



SDG7 Energy Compact of Vale

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

SECTION 1: AMBITION

1.1. Ambitions to achieve SDG7 by 2030. [Please select all that apply]

(Member States targets could be based on their NDCs, energy policies, national five-year plans etc. targets for companies/organizations could be based on their corporate strategy)

<input type="checkbox"/> 7.1. By 2030, ensure universal access to affordable, reliable and modern energy services.	Target(s): N/A for Vale Time frame: Context for the ambition(s):
<input type="checkbox"/> 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix.	Target(s): By 2030, Vale’s stated goals are to achieve 100% renewable electricity consumption, against a 2017 baseline of 69%. Time frame: 2030 (globally) and 2025 (Brazil). The three pillars of energy initiatives are: i) 100% consumption of renewable power (Reach 100% of renewable self-generation by 2025 in Brazil and 100% of renewable electricity consumption globally by 2030); ii) Energy efficiency (High energetic performance throughout Vale's production chain, supported by a systematized management model and multidisciplinary teams); iii) Powershift (transition to a lower-carbon energy mix. The Powershift program aims to make the Company's energy matrix clean by focusing on the use of renewable energy and alternative fuels, greater efficiency of operations using new technologies, and forest promotion). http://www.vale.com/esg/en/Pages/Energy.aspx Context for the ambition(s): Vale’s broader goals on climate change, as part of its ambition to be a Leader in Low-Carbon Mining, its New Pact With Society, and its organizational purpose: To Improve Life and Transform the Future, Together. For means of broader context, it is important to note that in 2019 and throughout 2020, Vale revised and increased its 2030 goals related to climate change, forestry, and water. The new goals, as related to GHG emissions reductions, call for a reduction on Scope 1 and 2 emissions in line with the

	<p>Paris Agreement (33% by 2030 against a 2017 baseline), net-zero emissions of Scopes 1 and 2 by 2050, and a reduction in Scope 3 emissions of 15% by 2035.</p> <p>These increased targets compare to previous targets which were intensity-based targets, at a lower percentage, and only included Scopes 1 and 2. It is important to note that the sum-factor the increased ambition by Vale as expressed through these goals, and enhanced therein by a corporate governance structure set up during that time to ensure the necessary company-wide participation, tracking, and top-leadership direct involvement, all helped to further spur ambitions more directly related to energy consumption. As a result, the goals of scope 2 neutrality by 2025 (Brazil) and 2030 (globally) are borne of this process and assessed as an essential component to achieving those broader goals.</p>
<p><input type="checkbox"/> 7.3. By 2030, double the global rate of improvement in energy efficiency.</p>	<p>Target(s): Ambition to achieve 2 separate metrics of energy efficiency, as described here below – PowerShift Program and the Energy Efficiency Program</p> <p>A unique feature of Vale’s strategic directive on energy efficiency is that the company tracks this in two distinct programs and related metrics.</p> <p>The first program, called “PowerShift”, supports our climate change goals by driving the energy matrix transformation for our mining activities through innovation (scope 1). Its objective is to turn our energy matrix cleaner, focusing on the use of renewable energy, alternative (non-fossil) fuels, greater efficiency in our operations by leveraging new technologies. Highlights within this program include the transition to electric-driven motors for rail and road transport and related mining activities and innovations and scaling in the use of battery storage. It is estimated that the sum-total of activities envisioned by the PowerShift program shall contribute up to 40% of the emissions reductions planned for Vale’s 2030 target.</p> <p>The second program, referred to as the Energy Efficiency Program, is an internal program aimed at examining our operational routines and driving further energy efficiency through systemic behavioral change, spurring greater self-scrutiny of our processes and pinpointing areas for near-term innovation. This this complementary set of behavior- and process-driven discoveries, we look to achieve greater energy efficient independent of and before the arrival of otherwise new technologies or processes (such as borne from our Powershift program). For the Energy Efficiency Program, Vale envisions an increase of energy efficiency (between 2022 and 2030) of up to 5% compared to the base-year of 2017.</p> <p>Additional examples (not exhaustive) of innovations underway that shall bring material improvements to Vale’s energy efficiency are as follows:</p> <p>Shipping: Vale’s highlighted efforts are brought to its business through its Eco Shipping program, a program created to meet the challenge of reducing the company’s carbon emissions, in line with the scope discussion within the International Maritime Organization (IMO). Of note, two pilot approaches have already achieved an advanced stage of testing, those being the following: the incorporation of rotary sails; the fitting of air lubrication pods to the vessel hull.</p> <ul style="list-style-type: none"> ● Regarding rotary sails: the design involves the placement of rotary sails on ore carriers. The rotary design responds to the wind direction to add forward-propulsion, thereby allowing for reduced fuel consumption. It is estimated that the use of these sails on the company’s very large ore carriers will lead to an efficiency gain of 8%, a consequence reduction of up to 3.4 thousand tons of CO2 equivalent per ship per year. The company envisions the utilization of this solution in at least 40% of its fleet, a scenario which would lead to a reduction of approximately 1.5% of the annual transport-related CO2 emissions by the company. ● Regarding air lubrication of the vessel hull: this involves the incorporation of devices which inject air into pods on the vessel hull, serving to reduce friction between the hull and the water. Conservative estimates point to a fuel reduction of around 5-8%, with a potential overall reduction of 4.4% in annual emissions from Vale’s transport of iron ore, through the scaling up of this technological solution. <p>Additionally, Vale has achieved gains in overall efficiency and related CO2 emissions reduction in its shipping activities through its high-efficiency vessels known as “Valemax”. Also known as green ships, the second generation of Valemax emit 41% less greenhouse gases per ton per mile transported compared to the Capesize fleet.</p>

	<p>Electric Grid Consumption Reduction at Port Operations via BESS (Battery Energy Storage Systems) – Enabling the re-routing of Electricity Capacity Back to Public Grid:</p> <ul style="list-style-type: none"> ● In partnership with Siemens and MicroPower Comerc (MPC), the Battery Energy Storage Systems were designed to reduce the cost of electric energy at the Port Terminal of Guaíba Island (Mangaratiba, Rio de Janeiro). Installed in 2021, the system of battery-storage strengthens our energy management related to our activities at the port and is part of a broader strategy to substitute the use of fossil fuels in our operations. ● As part of the principal of “peak-energy shaving,” the electric demand from the grid is rerouted back to the energy stored in the batteries when the energy tariff is at a premium. The mechanism installed there, produced by Tesla, is utilized in parallel to the public utility electric system, and possesses an electricity potency of 5MW and a storage capacity of 10MWh, an amount sufficient to supply 45 thousand residents for up to one hour. ● As a main result: through this potential to reroute grid energy back to the grid, by harnessing the battery-stored energy, we can achieve a reduction from 10.5 MW down to only 5 MW to be drawn from the established contract for electricity usage with the utility, thereby freeing up that difference, previously consumed by Vale, to be made available to local, non-Vale consumers. ● An important additional feature of the BESS activities being carried out is the potential in the future for battery storage to act as a catalyst for the scaling up and feasible application of renewable energy, particularly as derived from Hydrogen. It is envisioned that this process may evolve in time to enable this transformation. <p>Time frame: 2030</p> <p>Context for the ambition(s): Vale’s broader goals on climate change, as part of its ambition to be a Leader in Low-Carbon Mining, its New Pact With Society, and its organizational purpose: To Improve Life and Transform the Future, Together.</p>	
<p><input type="checkbox"/> 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.</p>	<p>Target(s):</p> <p>Vale is a founding patron and leading partner of the “Charge On Innovation Challenge”. This initiative brings together some of the world’s largest mining companies, BHP, Rio Tinto, and Vale, and together with Austmine (leading non-profit for the Australian Mining Equipment, Technology, and Services Sector). A driving purpose of the Challenge is to encourage innovative technology development to support the mining industry’s decarbonization efforts.</p> <p>https://chargeoninnovation.com</p> <p>Vale is also a leading member of the ICSV – the Innovation for Cleaner and Safer Vehicles, and initiative spearheaded by the ICMM – the International Council on Mining and Metals, of which Vale is a member. ICMM’s Innovation for Cleaner, Safer Vehicles (ICSV) brings together 28 of the world’s leading mining and metals companies with the largest original equipment manufacturers (OEMs), in a non-competitive space, to accelerate the development of a new generation of mining vehicles and improve existing ones. This is a CEO-led initiative, with participants working towards the achievement of three ambitions:</p> <ul style="list-style-type: none"> ● Introduce greenhouse gas emission-free surface mining vehicles by 2040. ● Minimize the operational impact of diesel exhaust by 2025. ● Make vehicle collision avoidance technology available to mining companies by 2025. <p>https://www.icmm.com/en-gb/innovation/cleaner-safer-vehicles</p> <p>In Canada, Vale collaborates with a series of consortia, such as the Canada Mining Innovation Council (CMIC), the Global Mining Guidelines Group (GMG) and the Mining Innovation, Rehabilitation, and Applied Research Corporation (MIRARCO), that allow us to contribute to new standards and guidelines for the sector and at the same time accelerate the development of technologies for the energy transition through partnerships with OEMs and our peers who face similar challenges.</p>	

	<p>Time frame: open-ended where not fixed by certain goals of specific initiatives (such as ICSV, see above)</p> <p>Context for the ambition(s): Vale’s broader goals on climate change, as part of its ambition to be a Leader in Low-Carbon Mining, its New Pact With Society, and its organizational purpose: To Improve Life and Transform the Future, Together.</p>
<p><input type="checkbox"/> 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.</p>	<p>Target(s): N/A for Vale</p> <p>Time frame:</p> <p>Context for the ambition(s):</p>

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): Vale’s ambitions, as part of its organizational purpose, include being a Leader in Low-Carbon Mining. This takes into account goals such as the reduction by 15% of net Scope 3 emissions by 2035, the reduction of absolute Scope 1 and 2 emissions by 33% by 2030, the achievement of carbon neutrality by 2050 for Scopes 1 and 2, in line with the Paris Agreement. Regarding coal, Vale is committed to drawing down this product from its portfolio and is currently in the process of evaluation to ensure a safe, responsible exit from its coal assets.

Time frame: 2035, 2050. Regarding Scope 3 targets, with current timeframe of 2035, Vale endeavors to review its Scope 3 targets every five years.

Context for the ambition(s): Vale’s broader goals on climate change, as part of its ambition to be a Leader in Low-Carbon Mining, its New Pact With Society, and its organizational purpose: To Improve Life and Transform the Future, Together.

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].*

<p><i>For 7.2: Reach 100% of renewable self-generation, for Brazil, by 2025</i></p> <p>As an important contribution to this goal, Vale announced the Sol do Cerrado Solar Power Generation Project in the municipality of Jaíba (Minas Gerais state) in Brazil in December 2020. With an installed capacity of 766 peak megawatts and scheduled to come on stream in the fourth quarter of 2022, the project will produce approximately 193 average megawatts (MWavg) of energy per year for Vale's operations. The solar project will be one of the largest ones in Latin America.</p> <p>Vale also has an option to purchase 60% or 100% of the shares of the Folha Larga Sul wind project in Campo Formoso (Bahia State). It has an installed capacity of 151.2 MW and is already in operation, with 60% of its production destined for Vale or its subsidiaries by 2023.</p>	<p>2025 (Brazil) and 2030 (Globally)</p>
<p><i>Description of action (please specify for which ambition from Section 1)</i></p> <p>For 7.3:</p> <p>Powershift Energy Efficiency Program EcoShipping</p> <p>For 7.a: The ICSV takes into account the following goals:</p> <ul style="list-style-type: none"> ● Introduce greenhouse gas emission-free surface mining vehicles by 2040. ● Minimize the operational impact of diesel exhaust by 2025. ● Make vehicle collision avoidance technology available to mining companies by 2025. <p>For 7.a: The ChargeOn Innovation Initiative takes into account the following actions:</p> <ul style="list-style-type: none"> ● The Charge On Innovation Challenge asks Vendors to present interoperable solutions that can safely deliver electricity to large battery-electric off-road haul trucks in a way that maintains or improves current productivity levels. 	<p>7.3: For Powershift and EcoShipping, the energy reduction achievements shall serve the broader targets of Scope 1 and 2 reductions by 2030 and net-zero by 2050.</p> <p>For the Energy Efficiency Program, the target is set for 2030.</p> <p>7.a: For the ICSV, the goals take into account targets of 2025 and 2040, respectively.</p>

<ul style="list-style-type: none"> Specifically, the engagement platform is focused on scaling mechanisms capable of delivering in the order of 400kWh of electricity to each truck within a haul cycle (e.g. load, travel, dump, return, queue). The delivered electricity is to charge a battery, and if applicable directly propel the truck. <p>For 1.2: Vale continues to seek a responsible divestment of its coal assets.</p> <ul style="list-style-type: none"> By means of example: Vale Press Release, Rio de Janeiro, June 8 th, 2021 - Vale S.A. ("Vale" or "Company") informs that the concessionaires of Nacala Logistics Corridor ("NLC"), located in Mozambique and Malawi, sent today an irrevocable notice to the financing banks of the Nacala Corridor Project Finance confirming their intention to prepay the outstanding balance of approximately US\$ 2.5 billion, which will be settled on June 22nd, 2021 with funds provided by the Company. With the settlement of the Project Finance, all conditions precedent for the completion of the transaction for the acquisition of Mitsui's stakes in the Moatize coal mine ("Moatize mine") and the NLC are fulfilled, which is expected to occur following the prepayment of the Project Finance. After the closing, Vale will consolidate the Moatize mine and the NLC in its financial statements. Accordingly, the EBITDA will no longer be burdened with costs related to debt service, investment in maintenance of operations (which will be executed directly by Vale as sustaining capital) and others, financed by NLC's tariff, and that already discounting the interest received by Vale, impacted the 2020's EBITDA by approximately US\$ 300 million. With the simplification of the governance and management of the assets, Vale continues the process of a responsible divestment of its participation in the coal business, based on the preservation of operational continuity of Moatize mine and NLC. <ul style="list-style-type: none"> http://www.vale.com/EN/investors/information-market/Press-Releases/ReleaseDocuments/0608%20Notice%20PF_i.pdf 		
<p><i>Description of action (please specify for which ambition from Section 1)</i></p>	<p><i>Start and end date</i></p>	

<p>SECTION 3: OUTCOMES</p>	
<p>3.1. Please add at least one measurable and time-based outcome for each of the actions from section 2. <i>[Please add rows as needed].</i></p>	
<p>7.2: Repeating from the above, the measurable and time-based indicators for energy consumption are detailed by Vale in its goals to achieve full renewable-based energy consumption in Brazil by 2025, and globally by 2030.</p> <p>Powershift - up to 40% of Vale`s overall emissions reduction goals by 2030</p> <p>Energy Efficiency Program – up to 5% increase in energy efficiency indicator (between 2022-2030).</p> <p>7.a.: The ICSV takes into account the following time-bound goals:</p> <ul style="list-style-type: none"> Introduce greenhouse gas emission-free surface mining vehicles by 2040. Minimize the operational impact of diesel exhaust by 2025. Make vehicle collision avoidance technology available to mining companies by 2025. 	<p>7.2.: 2025, 2030</p> <p>7.a.: 2025, 2040</p>

SECTION 4: REQUIRED RESOURCES AND SUPPORT

4.1. Please specify required finance and investments for **each** of the actions in section 2.

N/A.

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; development of integrated energy plans and energy transition pathways; technical assistance, etc.]

<input type="checkbox"/> Financing	Description
<input type="checkbox"/> In-Kind contribution	Description
<input type="checkbox"/> Technical Support	Description
<input type="checkbox"/> Other/Please specify	Description

SECTION 5: IMPACT

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

At current stage, from a jurisdictional standpoint, Vale’s energy-related goals consider all countries in which Vale has operations wherein the company maintains full or at least majority control of activities. As such, this takes into account Brazil, Canada, Oman, Malaysia, Japan, UK, Paraguay, Mozambique. Additionally, through its partnerships such as the Charge On Innovation Challenge, and the ICSV, the reach of countries that may be positively impacted by activities to which the company is actively engaging is broader and would include other key jurisdictions particularly in Asia, Europe, North America.

5.2. Alignment with the 2030 Agenda for Sustainable Development – Please describe how **each** of the actions from section 2 impact advancing the SDGs by 2030.

[up to 500 words, please upload supporting strategy documents as needed]

For renewable energy and energy efficiency, such as detailed in sections 1 and 2 above, our activities align with the SDGs, in particular relating to SDGs 7 and 13, through the targets set forth which are time-bound and measurable. Additionally, through the efforts in collaboration on technological solutions, in conjunction with a diverse range of stakeholder partnerships, we harness elements of SDG 17 (partnerships) towards these endeavors. We also understand that through activities underway and through the broader company purpose: underpinned in part by Vale's strategic pillar "New Pact With Society" which itself encompasses our climate change strategy" – a range of SDGs such as 9, 12, 15 are also addressed in varying degrees.

Further highlights are provided as follows:

- As large part of GHG emissions is linked to the consumption of energy during the operations process. Vale's initiatives to reduce GHG emissions will increase substantially the share of renewable energy in the company's energy mix by prioritizing energy efficiency and a switch to renewable energy, increasing the role of bioenergy as a transition fuel for operations, and for the longer term, counting on both electrification and innovative processes replacement.
- Vale will induce its value chain on the same direction through the development of new products, nature-based solutions, partnership and engagement with clients and suppliers. One example of this is Vale's involvement in the CDP (Carbon Disclosure Project), and a subset initiative to engage suppliers, to which Vale committed to partake as of 2020. Through this work, Vale will evaluate the responses from 274 suppliers (those classified as critical in terms of GHG emissions, from a base of over 500 suppliers, as they account for nearly 30% of the company's global spend).

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]

Vale's first pillar of climate action is related to minimizing our operational emissions. Initiatives from section 2 support our target of reducing scope 1 and 2 emissions in 33% by 2030, aligned with the Paris Agreement goal of limiting global average temperature rise to well-below 2 degrees Celsius.

This is stated in the UN's Emission Gap Report as follows: "global GHG emissions in 2030 need to be approximately 25 percent and 55 percent lower than in 2017 to put the world on a least-cost pathway to limiting global warming to 2°C and 1.5°C respectively."

One important component to deliver that reduction is achieving 100% renewable electricity in our operations. We will do that in Brazil within only 4 years, by 2025, and globally, by 2030.

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.

In relation to the targets of strengthening resilience and adaptive capacity to climate-related hazards and natural disasters, Vale follows the guidance from the Task Force on Climate-Related Financial Disclosures (TCFD), through which it runs an internal process which evaluates the potential impacts of climate change on its operational areas and adjacent areas. With this initiative, we aim to reinforce climate transparency and governance in our supply chain.

In relation to targets of integrating climate change measures into national policies, strategies, and planning, as previously stated Vale has instated a series of governance measures, highlights of which are as follows:

- Vale’s path – and the relationship between its Board of Directors and its Executive Board regarding climate change – is guided by recommendations from the Task Force for Climate-Related Financial Disclosures (TCFD). This includes essential activities, such as climate-related scenario analysis, and a systematic review of our adherence to TCFD guidelines overall on Governance, Strategy, Risk Management, and Metrics.

There are other very relevant highlights that help us strengthen our climate governance.

- **Low Carbon Forum**, a group led by me, and composed of our Executive Directors. It aims to track the implementation of our commitments, including the deployment of pilot projects. As a multidisciplinary process, it relies on the participation from diverse skillsets and expertise within the company. In that way, it helps us to deliver on our goals through shared knowledge on climate change, while reinforcing how essential our climate commitments are to our broader purpose.
- **Executive Officer for Sustainability**. The path of transformation for Vale recently reached a new milestone with the creation, under the guidance of our Board of Directors, of an Executive Office exclusively focused on Sustainability. The recognition of Sustainability as a strategic driver for the company’s value proposition is an example of the priority we place on these fronts.
- **Executive compensation linked to our ESG agenda**. Today, 60% of Vale’s short-term compensation scorecard is linked to our ESG agenda, considering social issues, low carbon, people, risks, health & safety, and 5% specifically on climate-related KPIs such as emissions reduction and renewable energy. On long-term compensation, 20% is linked to ESG (GHG, energy, forests, water, ESG gaps, health and safety).
- **Independent Sustainability Committee**. Within Vale’s board, we rely on a select committee of members tasked with a focus on sustainability issues. This board-level group corresponds with leaders from Vale’s executive team, to routinely discuss and guide Vale’s sustainability agenda.
- **Active listening**. We are expanding our external awareness and listening capability with a Sounding Panel composed of senior external ESG specialists with a diverse range of expertise and backgrounds.

SECTION 7: GUIDING PRINCIPLES CHECK LIST

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

I. 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

I. 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

I.2. Does the Energy Compact increase the geographical and/or sectoral coverage of SDG7 related efforts? Yes No

I.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? Yes 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? Yes No

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

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

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

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

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

SECTION 8: ENERGY COMPACT GENERAL INFORMATION

8.1. Title/name of the Energy Compact

Vale Energy Transition and Climate Change Strategy

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)

Vale

8.3. Lead entity type

Government

Local/Regional Government

Multilateral body /Intergovernmental Organization

Non-Governmental Organization (NGO)

Civil Society organization/Youth

Academic Institution /Scientific Community

Private Sector

Philanthropic Organization

Other relevant actor

8.4. Contact Information

Andrew De Simone – External Affairs Manager – Andrew.desimone@vale.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.

<http://www.vale.com/esg/en/Pages/Energy.aspx>

[http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale receives the worlds first ore carrier that produces air bubbles in the hull to reduce emissions&s=Environment&rID=1492&sID=2](http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale+receives+the+worlds+first+ore+carrier+that+produces+air+bubbles+in+the+hull+to+reduce+emissions&s=Environment&rID=1492&sID=2)

[http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale informs on the Sol do Cerrado Solar Project&s=Environment&rID=1436&sID=2](http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale+informs+on+the+Sol+do+Cerrado+Solar+Project&s=Environment&rID=1436&sID=2)

[http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale innovates by using battery storage to reduce electric energy consumption and costs at ore terminal&s=Environment&rID=1413&sID=2](http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale+innovates+by+using+battery+storage+to+reduce+electric+energy+consumption+and+costs+at+ore+terminal&s=Environment&rID=1413&sID=2)

[http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale announces target to reduce client and supplier emissions by 15 by 2035&s=Environment&rID=1437&sID=2](http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale+announces+target+to+reduce+client+and+supplier+emissions+by+15+by+2035&s=Environment&rID=1437&sID=2)

[http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale and Progress Rail Develop the First 100 Electric Locomotive of the Brazilian Mining Industry&s=Environment&rID=1405&sID=2](http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale+and+Progress+Rail+Develop+the+First+100+Electric+Locomotive+of+the+Brazilian+Mining+Industry&s=Environment&rID=1405&sID=2)

NOTE: above list is not exhaustive and will be subject to change and updates over time.