



SDG7 Energy Compact of En+ Group

“En+ Group’s ‘New Energy’ Modernization program and En+ Group’s I-RECs program”

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, and make sure to state the baseline of each target]

(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 type="checkbox"/> 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix.	Target(s): Time frame: Context for the ambition(s):
<input checked="" type="checkbox"/> 7.3. By 2030, double the global rate of improvement in energy efficiency.	<p>Time frame: 2007 – 2025</p> <p>Context for the ambition(s): <i>En + Group is a global leader in renewable energy generation and low-carbon aluminium production with a well-established presence across five continents and a strong operational hub in Siberia (Russia). Since 2007, En+ Group successfully implements ‘New Energy’ modernization program of its hydropower plants (HPPs) located in Siberia (Russia) to boost electricity power output without increasing the amount of hydro resources in use and further to partly substitute energy generated by local coal-fired plants, thus preventing GHG emissions.</i></p> <p>Target(s): <i>En+ Group plans to continue replacing electricity generated by coal, avoiding GHG emissions from coal plants by 2.5 million t CO₂e emissions by 2025. The program is designed to increase hydropower clean energy generation output up to 2.5 TWh per year, with the same volume of water passing through the hydro turbines. Higher efficiency (max. +8%) is achieved due to the improved blade profile of the new turbine wheels and the materials used.</i></p> <p><i>The anticipated result of En+ Group’s ‘New Energy’ modernization program for 2007-2025 is 23.1 mln MWh of electricity generated by coal being replaced by clean hydropower electricity. The 13.9 mln MWh of electricity generated by coal was already replaced by clean hydropower electricity for the period of 2007-2021. The following amount of electricity as of 9.2 mln MWh generated by coal is planned to be replaced by clean hydropower electricity for the period of 2022 - 2025.</i></p> <p><i>The anticipated results of En+ Group’s ‘New Energy’ modernization program for 2007 – 2025 are 26.6 Mt CO₂ emissions prevention.</i></p>

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.

Time frame: 2030

Context for the ambition(s):

En+ Group, the world's leading producer of low carbon aluminium and largest private sector generator of hydropower, has become the first energy producer and supplier in Russia certified to trade international renewable energy certificates (I-RECs). Since December 2020, En+ Group supplies I-RECs to national and international end-consumers corresponding to the electric energy produced by En+ Group's Krasnoyarsk Hydropower Plant and Abakan Solar Power Plant located in Siberia.

Target(s): En+ Group stands for moving towards "clean" development through the joint efforts of the international community. One of the instruments for encouraging and financing green projects is the International Renewable Energy Certification Standard (International Renewable Energy Certificate Standard, I-REC), which can also become one of the mechanisms of Article 6 of the Paris Agreement to promote green international development.

En+ Group aims at working on cross-border recognition of I-RECs through various channels. It will expand the geographical scope of I-RECs usage to accelerate decarbonisation plans of international end-consumers. Clean energy producers will receive additional opportunities to stimulate the development of green capacities. En + Group looks at the I-RECs market as at one of the crucial instruments of the international renewable energy market and provides the corresponding volume of clean electricity that exceeds the current En+ Group's own needs, including the needs of its Metals segment UC RUSAL in generation of clean hydropower energy. The En+ Group's estimated annual sales of green capacities in future will depend on a number of factors and range from 2.5 million I-RECs to 3.5 million I-RECs. If cross-border recognition of I-RECs happens, these volumes become available to a broader number of end-consumers. .

By launching I-RECs program, En+ Group contributes to minimizing carbon impact of the international end-consumers through facilitating their consumption of clean energy. In 2020-2021, En+ Group will supply 1 mln. I-RECs. An I-REC (International Renewable Energy Certificate) is a type of Energy Attribute Certificate (EAC), which represents one-megawatt hour (MWh) of electricity produced by renewable sources.

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): Reducing greenhouse gas emissions is a key strategic goal of the En+ Group. In January 2021, the En+ Group announced its ambition to achieve net zero carbon emissions by 2050 and to reduce greenhouse gas ("GHG") emissions by at least 35% by 2030 (Scope 1 and 2, as benchmarked against the Group's 2018 GHG emissions). To achieve this, the En+ Group is modernizing its facilities, under the "New Energy" program, and introducing the best available technologies as well as developing new ones such as Inert Anode.

Time frame: 2030 - 2050

Context for the ambition(s): In 2019, the En+ Group's Metals segment, UC RUSAL, produced 6% of the world's aluminium and its power segment, and EuroSibEnergo, part of En+ Group's power business, generated over 64 TWh of clean hydropower. The En+ Group believes that the targets announced today represent the most ambitious carbon reduction targets yet seen in the global aluminium industry, setting a new standard in one of the most energy intensive industries in the global economy.

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>Description of action (please specify for which ambition from Section 1) Action 3: Energy Efficiency</p> <ul style="list-style-type: none"> Since 2007, En+ Group actively implements 'New Energy' modernization program of its hydropower plants (HPPs) located in Siberia. En+ Group's 'New Energy' program aims at increasing the clean energy output by 2.5 TWh per year by 2025 with the same water volumes passing through the HPP turbines. Each HPP has its own modernization schedule. The program helps to partly substitute energy generated by local coal-fired plants and allows preventing GHG emissions. Thus, the following volume of electricity - 13.9 mln MWh - generated by coal was already replaced by clean hydropower electricity for the period of 2007-2021. The following volume of electricity as of 9.2 mln MWh generated by coal is planned to be replaced by clean hydropower electricity for the period of 2022 - 2025. From 2007 until 2019, En+ Group's 'New Energy' modernization program helped to prevent 11.5 Mt CO₂ emissions. The anticipated results of En+ Group's 'New Energy' modernization program for 2007 – 2025 are 26.6 Mt CO₂ emissions prevention. 	<p>Start and end date 2007 – 2025</p>
<p>Description of action (please specify for which ambition from Section 1) Action 7.a. International Cooperation</p> <p>En+ Group actively implements I-RECs program, having launched Russia's first I-RECs as further demonstration of En+ Group's commitment to address the global climate crisis. In 2020-2021, En+ Group will supply 1 million of I-RECs.</p>	<p>Ongoing till 2050, the middle date target 2030</p>
<p>Description of action (please specify for which ambition from Section 1)</p>	<p>Start and end date</p>
<p>Description of action (please specify for which ambition from Section 1)</p>	<p>Start and end date</p>

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].*

<p>Outcome</p> <p>Outcome for Action 3: Energy Efficiency</p> <p>En+ Group plans to continue replacing electricity generated by coal, avoiding GHG emissions from coal plants by 2.5 million t of CO₂e emissions per year by 2025. The expected results of En+ Group's 'New Energy' modernization program for 2007 – 2025 are 26.6 Mt CO₂ emissions prevention.</p> <p>The anticipated result of En+ Group's 'New Energy' modernization program for 2007-2025 is 23.1 mln MWh of electricity generated by coal being replaced by clean hydropower electricity. The 13.9 mln MWh of electricity generated by coal was already replaced by clean</p>	<p>By 2025</p>
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hydropower electricity for the period of 2007-2021. The following amount of electricity as of 9.2 mln MWh generated by coal is planned to be replaced by clean hydropower electricity for the period of 2022 - 2025.

En+ Group's 'New Energy' program aims at increasing the clean energy output by 2.5 billion kWh per year by 2025 with the same water volumes passing through the hydropower plants turbines.

Outcome for Action 4: International Cooperation

En+ Group stands for moving towards "clean" development through the joint efforts of the international community. One of the instruments for encouraging and financing green projects is the International Renewable Energy Certification Standard (International Renewable Energy Certificate Standard, I-REC), which can also become one of the mechanisms of Article 6 of the Paris Agreement to promote green international development.

En+ Group aims at working on cross-border recognition of I-RECs through various channels. It will expand the geographical scope of I-RECs usage to accelerate decarbonisation plans of international end-consumers. Clean energy producers will receive additional opportunities to stimulate the development of green capacities.

By 2030

SECTION 4: REQUIRED RESOURCES AND SUPPORT

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

Action 3: Energy Efficiency

En+ Group's Investment into 'New Energy' program is expected to total RUB 21 billion in the period up to 2026 (around USD 284.3 million as of 31 December 2020).

Action 4: International Cooperation

No particular investment is required

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.

Action 3: Energy Efficiency

The Hydropower Plants efficiency will match that of the world's best performers after the En+ Group's 'New Energy' program completed, providing for better reliability and a higher quality power supply to Siberian consumers. On top of the expected economic improvement, the New Energy program will positively affect the environment of the Siberian regions (Russia) in which En+ Group operates. Hydroelectric energy is used to partially replace the energy generated by coal-fired power plants and thus prevent 26.6 Mt CO₂ for the period 2007 – 2025.

Action 4: International Cooperation

The En+ Group's I-RECs program and further work on cross-border recognition of I-RECs character will positively affect the enlargement of the possible mechanisms of Article 6 under the Paris Agreement to promote green international development.

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]

Action 1: Universal access: n\a

Action 2: Renewable Energy: n\a

Action 3: Energy Efficiency:

The deployment of new hydro power generators, replacement of runners and transformers at En+ Group's Hydropower Plants within En+ Group's "New Energy" modernization program will increase the efficiency of HPPs work and ultimately the amount of hydro power output, thus finally reducing the reliance on electricity generated by coal plants. This will generate economic and social value for the target communities in Siberia and improve environmental living standards since a certain amount of CO₂ is prevented. By focusing on providing access to more clean and affordable hydropower electricity in Siberia, En+ Group's Energy Compact will help partially displace the environmental costs of using energy from coal power and contribute to a wide range of Sustainable Development Goals (SDGs):

- **SDG 7:** Providing access to clean and affordable energy.
- **SDG 9:** Promoting innovative and sustainable infrastructure.
- **SDG 13:** Accelerating climate action through the abatement of the fossil fuel use

Action 4: International Cooperation

Launching of I-RECs program by En+ Group and working on cross-border recognition of I-RECs through various channels and with various stakeholders will support the variety of market-based solutions to address the global climate crisis at a corporate, national, and international levels. Cross-border recognition of I-RECs promoted by En+ Group will enable green power leaders to attract additional foreign investment. By focusing on issuing more I-RECs and their cross-border recognition, En+ Group will help to make green transformation inclusive, enabling all participants of the market to cover their carbon footprint. This En+ Group's Energy Compact contributes to a wide range of Sustainable Development Goals (SDGs):

- **SDG 7:** Providing access to clean and affordable energy.
- **SDG 13:** Accelerating climate action through the abatement of the fossil fuel use

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]

Action 3: Energy Efficiency:

The energy efficiency actions contained in En+ Group's 'New Energy' modernization program are aligned with En+ Group's commitment to achieve net zero emissions by 2050, and to reduce greenhouse gas ("GHG") emissions by at least 35% by 2030 (Scope 1 and 2, as benchmarked against the Group's 2018 GHG emissions) as indicated in En+ Group's corporate documents.

Action 3: International Cooperation

The En+ Group's I-RECs program and further work on cross-border recognition of I-RECs character will positively affect the fulfilment of net –zero commitments by other companies without geographical limitations since cross-border recognition is one of the ways of the enlargement of the possible mechanisms of Article 6 under the Paris Agreement to promote green international development.

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.

Action 3: Energy Efficiency:

Annual electricity power output increase due to the upgrades of the hydropower generators, replacement of runners, transformers: The En+ Group tracks this indicator under the methodology within 'New Energy' modernization program. The figures on increase as well as GHG emissions prevention are reported publicly annually.

Action 4: International Cooperation:

Annual increase of I-RECs deliveries to international end-consumers: The En+ Group tracks this indicator under the number of concluded agreements with brokerage companies and end-consumers. The figures on deliveries and issues of I-RECs by En+ Group are reported publicly annually.

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

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

En+ Group Energy Compact: En+ Group's 'New Energy' Modernization program and En+ Group's I-RECs program

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)

En+ Group

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

*Contact person: Liubov Yaroshenko for En+ Group's Energy Compact: En+ Group's 'New Energy' Modernization program, YaroshenkoLA@enplus.ru, + 7 495 642 79 37
Contact person: Andrey Sapozhnikov for En+ Group's Energy Compact: En+ Group's I-RECs program, SapozhnikovAI@enplus.ru, + 7 495 642 79 37*

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.