

IMPLEMENTATION AND INVESTMENT LAB

Powering the Real Economy through Energy and Industrial Transformation

Concept Note

Version: 22 April 2026

23 April 2026 | 14:00 – 16:00 (KST) | Room: Seminar Room 4

Background and Scope

At UNFCCC Climate Week 2026, the Implementation and Investment Labs within the Implementation Forum are hands-on, solution-oriented sessions focused on overcoming implementation bottlenecks and scaling proven climate solutions. They convene non-Party stakeholders—business, finance, civil society, subnationals—and policy makers to identify enablers and barriers from each stakeholder perspective. Topics align with relevant axes of the Global Climate Action Agenda and the outcomes of the first GST.

Renewable energy deployment is reaching record levels with unprecedented growth in new power generation capacity worldwide. Yet momentum alone will not be sufficient. Meeting the global target of tripling renewable energy capacity by 2030 requires reaching roughly 11,000 GW of installed capacity, demanding significantly faster deployment of solutions in the years ahead. This scale-up matters not only for decarbonizing the power sector itself, but also because a rapidly growing share of emissions reductions in the real economy depends on clean, reliable electricity. Industry is central to that equation: it is one of the largest sources of global energy demand and emissions, and many of the most promising near-term pathways—electrification of industrial heat and processes, green hydrogen, and expanded use of low-carbon materials—are constrained by access to affordable renewable energy and a resilient grid infrastructure.

Drawing on the experience of industry, energy developers, utilities, investors, and technology providers, this Implementation and Investment Lab will focus on concrete projects and solutions emerging from the real economy at the intersection of energy and industry, where the energy transition enables low-emission industrial production, and industrial demand and investment help accelerate clean energy scale-up. The Implementation and Investment Hub will host focused discussions on key Energy and Industry topics, highlighting COP30 Plans to Accelerate Solutions developed under the COP30 Global Climate Action Agenda, as well as other ongoing initiatives. Participants will be invited to showcase transformative, scalable approaches, with particular attention to what is required to accelerate progress now. These parallel discussions will explore critical enablers such as policy frameworks, incentive structures, cross-border collaboration, and demand signals needed to drive the growth of green industry and scale proven solutions across sectors and markets. Finally, investors and financial stakeholders will be invited to share perspectives on how the proposed solutions can be made commercially viable.

Objectives

- Showcase real-world solutions advancing the transition of energy systems and decarbonization of industrial production, including grid improvement and modernization, transboundary power trade, low-emission options for industrial processes (e.g. electrification, green fuels and feedstocks), and improvements in market design.
- Examine how these projects are being implemented by real economy actors, including business, utilities, energy developers, and technology providers, and how changes in energy systems are enabling the decarbonization of industrial production across sectors and value chains.

- Identify concrete policy, and finance levers needed to accelerate implementation, including energy market design, regulatory frameworks, investment structures, and trade measures that influence the transition of both energy systems and industrial production.

Preliminary Agenda

14:00- **1. Welcome and Introduction**

14:15 **Opening remarks: Dan Ioschpe** , COP 30 Climate High-Level Champion [video message]

14:15- **2. Building on What Works: Unlocking Transformative Industry Solutions**

14:20 **Angela Churie Kallhauge**, Executive Vice President, Environmental Defense Fund and Co-chair of the Mitigation Work Programme

Insights from UNFCCC Mitigation Work Programme on Enhancing Mitigation Action in Industry.

14:20- **3. Key trends shaping the transition**

14:25 **Simon Benmarraze, Head of Unit, Strategic Infrastructure, IRENA**

A brief overview of the key trends shaping the transition of energy systems and industrial decarbonisation. This includes the rapid expansion of renewable energy, power trade, clean energy demand from industry, and the growing role of electrification, energy infrastructure modernization, and demand for green commodities, highlighting how these shifts are shaping real world implementation across sectors and regions.

14:25- **4. Implementation and Investment Lab**

15:40 **Real Economy Solutions: Projects Driving Energy and Industrial Transition**

The Implementation and Investment Lab will bring together, multi stakeholder groups for focused deep dives into identifying real world and scalable projects. Each hub will explore solutions already being deployed by governments, industry, energy providers, technology developers, and investors, examining what is enabling these projects to move forward.

The scene-setting for each breakout will draw on the COP30 Plans to Accelerate Solution developed under the Global Climate Action Agenda and specific initiatives underway. Groups will then identify promising and concrete emerging initiatives with potential for scale, then converge on 2-3 initiatives/projects that could be delivered with the right enabling conditions such as policy and regulatory frameworks, infrastructure requirements, and partnerships needed to advance these projects. There will be the following breakout groups:

- **Group 1: Enabling electrification: scaling up clean power supply**
Moderated by Rex Amancio, Regional Lead, Asia Pacific, Global Renewables Alliance
- **Group 2: Grids and enabling infrastructure**
Moderated by Simon Benmarraze, Head of Unit, Strategic Infrastructure, IRENA
- **Group 3: Accelerating green industry and creating markets**
Moderated by Rachel Howard, Director of Industrial Decarbonisation and APAC at Mission Possible Partnership

Participants will explore the following guiding questions across the breakout groups:

- **Scalable solutions:** What concrete solutions or projects are already being implemented in your context that show strong potential to scale across sectors or markets?
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- **Enabling conditions:** What are the key enablers required to scale these solutions, particularly in terms of policy and regulation, finance, infrastructure, and market design
- **Partnerships and collaboration:** What types of partnerships or collaborations are needed to advance these solutions, and which actors need to come together to unlock implementation at scale

4.1. Sharing across themes

Recognizing the linkages between energy systems and industrial transformation, the hubs will provide a brief overview of the solutions and financing approaches identified, helping to expand the exchange of insights across participants.

15:40- 4.2: From Opportunities to Investment Readiness

15:55 Although some opportunities are already technically viable, others are struggling and their uptake is slowed by persistent policy and market barriers—most notably regulatory uncertainty, high capital costs, and insufficient derisking tools. Representatives of financial institutions and global climate funds will be invited in an interactive session, to react to the overview by breakout groups on how to rapidly scale investment in identified solutions that can deliver immediate progress.

Reflections provided by:

Yuki Yasui, Managing Director Asia Pacific Network, Glasgow Financial Alliance for Net Zero (GFANZ)

15:55- 5. Closing and Next Steps

16:00 Presenting concise implementation and investment insights and next steps, with a synthesis of cross-cutting messages to inform Climate Week outcomes and COP 31 discussions.