



# IDDI GREEN PUBLIC PROCUREMENT PLEDGE ANNOUNCEMENT

5 December 2023

We, the undersigned governments, are committed to helping drive the global decarbonisation of heavy industries by creating a market demand for low and near zero emission steel, cement, and concrete, through public procurement.

We recognise that public procurement represents a significant share of steel and concrete markets. These materials remain as two of the most carbon intensive commodities on the planet – accounting for ~16% of global GHG emissions – and continue to face a unique set of challenges in reducing emissions. The presence of a significant demand for low carbon steel, cement and concrete, especially in the construction sector, is a positive enabler to decarbonisation.

We recognise that transparent and harmonised emissions accounting standards and definitions for low and near zero emission steel, cement and concrete are foundations that underlie green public procurement.

We recognise the need for inter- and intra- governmental collaboration and cross-sectoral dialogue to accelerate public procurement commitments and implementation.

#### Our commitments:

We pledge to adopt timebound commitments for procurement of low emission steel, cement and concrete, and/or to set emissions reduction thresholds for whole project life cycle assessments, to achieve net zero emissions in public buildings and/or built infrastructure. We also commit to support innovation and the deployment of breakthrough technologies by stimulating demand and commercialisation of near zero emission materials.

We commit to support the development and use of harmonised emissions accounting standards and definitions for low and near zero emission construction materials, starting with steel, cement and concrete. We will use robust Type III Environmental Product Declarations (EPDs) or otherwise independently verified Life Cycle Assessments (LCAs) as the basis for standardised reporting and defining GHG intensity levels in public procurement. We will also work together with stakeholders to improve harmonisation of EPD Product Category Rules (PCRs) for the target materials.

We will report transparently on progress towards the IDDI green public procurement commitments.

## **Our actions:**

#### Canada

The Government of Canada owns over 34,000 buildings and 20,000 engineering assets and spends over \$30 billion a year through procurement, it is the largest asset owner and public procurer in Canada. In 2020, the Government of Canada updated its Greening Government Strategy (GGS) to include requirements for low carbon structural materials in major construction projects. These requirements were supported by stakeholder consultations with industry, experts across government, and civil society and consultations continue to support policy development and implementation.

In line with the <u>IDDI GPP Pledge</u>, the government of Canada is taking the following actions:

### Pledge Level 1

Government of Canada signaled its intent to require embodied carbon disclosure in 2020. In 2022, it issued requirements for disclosure and reductions with the release of the procurement Standard on Embodied Carbon in Construction. As a result, concrete and cement associations, and suppliers across Canada have developed Environmental Product Declarations (EPDs) and are able to disclose the amount of embodied carbon in their products. Other construction material sectors are following suit and creating Canadian EPDs. Practical guidance on disclosure of embodied carbon has been developed and is now being used by project teams, designers, builders, and material suppliers across the country.

### Pledge Level 2

By 2025, the Government of Canada will begin conducting whole building (or asset) life-cycle assessments (LCAs) for major buildings and infrastructure projects that it procures. Upcoming projects are being identified to pilot the use of whole building LCA. The GGS prioritizes the use of recycled and lower-carbon materials, material efficiency and performance-based design to achieve its embodied carbon targets for federal construction projects. In 2022, the National Research Council of Canada (NRC) created guidance on consistent LCA methodology for building projects which is now being shared across all levels of government and through post-secondary courses. Over time, methodologies will be applied to other asset types, strengthening quantification of carbon-related emissions and reductions in Canada.

Government has also committed to being net-zero emissions by 2050 including government-owned and leased real property, and in the procurement of goods and services.<sup>2</sup>

### Pledge Level 3

Through the GGS, the Government of Canada has committed to reducing the embodied carbon of the structural materials of major federal construction projects by 30% starting in 2025. Canada's NRC is working

Standard on Embodied Carbon in Construction - Canada.ca

<sup>2. &</sup>lt;u>Greening Government Strategy: A Government of Canada Directive - Canada.ca</u>

with industry to acquire life cycle emissions data to establish a foundation for calculation of the environmental and GHG performance of construction materials and built infrastructure assets. Public Services and Procurement Canada is piloting the selection, design and installation of low-carbon concrete and other lower embodied carbon materials on signature construction projects. These include the heritage restoration of our Parliament Building Centre Block and a new Parliament Welcome Centre in our nation's Capital, as well as a new Taxation Centre in Quebec, and the Burlington Lift Bridge Deck on the western shore of Lake Ontario.

### Pledge Level 4

Canada's Innovation, Science and Economic Development department offers an Innovative Solutions Canada (ISC)<sup>3</sup> program designed to help startups and SMEs overcome development hurdles so they can produce globally demanded products while also meeting government operational needs. An ISC challenge for Low Carbon Materials closed in October 2023 which aims to address market gaps that could be a barrier to delivery of federal government commitments such as those in the Greening Government Strategy.

The government of Canada also invests to secure long-term supply of lower and near zero emission materials through programs such as the Net Zero Accelerator<sup>4</sup>, the Energy Innovation Program<sup>5</sup>, and Scientific Research Experimental Development Investment Tax Credits<sup>6</sup>. Recent investments include over a billion dollars in announcements supporting more than \$4 billion in decarbonization activities for steel and cement. Based on current levels of investment, Canada's cement and steel sectors will reduce nearly eight megatonnes of CO<sub>2</sub> equivalent emissions by 2030, with more announcements pending as projects are approved.

# Germany

The Federal Climate Change Act adopted by the Federal Government of Germany in 2019 recognises green public procurement as one main element for the achievement of its climate neutrality goal in 2045. With the programme of measures and its further development in 2021 the German government attributes to the federal government level a role model function for sustainable construction and introduce a comprehensive assessment system for buildings (BNB). In 2023, a stakeholder consultation process, involving different Federal Ministries and the German Environment Agency, as well as key external stakeholders from industry, science, and civil society was led by the Federal Ministry for Economic Affairs and Climate Action for the development of definitions and demand signals for green steel, cement and basic chemicals.

<sup>3. &</sup>lt;a href="https://ised-isde.canada.ca/site/innovative-solutions-canada/en">https://ised-isde.canada.ca/site/innovative-solutions-canada/en</a>

<sup>4.</sup> https://ised-isde.canada.ca/site/strategic-innovation-fund/en/net-zero-accelerator-initiative

 $<sup>5. \</sup>qquad \text{https://natural-resources.canada.ca/science-and-data/funding-partnerships/opportunities/grants-incentives/energy-innovation-program/18876}$ 

<sup>6.</sup> https://www.canada.ca/en/revenue-agency/services/scientific-research-experimental-development-tax-incentive-program.html

In line with the <u>IDDI GPP Pledge</u>, the Federal Government of Germany is taking the following actions:

### Pledge Level 1

The German government has set itself specific targets since 2010 to ensure that its own administration acts sustainably. A key element of the programme of measures is the Federation's function as a role model for sustainable construction of buildings.

Therefore, since 2013, all new construction projects and complete refurbishments of federal buildings with costs higher than € 2 million have to meet the silver standard of the Assessment System for Sustainable Building (BNB). The standard silver of BNB has an influence on the planning of the building and affects the procurement and grant promotion processes. A mandatory part of the BNB is a life cycle assessment (LCA) for the entire building which also includes the disclosure of the emissions from the used materials such as cement, steel and concrete.

# Pledge Level 2

A mandatory part of the BNB framework is a building LCA, which evaluates the environmental impact of buildings over their entire life cycle. As a result, LCAs of federal construction projects for buildings have been mandatory for more than 10 years now.

According to the Federal Climate Change Act §13 when planning, selecting and implementing investments and purchasing, the federal government examines how these investments can contribute to achieving the national climate action goals, especially the climate neutrality goal by 2045. If several implementation options are possible, preference should be given to those that enable emissions reduction over the entire life cycle at the lowest cost.

### Pledge Level 3

With the current programme of measures adopted in 2021, the German government has decided to further develop the silver standard of the BNB for buildings to support the goal of a climate-neutral federal administration. This will result in increased demand for low emission cement/concrete and steel due to enhanced thresholds for whole life carbon emissions (WLC) in BNB. The further development of the BNB will be completed in 2025.

Additionally, Germany placed an efficient instrument mix for the decarbonisation of the steel and cement industry. The continuously rising CO<sub>2</sub> price and the set of funding programmes addressing both investment and operating costs are enhancing the competitiveness of green construction materials over time. Green construction materials will be available as an economical option to the public sector which is currently accounting for 24 % of the annual cement and 10% of the annual steel demand.

### Pledge Level 4

With the current programme of measures adopted in 2021, the German government has decided to integrate requirements into the BNB for buildings that will lead to an increased demand for "green" construction materials such as steel and cement. For this purpose, the responsible ministries, agencies and institutes at the federal level shall develop concrete minimum requirements for building materials starting in 2024, in detail:

"3 (f) minimum requirements for building materials and products with the aim of,

(1) identifying construction products and services that are particularly relevant in terms of sustainability, and to develop specified requirements such as CO<sub>2</sub> emission from production for "green" steel or cement to be met and where necessary, prohibitions/restrictions (e.g. peat, environmentally harmful refrigerants)." (Programme of measures adopted in 2021, Section II. Construction, renovation and managing of federal properties).

# **United Kingdom**

The Government of the United Kingdom identified green public procurement as a goal in The National Procurement Policy Statement. Over the course of 2023, the United Kingdom held a stakeholder consultation process on the definitions, measurements methods and demand signals for green steel and cement, which actively engaged industry, science and civil society.

In line with the <u>IDDI GPP Pledge</u>, the government of the United Kingdom is taking the following actions:

### Pledge Level 1

As part of the UK government's Industrial Decarbonisation Strategy and Net Zero Strategy, the UK government will use public procurement to drive change and reduce emissions in public construction projects. UK businesses already meet a range of emission reporting requirements, including those under the UK Emissions Trading Scheme. The UK government has consulted on embodied emission requirements for the purpose of demand side and carbon leakage policies. A standardised framework for embodied emissions reporting would enable businesses to report emissions consistently and could help to minimise the burden. The requirement and standardisation of Whole Life Cycle carbon assessments and reporting has been established across major construction procuring departments since 2022 to support the mandated requirements, with progress indicating adoption not only on new projects in the Government Major Projects Portfolio but also extending to other major projects across the public sector.

### Pledge Level 2

The UK government is bound by the Climate Change Act of 2008, which commits to a 100% reduction of greenhouse gas emissions by 2050 compared to 1990 levels.

By the Level 2 pledge implementation date of 2030, Whole Life Cycle assessments in the UK should be well established with data and insights informing interventions to optimise decarbonisation. The UK's Construction Playbook sets out key policies for public projects and states that all Contracting Authorities should have strategies in place to achieve net zero carbon across their portfolio of estates and infrastructure assets by 2050.

In addition, the Net Zero Estate Playbook captures guidelines outlining the government's expectations of how property estates teams should implement improvements and interventions to buildings and estates to improve energy efficiency and contribute to the achievement of the Net Zero 2050 commitment. This requires organisations within government to develop decarbonisation plans for construction and operational emissions, as part of a Strategic Asset Management Plan for the organisation. In fact, Contracting Authorities are already encouraged to embed a whole life approach to sustainability, including carbon management and wider environmental benefits during the development of the business case, then into the project design phase.

### Pledge Level 3

Already in the UK, all government departments and their related organisations must ensure that they meet the minimum mandatory Government Buying Standards for construction and major refurbishment projects. These require the application of the Building Research Establishment Environmental Assessment Method (BREEAM) standards, or equivalent, which recognise the use of low carbon steel and concrete, and embodied carbon measurement as ways of minimising a project's life cycle impact. The wider UK public sector is also encouraged to specify the minimum mandatory standards in tenders.

# Pledge Level 4

To support future production of near-zero emission steel and cement, and procurement of these products for signature projects, the UK government is supporting the decarbonisation of the cement and steel sectors through various policies. The £1 Billion Net Zero Innovation Portfolio (NZIP) provides support to companies, including those in the UK steel and cement sectors, to decarbonise. NZIP has funded studies on both the use of hydrogen production in Iron and green hydrogen in steel. The UK steel and cement sectors can also bid into the Industrial Energy Transformation Fund, which is providing £500 million in funding to support industrial sites with high energy use transition to a low carbon future. Moreover, to reduce the carbon emissions from industries such as steel and cement, the UK government initiated the £210 million Industrial Decarbonisation Challenge. This initiative supports the development of low-carbon technologies and infrastructure.

The UK government has committed to invest up to £20 billion in the early development of Carbon Capture, Utilisation and Storage. The UK government is committed to deploying at least two CCUS clusters by the mid-2020s and four by 2030, with the world's first net zero industrial cluster by 2040.

#### **United States of America**

The Government of the United States of America, pursuant to Executive Order 14057 of December 8, 2021 (*Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*), and President Biden's Federal Sustainability Plan, launched a Federal Buy Clean Task Force in 2022 to prioritize Americanmade, lower-carbon construction materials in Federal procurement and federally-funded infrastructure projects. The Bipartisan Infrastructure Law (Public Law 117–58, 2021) and the Inflation Reduction Act (Public Law 117–169, 2022) catalyzed the Federal Buy Clean Initiative by appropriating over USD \$4.5 billion for the identification and procurement of construction materials with substantially lower embodied carbon (taking whole life-cycle emissions into account, as reported through robust Environmental Product Declarations (EPDs)). The Federal Buy Clean Initiative also includes a Federal-State Buy Clean Partnership with thirteen U.S. States, which harmonizes Federal and State buy-clean policy to further amplify the demand signal; likewise, the First Movers Coalition has united almost 100 companies that use their purchasing power to create early markets for innovative clean technologies.

In line with the <u>IDDI GPP Pledge</u>, the government of the United States of America is taking the following actions:

### Pledge Level 1

In support of the Federal Buy Clean Initiative, Federal agencies are for the first time establishing policies, procedures and pilots that prioritize the use of American-made, lower-carbon construction materials in Federal procurement and Federally-funded projects while making historic investments to upgrade U.S. transportation, buildings and energy infrastructure. A White House-led Buy Clean Task Force strengthens collaboration across participating agencies, which collectively account for 90 percent of all federally financed and purchased construction materials. The Buy Clean Task Force has prioritized four construction materials with high embodied carbon—steel, cement/concrete, asphalt and flat glass. To support these efforts and drive the market for lower embodied carbon construction materials, the Environmental Protection Agency (EPA) is developing grants, technical assistance and tools to improve the standards for and measurement and verification of embodied carbon data (via EPDs), including a USD \$100 million grant program and a forthcoming carbon labeling program.

### Pledge Level 2

Agencies are purchasing low embodied carbon materials to modernize Federal facilities. The General Services Administration (GSA) is analyzing a project's whole life cycle in planning new construction and major renovations. In November 2023, GSA announced a pipeline of over 160 Federal buildings that will be modernized and upgraded by using over USD \$2 billion in IRA funding to procure low embodied

carbon construction materials. These projects span 39 U.S. states and Puerto Rico. Other agencies are also integrating embodied carbon considerations into their construction projects' design and procurement, including the Department of Defense and the Department of State.

### Pledge Level 3

Federal agencies are prioritizing low embodied carbon materials for federally-funded infrastructure. The Department of Transportation (DOT)'s Federal Highways Administration will distribute USD \$2 billion to states and other local governments to purchase products with substantially lower embodied carbon through its Low-Carbon Transportation Materials Grants program. This program advances DOT's goals to support job creation in sustainable industries while investing in American infrastructure. Agencies are also working to ensure all communities benefit from the Federal Buy Clean Initiative. The Department of Housing and Urban Development's Green and Resilient Retrofit Program includes funding for low-income multifamily properties to purchase low embodied carbon materials. The Federal Emergency Management Agency (FEMA) helps communities use low-carbon materials in disaster recovery and climate resilience projects.

## Pledge Level 4

U.S. companies are investing in historic industrial decarbonization and innovating the sustainable materials of the future. Various Federal programs, including GSA's Green Proving Ground program, are using Federal facilities as a testbed to understand the performance of innovative building materials in real-world settings. The U.S. Army Corps of Engineers' Engineer Research and Development Center is also leading research on sustainable materials for military installations. This testing is complemented by the Department of Energy's (DOE's) Pathways to Commercial Liftoff reports, which outline the capital and technological innovations needed to decarbonize the manufacturing of materials such as steel and cement; DOE's Industrial Demonstrations Program, which is providing over USD \$6 billion in funding to accelerate decarbonization of energy-intensive industries; and DOE's Loans Program Office, which has already loaned USD \$30 billion to innovative clean energy and supply chain projects.

To find out more about IDDI visit: <a href="https://www.industrialenergyaccelerator.org/areas-of-work/heavy-industry-decarbonization/">https://www.industrialenergyaccelerator.org/areas-of-work/heavy-industry-decarbonization/</a> or email: <a href="mailto:iddi@unido.org">iddi@unido.org</a>.





