

Agenda item 5.c.ii

Transformative industry: Mapping of existing initiatives to identify areas where the TEC could add value

Technology Executive Committee, 26th meeting and TEC-CTCN Joint session
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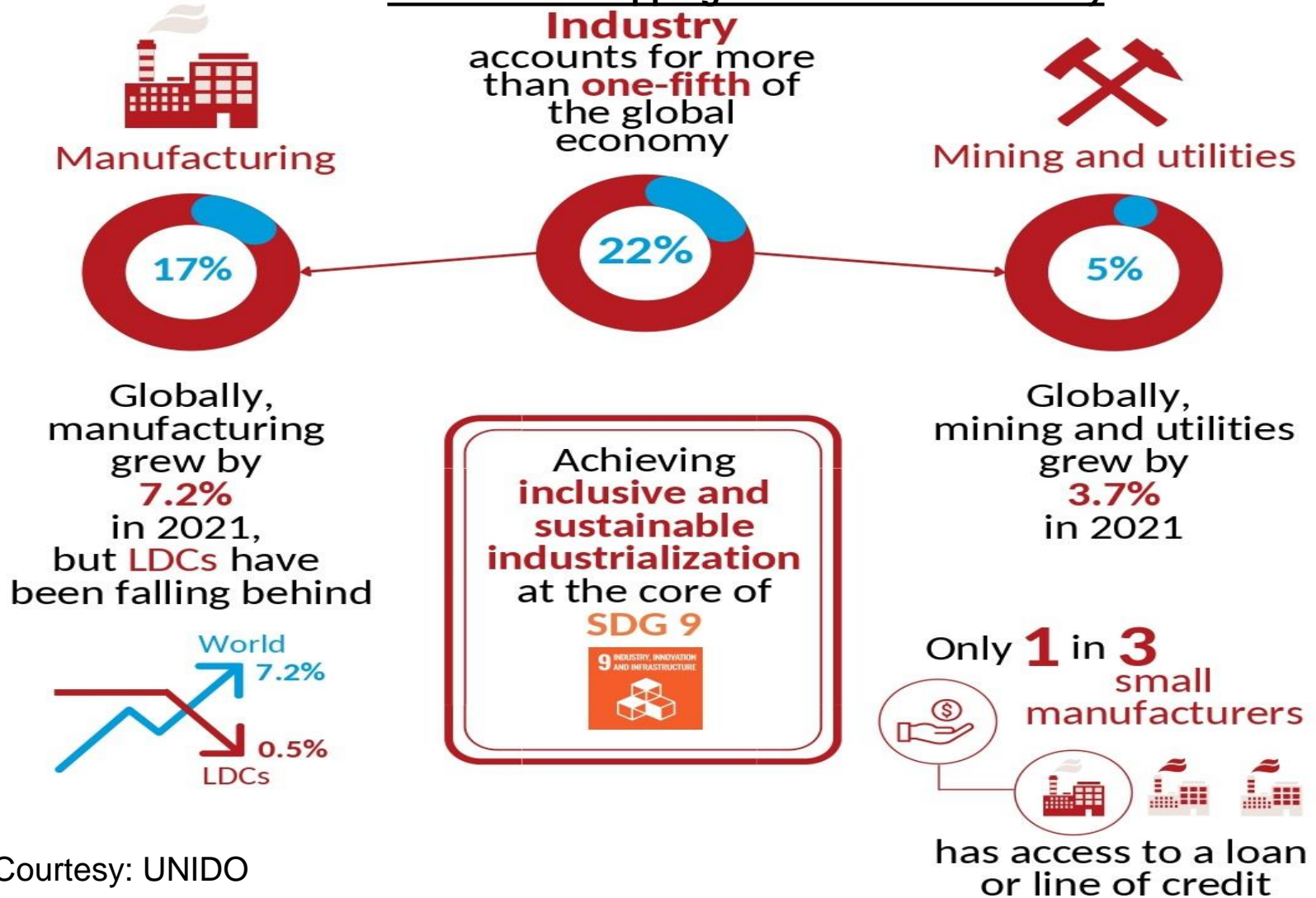
Background



- Meaningful tool forming the basic skeleton of envisaged policies for deployment of climate technologies in energy intensive industries.
- Integration of TEC Planned Transformative Industry Roadmap (TIRM) in Parties NDCs, TNAs, TAPs, and LT-LEDSs.
- Mandated in TEC's Rolling Workplan 2023-27 under workstream.
- Mapping existing initiatives in sustainable transformation of industries to identify areas where TEC could add value

Agenda item 5.c.ii Transformative industry: Mapping of existing initiatives to identify areas where the TEC could add value

Rationale of Mapping Transformative Industry



Courtesy: UNIDO



Scope of the map of existing initiatives related to hard-to-abate industrial sectors



- **Energy intensive industries** i.e. Cement, iron and steel, and chemicals and petrochemicals industries are singled out as the most significant industrial CO₂ emitters.
- **Implementing** industrial energy efficiency measures could reduce emissions by around 2 billion tons of CO₂ by 2030- UNIDO.
- **Low income economies** produce 9.5 times the amount of CO₂ per unit of Manufacturing Value Added (MVA) compared with high income economies-UNIDO.

Objective: To map existing initiatives to identify areas where the TEC could add value which will also serve as basis to prepare later expected outputs/deliverables in the Rolling workplan of the Technology Executive Committee for 2023–2027, scheduled for 2024, 2025 and 2026.

Scope of the map of existing initiatives related to hard-to-abate industrial sectors



- **Map relevant** global studies and roadmaps
- **Analyze IPCC Reports** and relevant findings
- **Explore the availability** of relevant/new technologies.
- **Cross match global emission** related data (*i.e. cement, responsible for 7% of global emission; steel, responsible for 8% of global emission; chemical, responsible for 4% of global emission*)
- **Analyze existing gaps** (*i.e.- innovation, finance, governance, technology, international collaboration gaps*)
- **Identify success stories and lessons learned** that are underpinning for scaling up green growth.
- **Establish linkages** to the TNAs, NDCs, and LT-LEDS.
- Based on the above findings **prepare recommendations.**

Transformative Industry: Guiding elements and issues for TEC consideration



- **Success stories of GEF, GCF** and other multilateral development financier in the field of green technology, green production, circular economy may be considered to infiltrate best performing technologies in aspect of net zero emission growth for replication and scaling up.
- Integration of industries appropriate business model with technology for transformation to sustainable industry.
- **The results of the mapping process may include policy recommendations for the Parties** to, for example, promote innovation and related start up to audit sectoral carbon footprint, to rank industries, by the competent government agencies, for providing incentives to best performing industries. Such an approach could create an ecosystem in the industry sector for upholding or even growing their net zero initiatives.

Issues for TEC consideration

Mapping of existing initiatives may include-

- Transformative and Innovative **Industrial Climate Solutions Taxonomy**.
- Integration of Industry 4.0 into transformative industry mapping, sustainable consumption and production (SDG 12).
- Policy recommendations and pathways for **Country cluster based technologies transfer** to implement countries TNA and achieve PA and DGS goals.
- Feasibility analysis for establishment of **Industry-Academia linked Industrial Center of Excellence** for Innovation, R&D and demand side energy efficiency.
- Possible ways for **process shift from linear ‘make and dispose’ economic models to those that emphasize** product longevity, reuse, refurbishment, recycling, and material efficiency.
- Presenting findings alongside Climate Technologies Digital Showcasing event at COP28

Transformative Industry: Next Steps

Mapping of existing initiatives-

- **Mapping existing** transformative industry initiatives
- **Success stories and lesson learned** of the technologies
- Gap analysis (*i.e.- innovation, finance, governance, technology, international collaboration gaps*)
- Draw pathways **linking LT LEDS, TNA, NAP** focusing where are we now and where we want to go by transformative industry integrating Industry 4.0
- Encouraging **circular economy** that is shift from ‘make and dispose’ economic model to reuse, recycling, material efficiency and low energy demand.
- Policy recommendations and pathways for **Country cluster based technologies transfer** to implement countries TNA and achieve Paris Agreement and SDG goals.
- Feasibility analysis for establishment of **Industry-Academia linked Industrial Center of Excellence** for Innovation, R&D and demand side energy efficiency.



Thank you!

