Industry Consultation on 'Role of Power Sector in accomplishing the UN Sustainable Development Goals (SDGs) in India'

Wednesday, 5 August 2020





The Context and Introduction to TERI Approach



Business & UN SDGs – Recommendations of TERI CBS Executive Committee

January 2019: Ex-Com
Recommendations

- Many corporates in India already working towards addressing the SDGs
- Need to collate the information to identify & prioritize issues to be addressed by businesses in India
- TERI CBS should work towards developing a framework/format for corporates to work on SDGs

TERI-NFCG (MCA, GoI) Partnership:

To 'augment & accelerate business action on SDGs in India'

- Developing the architecture of industry sector-specific SDG Roadmaps basis NIF, (MoSPI, GoI) to enable deeper business action on SDGs in India; and
- Mainstreaming SDG reporting by Indian businesses by leveraging existing mandatory reporting frameworks & mechanisms to consolidate and report business actions on SDGs in India

November 2019:

Ex-Com Response

• Buy-in & go-ahead from Ex-Com members on the project



Need for Enhancing Actions on SDGs By Businesses & Government



- Post-COVID Recovery demands a stronger India, effectively equipped to address any crisis of such scale & magnitude.
- India has renewed its commitment on SDGs at HLPF 2020 & pledged to accelerate actions to impacting the SDGs in the 'Decade of Action' in light of the COVID-19 crisis.
- A critical source of finance, driver of innovation & technology, and a key driver of economic growth in India business action crucial to accelerate implementation of SDGs in India.
- Representing a paradigm shift in its approach from 'whole-of-government' to 'whole-of-society' to implementing the SDGs, India's VNR 2020 report '<u>Decade of Action: Taking SDGs from Global to Local</u>', for the very first time, takes into account industry contributions in the country's progress towards achieving the SDGs so far, underscoring the significant role that businesses are envisaged to play in the decade of action.
- For businesses, integrating the key elements of sustainability, SDGs provide a holistic framework to look at the socio-economic & environmental issues and ways to internalize them so as to prioritize their sustainability actions and goals, for equitable growth of the society and for the sustainable growth of the business itself.

TERI's Discussion Paper "<u>SDGs still remain relevant for accelerating focused sustainability actions by Indian businesses</u>" articulates a Call-to-Action for Indian businesses to act on SDGs, particularly in the post-COVID-19 world.

Ministry of Statistics and Programme Implementation (MoSPI), Govt. of India and National Indicator Framework (NIF)

- MoSPI Custodian of NIF responsible for development & refinement of NIF
- 306 India-specific statistical indicators, mapped to relevant government ministries/ departments for monitoring purposes
- India accepted select indicators from the Global Indicator Framework (GIF) (~80) for which data are produced in India or can be produced from existing data sets
- Whereas, the comprises 231 indicators classified as:

Tier I (115)

- Conceptually clear
- Internationally established methodology & standards
- Data regularly produced by countries

Tier II (95)

- Conceptually clear
- Internationally established methodology & standards
- Data not regularly produced by countries

Tier III

- No internationally established methodology or standards
- Methodology/ standards being developed or tested

As of 51st session of UN Statistical Commission (UNSC), March 2020:

• No Tier III indicators; 2 indicators having multiple tiers; 19 indicators with tiering pending a data availability review

MoSPI's recently released "<u>SDGs National Indicator Framework Progress Report, 2020</u>" highlights the progress made so far in the journey of SDGs' monitoring/achievement in India, and provides inputs in the preparation of India's VNR on SDGs and assist policy makers in identifying relevant focus areas.



Instructions for Participants



Instructions

- The session will be a mix of presentations and discussions to be conducted over a duration of 1.5 hours, starting with a brief presentation by TERI introducing the context and TERI's approach to the Project, followed by the Working Session.
- All tabs necessary to facilitate your participation are shown at the bottom of your screen.
- Participants are requested to kindly:
 - Put themselves on 'Mute' while another person is speaking.
 - Raise their hand by clicking on the 'Raise Your Hand' tab shown at the bottom of the screen and wait for their turn to speak.
 - Type their questions in the Conversation Window by clicking on the 'Show Conversation' tab. The questions shall be taken up during the course of the session at relevant times.



Role of Power Sector in Accelerating the Implementation of SDGs in India



Power Sector and Government of India's Recent Initiatives

Industry Size

- With a generation of 1,561 TWh, India is the third largest producer and the third largest consumer of electricity in the world.
- In FY20, total thermal installed capacity in the country stood at 230.81 GW, while renewable, hydro, and nuclear energy installed capacity totalled to 86.76 GW, 45.70 GW and 6.78 GW, respectively.
- India ranked sixth in the list of countries to make significant investments in clean energy at US\$ 90 billion
- India's power sector is forecast to attract investment worth Rs 9-9.5 trillion (US\$ 128.24-135.37 billion) between FY19-FY23.

Contribution to India's Development

- India's power demand is expected to grow at a rate of around 6-6.5 per cent
- Co-relation between HDI and energy consumption

FDI Inflow

- Between April 2000 and March 2020, the industry attracted US\$ 14.98 billion in Foreign Direct Investment (FDI)
- Relaxed FDI norms

Policy focus

- Atma Nirbhar Bharat Abhiyan to be given boost in Power Sector
- Ministry of Power is committed to provide 24x7 supply of electricity to all consumers
- The Government plans to double the share of installed electricity generation capacity of renewable energy to 40 per cent till 2030. The target for renewable energy has been increased to 175 GW by 2022
- Paris Agreement targets

Opportunities for the Power Sector in accomplishing and accelerating the implementation of SDGs in India, along with enhancing the sector's preparedness for post-COVID Recovery

Power Sector: Role in Accelerating Implementation of SDGs in India

- Individual Sectoral Contribution
 - **Operational**: Effluent treatment and waste management, energy mix to have renewables
 - CSR: Community Development Programmes; Youth Skilling & Empowerment
- Catalyst/Enabler for development for other industries and state governments
 - Industries
 - Agriculture
 - Household
 - Commercial
 - Healthcare
 - ICT and other service sector

Industry Sector Consultation on 'Role of Power Sector in accomplishing SDGs in India'

Objective:

To arrive at priority SDGs and key business actions & impacts/outcomes for enabling deeper and focused business action on SDGs by the Power sector in India basis the Ministry of Statistics and Programme Implementation (MoSPI, GOI) National Indicator Framework (NIF).

The Approach:

- 1. Identification of Key Material Issues for the industry sector and their alignment with the NIF;
- 2. Articulation of sectoral-level business actions & impacts/outcomes for each of the identified material issues, basis the NIF; and
- 3. Identification of priority SDGs for the industry sector, and the timeframe required to realize the identified impacts/outcomes for priority SDGs



Working Session: Developing the Architecture of SDG Roadmap for Power sector in India



SDGs & Power Sector in India: *Current Practices*

SDGs and Business Actions (Operational and CSR) by Companies in India:

Broadly:

- Alignment is retrospective than strategic
- Mapping of sustainability actions is limited to Goals level; no alignment with SDG Targets or Indicators
- Lacking linkages between companies' key material issues and the SDGs
- No alignment with country-specific NIF (developed by MoSPI, GoI) that takes into account national socio-economic, environmental and development priorities

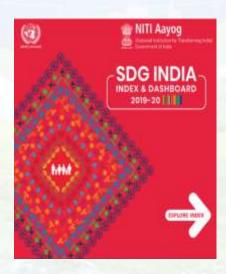


Planned Next Steps



Planned Next Steps

- Tackling SDGs the New Way (SDGs & NIF-oriented Business Actions and Monitoring of Actions)
- Dialogues around developing business-specific indicators with MoSPI and NITI Aayog
 - (Reflection of business action in SDGs NIF and SDG dashboard)
- India's VNR 2020 Recognizing Private Sector contribution (In India's official submissions to international processes)





Components for Developing the Architecture of SDG Roadmap for Power sector in India

1. Why: Focusing on Key Material Issues for Power Sector and alignment with the NIF

2. How: Designing Business Actions for Power Sector

3. What & When: Realizing Impacts & Outcomes for Priority SDGs



Why: Focusing on Key Material Issues for Power Sector and alignment with the NIF

Inputs solicited from Industry Colleagues

- Identification and validation of Key Material Issues for the Power Sector as a whole
- Alignment of identified sector-specific Key Material Issues with the SDGs National Indicator Framework (NIF) developed by MoSPI, GoI
- Identification of gaps in sector-specific key material issues and indicators under NIF



01. Why: Focusing on Key Material Issues for Power Sector and alignment with the NIF

HIGH PRIORITY MATERIAL ISSUES FOR POWER SECTOR

Economic Performance

Environmental Compliance

Socioeconomic Compliance

Effluents and Waste

Air Emissions

Employment

Labour/

Relations

Management

Local Communities

Water Management Fuel Availability Occupational Health and Safety

MEDIUM PRIORITY MATERIAL ISSUES FOR POWER SECTOR

Anti-corruption

Biodiversity

Diversity and Equal Opportunity

Rights of Indigenous People Operational
Efficiency & Plant
Reliability

Land Acquisitions

Human Rights
Assessment

ssessment

Procurement Practices

Security Practices

The key material issues for the sector have been identified basis the material issues outlined by individual Power sector companies in their Sustainability/ Integrated Reports



01. Why: Focusing on Key Material Issues for Power Sector and alignment with the NIF

Alignment with MoSPI (GoI)'s National Indicator Framework (NIF)

Effluents and Waste

- 3.9.1 Mortality rate attributed to unintentional poisoning, (per 1,00,000 population)
- 3.9.2 Proportion of men and women reporting Asthma in the age group (aged 15-49 years), 2015-16 (in percentage)
- 6.3.1 Percentage of sewage treated before discharge into surface water bodies
- 6.3.2 Percentage of industries(17 category of highly polluting industries/grossly polluting industry/red category of industries) complying with waste water treatment as per CPCB norms, 2017-2018
- 6.3.3 Proportion of waste water treatment capacity created vis-à-vis total generation
- 6.4.1 Percentage ground water withdrawal against availability
- 6.4.2 Per capita storage of water, (in m3/person)
- 6.4.3 Per capita availability of water, 2011 (in m3/person)
- 6.6.1 Percentage of blocks/mandals/taluka over- exploited, (in percentage)
- 6.6.2 Percentage sewage load treated in major rivers
- 6.6.3 Biological assessment information of surface water bodies
- 12.4.1 Developing national secondary resource policy framework
- 12.4.2 Development of national policy for environmentally sound management of hazardous chemical and waste
- 12.4.3 Implementation of National Action Plan for fulfilling obligations of various Multilateral Environmental Agreements (MEA) ratified
- 12.5.1 Number of waste recycling plants installed
- 12.5.2 Number of municipal corporations using waste segregation techniques
- 12.5.3 Number of municipal corporations banning single use plastic
- 14.1.1 Coastal Water Quality Index, 2015 16
- 14.1.3 Percentage use of nitrogenous fertilizer to total fertilizer (N,P & K)



01. Why: Focusing on Key Material Issues for Power Sector and alignment with the NIF

Alignment with MoSPI (GoI)'s National Indicator Framework (NIF)

Energy

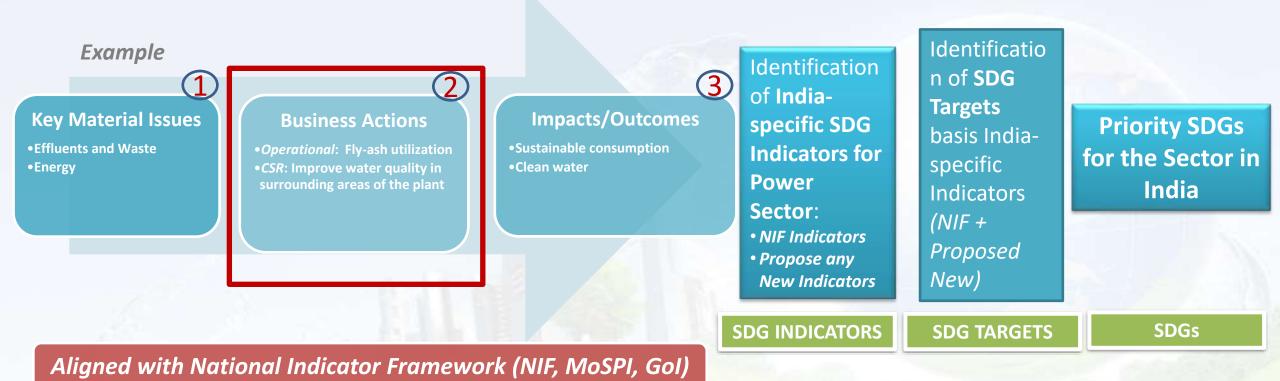
- 7.2.1 Renewable energy share in the total installed electricity generation
- 7.3.1 Energy intensity measured in terms of primary energy and GDP, (in mega joules per rupee)
- 8.4.2 Per capita fossil fuel consumption, (in Kg.)
- 8.4.3 Proportion of waste recycled vs. waste generated, 2017-18
- 12.2.1 Percentage variation in per capita use of natural resources



Inputs solicited from Industry Colleagues

- Identification of Business Actions (Business & CSR) and Impacts/Outcomes for the identified Key Material Issues aligned with NIF
- Identification of NIF Indicators and proposed New Indicators, aligned with the identified Key Material Issues, Business Actions & Impacts/Outcomes.
- Identify priority SDGs for Power sector in India





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Example



Key Material Issue

ENERGY

Business Actions

OPERATIONAL

- Implementation of Energy Efficiency Management System (EEMS)
- Introduced Fly Ash Policy to address the plans and vision for ash utilization in an integrated way from generation to end product

CSR

- Install solar water heaters in hostels of government residential schools
- Install mini solar power plants installed for community



Impacts/Outcomes

- Energy Efficiency & Use of Renewable Energy
- Low Carbon Energy
- Energy access
- Community Development



Example



EFFLUENT AND WASTE

Business Actions

OPERATIONAL

- Persistent endeavours are underway to transform all stations as "Zero Liquid Discharge (ZLD)" and emphasis has been laid on cascaded use of waste water generated from one process to another.
- Air Cooled Condensers which has potential to save 75% of water when compared to conventional cooling system. Cycles of Concentration (CoC) is being increased at all stations for reducing fresh water intake.
- Liquid effluent is managed through proper treatment followed by zero discharge of effluents.

CSR

- Revival and rejuvenation of water bodies
- Construction of individual household toilets and community toilets.



Impacts/Outcomes

- Circular economy
- Clean environment
- Clean water for life and livelihoods
- Community Development



What & When: Realizing Impacts & Outcomes for Priority SDGs

Inputs solicited from Industry Colleagues

• Identification of timeframe required to realize the identified impacts/outcomes for priority SDGs





Key Material Issue

ENERGY

Business Actions

Operational

CSR

Impacts/Outcomes

- Energy Efficiency & Use of Renewable Energy
- Low Carbon Energy
- Energy access
- Circular economy
- Clean environment
- Community Development

Aligned with National Indicator Framework (NIF, MoSPI, GoI)

TIMEFRAME

Short-term (2020-23)

Company-wide 100% utilization of fly ash by 2021.

Medium-term (2025)

 30-40% share of total generation capacity from non-fossil fuel sources (including hydro power) by 2025.

Long-term (2030)

 Non-fossil fuel based generation capacity shall make up nearly 30% of our company's portfolio.

For implementing Business Actions & realizing Impacts/Outcomes for Priority SDGs



The Way Forward: Developing the Architecture of SDG Roadmap for Power Sector in India



Developing the Architecture of SDG Roadmap for Power sector in India

