

Advancing the
CEM Future Fuels Action Plan
Status Update: September 2025

Background

Future Fuels such as clean hydrogen, ammonia, e-fuels, and sustainable biofuels and bio-based materials are emerging as critical enablers of decarbonisation, particularly in sectors where direct electrification is not feasible. In this context, at CEM15, nine CEM members launched the [CEM Future Fuels Action Plan](#).

Launched in support of the Brazilian G20 Presidency's priority on sustainable fuels, the Action Plan consists of 20 cross-sector actions to accelerate the deployment of sustainable Future Fuels.

The CEM Future Fuels Action Plan is focused on three priority pillars:

- **Demand Creation**: The CEM is creating demand for *all* sustainable Future Fuels and related materials by assembling broadly-based implementation coalitions. These coalitions are translating low carbon objectives into demand for Future Fuels in key sectors such as maritime, aviation, heavy industry, and road transport.
- **Lifecycle Carbon Accounting**: The CEM is promoting the essential role of *transparent and coherent* approaches to Lifecycle Carbon Accounting for investment in Future Fuels, and the sustainable materials that rely on Future Fuels as feedstocks. This involves new collaboration and knowledge-sharing between suppliers and prospective buyers.
- **Markets and Infrastructure**: The CEM is working across sectors to develop market mechanisms and physical infrastructure for global Future Fuels value chains. Priorities include cross-border carbon trade and the production of low-emissions e-fuels.

Activities being progressed by CEM members and partners consist of knowledge sharing, coalition building, publications, and awards.



CEM16 High-Level Dialogue to Accelerate Future Fuels in Busan, South Korea

CEM16 Marked an Implementation Milestone for the Future Fuels Action Plan

As CEM16 host, Korea emphasised implementation of the Future Fuels Action Plan as a priority deliverable. Future Fuels are also being notably highlighted through Brazil's COP30 Presidency, South Africa's G20 Presidency, and Canada's G7 Presidency, with the active support of the CEM Future Fuels community and key partner organisations.

For this reason Busan brought together governments leaders, CEOs, and other key partners for a **high-level dialogue to accelerate Future Fuels**. The discussion focused on CEM's progress implementing the Action Plan – with a focus on demand creation, lifecycle carbon accounting, and the creation of new markets and infrastructure. Leaders at the High-Level dialogue:

- **Reiterated support for the CEM Future Fuels Action Plan** by CEM member governments and key partner organisations – as an essential implementation platform for accelerating the deployment of *all* sustainable fuels, including as feedstocks for heavy industry.
- **Supported new collaborations under the Action Plan with transport and industry** – particularly for high-emitting sectors such as shipping, aviation, road transport, and heavy industry.
- **Championed the contribution of the Action Plan to multilateral priorities** for sustainable fuels in 2025 under South Africa's G20 Presidency, Canada's G7 Presidency, and Brazil's COP30 Presidency.

At Busan, the CEM Future Fuels community also organised six dedicated Future Fuels sessions to progress the Action Plan. These sessions focused on *Future Fuels Demand Creation, Harmonisation of GHG Accounting Standards for Future Fuels, Low to Negative Emissions Biofuels and e-Fuels, CCUS and the Global Maritime Sector, Shipping's Dual Role as a User and Mover of Future Fuels, and International Hydrogen Trade and Decarbonisation*.

A further five CEM community events advanced relevant topics such as *demand creation for sustainable biofuels, industrial decarbonisation, CCUS investment, and clean transport fuels*.



Future Fuels – Carbon Accounting



Future Fuels – BECCS and e-Fuels



Future Fuels – Maritime and CCUS



Future Fuels – International Hydrogen Trade Forum

Key Announcements and Outcomes Across All Sustainable Fuel Types and Sectors

Key implementation announcements by CEM members, industry leaders, and key partner organisations at CEM16 included:

- **Strengthened cross-sector engagement with transport and industry** by agreeing to new work on Future Fuels demand creation with key partner organisations such as the [International Transport Forum](#), [International Civil Aviation Organization](#), [International Chamber of Shipping](#), [UNIDO](#), and the [Mission Possible Partnership](#).
- **Launch of a new collaboration** between the CEM Biofuture Platform and the CCUS Initiative to build new networks and policy knowledge in support of low-to-negative emissions BECCS and e-fuels.
- **Launch of a new collaboration** between the CEM CCUS Initiative and CEM-Hubs to develop policy expertise and provide guidance to governments and industry on establishing ports and shipping infrastructure as hubs for carbon capture and storage.

These high-level announcements were based on substantial outcomes under the Action Plan, driven by CEM workstreams working together with key partners:

- **Launch of consultations on new ISO Workshop Agreement** to accelerate carbon accounting for heavy industry products and low-carbon fuels as feedstocks.
- **Launch of a Hydrogen Action Plan** to promote accelerated deployment of low and near-zero emissions hydrogen in the lead-up to COP30.
- **Launch of policy recommendations for Future Fuels investment** by CEOs and other private leaders from across the [energy and maritime sectors](#) in the [CEM-Hubs Initiative](#).
- **Launch of a new [carbon management glossary](#)** to promote a common understanding of key terms and technologies essential to the production of BECCS, e-fuels, and low-carbon industrial feedstocks.

- **Launch of the [Green Public Procurement Factsheet](#)** to provide governments with practical guidance on how to use public procurement to drive new demand for buildings with low-carbon materials and fuels.
- **Launch of a new report on Green Public Procurement and Ecolabels** to help governments harmonise environmental criteria across procurement for low-carbon materials and feedstocks.
- **2025 Hydrogen Awards of Excellence** to put a spotlight on *‘Hydrogen innovations and Technologies for Hard-to-Decarbonise Sectors and Sustainable Fuels’*.



*CEM16 Session on Future Fuels and the Maritime Sector.
26 August, Busan, Republic of Korea*

Looking Forward – Busan to Belém, and Beyond

CEM members and key partner organisations continue to implement the Future Fuels Action Plan through international fora such as the G20, G7, COP30, and beyond.

At **New York Climate Week** in September, CEM will provide a bridge between the tangible progress and outcomes on Future Fuels at CEM16 and momentum building for COP30.

- At the **Sustainable Fuels Industry Roundtable** (jointly organised by the Hydrogen Council and Molecule Group), CEM will emphasise the critical role of the **Future Fuels Action Plan** as a key implementation platform for Brazil’s COP30 Presidency. In the lead-up to Belém, Brazil has emphasised the importance of sustainable fuels in global energy transitions. By pointing to outcomes under the Action Plan, CEM will demonstrate real-world progress delivering tangible outcomes on key priorities such as demand creation, Lifecycle Carbon Accounting, and enabling infrastructure. Highlighting the practical,

achievable nature of the COP30 Presidency's priorities will be essential to build momentum for success in November.

- At the **WEF Future of Clean Fuels** session, CEM will invite private sector leaders to deepen their collaboration with CEM members under the Action Plan. Deepened collaboration between CEM and WEF's private sector members facilitates new public-private partnerships for sustainable fuels. These partnerships will be vital to create new markets for Future Fuels and overcome the 'green premium' that still exists for many deployment pathways.

In October, on sidelines of the G20 Energy Transition Working Group and Ministerial meetings in Durban, South Africa and CEM will convene a **Future Fuels Demand Creation Workshop**. Organised by CEM and South Africa's G20 Presidency, this event will focus on assembling new implementation coalitions to create demand for Future Fuels in the transport and industry sectors. The session will promote the importance of greater cooperation across global value chains by aligning policies for producing Future Fuels with new and emerging regulatory obligations for users.

The CEM Future Fuels community continues to provide support for Canada's G7 Presidency – particularly its prioritisation of **Lifecycle Carbon Accounting** for Future Fuels and industrial feedstocks. In the lead up to the G7 Ministerial in October, Canada continues to share its policy priorities and technical approach to LCA issues through the *CEM Future Fuels LCA Working Group*.

For COP30 in November, the CEM Future Fuels community is actively supporting sustainable fuels as a priority objective for Brazil's Presidency. CEM stands ready to mobilise an implementation coalition for any demand creation targets in the lead-up to COP30. Indeed, the CEM Future Fuels community is actively engaging with Brazil and is planning key outcomes and events across the energy, industry, and transport sectors.

In the lead-up to Belém, the CEM Future Fuels community is participating in four of the COP30 Presidency's dedicated Activation Groups for transitioning the energy, transport, and industry sectors – with CEM's contributions focused on hard-to-abate sectors and Future Fuels production. As a result of this collaboration with Brazil and key partners, at COP30 CEM will:

- Convene a **High-Level Future Fuels Demand Creation Dialogue** at Belém in support of expected COP30 Presidency objectives for scaling deployment of sustainable fuels.
- Bring together **Energy-Maritime Leaders Dialogue to Accelerate Future Fuels**
- Launching a **Public Private Implementation Statement on Demand Creation for Low-Emissions Hydrogen**.

- Launch a new **ISO International Workshop Agreement for Heavy Industry Products and Feedstocks** jointly prepared by the CEM Industrial Deep Decarbonisation Initiative and the Industrial Transition Accelerator.
- Seek government and industry support for a new call to action to **Promote Bio-based Chemicals and Materials**.
- Launch an updated **Green Public Procurement Pledge** to better reflect the needs and interests of green industrial investment in Emerging Markets and Developing Economies.
- Bring together Energy and Transport leaders from governments and industry to accelerate the use of **Future Fuels for clean transport**.