









Global Agenda for Industry Transitions Relevance, Challenges and Opportunities for India

THEMATIC TRACK SUMMARY

Venue: Sundarbans

Date: February 18, 2022

Time: 02:45 PM - 04:15 PM (IST)

Suggested Citation

World Sustainable Development Summit (2022), Global Agenda for Industry Transitions: Relevance, Challenges and Opportunities for India, Thematic Track Summary (Rapporteur: Shruti Dayal), New Delhi: The Energy and Resources Institute.

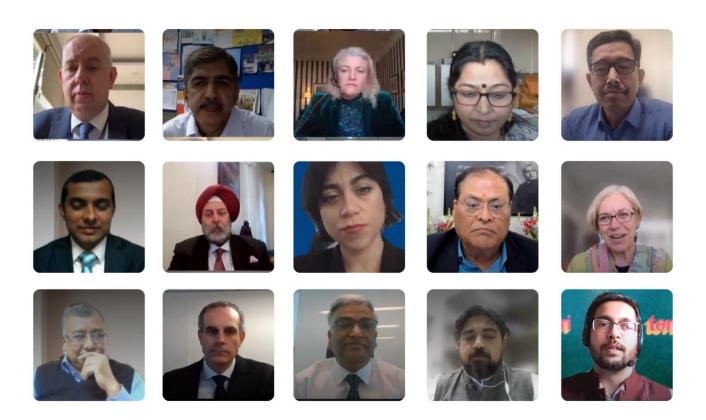
Actionable Messages

Message I: Collaborations and partnerships between governments, industries, and civil society will be critical in achieving global low carbon transition.

Message 2: Platforms and initiatives such as LeadIT and SPIPA Project will be important in supporting various stakeholders for achieving global climate targets.

Message 3: Actions by industries on decarbonisation are critical and require financial support.

Message 4: Knowledge-sharing from EU innovation Fund and other multi-stakeholder initiatives are necessary.



Narrative

The Thematic track *Global Agenda for Industry Transitions – Relevance, Challenges and Opportunities for India* focused on the role of multi-stakeholder initiatives such as Leadership Group for Industry Transition (LeadIT) and Strategic Partnership for the Implementation of the Paris Agreement (SPIPA), in driving global industry transitions. The speakers explored the challenges and opportunities these platforms present within the Indian context, and aspects for enabling and accelerating industry transitions in India.

The Session began with a welcome address by Mr Edwin Koekkoek, First Counsellor, Energy and Climate Action, EU Delegation to India. The European Union (EU) delegation is pleased to work with the Government of India and the Ministry of Environment, Forests and Climate Change (MoEFCC) on industry transitions through initiatives like the SPIPA Project. The project focuses on the implementation of the Paris Agreement. The implementation of the SPIPA project will be in close collaboration with GIZ India. He hoped that discussions would lead to recommendations on strengthening industry transitions in India and globally.

Setting the context, **Mr Girish Sethi, Senior Director – Energy, TERI**, underlined the growing interest in industry transitions across the globe. TERI has been working on the theme of industry transition and specifically on the potential role of hydrogen. Several government stakeholders and policymakers from Europe have also expressed their interest in collaborating on industry transition and green hydrogen. The so called harder-to-abate (HTA) sectors such as Iron and steel, cement and fertilizers, are now being seen as possible-to-abate (PTA) sectors.

In her opening remarks, Ms Johanna Lissinger Peitz, Ambassador for Stockholm+50, Swedish Ministry of Environment, mentioned that the LeadIT initiative brings together leading public and private sector stakeholders to drive industrial decarbonisation, and develop plans to align heavy industry with the goals of the Paris Agreement. Sweden aims to become carbon neutral by 2045, through the application of new technologies, use of renewable energy and improvements in energy efficiency. Sweden in collaboration with Kenya, will co-host the Stockholm + 50 Conference in June 2022 to commemorate 50 years since the first UN Conference on environment held in Stockholm 1972. Stockholm + 50 will serve as a platform to push collective action towards making the world climate neutral and nature positive.

In her Special Remarks, Ms Rajasree Ray, Economic Adviser, Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India, highlighted that the industries must play a key role in achieving the targets of the Paris Agreement and in making the shift to a low-carbon development trajectory. India's net-zero by 2070 commitment and the 5 "Panchamrit" elements, are some of India's ambitious policies on climate action. Indian industry has also set ambitious targets, and announced several voluntary commitments in renewable energy use, resource efficiency etc. Achieving energy transitions will require access to cutting-edge technologies and adequate finance. Investment and collaborative partnerships to scale up low-carbon technologies will be essential. India's policies on long-term transitions include measures in areas such as renewable energy, hydrogen, forest and bio-diversity conservation, and promotion of sustainable lifestyles.

Dr Ashok Kumar, Deputy Director General, Bureau of Energy Efficiency (BEE), emphasized that industry transition is ongoing in India. The Indian Cement sector is the best performing sector in the world, in terms of energy consumption per unit of cement production. In 2018-19 industries accrued savings of approximately 14 million tonnes of oil equivalent, through the Perform Achieve and Trade (PAT) Scheme. Low-carbon technologies need to be made affordable, adoptable and customisable. Business cases to promote technology transfers need to be developed.

Mr Jai Kumar Gaurav, Senior Advisor-Climate Change, GIZ-India, gave a presentation detailing the SPIPA Project. Under this project, sectoral studies, stakeholder discussions, plant visits and workshops are being carried out to understand the challenges in adopting low-carbon technologies. Sectoral emissions profiles will be created to examine possibilities for adopting low-carbon technologies in the short, medium and long-term in these sectors and for developing sectoral roadmaps. The analysis will also focus on financing aspects and barriers to accessing finance.

The Panel discussion was chaired by **Ambassador Manjeev Puri, Distinguished Fellow, TERI**, and included representatives from LeadIT Secretariat, Clean Energy Ministerial, the Embassy of Federal Republic of Germany and leading chief executive officers from Indian industries. The EU is India's largest trading partner, major investor and key source for Standards and ways of doing business. The relationship is of mutual benefit and must be taken forward.

Dr Gokce Mete, Head of LeadIT Secretariat, Stockholm Environment Institute, provided an overview of the initiatives of the LeadIT platform. LeadIT is working with financial institutions to facilitate knowledge transfer. At

the LeadIT Summit during COP26, all members of the group endorsed a set of finance principles on industry transition, to support development of policy frameworks to de-risk projects. Matchmaking with donor countries to ensure targeted funding will also be examined. LeadIT works closely with students to ensure the integration of youth perspectives in industry transition agenda. As part of the pledge to co-produce stakeholder lead Roadmaps, LeadIT launched the Industry Transition Roadmap Planner (https://www.industrytransition.org/). The platform aims to engage Indian stakeholders to develop sectoral Roadmaps.

Mr Mahendra Singhi, Managing Director and CEO, Dalmia Cement (Bharat) Ltd., shared insights on the role that LeadIT can play in facilitating partnerships and collaboration. Indian industry needs guarantee for accessing finance to carry-out demonstration projects. A shift is needed from pilot-level to industry-level demonstration projects. Timelines to get access to green finance for decarbonisation is required. The costs of inaction are significant and low-carbon technologies, such as carbon, capture use and storage (CCUS), and green hydrogen, may not fructify in the coming years. Financial institutions need to be willing to take a risk on technologies that may not be commercially mature (a first-loss guarantee).

In her address, **Dr Antje Berger**, **Counsellor**, **Climate and Environment**, **Embassy of Federal Republic of Germany**, shared that India, EU and its member States have a leading role. Germany has strengthened its commitment to achieve net-zero by 2045 and has acknowledged its role in climate action and mitigation. Steel, chemicals and cement are major energy consumers, and with heavy transport account for more than 25% of Germany's emissions. The SPIPA project is a key supporting instrument. More than 42 projects are supported in India in the field of climate mitigation, adaptation, and bio-diversity and forest conservation. Knowledge-sharing from EU innovation Fund and other multistakeholder initiatives are necessary. Additionally, domestic and international funding mechanisms and technology transfers to support the transitions of HTA sectors, in India should be explored and expanded.

Mr Anirban Ghosh, Chief Sustainability Officer, Mahindra Group mentioned that industry transition comprises of four broad areas - i) clean operations; ii) clean materials; iii) clean products; and iv) circularity. Several industries beyond cement and automobiles are working on the clean operations element of industry transitions in India and globally. Industries are working towards reducing Scope I and Scope 2 emissions. End-user member industries of the First Movers Coalition (Mahindra is founding member) have pledged to purchase clean materials. On clean products, there is a wide spectrum of products from electric vehicles to green buildings that can be examined. Circularity is an emerging area that requires technologies and solutions. There were three key imperatives on new technologies - i) financing, ii) policies to accelerate adoption and iii) the role of business to scale solutions. Battery energy storage technology could address the challenges for scaling-up other technologies such as renewable energy, electric mobility, and clean hydrogen. Investments in improving battery storage technologies need to be ramped up.

Mr Dan Dorner, Head of Clean Energy Ministerial Secretariat, shared insights on the work undertaken by the Clean Energy Ministerial (CEM) that aims to accelerate the deployment of clean energy solutions around the world. CEM has 22 active work-streams across the energy spectrum. The Industrial Deep Decarbonisation Initiative (IDDI) is working across 3 pillars – i) transparent data practices across the supply chain; ii) enabling consistent and standardised assessment of low-carbon products, and iii) green public procurement. The BEE in co-ordination with UN Industrial Development Organization, and IDDI has undertaken workshops to identify measures that will help the discussions move towards actions. India will host the Annual Clean Energy Ministerial meeting in 2023, providing opportunities for synergies between international political leadership and practical action.

Mr Prabodha Acharya, Chief Sustainability Officer, JSW Group, highlighted that steel is an important material for the economy, vital for supporting decarbonisation in other sectors and to build climate resilient societies. Three timelines are important to plan action on accelerating the decarbonisation of the sector and to achieve a net zero by 2070 – i) 2020s; ii) 2030-2050; iii) beyond 2050. Currently, the focus is on using best available technologies to produce steel – utilising waste gases, using renewable energy and using low-carbon material. The challenge is absence of scrap. Steelmaking through the scrap route has a smaller carbon footprint. Globally, decarbonisation of the steel sector will require an additional investment of \$250 billion till 2050. The sector requires only 0.1% of global GDP to decarbonise, while already contributing to 0.7% of global GDP.

In his closing remarks **Mr Arupendra Nath Mullick, Vice President, TERI Council for Business Sustainability** thanked global partners, industry leaders for joining the discussion. He acknowledged the various perspectives on opportunities for collaboration and actions to enable and accelerate industry transitions in India such as public-private partnerships, technology, finance, policy and regulations.

Making Words Count @WSDS 2022

Industry transition is an important element of clean energy transition and of the green transition.

Mr Edwin Koekkoek

First Counsellor, Energy and Climate Action, EU Delegation to India

Stockholm +50 event will push collective transformation and will be an opportunity to connect various stakeholders. There is a need to act with a greater sense of urgency. Businesses, including the finance sector have a key role to play in realizing sustainable transformations and green and inclusive recovery.

Ms Johanna Lissinger Peitz

Ambassador for Stockholm+50, Swedish Ministry of Environment

India has been pursuing a low-carbon transition while striking the balance between the objectives of ecology and economic development and sustainability. India has ambitious targets across various areas such as energy efficiency, renewable energy, forest and bio-diversity conservation and hydrogen. Many meaningful partnerships with all stakeholders are needed to realise the goals of low carbon transition.

Ms Rajasree Ray

Economic Adviser, Ministry of Environment, Forests and Climate Change (MoEFCC)

Government of India

Transition to low-carbon industry is imperative and efforts in this direction are ongoing in India. We solicit co-operation and partnerships with global stakeholders, so that Indian industry can play a bigger role in achieving global climate goals.

Dr Ashok Kumar

Deputy Director General, Bureau of Energy Efficiency

International collaboration is critical to achieve clean energy and climate goals faster, cheaper and more effectively for all. India's international relationships and clean energy transition is important, and is extremely valued by the global community.

Mr Dan Dorner

Head of Clean Energy Ministerial Secretariat

India, EU and Germany, believe in the power of renewable energy and other sustainable technologies including green hydrogen. Together with the EU, Germany is proud to partner with India to help the country achieve its climate goals.

Dr Antje Berger

Counsellor, Climate and Environment, Embassy of Federal Republic of Germany

LeadIT is playing a very important role in motivating industry to take action on decarbonization.

Collaboration and partnerships between all stakeholders are needed across Governments, and industry.

Mr Mahendra Singhi

Managing Director and CEO, Dalmia Cement (Bharat) Ltd.

I am very optimistic that the Indian steel industry will be able to decarbonize faster. JSW has set a target of reducing emissions by 42% by 2030. Steel is an important material for supporting decarbonisation in other sectors and to build climate resilient societies.

Mr Prabodha Acharya Chief Sustainability Officer, JSW Group

There are several good examples on sustainability in India and globally. Bigger steps on decarbonization need to be taken and collaborations will be the way forward. Battery energy storage technology could address the challenges for scaling-up other technologies such as renewable energy, electric mobility, and clean hydrogen.

Mr Anirban Ghosh Chief Sustainability Officer, Mahindra Group

India and Europe must collaborate. There is a great deal of similarity in the way we do business. This collaboration will lead to faster results and the world will benefit.

Ambassador Manjeev Puri Distinguished Fellow, TERI