

Sustainable Development Goals India - Strides and Challenges Ahead

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SDGs India Index

- India's commitment to the SDGs is reflected in is convergence with the national development agenda as reflected in the motto of 'Collective Efforts for Inclusive Growth'.
- Based on the evidence from the SDG India Index, which measures progress at the sub-national level, the country has developed a robust SDG localization model centred on adoption, implementation and monitoring at the state and district levels.

SDG Indicators

- The progress is tracked on 115 indicators aligned to the National Indicator Framework of the Ministry of Statistics and Programme Implementation.
- The 115 indicators consist of 16 of the 17 SDGs, with a qualitative assessment on Goal 17 and cover 70 SDG targets.
- This is an improvement over the 2018-19 and 2019-20 editions of the index, which had utilized 62 indicators across 39 targets and 13 goals, and 100 indicators across 54 targets and 16 goals respectively.

Voluntary National Review, 2020

- The 2020-21 index showed that the country's overall SDG score improved by 6 points. It improved from 60 in 2019 to 66 in 2020. The positive change is largely driven by exemplSary nationwide performance in Goal 6 (clean water and sanitation) and Goal 7 (affordable and clean energy) in which the composite score reached 83 and 92 respectively.
- Subsequent slides capture India's progress across the SDGs.

India's progress across SDGs

- **Empowered and Resilient India:** India has successfully lifted more than 271 Million people out of multi dimensional poverty through economic growth and empowerment.
- Clean and Healthy India: Through a nationwide initiative triggered by the Clean India Campaign and the National Nutrition Mission, India achieved 100% rural sanitation and sharp reduction in stunting and child and maternal mortality rate. India is at the forefront in providing medical assistance globally after the Covid-19 pandemic. It contributed to SAARC emergency fund with an initial contribution of USD 10 Million.
- Inclusive and Entrepreneurial India: Social inclusion is pursued through universalizing access to nutrition, health, education, social protection and developing capabilities for entrepreneurship and employment. Direct benefit transfer to the poor was a major step.

India's progress across SDGs

- **Sustainable India:** India's climate action strategies call for clean and efficient energy systems, disaster resilient infrastructure, and the planned eco-restoration. Acting on nationally determined contributions, India has electrified 100% of its villages, reduced 88 million tons of CO2 emissions annually through energy efficient appliances, provided clean cooking fuel to 80 million poor households, and set a target to install 450 MW of renewable energy and restore 26 Million hectares of the degraded land by 2030.
- **Prosperous and Vibrant India:** India is one of the fastest growing economies with a GDP of USD 2.72 Trillion in 2018-19. India strives to become a USD 5 Trillion economy by 2025 and pursue an inclusive and sustainable growth trajectory by stimulating manufacturing, building infrastructure, spurring investment, fostering technological investment and boosting entrepreneurship.

India's progress across SDGs

- India launched the Coalition for Disaster Resilient Infrastructure and the International Solar Alliance to leverage global partnerships for climate action and disaster resilience.
- In the spirit of South-South Co-operation, for realising the 2030 Agenda, India supports SAARC developing countries through the USD 150 Million India-UN Development Partnership Fund. In this spirit of regional and global partnership, and the country's commitment to leave no one behind, India steps into the Decade of Action, drawing confidence from its experience in addressing challenges.

India's Nationally Determined Contribution – Relating to SDG 7 & 13 Relevant for Cop 26

- India has committed the following:
 - ➤ Reduce emission intensity of its GDP by 33-35% by 2030, from 2005 levels.
 - ➤ Generate 40% of electricity through non-fossil fuel sources such as solar, wind, hydro, bio-mass and nuclear.
 - ➤ Create additional carbon sink of 2.5 to 3 billion tons of carbon-dioxide by increasing forest and tree cover.
 - ➤ Raise investment in programmes to adapt to climate change in agriculture, water resources, Himalayas, coastal regions, health and disaster management.
 - ➤ All above actions will need USD 2.5 Trillion from 2015 to 2030, part of which India will seek from the west.

SDG-7: Renewable Energy Capacity Addition

- Installed capacity in the country (2021) 95.66 GW (25% of total).
- Renewable electricity generation increased from 61.78 BU in 2014 -15 to 147.25 BU in 2020-21 (2.4 times).
- Investment of about USD 70 Billion since 2014.
- Domestic SPV modules capacity : 9-10 GW, and annual module demand 25-30 GW.
- Rs. 4500 Crore as Production linked Incentive.
- Aspirational Goal- 450 GW by 2030.
- Promote Green Hydrogen

SDG-13: Combating Climate Change

- India is on track to meet the commitment made in its Nationally Determined Contributions under the Paris Agreement (India reduced emission intensity of its economy by 24 per cent relative to 2005 by 2016). India's NDC targets, in line with Paris Climate Agreement.
- India has already put a cess on coal consumption (Rs. 400 per tonne).
- India's National Action Plan on Climate Change is among the most Challenging Globally.

INAE-Initiatives on Sustainability and Climate Change

- INAE's Vision is to provide timely inputs to the national and international policy makers and to extend appropriate assistance in developing engineering solutions.
- INAE has a Vision Document 2020-2025 focussed on sustainability issues and creating a cleaner world through decarbonisation and use of cleaner energy options.
- INAE's focus has been on development for all sectors of economy mainly the critical sector of materials.
- These materials have to be engineered for India-specific applications, that means considering the natural resources and the kind of supply chain that India has. The environmental impact of these materials need to be analyzed and assessed for the life-cycle.

INAE-Initiatives on Sustainability and Climate change

- INAE is focussing on large scale energy storage solutions, electricity grid infrastructure, transportation, mining, mineral processing and extractive metallurgy industry, recycling of waste by-products including municipal waste, supply chain for raw materials need for the transition, finding alternative technology option for the manufacture of steel and cement to reduce the environmental footprint, waste water treatment and recycling, and water purification technology including desalination.
- Leveraging the advanced digital technology for healthcare facilities, egovernance and utilities is a priority.
- INAE has an interdisciplinary expert group (Energy Forum) to study the whole energy transition, comprehensively and holistically.

INAE's experience of engaging with policy makers

- INAE has been engaging with the highest Planning Body Niti Aayog (also the nodal point for SDGs in the government) and the Department of Science and Technology on various topics.
- Realising the importance for Climate Change Action Plan INAE had conducted two studies. The first, immediately after the Paris COP, in 2015, where India committed 175 GW of renewable power by 2022. INAE had expert consultation and published the report on Engineering for Attaining 175 GW of Renewable Power by 2022, in February 2017, The Report was discussed at national and local levels and with other stakeholders who implemented most of the recommendations.
- INAE conducted a second study on Green and Clean Energy Options for Urban Areas during 2017-18 and came out with the report in December 2018. This report was also widely circulated and used by various stakeholders in the planning process.
- INAE also organized a number of Expert Group Meetings and National Level Flagship events to create awareness about the engineering options for meeting SDG 2030 targets and moving toward Net Zero Emissions in 2050.

Initiatives of Reliance Industries

- Investment (upto 2030) in new renewable business: USD 10 billion.
- 4 Giga Factories for next green plan: Integrated solar photovoltaic module factory-production of solar energy. Advanced storage battery factory-storage of intermittent energy. Electrolyses factory-production of green hydrogen. Fuel cell factory-converting hydrogen into mobile and stationary power.
- Green Energy Giga Complex on 5000 acres.
- Plans to produce 100 GW solar panels (by 2030).
- Solar solutions and finance businesses to support deployment of decentralized solar.