 national average per capita consumption of 1,181 kWh can meet demand of 88.11 million people. The basis of per capita electricity consumption is taken from CEA study quoted in this PIB press release: <u>https://pib.gov.in/Pressreleaseshare.aspx?PRID=1592833</u>

5.3. Alignment with Paris Agreement and net-zero by 2050 - Please describe how each of the actions from section 2 align with the Paris Agreement and national NDCs (if applicable) and support the net-zero emissions by 2050. [up to 500 words, please upload supporting strategy documents as needed]

As per the IEA's Net Zero by 2050, Net Zero requires steps such as halting sales of new internal combustion engine passenger cars by 2035, and phasing out all unabated coal and oil power plants by 2040. Electricity will play a key role across all sectors, from transport and buildings to industry. Electricity generation will need to reach net-zero emissions globally in 2040 and be well on its way to supplying almost half of total energy consumption. The global energy sector in 2050 should be based largely on renewables, with solar the single largest source of supply. Achieving this cleaner, healthier future will rely on a singular, unwavering focus from all governments, working closely with businesses, investors and citizens. It will also require greater international cooperation among countries, notably to ensure that developing economies have the financing and technologies they need to reach net zero in time. (Reference: https://www.iea.org/reports/net-zero-by-2050)

As electricity generation becomes progressively cleaner, electrification of areas previously dominated by fossil fuels emerges as a crucial economy-wide tool for reducing emissions. The path to net-zero emissions is narrow: staying on it requires immediate and massive deployment of all available clean and efficient energy technologies. In the net-zero emissions pathway presented in IEA report, the world economy in 2030 is some 40% larger than today but uses 7% less energy. A major worldwide push to increase energy efficiency is an essential part of these efforts, resulting in the annual rate of energy intensity improvements averaging 4% to 2030 – about three-times the average rate achieved over the last two decades. Emissions reductions from the energy sector are not limited to CO2: in our pathway, methane emissions from fossil fuel supply fall by 75% over the next ten years as a result of a global, concerted effort to deploy all available abatement measures and technologies.

At estimated 45,000 MW and 24% average PLF, AGEL is likely to generate 94.60 TWh in 2031. This will avoid ~ 80.11 million tCO₂ per year from 2031 from the India grid (at present 0.93 tCO2/MWh Combined Margin; weighted Average - 75% OM and 25% BM, Grid Emission Factor from CEA Baseline Carbon Dioxide Emission Database, Version 16.0, 2021 <u>https://cea.nic.in/cdm-co2-baseline-database/?lang=en</u>)

SECTION 6: MONITORING AND REPORTING

6.1. Please describe how you intend to track the progress of the proposed outcomes in section 3. Please also describe if you intend to use other existing reporting frameworks to track progress on the proposed outcomes.

AGEL will publish progress on the objectives and targets as part of its annual sustainability reports and its website. <u>https://www.adanigreenenergy.com/sustainability</u>

The recent sustainability report 2020-21 is available based on GRI and other ESG frameworks at its website: www.adanigreenenergy.com/-/media/Project/GreenEnergy/Sustainability/latest-report.pdf

181 kWh can meet demand		
<u>592833</u>		

SECTION 7: GUIDING PRINCIPLES CHECK LIST

Please use the checklist below to validate that the proposed Energy Compact is aligned with the guiding principles.

- 1. Stepping up ambition and accelerating action Increase contribution of and accelerate the implementation of the SDG7 targets in support of the 2030 Agenda for Sustainable Development for Paris Agreement 1. 1. Does the Energy Compact strengthen and/or add a target, commitment, policy, action related to SDG7 and its linkages to the other SDGs that results in a higher cumulative impact compared to existing frameworks? ⊠Yes □No
 - 1.2. Does the Energy Compact increase the geographical and/or sectoral coverage of SDG7 related efforts? \square Yes \square No
 - 1.3. Does the Energy Compact consider inclusion of key priority issues towards achieving SDG7 by 2030 and the net-zero emission goal of the Paris Agreement by 2050 as defied by latest global analysis and data including the outcome of the Technical Working Groups? \boxtimes Yes \square No

II. Alignment with the 2030 agenda on Sustainable Development Goals – Ensure coherence and alignment with SDG implementation plans and strategies by 2030 as well as national development plans and priorities.

II.1. Has the Energy Compact considered enabling actions of SDG7 to reach the other sustainable development goals by 2030? \boxtimes Yes \square No

II.2. Does the Energy Compact align with national, sectoral, and/or sub-national sustainable development strategies/plans, including SDG implementation plans/roadmaps? \square Yes \square No

II.3. Has the Energy Compact considered a timeframe in line with the Decade of Action? \square Yes \square No

III. Alignment with Paris Agreement and net-zero by 2050 - Ensure coherence and alignment with the Nationally Determined Contributions, long term net zero emission strategies.

III.1. Has the Energy Compact considered a timeframe in line with the net-zero goal of the Paris Agreement by 2050? \boxtimes Yes \square No

III.2. Has the Energy Compact considered energy-related targets and information in the updated/enhanced NDCs? \boxtimes Yes \square No

III.3. Has the Energy Compact considered alignment with reaching the net-zero emissions goal set by many countries by 2050? \boxtimes Yes \square No

IV. Leaving no one behind, strengthening inclusion, interlinkages, and synergies - Enabling the achievement of SDGs and just transition by reflecting interlinkages with other SDGs.

IV.1. Does the Energy Compact include socio-economic impacts of measures being considered? \boxtimes Yes \square No

IV.2. Does the Energy Compact identify steps towards an inclusive, just energy transition? \square Yes \square No

IV.3. Does the Energy Compact consider measures that address the needs of the most vulnerable groups (e.g. those impacted the most by energy transitions, lack of energy access)? \boxtimes Yes \square No

V. Feasibility and Robustness - Commitments and measures are technically sound, feasible, and verifiable based a set of objectives with specific performance indicators, baselines, targets and data sources as needed.

V.1. Is the information included in the Energy Compact based on updated quality data and sectoral assessments, with clear and transparent methodologies related to the proposed measures? 🛛 Yes 🗆 No

V.2. Has the Energy Compact considered inclusion of a set of SMART (specific, measurable, achievable, resource-based and time based) objectives? \square Yes \square No

V.3. Has the Energy Compact considered issues related to means of implementation to ensure feasibility of measures proposed (e.g. cost and financing strategy, technical assistant needs and partnerships, policy and regulatory gaps, data and technology)? \boxtimes Yes \square No

SECTION 8: ENERGY COMPACT GENERAL INFORMATION

8.1. Title/name of the Energy Compact

Adani Green Energy Limited

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8.2. Lead entity name (for joint Energy Compacts please list all parties and include, in parenthesis, its entity type, using entity type from below)

Adani Green Energy Limited

8.3. Lead entity type

Government	□ Local/Regional Government	□ Multilateral body /Intergo
□ Non-Governmental Organization (NGO)	□ Civil Society organization/Youth	□ Academic Institution /Scie
⊠ Private Sector	□ Philanthropic Organization	□ Other relevant actor

8.4. Contact Information

Mr. Santosh Kumar Singh, CSO, AGEL, Adani Corporate House", Shantigram, Nr. Vaishno Devi Circle, S G Highway, Khodiyar, Ahmedabad – 382 421, Gujarat, India, Email: cso.renewable@adani.com

Mr. Praveen Anant, Head ESG, AGEL, Adani Corporate House", Shantigram, Nr. Vaishno Devi Circle, S G Highway, Khodiyar, Ahmedabad – 382 421, Gujarat, India, Email: praveen.anant@adani.com

Mr, Pravin Jadhav, Lead – Sustainability, AGEL, Adani Corporate House", Shantigram, Nr. Vaishno Devi Circle, S G Highway, Khodiyar, Ahmedabad – 382 421, Gujarat, India, Email: pravin.jadhav@adani.com

8.5. Please select the geographical coverage of the Energy Compact □Africa ⊠Asia and Pacific □Europe □Latin America and Caribbean □North America □West Asia □Global

8.6. Please select the Energy Compact thematic focus area(s)

Energy Access Energy Transition Enabling SDGs through inclusive just Energy Transitions Innovation, Technology and Data Finance and Investment.

SECTION 9: ADDITIONAL INFORMATION (IF REQUIRED)

Please provide additional website link(s) on your Energy Compact, which may contain relevant key documents, photos, short video clips etc.

Adani Green Energy Limited (AGEL) is one of the largest renewable companies in India, with a current project portfolio of 13,990 MW. AGEL is part of the Adani Group's promise to provide a better, cleaner and greener future for India. Driven by the Group's philosophy of 'Growth with Goodness', the Company develops, builds, owns, operates and maintains utility-scale grid-connected solar and wind farm projects. The electricity generated is supplied to central and state government entities and government-backed corporations.

On the back of long-term Power Purchase Agreements (PPAs) of 25 years with central and state government entities, AGEL has leveraged its capabilities and expanded its presence across 11 Indian states. The Company deploys the latest technologies in its projects. With a portfolio of 54 operational projects and 12 projects under construction, AGEL is driving India on its renewable energy journey.

Corporate website: https://www.adanigreenenergy.com/ overnmental Organization

entific Community