MOODY'S RATINGS

ASSESSMENT
13 March 2025

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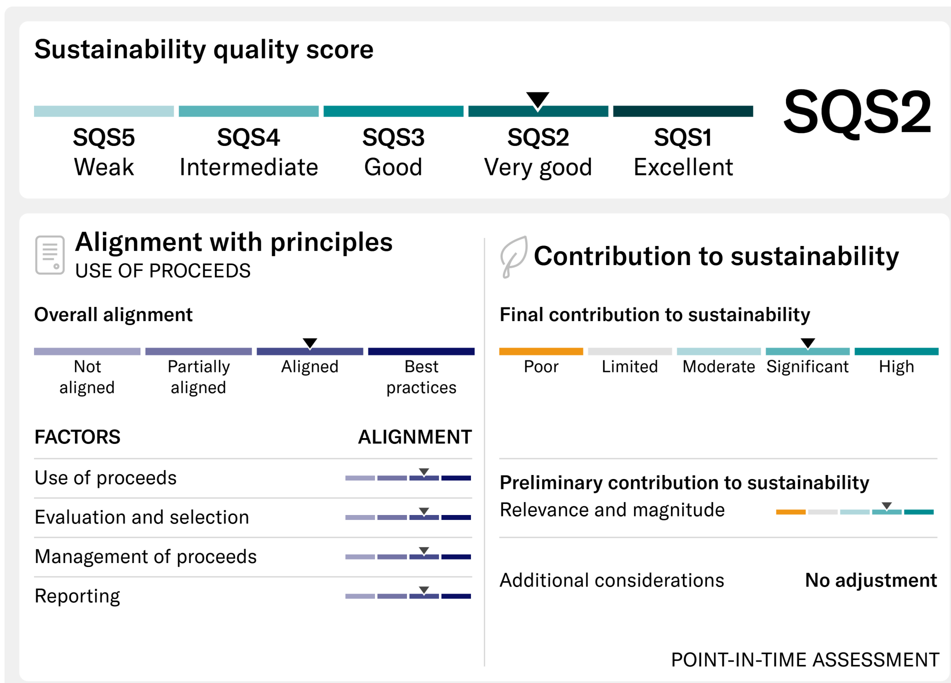
Greenko Group

Second Party Opinion – Green Bond Framework Assigned SQS2 Sustainability Quality Score

Summary

We have assigned an SQS2 Sustainability Quality Score (Very Good) to Greenko Group's (Greenko) green bond framework dated Feb-2025. Greenko has established its use-of-proceeds framework to finance four eligible green categories, covering renewable energy and energy storage. The framework is aligned with the four components of the International Capital Market Association's (ICMA) Green Bond Principles (GBP) 2021 (with June 2022 Appendix 1). The framework demonstrates a significant contribution to sustainability.



Scope

We have provided a Second Party Opinion (SPO) on the sustainability credentials of Greenko's green bond framework, including the framework's alignment with the ICMA's GBP 2021 (with June 2022 Appendix 1). Under its framework, the issuer plans to issue use-of-proceeds green bonds to finance projects in four green categories, which include renewable energy and energy storage, as outlined in Appendix 3 of this report.

Our assessment is based on the last updated version of the framework dated Feb-2025, and our opinion reflects our point-in-time assessment[1] of the details contained in this version of the framework, as well as other public and non-public information provided by the company.

We produced this SPO based on our Assessment Framework: Second Party Opinions on Sustainable Debt, published in November 2024.

Issuer profile

Greenko Group (Greenko), a Mauritius-based company focused on renewable energy generation in India, is a major energy company that owns and operates a diversified portfolio of hydro, wind, solar and biomass power plants. After acquiring Teesta III, Greenko Energy Holding's total consolidated capacity will increase to 6,660 megawatts (MW), including 3,172 MW of wind, 1,950 MW of hydro and 1,538 MW of solar. Greenko Mauritius is an intermediate holding company in the Greenko group, wholly and directly owned by Greenko.

Greenko's ESG considerations capture the lack of cash flow during the restoration period of Teesta III before the cofferdam becomes operational, as well as the potential requirement for additional debt-funded capital expenditure to support the restoration. Greenko's environmental considerations reflect benefits from carbon transition for the company as a pure renewable operator with a diversified portfolio of generation assets and ongoing investments into pumped hydro storage projects (PHSPs), partly offset by the company's exposure to variability in available natural resources. The environmental considerations also captures Greenko's elevated exposure to flood risks arising from glacier melting and heavy rainfall following the acquisition of hydropower project Teesta III.

Strengths

» The eligible categories of solar, wind, and hydro will contribute significantly towards the government's plans to install 500 gigawatts (GW) of renewable capacity by 2030.

» The solar and wind power generation assets correspond to the best available technologies with minimal lock-ins.

Challenges

» The hydropower projects and PHSPs are large-scale undertakings with significant footprints, entailing inherent ESG risks such as displacement and biodiversity risks, for which the issuer commits to conducting environmental and social impact assessments (ESIAs).

» No commitment to post-issuance verification of the impact reporting, and it is not clear whether the methodologies and assumptions used to report on E&S impacts will be disclosed.

Alignment with principles

Greenko's green bond framework is aligned with the four core components of the ICMA's GBP 2021 (with June 2022 Appendix 1). For a summary alignment with principles scorecard, please see Appendix 1.

- [x] Green Bond Principles (GBP)
- [ ] Green Loan Principles (GLP)
- [ ] Social Bond Principles (SBP)
- [ ] Social Loan Principles (SLP)
- [ ] Sustainability-Linked Bond Principles (SLBP)
- [ ] Sustainability Linked Loan Principles (SLLP)

Use of proceeds

Not aligned	Partially aligned	Aligned ▼	Best practices

Clarity of the eligible categories – ALIGNED

Greenko has clearly communicated the nature of expenditures for the eligible categories, as well as the exclusion criteria addressing fossil fuel and nuclear related activities. The eligibility criteria for the project categories are defined in the framework, but some lack explicit threshold details. The issuer has identified the target location as India.

Clarity of the environmental or social objectives – BEST PRACTICES

The issuer has clearly outlined the environmental and social (E&S) objectives associated with all four categories. All the eligible categories are relevant to the respective E&S objectives to which they aim to contribute. The issuer has referenced the United Nations' (UN) Sustainable Development Goals (SDGs) in articulating the objectives of the eligible categories, and the objectives are coherent with these recognized international standards.

Clarity of expected benefits – ALIGNED

The issuer has identified relevant E&S benefits for all eligible categories. The expected benefits are measurable and will be quantified in the impact reporting. However, the framework lacks visibility into the portion of the proceeds used for refinancing and the associated look-back period.

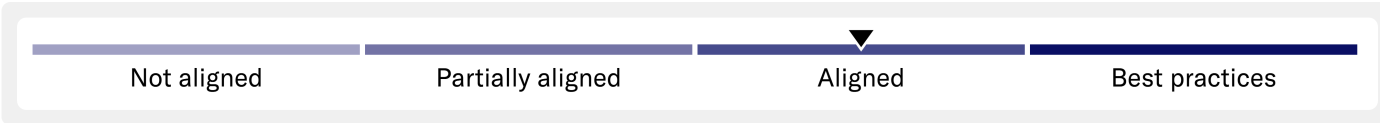
Process for project evaluation and selection

Not aligned	Partially aligned	Aligned ▼	Best practices

Transparency and clarity of the process for defining and monitoring eligible projects – ALIGNED

The issuer's decision-making process for determining the eligibility of projects is well structured and clearly outlined in the framework, which will be publicly available. The business development department at Greenko evaluates projects based on commercial feasibility. To mitigate environmental and social risks, the Greenko Integrated Management System (GIMS) and Environmental, Health, and Safety (EHS) teams oversee project selection with regard to alignment with eligibility and exclusionary criteria. The issuer has confirmed that all projects will be subject to ESIA to help identify potential impacts on biodiversity, displacement, and livelihoods, enabling the company to strategically address and mitigate key risks.

Management of proceeds

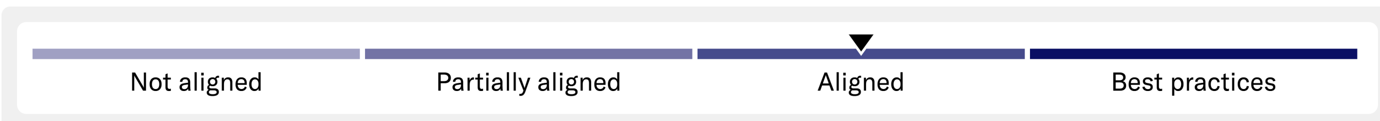


Allocation and tracking of proceeds – ALIGNED

The use of proceeds will be clearly defined in the bond documents, and the funds are tracked by the trustee to ensure they are used accordingly. The proceeds are received by the corresponding Foreign Portfolio Investor (FPI). The funds are used for: (a) financing existing USD-denominated loans at the FPI, which were initially raised to finance the eligible project, and (b) subscribing to Non-Convertible Debentures (NCDs) of an Indian Special Purpose Vehicle (SPV) that holds the eligible project, using the funds either to repay the INR-denominated loan previously raised to fund the eligible project or for the residual capital expenditure of the eligible project.

The issuer has committed to annually adjusting the net proceeds to match the allocation to eligible projects made during that period. The issuer intends to fully allocate the proceeds immediately, so we expect the allocation will be within 24 months. However, we lack visibility into the type of temporary placements in which any unallocated proceeds will be held.

Reporting



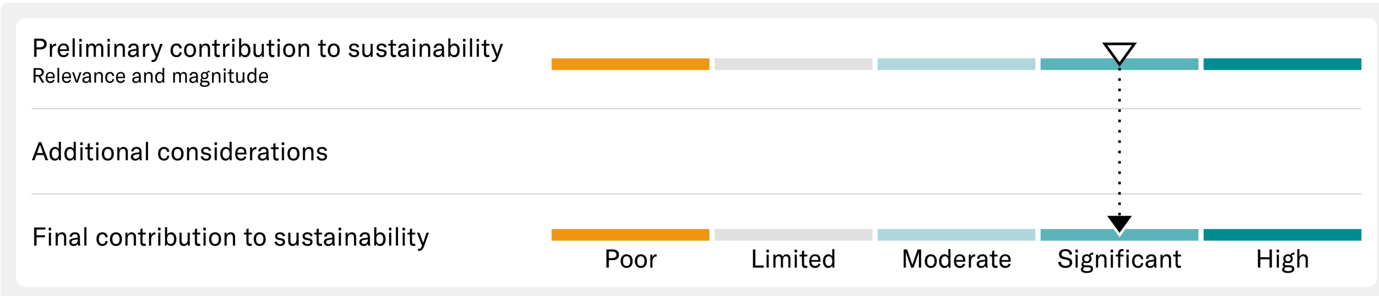
Reporting transparency – ALIGNED

The issuer will report on green bond proceeds annually until all proceeds have been allocated and will prepare both allocation and impact reports. These reports will be made available on Greenko's website. The issuer commits to providing reporting on disbursement and impact indicators, including allocation details at the project level and the expected E&S benefits at the category level.

The issuer has identified relevant E&S impact indicators for the eligible categories. However, the framework lacks visibility on whether the methodologies and assumptions used to report on E&S impacts will be disclosed in the impact reporting. Greenko has committed to appointing an external verifier to conduct annual post-issuance verification of the allocation reporting, but it is not clear whether this verification will also be done for impact reporting.

Contribution to sustainability

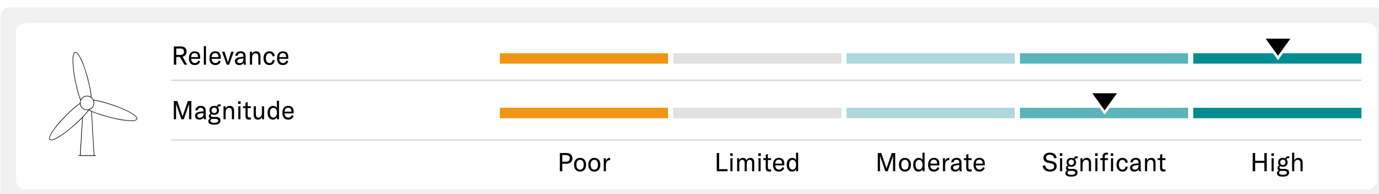
The framework demonstrates a significant overall contribution to sustainability. This reflects a preliminary contribution to sustainability score of significant, based on the relevance and magnitude of the eligible project categories, and we have not made an adjustment to the preliminary score based on additional contribution to sustainability considerations.



Preliminary contribution to sustainability

The preliminary contribution to sustainability is significant, based on the relevance and magnitude of the eligible project categories. The issuer has shared the expected distribution of proceeds among the four eligible categories, with energy storage projects receiving the most funding. Based on this information, we have assigned the majority of the weight to energy storage projects, followed by hydropower assets, while solar and wind eligible categories have received the smallest weight. A detailed assessment by eligible category has been provided below.

Hydroelectricity production and transmission facilities

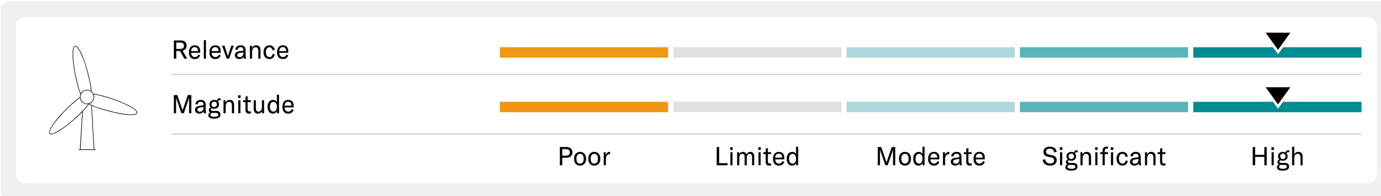


The relevance is high because investments in hydropower assets will contribute significantly to meeting India's target of achieving 40% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030. India's current installed capacity is approximately 466 GW,[2] with hydropower accounting for 12% of the energy mix.[3] India has a low per capita electricity consumption of 1,255 kWh, which is about one-third of the world average, but the energy demand is expected to increase in the coming years, so the investments in hydropower assets are a highly relevant addition to the clean energy mix.

The magnitude is significant as the hydropower projects aim to significantly contribute to climate change mitigation, with a performance threshold of power density greater than $10 W/m^2$, which aligns with the Climate Bonds Initiative's (CBI) stringent threshold. These large-scale projects come with significant risks such as population displacement and ecosystem fragmentation. To address these, the issuer has committed to conducting ESIA for all the projects, which is viewed positively.

Greenko's recent acquisition of the Teesta III hydropower project has been exposed to flood risks from glacier melting and heavy rainfall. The dam was breached in 2023 under the Sikkim government's control, and is now currently being restored by Greenko. The issuer has shared that the current green bond issuance is primarily intended for storage projects, and Teesta III will not receive any proceeds from this issuance. Nonetheless, the project will undergo an ESIA to manage material ESG risks.

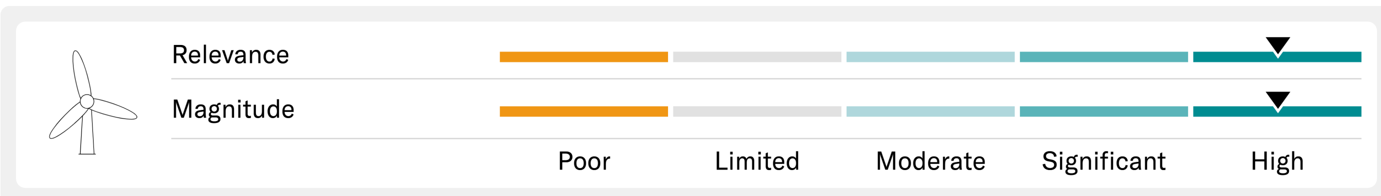
Solar generation and transmission facilities



The category relevance is high because solar power projects help reduce the country's carbon footprint and mitigate the impacts of climate change. Electricity generated from solar is expected to constitute 41% of the Indian energy mix by 2031-32,[4] up from 19% as of January 2025. For a country expecting a power generation capacity addition of 575-625 GW by 2035,[5] investments in renewable energy sources like solar will play a crucial role in the energy mix. Furthermore, an increase in solar power capacity reduces India's reliance on imported fossil fuels, supporting the transition to cleaner energy and enhancing energy security.

The magnitude is high because solar photovoltaic electricity generation facilities correspond to best available technology, with minimal lock-in effects. The assets financed in this category align with the technical criteria of international standards, such as EU taxonomy. The issuer is committed to end-of-life management, including project life extension.

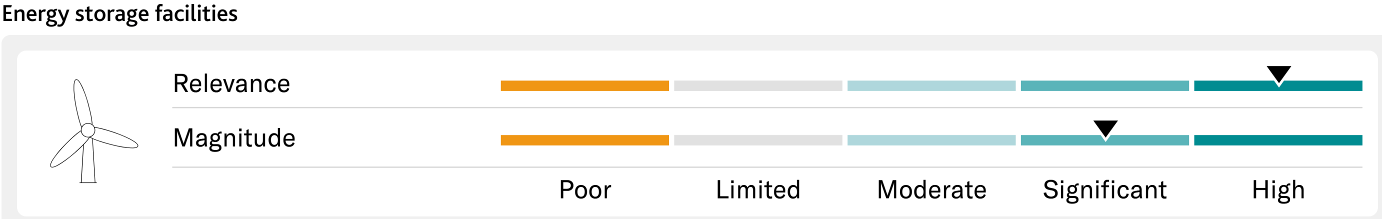
Wind generation and transmission facilities



The relevance is high because wind power facilities play an important role in India's energy transition. Wind power currently comprise 10% of the India's energy mix, and this proportion is expected to increase to 13% by 2031-32, based on National Electricity Plan 2022-2032. Wind, together with solar, is expected to contribute more than 50% of the capacity in the Indian grid by 2031-32, as part of the government plan to install 500 GW of renewable capacity by 2030.[6] For the issuer, wind power forms the highest portion of the revenue mix (FY 2023-24), accounting for 55%, reflecting a high relevance.

The magnitude of this eligible category is high because wind power generation facilities are onshore projects, representing the best available technology with minimal lock-in effects. The assets financed in this category adhere to the technical criteria of market-based taxonomies, such as the CBI. The issuer is committed to conducting ESIA for these projects, thereby mitigating material ESG risks, including impacts on biodiversity. Additionally, the issuer has programs focused on the end-of-life management of wind blades, such as donating portions of the blades, free of cost, to local fishing communities, who repurpose them into boats.

Energy storage facilities



The relevance is high because PHSPs financed under this category are crucial for addressing the intermittent nature of renewable energy, which is expected to increase in generation capacity in the coming years. India currently has around 4.7 GW of installed pumped hydro storage capacity, with plans to significantly increase this to potentially 55 GW by 2031-2032,[7] highlighting a major push towards developing PHSPs across the country. The issuer plans to develop 22 GW of PHSP capacity across 10 states, as per its integrated report, contributing materially to India's future energy storage requirements.

The magnitude is significant, as the category will finance PHSPs and battery storage, expected to contribute significantly to climate change mitigation. PHSP projects aim to meet the intensity threshold of 50gCO2e/kWh or a power density greater than $10W/m^2$, aligning with the CBI's standards. The issuer commits to purpose-built PHSPs alongside third-party-managed intermittent renewables, addressing grid balancing and transmission system underutilization. With intermittent renewables making up 32.5% of India's installed capacity as of March 2024,[8] these PHSPs are expected to support a grid with at least 20% intermittent renewable energy.

The issuer plans to develop 22 GW of PHSP capacity, indicating large-scale projects with significant environmental footprint. Construction of reservoirs and related infrastructure may lead to substantial land use changes, deforestation, and habitat destruction, especially in protected landscapes. Although there is limited visibility on the extent of adverse impacts due to the early project stages, they will be subject to ESIA to address issues like population displacement and ecosystem fragmentation.

Additional contribution to sustainability considerations

We have not made an adjustment to the preliminary contribution to sustainability score based on additional considerations.

For coherence, the projects are expected to align with Greenko's sustainability priorities, focusing on renewable energy investments. Although India has historically relied on coal, Greenko's investments in wind, solar, and pumped hydro storage diversify the energy mix, enable incremental renewable energy additions to the grid and thus, support decarbonization, and enhance energy security. These projects will significantly contribute to Greenko's target of 100 GWh per day storage service, with over 13 GW storage capacity.

Greenko conducts ESIAs for all its projects, adhering to international standards like the Equator Principles, IFC Performance Standards, and EHS Guidelines. These assessments identify potential impacts on biodiversity, displacement, and livelihoods, enabling strategic risk mitigation. Greenko is certified under ISO 9001:2015 (Quality Management), ISO 45001:2018 (Occupational Health and Safety), ISO 14001:2015 (Environmental Management), and ISO 27001:2022 (Information Security).

Appendix 1 - Alignment with principles scorecard for Greenko's green bond sustainable financing framework

Factor	Sub-factor	Component	Component score	Sub-factor score	Factor score
Use of proceeds	Clarity of the eligible categories	Nature of expenditure	A	Aligned	Aligned
		Definition of content, eligibility and exclusion criteria for nearly all categories	A		
		Location	A		
		BP: Definition of content, eligibility and exclusion criteria for all categories	No		
	Clarity of the objectives	Relevance of objectives to project categories for nearly all categories	A	Best practices	
		Coherence of project category objectives with standards for nearly all categories	A		
		BP: Objectives are defined, relevant and coherent for all categories	Yes		
	Clarity of expected benefits	Identification and relevance of expected benefits for nearly all categories	A	Aligned	
		Measurability of expected benefits for nearly all categories	A		
		BP: Relevant benefits are identified for all categories	Yes		
		BP: Benefits are measurable for all categories	Yes		
		BP: Disclosure of refinancing prior to issuance and in post-allocation reporting	No		
		BP: Commitment to communicate refinancing look-back period prior to issuance	No		
Process for project evaluation and selection	Transparency and clarity of the process for defining and monitoring eligible projects	Clarity of the process	A	Aligned	Aligned
		Disclosure of the process	A		
		Transparency of the environmental and social risk mitigation process	A		
		BP: Monitoring of continued project compliance	No		
Management of proceeds	Allocation and tracking of proceeds	Tracking of proceeds	A	Aligned	Aligned
		Periodic adjustment of proceeds to match allocations	A		
		Disclosure of the intended types of temporary placements of unallocated proceeds	A		
		BP: Disclosure of the proceeds management process	No		
		BP: Allocation period is 24 months or less	Yes		
Reporting	Reporting transparency	Reporting frequency	A	Aligned	Aligned
		Reporting duration	A		
		Report disclosure	A		
		Reporting exhaustivity	A		
		BP: Allocation reporting at least until full allocation of proceeds, and impact reporting until full bond maturity or loan payback	No		
		BP: Clarity and relevance of the indicators on the sustainability benefits	Yes		
		BP: Disclosure of reporting methodology and calculation assumptions	No		
		BP: Independent external auditor, or other third party, to verify the tracking and allocation of funds	Yes		
		BP: Independent impact assessment on environmental and social benefits	No		
				Overall alignment with principles score:	**Aligned**

Legend: BP - Best practice, A - Aligned, PA - Partially aligned, NA - Not aligned

Appendix 2 - Mapping eligible categories to the United Nations' Sustainable Development Goals

The four eligible categories included in Greenko's green bond framework are likely to contribute to two of the United Nations' Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals		SDG Targets
GOAL 7: Affordable and Clean Energy	*- Development and construction, of hydroelectricity production and transmission facilities* *- Development and construction, of solar generation and transmission facilities* *- Development and construction, of wind generation and transmission facilities* *- Development and construction, of energy storage facilities aiming at promoting the development of renewable energies*	7.2: Increase substantially the share of renewable energy in the global energy mix
GOAL 13: Climate Action		13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

The United Nations' Sustainable Development Goals (SDGs) mapping in this SPO considers the eligible project categories and associated sustainability objectives/benefits documented in the issuer's green bond framework, as well as resources and guidelines from public institutions, such as the ICMA SDG Mapping Guidance and the UN SDG targets and indicators.

Appendix 3 - Summary of eligible categories in Greenko's green bond framework

Eligible Categories	Description	Sustainability Objectives	Impact Reporting Metrics
Development and construction, of hydroelectricity production and transmission facilities	- Hydro power below 25MW; and Hydro Power above 25MW with power density greater than 10MW/m2 using the G-res tool (developed by the International Hydropower Association and the UNESCO Chair for Global Environmental Change), or a site-specific assessment in line with the IEA Hydro Framework	Climate change mitigation SDG 7 and SDG 13	- Total capacity installed and/or in operation (MW) - Annual GHG emissions reduced/avoided in tonnes of CO2 equivalent - Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy) - Variation of the carbon intensity factor of the transmission system in tonnes of CO2 equivalent per MWh
Development and construction, of solar generation and transmission facilities	- Development, construction, installation and maintenance of solar facilities (only photovoltaic energy)	Climate change mitigation SDG 7 and SDG 13	- Total capacity installed and/or in operation (MW) - Annual GHG emissions reduced/avoided in tonnes of CO2 equivalent - Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy) - Variation of the carbon intensity factor of the transmission system in tonnes of CO2 equivalent per MWh
Development and construction, of wind generation and transmission facilities	- Development, construction, installation and maintenance of wind facilities (only onshore wind energy)	Climate change mitigation SDG 7 and SDG 13	- Total capacity installed and/or in operation (MW) - Annual GHG emissions reduced/avoided in tonnes of CO2 equivalent - Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy) - Variation of the carbon intensity factor of the transmission system in tonnes of CO2 equivalent per MWh
Development and construction, of Energy Storage Facilities	- Development, construction, installation and maintenance of energy storage facilities aiming at promoting the development of renewable energies and/or replacing peak electricity produced by less environmentally friendly units	Climate change mitigation SDG 7 and SDG 13	- Total storage capacity installed and/or in operation (MWh or Ah) - Expected annual energy stores (MWh) - Avoidance and reduction of Greenhouse gas emissions (GHG) in tonnes of CO2 equivalent - Decrease in the carbon intensity factor (tCO_2e/MWh)

Endnotes

1 Point-in-time assessment is applicable only on date of assignment or update.

2 NITI Aayog: India Climate & Energy Dashboard, accessed on 05-Mar-2025.

3 IEA: Asia-Pacific: Sources of electricity generation, accessed on 05-Mar-2025.

4 Central Electricity Authority: National Electricity Plan 2022-32.

5 Moody's: Power – India: Massive investment required to achieve net-zero pledge; private sector will be vital.

6 Government of India: Ministry of Power: 500GW Nonfossil Fuel Target.

7 Asian-Power: India's pumped storage capacity to surge.

8 Central Electricity Authority: All India Installed Capacity (in MW) of Power Stations, Mar-2024.

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