Breakthrough Agenda

WTO environment week

October 2022
## Agenda

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Time</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overview of the Breakthrough Agenda</td>
<td>10 mins</td>
<td>UK</td>
</tr>
<tr>
<td>2</td>
<td>Breakthrough Agenda report recommendations on Steel and UK overview of existing international collaboration</td>
<td>10 mins</td>
<td>IEA</td>
</tr>
<tr>
<td>3</td>
<td>Deep dive: CEM IDDI</td>
<td>10 mins</td>
<td>UNIDO</td>
</tr>
<tr>
<td>4</td>
<td>Panel Q&amp;A</td>
<td>25 mins</td>
<td>Sweden, Germany</td>
</tr>
<tr>
<td>5</td>
<td>Closing Remarks</td>
<td>5 mins</td>
<td>Simon Manley</td>
</tr>
</tbody>
</table>
1. Overview of the Breakthrough Agenda
An overview of the Breakthrough Agenda

*The Breakthrough Agenda’s goal is to accelerate clean technology transitions in each sector through strengthened international collaboration, cooperation and coordination.*

Launched by world leaders at COP26 by 45 countries representing more than 70% of global GDP, with all G7 members endorsing the Agenda.

Countries committed to work together this decade to scale and speed up clean technologies, making them affordable and accessible for all, and agreeing on common goals across key sectors including power, road transport, steel and hydrogen.

Progress will be measured, and new recommendations made, in the Breakthrough Agenda report led by the IEA, IRENA and the UN High Level Action Champions.

By collaborating in this way, we can make the transition quicker, cheaper and easier for everyone - driving faster innovation, greater economies of scale, bigger incentives to invest, and level playing fields where needed.
Glasgow Breakthroughs

<table>
<thead>
<tr>
<th>Sector</th>
<th>Breakthrough</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Clean power is the most affordable and reliable option for all countries to meet their power needs efficiently by 2030</td>
</tr>
<tr>
<td>Road transport</td>
<td>Zero emission vehicles are the new normal and accessible, affordable, and sustainable in all regions by 2030</td>
</tr>
<tr>
<td>Steel</td>
<td>Near-zero emission steel is the preferred choice in global markets, with efficient use &amp; near-zero emission steel production established and growing in every region by 2030</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>Affordable renewable and low carbon hydrogen is globally available by 2030</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Climate-resilient, sustainable agriculture is the most attractive and widely adopted option for farmers everywhere by 2030</td>
</tr>
</tbody>
</table>
Breakthrough Agenda process

Key outputs

• Breakthrough Agenda Report (Sept 2022): Independent report, led by the IEA, IRENA and the UN High Level Action Champions, drawing on a wide evidence base and with extensive consultation. Tracks progress and recommends priorities for strengthen collaboration.

• Breakthrough Agenda Priority Actions (November 2022) Plans: Developed in collaboration with Breakthrough Agenda signatories and major international initiatives. Responds to the Report recommendations by outlining commitments from countries and initiatives to ongoing and new collaborative actions.
Objectives of the Breakthrough Agenda

The Breakthrough Agenda’s goal is to accelerate clean technology transitions in each sector through strengthened international collaboration, cooperation and coordination.

1. Deliver an independent, authoritative stocktake on global sector progress and the international action needed.

2. Identify ways the international architecture can be strengthened in each sector to deliver the shared Breakthrough goals.

3. Agree priority actions that can accelerate the pace of transition in each sector (responding to the report’s recommendations).

4. Embed the Breakthrough Agenda as an annual process to speed up and scale progress to achieve Breakthrough goals by 2030.

By COP27 (November 2022), we aim to respond to the Breakthrough Agenda report with a clear set of actions in each Breakthrough area.
Jointly decarbonising ↑ … carbon leakage ↓

A global issue, best solved with a global solution!

International coordination also supports businesses with the green transition

Live debates in trade fora on mutually supportive trade and decarbonisation
2: Breakthrough Agenda Report
A joint publication between the IEA, IRENA and the UN Climate Change High-Level Champions that focuses on –

• Where we need to get to by 2030

• How we get there, using national and international levers

• The current status of international collaboration

• Key recommendations for strengthening collaboration

Countries and companies will be tracked against these recommendations in future years.
Steel Breakthrough

“Near-zero emission steel is the preferred choice in global markets, with efficient use and near-zero emission steel production established and growing in every region by 2030.”

How do we get there?

Market share of NZS

- Early 2020s
  - Agree common standard for NZS
  - Scale up demonstration projects and share learning
  - Dialogue to enable NZS trade including all major producing countries
- Mid 2020s
  - Catalyse private sector investment, supported by public funds
  - New supply chains established (e.g., de-coupled iron and steel)
- 2030
  - Countries and companies have long-term net zero strategies in place
  - Countries and companies start to deploy supporting infrastructure
  - NZS technologies are at a commercial scale in all regions, sharing learning
  - Companies implement best practice strategies for retraining employees
  - Major steel production markets covered by NZ-compliant trade measures
  - Countries implement design regs to promote longer lifetime/reuse
  - Priority collaboration actions (recommendations)
  - Other actions for collaboration
  - Other actions with greater national relevance

NZS = Near Zero Emission Steel
Current status of collaboration

<table>
<thead>
<tr>
<th>Long-term Vision &amp; Action Plans</th>
<th>Leadership Group for Industry Transition</th>
<th>Mission Possible Partnership</th>
<th>World Steel Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand Creation &amp; Management</td>
<td>CEM’s Industrial Deep Decarbonisation Initiative</td>
<td>First Mover Coalition</td>
<td>SteelZero</td>
</tr>
<tr>
<td>Infrastructure &amp; Supply Chains</td>
<td>[under consideration]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance &amp; Investment</td>
<td>GFANZ</td>
<td>RMI Centre for Climate Aligned Finance</td>
<td></td>
</tr>
<tr>
<td>Market Structures</td>
<td>[under consideration]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standards &amp; Certification</td>
<td>ResponsibleSteel</td>
<td>First Movers Coalition</td>
<td>CEM’s Industrial Deep Decarbonisation Initiative</td>
</tr>
<tr>
<td>Trade Conditions</td>
<td>OECD Steel Committee</td>
<td>WTO Trade and Environmental Sustainability Structures Discussions</td>
<td></td>
</tr>
<tr>
<td>Knowledge, Capability &amp; Skills</td>
<td>[under consideration]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Engagement &amp; Impact</td>
<td>[under consideration]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape Coordination</td>
<td>Steel Breakthrough in partnership with the initiatives below</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The diagram summarises the roles of many public and private sector initiatives in this sector. Initiatives have been included if they have a global scope, with active members from multiple regions of the world, and have at least one significant work programme specifically focused on accelerating emissions reduction in that sector. The list is not exhaustive and will be updated over time.
Recommendations for stronger collaboration

Given where the steel sector currently stands in its transition, five areas stand out as priorities for strengthening international collaboration, where we recommend the following:

- Establish a strategic dialogue to agree an approach the **trade** of near zero emission steel that rewards first movers, whilst providing support for a broader set of fast followers

- Urgently agreeing on common **standards** for near zero emission steel

- Rapid scale-up of high-quality commitments to **purchase** near zero emission steel

- Immediately increasing public and private funding for **research and innovation**, supported by effective collaborative networks

- Increasing international assistance to catalyse private sector **investment** in pilot, demonstration and commercial-scale plants
3: Spotlight on the Clean Energy Ministerial (CEM) Industrial Deep Decarbonisation Initiative (IDDI)
INDUSTRIAL DEEP DECARBONIZATION INITIATIVE

TURNING THE TIDE ON CLIMATE CHANGE
WHY IDDI?

Heavy industry drives the engine of our modern world, but they are also one of the largest CO$_2$ emitters.
The top five CO$_2$-emitting industries (steel, chemical, cement, concrete, aluminum, and refining industry) account for around 70 per cent of total global industrial emissions.

Together, steel, cement and concrete, are responsible for 14-16% of global energy-related CO$_2$ emissions.

Source: https://www.sciencedirect.com/science/article/pii/S0306261920303603
WHO IS IDDI?

IDDI is the largest and most diverse coalition of governments and private sector working to decarbonise heavy industries, starting with steel, cement and concrete.
WHO’S INVOLVED?

COUNTRIES

CO-LEADS

[Flags of the UK, Canada, USA, India, Germany, Saudi Arabia, and Japan]

NEW IN 2022

[Flags of the UK, Canada, USA, India, Germany, Saudi Arabia, and Japan]

PARTNERS

[Images of various organizations and logos, including Climate Group, Agora, and Mission Possible Partnership]
IDDI’S APPROACH

The gap that we want to bridge

There are two key gaps in promoting the decarbonisation of industrial sectors.

- Data and standards
- Green public procurement policy
Empowering governments to buy near zero carbon materials for their public works.

Encouraging governments to disclose and reduce embodied carbon emission in public construction projects.

Building the foundations to enable a thriving global market.
Our three pathways to achieve change

1. Building the foundations to enable a thriving global market.

What is green steel, cement and concrete?

A large part of IDDI’s work is creating global standards for near zero carbon materials and how to report against them. IDDI will develop:

- Consistent, **global standards** for near zero carbon steel, cement and concrete
- A standard **environmental reporting mechanism**
- An **evaluation process** and tools for project bids which incentivise and reward public work contractors.
Green Public Procurement

Using the purchasing power of governments is an efficient way to increase demand for low carbon products.

- Government agencies are top purchasers of steel, cement and concrete for infrastructure projects, which can account for 40% of cement and concrete and 25% of steel nationally.
- IDDI will set a globally recognised pledge for GPP for industrial materials and establish voluntary guidelines for governments to write policy and implement this pledge.
- We will also launch a free or low-cost certification service for manufacturers.

Our three pathways to achieve change

PATHWAY

Empowering governments to buy near zero carbon materials for their public works.
Encouraging governments to disclose and reduce embodied carbon emission in public construction projects.

Within the next three years IDDI expects to have enabled a minimum of ten governments to pledge to reducing embodied carbon emissions of all major public construction projects by 2050 in line with a 1.5C global warming trajectory.

Governments can commit to one of four levels, depending on their national circumstances:

<table>
<thead>
<tr>
<th>Ambition Level</th>
<th>DISCLOSE</th>
<th>DISCLOSE + NET ZERO</th>
<th>DISCLOSE + NET ZERO + 2030 TARGET</th>
<th>DISCLOSE + NET ZERO + 2030 TARGET + ZERO EMISSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Starting no later than 2025, require disclosure of the embodied carbon in cement, concrete and steel procured for public construction projects.</td>
<td>Starting no later than 2030, conduct whole project life cycle assessments for all public construction projects, and, by 2050, achieve net zero emissions in all public construction projects.</td>
<td>Starting no later than 2030, require procurement of low emission cement, concrete and steel in public construction projects.</td>
<td>Starting in 2030, require procurement of a share of cement, concrete and/or crude steel from near zero emission material production for signature projects.</td>
</tr>
</tbody>
</table>
IDDI priority actions 2023

Mobilization of additional country commitments to holding consultations and subsequent adoption of GPP pledge
Development of platform to track and report against progress on GPP pledge
Supporting documentation to GPP pledge (FAQ) and further technical notes incorporating feedback from national consultations
Knowledge sharing material on GPP best practice
Finalize definition of low-carbon and near-zero concrete, in alignment with key partners such as the First Mover’s Coalition and the IEA
Development of an open data industry standard (standardized methodology for reporting on embodied carbon)
Guidelines for public procurement agencies to apply IDDI methodology in PCRs and EPDs.
Thank you
Rana Ghoneim, Chief
Energy Systems and Industrial Decarbonization Unit

Website
www.cleanenergyministerial.org/initiative-clean-energy-ministerial/industrial-deepdecarbonisation-initiative

email:
IDDI@unido.org
We¹), the undersigned governments, in recognition of:

• the importance of decarbonising the global steel and cement sectors;
• the role of governments to lead by example and incentivise the adoption of energy efficiency and low emission technologies;
• the benefits of measuring and reporting the embodied carbon in the highest-emitting construction materials;
• the importance of encouraging efficient use of construction materials and deployment of available and transformative decarbonisation technologies and best practices to reduce carbon intensity, and accelerate near zero emission production of these materials;

Commit to adopt one or more of the pledge levels in the Pledge document set out below, subject to their internal processes including consultation, and to inform the IDDI of the pledge level to be adopted before the end of 2023.

¹) The undersigned governments, in recognition of:
Green Public Procurement Pledge (2/2)

Pledge(1)(2)

**Level One:**
Starting no later than 2025, require disclosure of(3) the embodied carbon in cement/concrete and steel(4) procured for public construction projects(5).

**Level Two (in addition to Level 1):**
Starting no later than 2030, conduct whole project life cycle assessments(6) for all public construction projects, and, by 2050, achieve net zero emissions in all public construction projects.

**Level Three (in addition to Levels 1 and 2):**
Starting no later than 2030, require procurement of low emission cement/concrete and steel(7) in public construction projects, applying the highest ambition possible under national circumstances.

**Level Four (in addition to Levels 1, 2 and 3):**
Starting in 2030, require procurement of a share of cement and/or crude steel from near zero emission material production for signature projects(8).

NOT FOR PUBLIC DISTRIBUTION UNTIL 23 SEP 2022
Panel Q&A