

Agenda item 4 (c) iii. Transformative Industry

Revised draft analysis of standards and labels for low and near zero emission production and products

TEC/2026/32/16

TEC 32 & Joint session of the TEC - CTCN Advisory Board
14 – 16 and 17 April 2026 | Songdo, Republic of Korea



United Nations Climate Change
Technology Executive Committee

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Context

- **TEC 30 (Apr 2025):** Draft concept note for the Analysis of Standards and Labels for low and near zero emission production and products considered
- **Apr-Sep 2025:** Finalization of concept note and preparation of first draft
- **TEC 31 (Sep 2025):** Draft considered and guidance given to the activity group to revise the draft for further consideration at TEC 32
- **Sep 2025-Mar 2026:** Revised draft analysis of standards and labels prepared

Lead partner:



Key Changes

- **Included more information examples from developing countries**
- **Revised the presenting of concepts that have not yet achieved a global consensus**
- **Accounted for different stages of targets due to varying development levels among countries**
- **Surgical revisions were made based on the inputs by the TEC members**
- **Editorial revision was made to enhance consistency and align referencing**
- **Additional challenge was added on data and methodological barriers**



Why this analysis?

« Hard-to-abate » sectors CO2

Cement	7.8%
(Petro)Chemicals	4.6%
Steel	7%

- These 3 key sectors for the global economy are high in CO2 emissions
- Decarbonizing is costly and technically challenging

- There is a crucial need to map existing regulatory and voluntary carbon intensity standards, labeling schemes, and emissions thresholds



Overview

Executive Summary

1. Introduction
2. Mapping of Standards, Labels and Thresholds for all Sectors
3. Implementation Challenges in the Cement, (Petro)chemical, Steel Sectors
4. Case Studies in all the Sectors and Lessons Learned
5. Guidance to Harmonize Standards and Labels
6. Recommendations and Conclusion



- **Uses the Rapid Evidence Assessment (REA) approach, to synthesize existing evidence on standards and labels, considered as tools for measuring, verifying, and incentivizing emissions reductions**



Implementation Challenges in the Cement, (Petro)chemical, Steel Sectors

1	Limited Market Adoption of Standards and Labels	• Risk Aversion • Barriers for SMEs • Sector Complexity	5	Data and Methodological Barriers
2	Lack of Harmonization of Standards and Labels	• Divergent Definitions • Inconsistent Methodologies	• Low-carbon standard setting for the broader chemical sector is complicated by the complexity and diversity of chemistries, fuel, feedstocks, process technologies, and end-use applications across thousands of products	
3	Lack of Policies to Support Adoption	• Insufficient Policy Reinforcement • Gaps in Procurement and Building Codes		
4	Financial, Institutional, and Technical Barriers	• High Capital Costs, • Limited Access to Finance • Gaps in MRV Infrastructure		



Key Findings

- **Landscape is evolving rapidly**
- **Carbon intensity thresholds are converging**
- **MRV systems and environmental product declarations are foundational**
- **Fragmentation and gaps persist**
- **Maturity is uneven across sub-sectors**
- **Sectoral, product, and process diversity complicates alignment**
- **Adaptation metrics lack for climate resilient industry**



Summary of Recommendations

- **Co-develop international standards with staged targets**
- **Promote interoperability of national standards**
- **Integrate standards into climate policy**
- **Strengthen MRV infrastructure and digital tools**
- **Aggregate demand through procurement**
- **Mobilize finance and de-risking mechanisms**
- **Develop inventory of targeted products and chemistries**
- **Support just and inclusive transition**



Summary of Implications for Policy and Practice

POLICY MAKERS	INDUSTRY	INTERNATIONAL ACTORS
• Promote interoperability of credible standards • Promote harmonization of industry-specific carbon accounting methodologies and thresholds • Align the use of fiscal tools to performance-based product standards	• Adopt, align and/or support the development of emerging, industry-applicable voluntary standards • Engage in shaping MRV protocols and product category rules to ensure feasibility and credibility • Collaborate across value chains to accelerate decarbonization	• Promote mutual recognition of standards across global forums • Develop public goods such as open-source MRV protocols, environmental product declarations, etc. • Support capacity building and provide technical and financial assistance to emerging markets and developing economies



Conclusion

STANDARD AND LABELS
in « Hard-to-abate » sectors



**Are essential tools for
decarbonization but under-
utilized**



**HARMONIZATION
POLICY**



**INTEGRATION OF
STANDARDS**



FINANCE



INCLUSIVITY

URGENT ACTIONS



POLICYMAKERS

**Embed standards in
climate laws
(NDCs, public
procurement...)**



INDUSTRY

**Adopt voluntary
labels to future-
proof market
access**



**INTERNATIONAL
COMMUNITY**

**Scale technical &
financial support
for developing
countries**

Thank you.



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