SDG7 Energy Compact of the Government of India

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)

☒ **7.1.** By 2030, ensure universal access to affordable, reliable, and modern energy services.	Target 7.1 **Ensure sustained universal energy access** Time frame: By 2022 Baseline: May 2016, launch of Pradhan Mantri UjjwalaYojana (PMUY) 1.0 with target 50 million (revised to 80 million in March 2018) deposit-free LPG connections for below-poverty-line households. Context for the ambition • India electrified more than 18,000 inhabited villages in a record 987 days under the Deen Dayal Upadhyay Gram Jyoti Yojna. Further, under the Saubhagya scheme, India connected more than 28 million houses with electricity in just 18 months, ensuring universal access to electricity. This was the largest expansion of access in such short time frame anywhere in the world. • The universalization of access to electricity reduced/eliminated the dependence of the households on traditional fuels such as kerosene for lighting and cooking, and firewood / dried cow-dung for cooking. This has led to a reduction of kerosene consumption from 892 crore litres in 2014-15 to 204 crore litres in 2020-21 – a reduction of more than 77%; and a reduction in CO2 emissions by 17.2 million tonnes per annum.

		• To ensure universal access to clean cooking fuel, India's Union Budget FY 2021-22 provided for an additional 10 million deposit-free LPG connections under the PMUY 2.0 scheme for those low-income families who could not be covered under the first phase of PMUY. This will include first refill and a hotplate free of cost. • PMUY 1.0, launched in May 2016 aimed to provide LPG connections to 50 million women members of below-poverty-line (BPL) households. PMUY 1.0 target was expanded in March 2018 to 80 million LPG connections, which was achieved in August 2019, seven months ahead of schedule. • The LPG connections released under PMUY 1.0 have helped increase LPG coverage in India from 61.9 % as on 1 April 2016 to 99.5% as on 1 January 2021. PMUY 2.0 will help India move closer to 100% LPG coverage, ensuring universal access to clean cooking fuel. • The objective is to make LPG as a clean cooking fuel available to rural and deprived households which otherwise use traditional cooking fuels such as firewood, coal, cow-dung cakes, etc. which have detrimental impacts on the health of the women, family members, and the environment.
	☒ **7.2.** By 2030, increase substantially the share of renewable energy in the global energy mix.	Target 7.2.1 **Increase the renewable energy installed capacity to 450 GW by 2030** Time frame: 2030 Baseline: India's installed renewable energy (RE) capacity (excluding large hydro above 25 MW) as on 31st August 2021: 100.68 GW Context for the ambition • One of India's Nationally Determined Contributions at the CoP21 Paris Agreement is to achieve 40% share of non-fossil-fuel based installed capacity by 2030. • India's installed non-fossil fuel based capacity today stands at more than 153 GW, which equates to more than 39% share of total installed power generation capacity as of August 2021. 62 GW of additional renewable energy capacity is already under implementation and 29 GW is under bidding. • India has raised its ambition and enhanced its target to 450 GW of renewables based capacity by 2030. • India's renewable energy basket includes solar, wind, bioenergy, hydropower and emerging areas such as green hydrogen, geothermal, etc.
		Target 7.2.2: Develop and implement a National Hydrogen Energy Mission to scale up green hydrogen production and utilization across multiple sectors, with a target of ~1 million tonnes annual green hydrogen production by 2030.

		Time frame: 2030 Baseline: Launch of the National Hydrogen Energy Mission in 2021 Context for the ambition: • Prime Minister of India, on 15th August 2021, had announced the launch of National Hydrogen Mission with a target to make India a global hub for production as well as exporting green hydrogen. • The Ministry of New and Renewable Energy, Government of India is developing a National Hydrogen Energy Mission to scale up green hydrogen production and utilization across multiple sectors. • The Mission will support development and commercialization of green hydrogen technologies with an aim to reduce dependence on imported fossil fuels and enable decarbonization of the economy.
		Target 7.2.3: Production Linked Incentive (PLI) Scheme for high-efficiency solar modules to create an additional 10,000 MW of integrated solar PV manufacturing capacity by 2025. Timeframe: 2025 Baseline: 5.7 GW solar module manufacturing capacity in 2015. Context for the ambition • The Union Cabinet approved the Production Linked Incentive (PLI) Scheme in November 2020. It feeds into India's plans to install 450 GW renewable energy capacity by 2030. • This would improve India's clean energy ecosystem through increased manufacturing capacity, investments in R&D and process improvements to achieve higher Solar PV module efficiencies.
		Target 7.2.4: Create production capacity for 15 million metric tonnes (MMT) of compressed biogas (CBG) by 2024. Time frame: 2024 Baseline: Launch of national Sustainable Alternative Towards Affordable Transportation (SATAT) initiative in October 2018 to promote compressed biogas (CBG). Context for the ambition • The Government of India launched the SATAT initiative in October 2018 to promote CBG as an

		alternative green transport fuel. The initiative will also help in efficient management of biomass and organic waste such as municipal waste, forest residues, and agri-waste including animal-husbandry and marine waste. • CBG will replace a proportion of fossil based natural gas in transport sector. • Reduced dependence on fossil based natural gas will lead to reduced imports, increased energy security, greater utilisation of organic wastes, and lower emissions.
		Target 7.2.5: Achieve 20% ethanol blending in petrol by Ethanol Supply Year (ESY) 2025-26. Time frame: By ESY2025-26 Baseline: Between 2 – 2.5% ethanol blending in petrol in ESY 2014-15 Context for the ambition • The roadmap for sugarcane-derived ethanol blending in India 2020-25 was released on 5 June 2021, with notification dated 2 June 2021, to make E20 fuel available by April 2023. • India is promoting ethanol as an indigenous, non-polluting and virtually inexhaustible biofuel to reduce import of crude oil and reduce fossil fuel-based carbon emissions.
	☒ **7.3.** By 2030, double the global rate of improvement in energy efficiency.	**Target 7.3.1: Enhance energy efficiency in agriculture, buildings, industries and transportation sectors while also promoting energy efficient appliances/equipment** Time frame: 2030 Baseline: Implementation of the National Mission for Enhanced Energy Efficiency (NMEEE) in 2015. Context for the ambition: • India's Nationally Determined Contribution at the CoP21 Paris Agreement includes reducing its share of emissions intensity of its GDP by 33-35% over 2005 levels by 2030. India has already achieved emission reduction of 28% over 2005 levels and at this pace, it is all set to exceed its NDC commitments before 2030. • The National Mission for Enhanced Energy Efficiency (NMEEE), one of the key components of the National Action Plan on Climate Change (NAPCC), focuses on achieving energy efficiency in all sectors of economy with substantial potential for improvement. • The revised NMEEE – the Roadmap of Sustainable and Holistic Approach to National Energy Efficiency

	(ROSHANEE), released in 2019, includes all current and potential areas of energy efficiency in each sector. • The Bureau of Energy Efficiency (BEE) of the Ministry of Power is the implementing agency for ROSHANEE. Enhanced energy efficiency will lead to lower energy consumption across agriculture, buildings, industries and transportation and concomitant mitigation of GHG emissions. • Under the unique Perform, Achieve and Trade (PAT) scheme, energy efficiency targets are set for industry. If they achieve higher efficiencies than their targets, they get Energy Savings Certificates (ESCerts) equivalent to the extra efficiencies generated. The ESCerts are purchased by industries falling short of their Energy Efficiency target in a particular year. These ESCerts are tradable on the Power exchange. The PAT scheme has resulted in energy savings of 23 Million Tonne of Oil Equivalent (MTOE) and accounted for emission reduction of 102 million tonnes of CO2 per annum. • Under its Street Lighting National Program (SLNP), India will replace all its streetlights with LED streetlights. Under the program, more than 12.18 million LED streetlights have been installed across India. This has resulted in an estimated energy savings of 8.18 billion kWh per year with avoided peak demand of ~1,364 MW and estimated GHG emission reduction of 5.64 million tonnes CO2 per year. • The Standards & Labelling (S&L) programme, launched in 2006, aims to inform consumers about the energy and cost savings potential of adopting energy-efficient products. The programme targets the display of energy performance labels ('Star labels') on select appliances and equipment, and lays down minimum energy performance standards. Starting with 10 appliances/ equipment in 2009, the programme now covers 28 appliances/equipment; over 15,000 models have been awarded comparative Star labels. This has resulted in reduction of CO2 emissions by 55.0 million tonnes per annum. • The Government of India launched the Energy Conservation Building Code 2017 (ECBC) in June, 2017 for large commercial buildings with connected load of 100 kW and above or 120 kVA and above. Subsequently, the government also launched the Eco-Niwas Samhita 2018 (now Eco-Niwas Samhita 2021), the ECBC for residential buildings, to push for energy efficiency in the residential sector.

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: **N/A** Time frame: Baseline: Context for the ambition:

SECTION 2: ACTIONS TO ACHIEVE THE AMBITION

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

Description of action (please specify for which ambition from Section 1) Target 7.1 **Ensure sustained universal energy access** Action: Distribution of LPG through public sector Oil Marketing Companies, with special registration facilities for migrant families.	*Start and end date* 2021 – 2022
Description of action (please specify for which ambition from Section 1) Target 7.2.1 **Increase the renewable energy installed capacity to 450 GW by 2030** Action: Several national and subnational programmes to promote utility-scale solar and wind generation; rooftop solar installations; distributed renewable energy systems such as mini/micro-grids for agriculture, productive livelihood applications and communities; off-grid installations for remote areas; bioenergy and cogeneration plants; small and large hydropower projects; innovative systems such as round-the-clock power and wind-solar hybrid models; and emerging areas such as green hydrogen.	*Start and end date* 2021 – 2030
Description of action (please specify for which ambition from Section 1) **Target 7.2.2: Develop and implement a National Hydrogen Energy Mission to scale up green hydrogen production and utilization across multiple sectors, with a target of ~1 million tonnes annual green hydrogen production by 2030.** Action: The proposed Mission will focus on creation of demand and market instruments, incentivising indigenous manufacturing, development of the policy and regulatory framework, support for production and supply infrastructure, and public-private partnership in R&D for green hydrogen.	*Start and end date* 2023 – 2030
Description of action (please specify for which ambition from Section 1) **Target 7.2.3: Production Linked Incentive (PLI) Scheme for high-efficiency solar modules to create an additional 10,000 MW of integrated solar PV manufacturing capacity by 2025.** Action: The PLI scheme for high-efficiency solar modules is being implemented nationwide by the Ministry of New and Renewable Energy via the Indian Renewable Energy Development Agency (IREDA). Beneficiaries will be selected by a transparent bidding process.	*Start and end date* 2020 – 2025
Description of action (please specify for which ambition from Section 1) **Target 7.2.4: Create production capacity for 15 million metric tonnes (MMT) of compressed biogas (CBG) by 2024.** Action: The SATAT initiative envisages the setting up of infrastructure and supply chain for 15 MMT of CBG by 2024. As part of the scheme, public sector oil and gas marketing companies are inviting Expressions of Interest (EoI) for procurement of CBG on long term basis. The Reserve Bank of India (RBI) has included CBG plants in Priority Sector Lending. Central Financial Assistance or subsidy is available to set up CBG plants to promote new projects.	*Start and end date* 2018 – 2024

Description of action (please specify for which ambition from Section 1) **Target 7.2.5: Achieve 20% ethanol blending in petrol by Ethanol Supply Year (ESY) 2025-26.** Action: Bioethanol feedstock has been expanded to include damaged food grains in addition to sugar-based sources. The Government of India is encouraging sugar mills and distilleries to enhance distillation capacities by facilitating loans from banks with interest subvention up to 6%. This Ethanol is procured by public sector Oil Marketing Companies.	*Start and end date* Ethanol Supply Year (ESY) 2014-15 to 2025-26
Description of action (please specify for which ambition from Section 1) **Target 7.3.1: Enhance energy efficiency in agriculture, buildings, industries and transportation sectors while also promoting energy efficient appliances/equipment** Action: Extend PAT to more sectors, S&L to more appliances; 100% LED street lighting; Ensuring compliance with ECBC; enable data, technologies, finance for demand side management; promote energy efficient technologies across sectors; create standardised sectoral Monitoring, Reporting and Verification (MRV) protocols; create knowledge sharing platforms; capacity building and awareness creation.	*Start and end date* 2015 – 2030

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 Target 7.1 **Ensure sustained universal energy access** Outcome: Achieve universal access to LPG in India as a clean cooking fuel; reduction in ambient air pollution and corresponding reduction in exposure to indoor air pollution of women and families • Impact – Jobs: Greater participation of women in formal economic activities; additional jobs in the Oil Marketing Companies and their channel partners • Impact – Growth: Improved workforce productivity due to lower exposure to air pollution and associated co-morbidities • Impact – Health: Reduction in premature deaths and morbidity due to indoor air pollution • Impact – Sustainability: Reduction in forest degradation and emissions intensity due to lower dependence on firewood • Impact – Other Countries: Reduction in transboundary air pollution associated with the use of firewood and biomass • Impact – SDGs: SDG 3: Good health and well-being | SDG 5: Gender equality | SDG 7: Affordable and clean energy | SDG 8: Decent work and economic growth | SDG 11: Sustainable cities and communities | SDG 13: Climate action	*Date* 2022
Outcome	*Date*

	Target 7.2.1 **Increase the renewable energy installed capacity to 450 GW by 2030** Outcome: Increase in the share of renewables in grid-interactive installed capacity and resultant decarbonisation of the grid leading to reduced emissions; increase in domestic manufacturing capacity, etc. • Impact – Jobs: Estimated ~7,00,000 new jobs to be created by 2030 (India's RE sector employs over 1,00,000 full-time skilled and unskilled workers as of 2019-20). • Impact – Sustainability: Decarbonisation of electricity generation, which contributes 40% of India's GHG emissions. • Impact – Other Countries: Reduction in transboundary air-pollution; experience, technology and services sharing with ISA Member Countries. • Impact – SDGs: SDG 3: Good health and well-being | SDG 7: Affordable and clean energy | SDG 8: Decent work and economic growth | SDG 9: Industry, innovation and infrastructure | SDG 11: Sustainable cities and communities | SDG 13: Climate action	2030
	Outcome **Target 7.2.2: Develop and implement a National Hydrogen Energy Mission to scale up green hydrogen production and utilization across multiple sectors, with a target of ~1 million tonnes annual green hydrogen production by 2030.** Outcome: The Actions are expected to lead to Green Hydrogen production capacity of about 1 Million Tonne per annum by 2030; cumulative installation of about 15 GW of domestically manufactured electrolysers; about 30 GW of renewable energy deployment for production of Green Hydrogen; about 9 million tonnes per annum of carbon emissions reduction from the hard-to-abate sectors; development of indigenous supply chains including manufacturing of electrolysers; development of robust policy and regulatory framework; and development of cutting edge R&D capabilities in Indian industry and institutions. • Impact – Jobs: Local job creation across different elements of the hydrogen value chains. • Impact – Growth: Economic value addition through domestic manufacturing of hydrogen supply chain components. • Impact – Sustainability: Reduced emissions from hard-to-abate sectors. • Impact – Other Countries: India can contribute to global hydrogen economy through export of Electrolysers, green hydrogen and green ammonia • Impact – SDGs: SDG 7: Affordable and clean energy | SDG 8: Decent work and economic growth | SDG 9: Industry, innovation and infrastructure	*Date* 2030
	Outcome **Target 7.2.3: Production Linked Incentive (PLI) Scheme for high-efficiency solar modules to create an additional 10,000 MW of integrated solar PV manufacturing capacity by 2025.** Outcome: This scheme will help India achieve the ambition of 450 GW renewable energy capacity by 2030. • Impact – Jobs: About 30,000 direct and 1,20,000 indirect jobs are expected to be created in the solar modules sector via the PLI scheme.	*Date* 2025

	• Impact – Growth: The PLI scheme will incentivise domestic and global players to build large scale capacity in India. Expected outcomes include an additional 10,000 MW of integrated solar PV manufacturing capacity; direct investment of about INR 17,200 crore (USD 2.36 billion) in projects and in materials such as solar glass, back-sheets, and junction boxes. • Impact – SDGs: SDG 7: Affordable and clean energy | SDG 8: Decent work and economic growth | SDG 9: Industry, innovation and infrastructure	
	Outcome **Target 7.2.4: Create production capacity for 15 million metric tonnes (MMT) of compressed biogas (CBG) by 2024.** Outcome: Will reduce dependence on fossil natural gas, leading to increased energy security, greater utilisation of organic wastes, and lower emissions. Impact – Jobs: 75,000 direct job opportunities and hundreds of thousands of indirect jobs; additional local jobs in biomass supply chains - collection, storage, processing and transportation. Impact – Growth: Circular economy benefits in developing productive uses of organic waste streams; enhanced energy security through reduced import of natural gas and crude oil and consequent buffer against crude oil/gas price fluctuations; increasing farmer incomes. Impact – Sustainability: Avoided use of fossil natural gas in various demand centres; can sustainably utilise and treat organic fractions of municipal solid waste, animal waste, organic industrial waste, and other organic waste streams. Impact – SDGs: SDG 6: Clean water and sanitation | SDG 7: Affordable and clean energy | SDG 8: Decent work and economic growth | SDG 9: Industry, innovation and infrastructure | SDG 11: Sustainable cities and communities	*Date* 2024
	Outcome **Target 7.2.5: Achieve 20% ethanol blending in petrol by Ethanol Supply Year (ESY) 2025-26.** Outcome: Biofuel ethanol will be blended 20% with petrol which will reduce equivalent import and use of petrol and consequent emissions. • Impact – Growth: Will save foreign exchange of over INR 30,000 crore (USD 4 billion) annually by reduction in crude oil import, and thereby also increase energy security. • Impact – Sustainability: Will reduce Carbon monoxide emissions by 30-50% and hydrocarbon emissions by 20%. • Impact – SDGs: SDG 7: Affordable and clean energy | SDG 8: Decent work and economic growth | SDG 9: Industry, innovation and infrastructure | SDG 11: Sustainable cities and communities	*Date* Ethanol Supply Year (ESY) 2025-26
	Outcome **Target 7.3.1: Enhance energy efficiency in agriculture, buildings, industries and transportation sectors while also promoting energy efficient appliances/equipment** Outcome: Enhanced energy efficiency will lead to lower energy consumption across industries, buildings, transportation and agriculture, and concomitant mitigation of CO_2emissions. The activities proposed under ROSHANEE are expected to reduce over 557 million tonnes of CO2 (thermal energy savings of 42.71 million tonnes of oil equivalent and 500 billion units of electricity savings at generation end) by 2030.	*Date* 2030

- Impact – Jobs: Creation of skilled jobs via upskilling of professionals and utility staff for energy efficiency across sectors through certification programmes and Massive Online Open Courses; job creation in ESCOs; reduced energy costs can potentially lead to improved production competitiveness in industries and agriculture, thus aiding in economic growth and job creation.
- Impact – Growth: Reduced expenditure on energy leading to increase in disposable incomes; reduced energy costs could lead to improved competitiveness of industrial and agricultural sectors.
- Impact – Sustainability: Reduced energy consumption levels and associated GHG emissions.
- Impact – Other Countries: India is catering to regional/global demand for energy efficient technology, products and services.
- Impact – SDGs: SDG 7: Affordable and clean energy | SDG 8: Decent work and economic growth | SDG 9: Industry, innovation and infrastructure | SDG 11: Sustainable cities and communities | SDG 13: Climate Action

SECTION 4: REQUIRED RESOURCES AND SUPPORT

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

Description of action (please specify for which ambition from Section 1) Target 7.1 **Ensure sustained universal energy access** **Finance/investments**: Cost to be covered by India's Union Budget and Oil Marketing Companies.
Description of action (please specify for which ambition from Section 1) Target 7.2.1 **Increase the renewable energy installed capacity to 450 GW by 2030** **Finance/investments**: A cumulative investment of INR 17,00,000 crore (USD 221 billion) is required to set up 450 GW renewable generation capacity, including the associated transmission and storage systems.
Description of action (please specify for which ambition from Section 1) **Target 7.2.2: Develop and implement a National Hydrogen Energy Mission to scale up green hydrogen production and utilization across multiple sectors, with a target of ~1 million tonnes annual green hydrogen production by 2030.** **Finance/investments**: Total investment requirement of INR 1,50,000 crore (1 INR = 0.013 USD)
Description of action (please specify for which ambition from Section 1) **Target 7.2.3: Production Linked Incentive (PLI) Scheme for high-efficiency solar modules to create an additional 10,000 MW of integrated solar PV manufacturing capacity by 2025.** **Finance/investments**: Five-year budgetary allocation of INR 4,500 crore (USD 0.62 billion) under the PLI scheme.
Description of action (please specify for which ambition from Section 1) **Target 7.2.4: Create production capacity for 15 million metric tonnes (MMT) of compressed biogas (CBG) by 2024.** **Finance/investments**: SATAT envisages investments of approx. INR 2,00,000 crore (USD 27.2 billion) in 5000 CBG plants to achieve

15 MMT of CBG production capacity by 2024.
Description of action (please specify for which ambition from Section 1) **Target 7.2.5: Achieve 20% ethanol blending in petrol by Ethanol Supply Year (ESY) 2025-26.** **Finance/investments**: The Government of India expects INR 41,000 crore (USD 5.6 billion) investment in capacity addition and new distilleries to meet the target.
Description of action (please specify for which ambition from Section 1) **Target 7.3.1: Enhance energy efficiency in agriculture, buildings, industries and transportation sectors while also promoting energy efficient appliances/equipment** **Finance/investments**: Expenditure of ~INR 4202.71 crore (USD 0.60 billion) from 2021-22 to 2025-26 for agriculture, buildings, industries and transportation sectors; Around Rs 8,000 crores till 2024 for LED Street lighting; public/private partnerships, incubators and accelerators; ICT tools for energy efficiency; financial products to mobilise private investment in energy efficiency; capacity building among utilities, professionals and financial institutions on energy efficiency (1 INR = 0.013 USD). Promote low-cost finance, instalment schemes, etc. to enable adoption of energy-efficient products by all socioeconomic segments.

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.]

☒Financing	*Description* | Financing requirements have been listed for each target of this EC. India is hopeful of global cooperation in this context.
☐ In-Kind contribution	*Description* | N/A
☒ Technical Support	*Description* | The EC targets for forward-looking and need considerable RD&D and technological innovation to achieve. India is hopeful of global cooperation in this context.
☐ Other/Please specify	*Description* | N/A

SECTION 5: IMPACT

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

- India for national Energy Compacts | 1.3 billion citizens through the various interventions + partner countries for select interventions

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]

Alignment of each target with SDGs has been provided as part of the OUTCOMES segment for each target (earlier in the document).

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]

Targets contribute directly to India's Nationally Determined Contribution at the CoP21 Paris Agreement of

- Achieving 40% share of non-fossil-fuel based installed power generation capacity by 2030.
- Reducing its share of emissions intensity of its GDP by 33-35% over 2005 levels 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.

All Energy Compact targets will be measured, regulated and reported through designated Government of India sources.
Outcome Target 7.1 **Ensure sustained universal energy access** **Reporting methodology**: Official data from the Ministry of Petroleum and Natural Gas, Govt of India and LPG data from Oil Marketing Companies.
Outcome Target 7.2.1 **Increase the renewable energy installed capacity to 450 GW by 2030** **Reporting methodology**: Official data from the Ministry of New and Renewable Energy, Govt of India.
Outcome **Target 7.2.2: Develop and implement a National Hydrogen Energy Mission to scale up green hydrogen production and utilization across multiple sectors, with a target of ~1 million tonnes annual green hydrogen production by 2030.** **Reporting methodology**: Official data from the Ministry of New and Renewable Energy, Government of India.
Outcome **Target 7.2.3: Production Linked Incentive (PLI) Scheme for high-efficiency solar modules to create an additional 10,000 MW of integrated solar PV manufacturing capacity by 2025.** **Reporting methodology**: Official data from the Ministry of New and Renewable Energy, Govt of India and the Indian Renewable Energy Development Agency (IREDA).
Outcome **Target 7.2.4: Create production capacity for 15 million metric tonnes (MMT) of compressed biogas (CBG) by 2024.** **Reporting methodology**: Official data from the Ministry of New and Renewable Energy and the Ministry of Petroleum and Natural Gas, Govt of India.
Outcome **Target 7.2.5: Achieve 20% ethanol blending in petrol by Ethanol Supply Year (ESY) 2025-26.** **Reporting methodology**: Blending volumes tracked by Oil Marketing Companies; official data from the Ministry of Petroleum and Natural Gas, Govt of India
Outcome **Target 7.3.1: Enhance energy efficiency in agriculture, buildings, industries and transportation sectors while also promoting energy efficient appliances/equipment** **Reporting methodology**: Official data from the Bureau of Energy Efficiency, Ministry of Power, Government of India and Energy Efficiency Services Limited, Ministry of Power, Government of India.

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 N/A
India does not have a net-zero target.

III.2. Has the Energy Compact considered energy-related targets and information in the updated/enhanced NDCs? ☐Yes ☐No N/A
India's NDCs are till 2030. It has not declared any updated NDCs.

III.3. Has the Energy Compact considered alignment with reaching the net-zero emissions goal set by many countries by 2050? ☐Yes ☐No
N/A India does not have a net-zero target.

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

Energy Compact of the Government of India

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)

Ministry of New and Renewable Energy, Government of India

8.3. Lead entity type

☒ Government
☐ Non-Governmental Organization (NGO)
☐ Private Sector
☐ Local/Regional Government
☐ Civil Society organization/Youth
☐ Philanthropic Organization
☐ Multilateral body /Intergovernmental Organization
☐ Academic Institution /Scientific Community
☐ Other relevant actor

8.4. Contact Information

Mr Dinesh D Jagdale, Joint Secretary – International Relations, Ministry of New and Renewable Energy, Government of India
d.jagdale@gov.in cc ir.mnre@nic.in | Tel: +91 11 24361027

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.

Ministry of New and Renewable Energy: mnre.gov.in
Ministry of Petroleum and Natural Gas: petroleum.nic.in
Ministry of Power: powermin.gov.in
PM Ujjwala Yojana: pmuy.gov.in
Bureau of Energy Efficiency: beeindia.gov.in
Energy Efficiency Services Limited: https://eeslindia.org/
India's official HLDE website: energytransition.in
India's commemorative e-book on *Citizen-Centric Energy Transition: The India Story*