


DECARBONIZING STEEL, CEMENT AND CONCRETE

Using the power of public procurement to incentivize the production of low and near-zero emission materials


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Steel, cement and concrete are the backbone of our economies. But they account for just over 50 per cent¹ of all industrial emissions – and demand for these materials is rising. Decarbonizing these industries is essential for addressing the climate crisis. To drive momentum forward, in 2021 UNIDO and the Clean Energy Ministerial established the Industrial Deep Decarbonization Initiative (IDDI), a global coalition of governments and private sector organizations. Governments are among the top buyers of steel, cement and concrete. IDDI aims to harness this immense purchasing power to ignite a thriving market for these construction materials that generate low or near-zero emissions.

To achieve its aims, the IDDI is:



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.

An IDDI technical working group is responsible for each of these linked areas. Working Group 3 (green public procurement) is chaired by the Canadian Government's Natural Resources Canada, and consists of over 45 members from the private sector, government, civil society, intergovernmental organizations, trade associations, academia and think tanks from IDDI's partner countries.

To learn about the other two areas visit: [WG1 factsheet](#) | [WG2 factsheet](#) downloads.

1. <https://www.industrialenergyaccelerator.org/general/steel-and-cement-can-drive-the-decade-of-action-on-climate-change-this-is-how/>



The importance of green public procurement

Green public procurement is about public entities buying goods and services that are better for the environment. Many countries around the world already use this as a policy instrument.

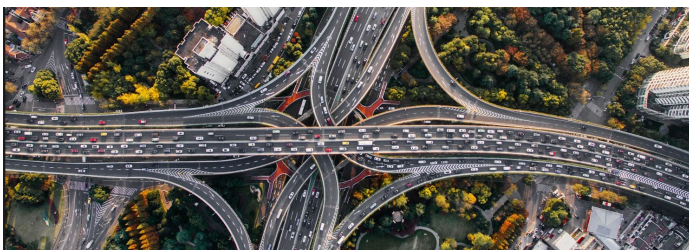
Through green public procurement, governments can use their immense purchasing power to buy low and near-zero emission steel, cement and concrete, stimulating the market and rewarding businesses that develop products with lower environmental impacts.

IDDI has established globally recognized targets for the public procurement of low and near-zero emission steel, cement and concrete, alongside guidelines to make it easier for governments to set and implement these targets in their procurement processes. These targets are bold enough to make a difference, but are also achievable (see the green public procurement pledge below).

In the next three years, IDDI will make it possible for governments to use these green public procurement targets to commit to purchasing low and near-zero emission steel, cement and concrete. Rallying governments to make these commitments will trigger the steel, cement and concrete industries to invest in the technologies needed to decarbonize these sectors.

Working Group 3: key tasks

- **Identify the biggest barriers** that government agencies and private industry face as well as solutions to make green public procurement for low and near-zero steel, cement and concrete a reality.
- **Establish the most effective types** of green public procurement targets to reduce embodied emissions in the steel, cement and concrete sectors.
- **Develop guidelines** around target setting and requirements for the disclosure of carbon emissions in materials and projects.
- **Agree best practices** for the application of green public procurement targets in bid evaluation.
- **Build capacity and encourage knowledge sharing** on procurement policy and best practices.



The green public procurement pledge

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

Level 1

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

Level 2 (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 3 (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 4 (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.

IDDI is the largest and most diverse coalition of governments and private sector working to decarbonize heavy industries. It is coordinated by UNIDO, led by the United Kingdom and India and has Canada, Germany, Japan, the United Arab Emirates, Saudi Arabia, Sweden and the United States as members. IDDI is supported by a strong coalition of initiatives and organizations, including the [Mission Possible Partnership](#), the [Leadership Group for the Industry Transition](#), and the [Climate Group](#).

To find out more about IDDI visit: <https://www.industrialenergyaccelerator.org/areas-of-work/heavy-industry-decarbonization/>

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