



SDG7 Energy Compact of Eletrobras and BNDES

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.

(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): Time frame: Context for the ambition(s):
<input checked="" type="checkbox"/> 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix.	<p>Target(s): Decarbonize the Amazon Isolated Systems' Power Matrix substituting diesel generation by clean, renewable and affordable energy. Time frame: 2021-2030 Context for the ambition(s):</p> <p>There are 257 Isolated Systems with an installed capacity of 1,218 MW in the Brazilian Amazon. More than 90% of this capacity is based on diesel generation. This reality of generation based on fossil fuels with high emission intensity in the Amazon Isolated Systems contrasts with the clean and renewable Brazilian Power Sector (EPE, 2021)¹.</p> <p>Diesel generation is also not justified from an economic point of view. The cost of diesel generation in Isolated Systems is extremely high. Since the systems are in low-income and socially vulnerable regions, this energy supply model is non-sustainable not only because of the fossil fuels emissions, but also because of the high cost that needs to be paid by a cross subsidy of approximately BRL 8 billion per year (CCEE, 2020)².</p> <p>There are new emerging technologies capable of substituting diesel generation by clean, renewable and affordable energy. A sustainable development model with right incentives has to be thought based on the paradigm of new clean technologies and on structured economic and socioenvironmental evaluation. Regulatory and legal challenges to the substitution of the diesel by renewable generation also need to be taken into consideration.</p> <p>It is urgent that strong institutions, such as the largest Brazilian Power Company (Eletrobras) and the Brazilian Economic and Social Development Bank (BNDES), make a commitment to coordinate joint efforts in order to have a robust approach to decarbonize Amazon Isolated Systems' Power Matrix.</p>
<input type="checkbox"/> 7.3. By 2030, double the global rate of improvement in energy efficiency.	Target(s): Time frame: Context for the ambition(s):

¹ Service Planning for Isolated Systems Horizon 2025 Cycle 2020 (EPE, 2021).

² Budget Premises Sectoral Accounts 2021 (CCEE, 2020).

<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.	Target(s): Time frame: Context for the ambition(s):
<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.	Target(s): Time frame: 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: 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].

Action 1) Prepare a Technical Cooperation Agreement between the largest Brazilian Power Company Eletrobras and the Brazilian Economic and Social Development Bank (BNDES) planning joint efforts for the decarbonization of the Amazon Isolated Systems' Power Matrix.	Sep/21-Dec/21
Action 2) Study in a structured way economic, socioenvironmental, technological, legal, and regulatory aspects to be considered in a plan to substitute diesel generation by clean, renewable, and affordable energy in Amazon Isolated Systems.	Jan/22-Jun/23
Action 3) Coordinate a mechanism to promote pilot projects and collaboration among institutions interested in getting involved with the decarbonization of the Amazon Isolated Systems.	Jul/22-Dez/23
Action 4) Evaluate studies, pilot projects results, and contribution made by involved institutions to propose a plan and public policies addressing the decarbonization of the Amazon Isolated Systems with specific goals from 2025 to 2030.	Jan/24-Dec/24
Action 5) Implementation of the proposed plan considering the possibilities related to the nature of the involved institutions.	Jan/25-Dez/30

SECTION 3: OUTCOMES

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

Outcome of action 1 Technical Cooperation Agreement between Eletrobras and BNDES signed.	Date Dec/21
Outcome of action 2 Report with an economic, socioenvironmental, technological, legal, and regulatory evaluation to support a plan to decarbonize Amazon Isolated Systems	Jun/23
Outcome of action 3 Report consolidating pilot projects experience (kW, investment, and impacted population) and collaboration made by involved institutions	Dez/23
Outcome of action 4 Plan 2030 to decarbonize Isolated Systems' Power Matrix with specific goals to be implemented from 2025 to 2030 (MW, investment, and impacted population)	Dec/24
Outcome of action 5 Goals to be defined in the Plan 2030 (Outcome of action 4).	From 2025 to 2030

SECTION 4: REQUIRED RESOURCES AND SUPPORT

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

Action 1 will be made by internal teams of Eletrobras and BNDES. Actions 2, 3 and 4 are initially planned to be made by internal teams of the involved institutions, but may be object of external consulting support (Scope and budget in BRL\$ to be defined during action 2). The finance and investments necessary to action 5 will be defined in the outcome of action 4.

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.

There are approximately 3 million inhabitants living in regions supplied by Isolated Systems in the Brazilian Amazon. Although this compact is focused on Brazilian Amazon Isolated Systems, a positive experience could be replicated in other countries in Amazon and also in any country with Isolated Systems generation based on fossil fuels.

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]

Since the target is to “Decarbonize the Amazon Isolated Systems’ Power Matrix substituting diesel generation by clean, renewable and affordable energy” (Section 1 of this compact), all listed actions are directly related to SDG 7 (Affordable and Clean Energy). The substitution of the generation based on fossil fuels (diesel) will promote Clean energy. The cost of diesel generation in Isolated Systems is very high and the modern clean technologies that will be used to substitute the diesel generation will also promote affordable energy. The Technical Cooperation Agreement between Eletrobras and BNDES (action 1) will establish a platform for studies (action 2) and pilot projects promotion and collaboration (actions 3 and 4) to support the preparation of a long-term plan to decarbonize Amazon Isolated Systems’ Power Matrix (action 4) that will be implemented from 2025 to 2030 in the context of the Agenda 2030 (action 5).

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]

The substitution of the generation based on a fossil fuel (diesel) with very high emission intensity by clean and renewable energy is totally aligned with Paris Agreement goal of limiting global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels, with the Brazil’s NDC commitment to reducing total net greenhouse gas emissions by 37% in 2025 and by 43% in 2030, and with the longer term objective of the country to be Net-Zero.

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.

It is planned to inform United Nations about the achievement of each outcome and the status of the outcomes in the planned deadlines. The intention is to include the progress status in the ESG annual reports of the involved institutions.

SECTION 7: GUIDING PRINCIPLES CHECKLIST

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

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? Yes 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 defined 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

Decarbonization of the Amazon Isolated Systems' Power Matrix substituting diesel generation by clean, renewable and affordable energy

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)

Eletrobras (Brazilian Power Company) and BNDES (Brazilian Economic and Social Development Bank)

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

Eletrobras: Thiago Silva de Matos Melo - thiago.s.melo@eletrobras.com - +5521965462237 / BNDES: Guilherme Arantes - guilherme.arantes@bndes.gov.br - +55213747-9227

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.