



THE INDUSTRIAL DEEP DECARBONISATION INITIATIVE (IDDI)

Turning the tide
on climate change

WHAT IS THE IDDI?

The IDDI is the largest and most diverse coalition of governments and private sector organization working to decarbonize heavy industries, starting with steel, cement and concrete.

WHO'S INVOLVED?

Coordinated by UNIDO, the IDDI is co-led by the UK and India. Current members are Brazil, Canada, Germany, Japan, Saudi Arabia, Sweden, the United Arab Emirates and the United States.



Other countries are expected to join soon.

The IDDI also brings together a **strong coalition** of **over 70** related initiatives and organizations, including:



WHY THE IDDI?

OVER
50%



of industrial carbon emissions are generated by steel, cement and concrete production.¹

FOR THE NEXT
40 years



the world is expected to build the equivalent of another New York City every month.²

TO ACHIEVE GLOBAL CLIMATE GOALS,

carbon emissions from steel, cement and concrete production need to decrease by more than **90%** by 2050.³

90%



APPROXIMATELY
20-30%



of global construction industry revenues come from purchases made by national, regional and local government entities together.⁴

THE WORLD COULD SAVE

1.25 billion tonnes of carbon emissions a year⁵



if 35% of the steel and 60% of the cement used in public construction projects was very low-emission. This is more than all the carbon emissions generated by the commercial aviation industry in 2019.⁶

1. Intergovernmental Panel on Climate Change (2022), [Climate Change 2022 Mitigation of Climate Change](#).

2. UNIDO, Industrial Analytics Platform (2022), [‘Steel and cement can drive the decade of action on climate change. This is how’](#).

3. Ibid.

4. World Economic Forum (2022), [‘6 countries taking action to solve concrete’s emissions problems’](#).

5. UNIDO, Industrial Analytics Platform (2022), [‘Consumers can play a central role in decarbonizing cement and steel’](#).

Industrialization can continue without worsening the climate crisis

- The IDDI is working with governments to decarbonize heavy industry by growing the market for low- and near-zero steel, cement and concrete. This will make a significant contribution to turning the tide on climate change.
- Making low- and near-zero steel, cement and concrete requires whole production processes to be transformed. And this requires significant innovation, investment and alignment.
- To do this, we need robust data, standards for low- and near-zero carbon products and a substantial demand pull.
- With new technologies plus growing political and industrial will we can achieve these things.

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.**⁷

7. Energy Transitions Commission (2018), *Mission Possible: Reaching net-zero carbon emissions from harder-to-abate sectors*.

THE IDDI'S APPROACH

Harnessing the power of Green Public Procurement

- Public procurement accounts for 13 per cent to 20 per cent of global GDP.⁸
- Governments are among the top buyers of steel, cement and concrete for major infrastructure projects, such as new roads, bridges, housing, schools and hospitals. But how large this opportunity is currently remains unclear due to a lack of data.
- The IDDI aims to harness governments' immense purchasing power to ignite a thriving market for low or near-zero emission steel, cement and concrete.
- If governments use their purchasing power to buy low- or near-zero products it will send a crucial signal to companies and investors that demand for these products is rising.

HOW THE IDDI IS CONTRIBUTING TO CHANGE



1. Establishing an approach for collecting **data and reporting** on low and near-zero emission steel, cement and concrete, including embodied carbon.



2. Harmonizing **global standards** to allow for comparability and define low and near-zero emission steel, cement and concrete.



3. Agreeing globally recognized **targets and best practices for the public procurement** of low and near-zero emission steel, cement and concrete.



Area 1:

Data and reporting

There are no widely used systems that capture, verify and share data on the carbon emissions of steel, cement and concrete across the value chain. This makes it hard to calculate embodied carbon.

The IDDI is changing this by establishing a global system for collecting and reporting data on low- and near-zero emission steel, cement and concrete, recognizing the efforts already made by other initiatives.

Key activities:

- Developing a roadmap and guidelines on data frameworks for embodied carbon – so that governments and businesses recognize a common data and reporting system.
- Establishing principles and incentives for sharing carbon data through the value chain and internationally.
- Sharing best practice, learning and knowledge with countries that are developing data collection and reporting systems for industrial emissions.

Area 2:

Aligning global standards

Fundamental to creating a thriving market is a coherent global framework that establishes what constitutes low- and near-zero emission steel, cement and concrete.

This will instil confidence among steel, cement and concrete manufacturers to invest in developing low- and near-zero emissions products.

These standards will make it easier for public and private buyers to identify low- and near-zero carbon products and make informed procurement decisions.



The IDDI's focus on standards builds on the work of Responsible Steel, IEA and others.

Key activities:

- Agreeing a harmonized approach to definitions of what constitutes low- and near-zero emission steel, cement and concrete.
- Collating the current standards being used and widening their use.
- Agreeing global standards on low- and near-zero emission steel, cement and concrete to encourage best production and manufacturing practices.

Area 3:

Using the power of public procurement

The IDDI is establishing globally recognized targets for the public procurement of low- and near-zero emission steel, cement and concrete.

Key activities:

- Identifying barriers that government agencies and industry face and finding solutions.
- Establishing effective green public procurement targets to reduce embodied emissions in the steel, cement and concrete sectors.
- Developing guidelines around targets and requirements for the disclosure of carbon emissions.
- Agreeing best practices for the application of green public procurement targets in bid evaluation.
- Developing expertise and encouraging knowledge sharing on procurement policy and best practices.

“If you make it we will buy it”

The Green Procurement Pledge

Within the next three years the 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 joining the IDDI will chose the level of ambition for their pledge:

Level One:

Starting **no later than 2025**, require disclosure of the embodied carbon in cement/concrete and steel procured for public construction projects.

Level Two

(in addition to Level 1):

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.

Level Three

(in addition to Levels 1 and 2):

Starting **no later than 2030**, require procurement of low emission cement/concrete and steel 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.

The IDDI government partners will provide information on their progress annually and share their learnings with other participating governments.



By 2025, the IDDI expects to have enabled a minimum of ten governments to make green public procurement commitments to buy low or near-zero emission steel, cement and concrete.

Why get involved?

The more partners that join the IDDI,
the more people and the planet will benefit.

Benefits for governments

- Access the opportunity to develop markets and grow the green economy, providing long-term confidence to industry investors.
- Access frameworks and tools, global technical experts and industry stakeholders.
- Help make the transition to low-carbon industrial materials cheaper and faster.
- Contribute to global harmonization of standards and methods to prevent duplication and bring transparency and credibility to the decarbonization process.

Why get involved?

Benefits for industry

- Gain commercially valuable knowledge on low- and near-zero steel, cement and concrete.
- Access frameworks and tools, global technical experts and government stakeholders.
- Accelerate progress towards organizational sustainability goals and meet corporate responsibilities to reduce GHG emissions under national and international regulations and laws.
- Bring your company and inputs to the attention of governments.





Contact us today to join the coalition and help fast-track a green future with low-carbon steel, cement and concrete.

To find out more about the IDDI visit:

<https://www.industrialenergyaccelerator.org/areas-of-work/heavy-industry-decarbonization/>

or email **Fiona Skinner: F.SKINNER@unido.org**.