



INDUSTRIAL DEEP DECARBONIZATION INITIATIVE: DRIVING GREEN PUBLIC PROCUREMENT OF CEMENT, CONCRETE, AND STEEL

“If You Make It, We Will Buy It”: Governments committing to purchase low-carbon cement, concrete, and steel for public infrastructure.

2025

Governments are among the largest buyers of cement, concrete, and steel for major infrastructure projects — from housing, schools, and hospitals to roads, bridges, and energy projects. By committing to buy low- and near-zero-emission materials, they can stimulate demand, shape market signals, and align public investment with climate objectives. The **Industrial Deep Decarbonization Initiative (IDDI)** aims to accelerate this transition through green public procurement (GPP), catalyzing early demand for clean construction materials.

Key Messages

1. Governments are powerful market-makers for low-emission materials

Public procurement accounts for up to 35% of cement and 25% of steel use in some countries. These decisions influence market trajectories and can accelerate the shift to clean construction.

2. Green public procurement accelerates clean industry transformation

When governments commit to buying low-emission cement, steel, and concrete, they send a powerful signal that drives innovation, attracts investment, and strengthens supply chains.

3. Procurement puts policy into practice

By leveraging existing frameworks like eco-label programs and green building certifications, GPP can help countries translate climate goals like Nationally Determined Contributions (NDCs) and decarbonization roadmaps into tangible outcomes.

4. IDDI supports governments through every stage of the GPP journey

Whether just starting or already progressing, governments at all levels can join IDDI's global coalition to access resources and set GPP commitments for cement, concrete, and steel. IDDI also provides access to support platforms like the Net Zero Partnership and Global Matchmaking Platform, which offer technical assistance, project preparation, technology matchmaking, and financing linkages.

1. What is Green Public Procurement (GPP)?

Green public procurement (GPP) is the practice of buying goods and services, and public infrastructure, that have a reduced environmental impact throughout its life cycle. Governments buy a vast array of goods and services so they can meet government objectives which may each have multiple environmental impacts. To minimize these impacts many governments create GPP policies that target various high-impact categories and environmental issues such as greenhouse gases in construction materials. GPP supports decarbonization by setting commitments for low-emission materials in design requirements and construction tenders, incentivizing innovation and emissions reductions in the supply chain.

2. The GPP Opportunity

Steel and cement are the materials of our modern societies, and they are also among the most carbon-intensive industrial materials on the planet – producing them accounts for 14–16% of global energy-related CO₂ emissions¹.

Public procurement represents approximately 14% of Gross Domestic Product (GDP) in developed countries, and it is a powerhouse in developing economies, representing up to 30% of their GDP². In fact, governments are often the largest single buyers of cement, concrete, steel, and other industrial materials, particularly for major infrastructure projects—in some countries purchasing up to 35% of all cement and 25% of all steel used in public construction³.

When governments commit to buying low carbon products it sends a signal to companies and investors that demand for these products is rising.

GPP is not just about buying differently; it's about building a clean industrial future. It can:

- Signal reliable demand for low- and near-zero-emission materials
- Direct public investment toward cleaner technologies
- Prevent carbon lock-in in new infrastructure

With benefits far beyond emissions reductions, GPP supports green innovation, skilled job creation, competitiveness for small business manufacturers, and climate-aligned investment.

3. About the Industrial Deep Decarbonization Initiative (IDDI)

The [Industrial Deep Decarbonization Initiative \(IDDI\)](#) is an initiative of the Clean Energy Ministerial (CEM), coordinated by the United Nations Industrial Development Organization (UNIDO), that uses GPP as a key driver to decarbonize heavy industries, focusing on steel, cement, and concrete. Open to **all levels of government**, IDDI brings together a broad coalition of stakeholders across industry, academia, civil society, and trade associations.

By leveraging the purchasing power of governments, IDDI seeks to create strong, early demand for low- and near-zero emission steel, cement, and concrete, helping to grow global markets for clean industrial products.

Data from select emerging economies highlights the scale of public sector demand. For example, in India⁴, public procurement accounts for approximately 27% of total steel demand. In China⁵, public construction is estimated to drive around 33% of national demand for both steel and cement, corresponding to roughly 350 million tonnes of steel and 775 million tonnes of cement annually.

1. <https://www.unido.org/news/worlds-largest-steel-and-concrete-buyers-make-game-changing-push-greener-solutions>

2. <https://www.globalefficiencyintel.com/fostering-industry-transition-through-green-public-procurement>

3. <https://decarbonization.unido.org/resources/the-scale-and-impact-of-green-public-procurement-of-steel-and-cement-in-canada-germany-the-uk-and-the-us/>

4. <https://www.globalefficiencyintel.com/green-public-procurement-of-steel-in-india-japan-south-korea>

5. <https://www.globalefficiencyintel.com/green-public-procurement-of-steel-and-cement-in-china>

IDDI drives impact through:

- Mobilizing public procurement commitments in a GPP Pledge to create early markets for low-emission products (cement, concrete, steel).
- Encouraging harmonization of GHG emissions accounting and definitions for low- and near-zero emission products by publishing guidance and recommendations.
- Facilitating collaborative learning through working groups and learning sessions that include associations, companies, and experts.
- Enabling knowledge exchange by helping countries share best practices, align approaches to low-emission procurement, and access expertise from a wide network of stakeholders across the public and private sectors.

4. How IDDI Supports Governments with GPP

By joining IDDI, countries access an international platform that transforms ambition into action. Through IDDI, governments can:

- **Turn Policy into Action**

Implement industrial decarbonization strategies and NDCs by creating real demand for low- and near-zero emission materials.

- **Align on Standards and Accounting**

Harmonize definitions, thresholds, and reporting methods for embodied carbon in procurement.

- **Learn from Peers**

Collaborate through joint workstreams, technical guidance, and best practice sharing.

- **Access Tools, Finance, and Support**

Tap into the Net Zero Partnership and Global Matchmaking Platform for technical assistance, project development, technology partnerships, and finance connections.

- **Stimulate Clean Growth**

De-risk investments in green tech, modernize domestic industries, and support jobs and innovation.

- **Demonstrate Leadership**

Align national actions with global climate goals and help decarbonize sectors responsible for ~15% of global CO2 emissions.

5. IDDI Areas of Focus

1. Data and Reporting



Establishing a common approach for collecting and sharing interoperable data to support consistent reporting on the procurement of low- and near-zero emission materials.

2. Standard Harmonization



Collaborating with governments, the private sector, civil society, and intergovernmental organizations to align standards and definitions for low- and near-zero emission products.

3. Public Procurement



Developing commitments and best practices to guide the public procurement of low- and near-zero emission materials.

“IF YOU HAVEN’T SIGNED UP TO SUPPORT...THE IDDI GREEN PROCUREMENT PLEDGE, I WOULD ENCOURAGE EVERYBODY ELSE TO DO THAT.”

H.E. Kerry McCarthy MP, Parliamentary Under-Secretary of State at the Department for Energy Security and Net Zero

6. How to get involved in IDDI

Governments

Governments at all levels—whether CEM members or not—are encouraged to contact the IDDI Secretariat (iddi@unido.org) to explore joining.

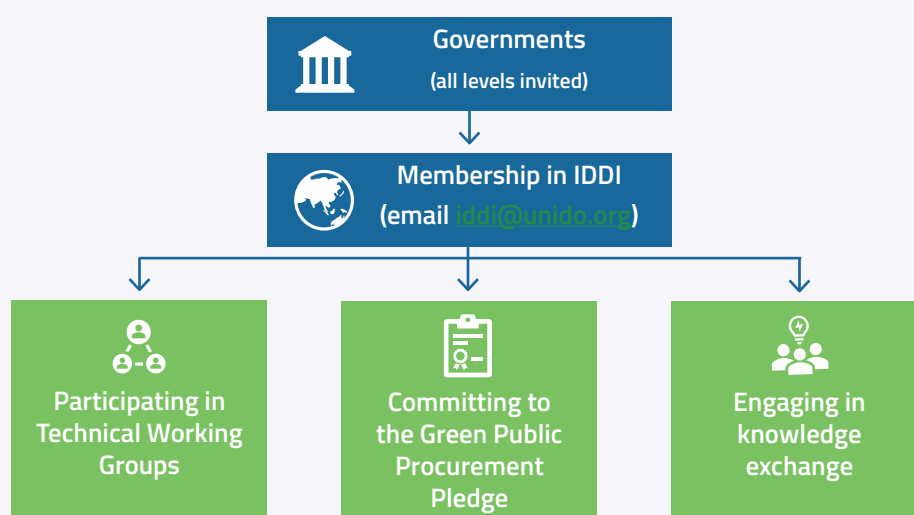
Membership in IDDI

Membership is the entry point for governments to fully participate in IDDI activities. It entails no formal

commitments or obligations and is based on voluntary contributions. By becoming members, governments unlock access to technical collaboration, policy development support, and knowledge exchange.

IDDI’s current country members include Brazil, Canada, Germany, India, Japan, Saudi Arabia, United Arab Emirates, United Kingdom, and United States.

Through membership, governments engage in the following three pathways:



1. Participating in Technical Working Groups

Member governments can join IDDI’s Technical Working Groups, which develop practical guidance on interoperable data and reporting, harmonized definitions and standards, and green procurement practices. These groups foster collaboration among government representatives, industry leaders, civil society, and the IDDI Secretariat, and are chaired by representatives from member countries.

2. Committing to the Green Public Procurement Pledge

Along with becoming members, national and subnational governments are encouraged to commit to IDDI’s Green Public Procurement Pledge at a level that aligns with their national circumstances. While not a requirement for IDDI membership, the pledge demonstrates leadership in advancing markets for low- and near-zero-emission

construction materials, such as green cement, concrete, and steel. More details can be found in the next section.

3. Engaging in Knowledge Exchange

Membership enables governments to also engage in targeted knowledge-sharing activities. These include sharing best practices, aligning procurement approaches with international peers, and accessing specialized expertise from across the public and private sectors. This exchange supports innovation, policy alignment, and capacity building for green industrial transitions.

Industry, Trade Associations, Civil Society Organizations

These stakeholders provide critical technical expertise and practical insights that support the initiative’s decarbonization objectives. Interested parties are encouraged to contact the IDDI Secretariat at iddi@unido.org to express their interest and learn more.

7. IDDI's GPP Pledge

One of IDDI's key activities is encouraging countries to commit to the **Green Public Procurement (GPP) Pledge**. Lead countries demonstrate leadership by committing to the pledge and reporting progress annually. Countries that have taken this step include Austria, Canada, Germany, Japan, United Arab Emirates, United Kingdom, and United States.

The GPP Pledge has five levels that allow for various ways to set commitments for the procurement of low-emission steel, cement, and concrete. Governments can choose the levels that best represent their national circumstances and strategic objectives.

- **Statement of Intent** – A commitment to assess readiness and explore how to set GPP goals for low carbon cement, concrete, and steel for infrastructure projects.
- **Level 1: Disclosure** – A product-level requirement requesting suppliers submit Environmental Product Declarations (EPD) for products sold to governments. This initiates critical early buyer-supplier engagement and informs future policy such as setting thresholds for low carbon products.
- **Level 2: Whole Project Life Cycle Assessment** – This project-level commitment incentivizes design decisions for efficient use of materials and circularity. Governments with existing project-level approaches such as following green building certifications or similar criteria may already meet this Level.
- **Level 3: Buying Low-Emission Materials** – A commitment to buy low emission materials, signaling demand to the cement, concrete, and steel sectors to trigger investment in the decarbonization of high emitting production processes. This product-level commitment can be met in an Ecolabel program and/or by following green building certifications or similar criteria.
- **Level 4: First Movers of Near-Zero Emission Materials** – A commitment to be a first customer for near-zero emission materials, supporting investment in breakthrough technologies such as green hydrogen and carbon capture and storage. This product-level approach can be integrated into innovation funding programs such as first-customer or test-bed programs.

No matter where a government starts, now is the time to take the next step towards buying green cement and steel for public infrastructure projects. The GPP Pledge levels enable a versatile, phased and strategic rollout.

"If you make it we will buy it"

The Green Public Procurement Pledge



Governments pledging choose their starting point and level of ambition

Statement of Intent

Start now to work towards key aspects of the pledge without timebound commitments.

Level One

Starting as soon as possible upon pledging, require disclosure of the embodied carbon in cement/concrete and steel procured for public construction projects.

Level Two

Starting no later than 2030, conduct whole project life cycle assessments for public construction projects, and, by 2050, achieve net zero emissions in all public construction projects.

Level Three

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

Starting in 2030, require procurement of a share of cement and/or crude steel from near zero emission material production for signature projects.



Leading countries that have joined IDDI's GPP Pledge

8. Contacts & Resources

IDDI Secretariat email: iddi@unido.org – contact us to join the coalition.

Find out more from our website and online resources here: <https://decarbonization.unido.org/projects/iddi/>.



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