

Industrial decarbonisation at COP26

COP26 to Drive the global decarbonisation of heavy industries, starting with steel, cement and concrete

MEDIA ADVISORY

For 9 November 2021

Keeping the 1.5 degree alive is the first objective of COP26. The world will not meet the central role of the Paris Agreement unless we tackle industrial greenhouse gas emissions. Today, industry accounts for one fourth of global energy-related emissions. Only cement, concrete and steel account for around 16 per cent of emissions. At COP26, the urgent need to decarbonize cement and steel will be high on the agenda of governments, companies and civil society leaders meeting in Glasgow.

WHAT

The United Kingdom Presidency of COP26 will host a high level event where other major economies such as India, Germany, Canada and the UAE will announce a groundbreaking pledge to adopt green procurement principles under The Industrial Deep Decarbonization Initiative or IDDI, [launched](#) earlier this year. The pledge is an effort by the five initial country members to drive the global decarbonisation of heavy industries such as steel and concrete. Public procurement of steel and cement in the five countries spearheading IDDI represents 25 to 40 per cent of the domestic market for such materials. Together, they aim to create market demand for near zero carbon concrete and steel rapidly enough to align the industries with the goals of the Paris Agreement.

WHO

Organized by UK's Department for Business, Energy and Industrial Strategy (BEIS) in the context of the Science and Innovation day, high level speakers announcing the green public procurement campaign include: India's Minister of Power (TBC) and Moroccan Minister of Energy Transition and Sustainable Development

WHEN

9 November 2021- 15:30-17:30 BST

WHERE

UK Pavilion as part of the Steel Breakthrough follow-up event: Accelerating Innovation: collaboration for a net zero future

For **more information** about the event and IDDI, please contact colleagues present at the COP26:

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Where else at COP26 will decarbonizing heavy industry be discussed?

Journalists interested in covering the critical topic of decarbonizing heavy industries such as steel and cement should note the following relevant events taking place at COP26:

Event Name/Theme	Organizer	Date + time (BST)	Location
Climate Club Climate competitiveness and industry	The Federal Ministry for Economic Affairs and Energy (Germany)	1 Nov 17:30 to 18:30 or 18:30 - 19:30 (TBC)	German Pavilion
Steel Breakthrough launch	The Department for Business, Energy and Industrial Strategy	2 Nov Time TBC	UNFCCC Central space
Accelerating the transition of Industrial Clusters toward Net Zero	World Economic Forum	3 Nov 15:00 - 16:30	Accenture pavilion
Addressing embodied carbon of materials: Supporting demand for lower carbon cement, metals and minerals	FLSmidth A/S	8 Nov 10:30 - 12:00	Danish Pavillon
LeadIT Summit (closed doors)	LeadIt	9 Nov 10:00 - 12:00	Business Sweden Pavillion
Shifting Systems: A net-zero materials revolution	Climate Group	9 Nov 5:00 - 6:30	Equator events
Kickstarting Construction Decarbonization – creating demand for low carbon materials	The Department for Business, Energy and Industrial Strategy	11 Nov 15:15-16:15	UK Pavilion

Who to talk to about heavy industry decarbonization?

Dates in Glasgow	ORG	NAME	TITLE	EXPERTISE	CONTACT/ Email
1 to 7 Nov	UNIDO	Tareq Emtairah	Director Energy	General, Policy, Cooperation	T.EMTAIRAH@unido.org
9 to 11 Nov	UNIDO	Rana Ghoneim	Energy & Industry Expert	General, Energy, Industry	R.GHONEIM@unido.org
1 to 11 Nov	Clean Energy Ministerial	Dan Dorner	Head CEM	General, Energy, Cooperation	dan.dorner@cemsecretariat.org
3 to 11 Nov	Clean Energy Ministerial	Sarbojit Pal	Manager of Partnerships	General, Energy, Cooperation	Sarbojit.pal@cemsecretariat.org

Decarbonizing cement and steel

Key facts and figures

- **Decarbonizing** heavy industry is essential to secure a **climate-safe future for humanity**.
- **70%** of global GHG emissions come from just 5 industry subsectors: cement, steel, aluminium, chemical industry and refining industry.
- Together, steel and cement account for around **14-16%** of global energy-related CO₂ emissions.
- Cement is the second most consumed product in the world after water and the number one of the largest emitters of CO₂ in the built environment.
- Decarbonization is urgent also given the forecasted growth of these industries as the world is expected to build the equivalent of another New York City every month for the next 40 years.
- Due to their high demand for energy in the manufacturing project, these two sectors are considered to be of the so-called **harder to abate** industries.
- The Industrial Decarbonization Initiative (IDDI) is one of the largest and most diverse coalition focussing on rallying governments and the private sector to help create a transparent and equitable **global market** for low-carbon industrial materials, starting with steel and cement.
- One key area of work is to achieve a globally recognized approach to accounting for **embodied carbon** of construction materials, from manufacturing, to transport, installation, maintenance and disposal.
- Public purchasing accounts for **40%** of cement global demand and **25%** of steel demand.
- To date, there are no clear, globally accepted definitions of what **low-carbon cement and steel are**. IDDI will change this, making it possible to set standards on what 'green' steel and cement are.
- Another key area of work is to develop guidelines for green public procurement (GPP) to help governments set ambitious targets for **buying "near carbon zero" products** for building roads, bridges, schools, and hospitals among others.
- The initiative has a **"You make it, we'll buy it"** approach, incentivizing market demand for green steel and cement.
- By joining IDDI, Governments will send a clear message that they are committed to delivering on their emissions reduction goals under the **Paris Agreement**.
- Achieving **net-zero carbon emissions** from heavy industry is technically and financially possible by 2050 in developed economies and by 2060 in developing economies, and could cost less than 0.5 per cent of the global GDP, according to the Energy Transitions Commission (ETC).
- Through IDDI, **countries** will be able to share knowledge and expertise to shorten the learning curve as well as creating frameworks and tools through consultation with technical experts and industry stakeholders.
- Through IDDI, the **private sector** will benefit by having a platform to bring their inputs to the attention of governments.

For more information about the Deep Decarbonization Initiative coordinated by UNIDO, check out the following materials



INDUSTRIAL DEEP DECARBONISATION
AN INITIATIVE OF THE CLEAN ENERGY MINISTERIAL


PART OF THE CLEAN ENERGY MINISTERIAL
The Industrial Deep Decarbonisation Initiative (IDDI) is the largest and most diverse coalition of governments and private sector working to decarbonise heavy industries, starting with steel, cement and concrete.

The challenge
Heavy industry drives the engine of our modern world, but emissions from the top five CO₂-emitting industries – steel, cement, concrete, chemical, aluminium and refining industry – account for 70 per cent of global industrial emissions. Demand for these globally traded materials will only increase as many countries around the world continue to industrialise. The world is expected to build the equivalent of another New York City every month for the next 40 years.¹ Most of this new construction will be developed using cement and concrete – the second most consumed product in the world after water, and one of the largest emitters of CO₂ in the built environment.

A unique set of challenges
Firstly, the need for continuous high-temperature heat to produce steel, cement and concrete requires large amounts of energy, much of which is still dependent on fossil fuels. Secondly, the chemical processes involved in production are themselves a source of emissions.

While the numbers are daunting, the task itself is doable. The Energy Transitions Commission (ETC) has shown that net-zero carbon emissions from heavy industry is technically and financially possible and could cost less than 0.5 per cent of global GDP. But it's going to take a collective response from the world's governments and industry sectors to achieve it.

1. IRENA (2019) <https://www.irena.org/IRENA/About/IRENA%20Publications/PDF/Emissions-Report-2019>
2. UN Environment, Global Status Report 2017, <https://www.unep.org/globalwarming/ghg-emissions>
3. <https://www.energy-transitions.com/publications/emissions-report-2019>



INDUSTRIAL DEEP DECARBONISATION
AN INITIATIVE OF THE CLEAN ENERGY MINISTERIAL

En route to a green future with low-carbon steel, cement and concrete

The production of steel, cement and concrete is responsible for 14-16% of global energy-related CO₂ emissions.

The Industrial Deep Decarbonisation Initiative (IDDI) aims to create a thriving market for near zero carbon industrial materials, starting with steel, cement and concrete.

Three pathways to achieve results

PATHWAY 1	PATHWAY 2	PATHWAY 3
1 Building the foundations to enable a thriving global market.	2 Empowering governments to buy near zero carbon materials for their public works.	3 Encouraging governments to disclose and reduce embodied carbon emission in public construction projects.

KEY MILESTONES

- Consistent standards for low-carbon steel, cement and concrete
- A standard environmental reporting mechanism for the cement, concrete and steel industries
- A high-quality training and digital tools for public, private, professional and general public
- Globally recognised targets for the public procurement of near-zero carbon steel, cement and concrete and guidelines for governments to write policy and implement the targets
- Industrial decarbonisation training and knowledge for financial institutions, companies, and governments
- By 2025, governments to begin to disclose embodied carbon emissions in public construction
- By 2030, governments to begin to disclose + NET ZERO
- By 2050, governments achieve net-zero embodied carbon emissions in public construction
- By 2060, governments complete a 50% program to reduce embodied carbon emissions in public construction

Government agencies are top buyers of steel, cement and concrete, which can account for

- 40%** of cement and concrete and
- 25%** of steel nationally

Coordinated by UNIDO, IDDI is co-led by the UK and India and current members include Canada, Germany and United Arab Emirates (UAE), with more countries joining the effort. IDDI also brings together a strong coalition of related industries and organizations including the Mission Possible Platform, Steel Zero Campaign, The Climate Group, the Leadership Group for the Industry Transition Fund(T), the International Renewable Energy Agency (IRENA) and the World Bank.

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

For more information about Green Public Procurement, check out the following materials:

Fostering industry transition through green public procurement: A "How to" guide for the cement & steel sectors (June 2021)



Target Setting for Green Public Procurement Programmes (October 2021)



What media are saying

Bloomberg (October 2021)
[Kerry Lines Up Pledges to Scrub Emissions From Carbon-Heavy Industries](#)

Nature (September 2021)
[Concrete needs to lose its colossal carbon footprint](#)

The New Yorker (September 2021)
[The promise of carbon-neutral steel](#)

Financial Times (February 2021)
['Green steel': the race to clean up one of the world's dirtiest industries](#)

Bloomberg (March 2021)
[China Ramps Up Push to Make World's Biggest Steel Industry Green](#)

New York Times - OPINION (March 2020)
[Making the Concrete and Steel We Need Doesn't Have to Bake the Planet](#)

ABC News (October 2020)
[Green cement: Startup aims to solve construction's carbon emissions problem](#)

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