



2021 UK G7 Presidency

Explanatory Presidency Document

G7 Industrial Decarbonisation Agenda (IDA)

7 June 2021 – London

G7 members are leading the way in the fight against climate change in 2021 and beyond through the pursuit of ambitious net zero goals by 2050 at the latest, and ambitious plans of action over the coming decades in pursuit of those goals.

To keep the 1.5°C goal within reach, we must pursue coordinated emissions reductions in hard-to-abate sectors as soon as possible.

Heavy industry produces about one quarter of global GDP and employment and makes materials and goods that are integral to our daily lives, while producing between one fifth and a quarter of global greenhouse gas emissions.

Reducing emissions, especially in hard-to-abate sectors such as cement, steel, and chemicals, while ensuring sustainable industrial growth, is possible through coordinated innovation policies and the creation of green markets.

Cooperation among the world's leading developed countries will accelerate the transition to net zero industries and will lower the cost of decarbonisation for the rest of the world.

To unlock market potential through high-level G7 government coordination, the UK's 2021 G7 Presidency and the United States have jointly proposed the formation of an ambitious industrial decarbonisation initiative to collaborate on activities in:

- market regulation
- decarbonisation standards development
- investment flows, procurement strategies
- possible joint research – the G7 Industrial Decarbonisation Agenda, or IDA

We envisage that this initiative would strengthen the current landscape, turbo-charging ambition and aligning the activities of existing key initiatives, while plugging critical gaps in the landscape wherever they exist.

The platform would serve as a flexible tool enabling future Presidencies to shape the vision and shifts in emphasis to fit with the rest of their agenda within the area of industrial decarbonisation.

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Principles

This new platform would adopt shared principles to guide G7 policy-makers and tether actions and commitments to the values our governments share. We are committed to:

- human rights, dignity, and equity, prioritising a people-centred energy transition that creates opportunity and is inclusive of all communities
- market-orientated approaches that set conditions for a level playing field, thereby fostering free and fair trade, while promoting innovation
- sustainability across industry that harnesses the best of our innovative practices in science, technology, and engineering, in the face of accelerating climate change
- shared scientific principles, informed by the highest standards for data generation, scientific integrity, and the need to create robust ecosystems for innovation

Objectives

The IDA process envisions objectives and activities at two levels:

The G7 and multilateral innovation collaboration efforts

Under IDA, G7 members, working closely with each G7 Presidency, will review the work underway across diverse innovation platforms such as:

- Mission Innovation and the Clean Energy Ministerial
- endorse and strengthen their plans for higher ambition where appropriate
- identify any gaps and develop collaboration options to fill them

An overview of the current international landscape is set out in Annex A.

Among G7 members

Working closely with each G7 Presidency, IDA will prioritise initiatives, collaborate on policies where possible, and accelerate work with an eye towards accomplishing our shared objectives to:

- achieve net zero outcomes which overcome the ‘first mover’, problem
- establish shared approaches, including standard setting, consistent with our principles

Work streams

To support both objectives, we propose establishing an IDA Coordinating Committee initially led by the UK's 2021 G7 Presidency.

This Committee will coordinate industrial decarbonisation work among G7 members, which could include one or more of the following:

- policy alignment: to develop a common approach towards market instruments, procurement, business models, and other measures that will guide innovative technology deployment for net zero outcomes. This should include the creation of international markets for net zero or green products
- innovation acceleration: to pursue investment in innovation by reducing costs for early adopters through government-backed innovation research on carbon-free technologies.
- developing economies: to enhance a common approach to building innovation environments that reflect our shared principles (see above)
- market opportunity: to collaborate with the private sector to mobilise capital and reduce risks of bringing innovative research, development and deployment (RD&D) technology to market

The G7 should discuss options for organising this process beyond the UK's G7 Presidency.

Future G7 Presidencies would have the option of proposing new workstreams in coordination with the other G7 members working through the IDA Coordinating Committee.

Policy environment

Achieving our objectives will require coordinated action to align three interdependent spheres (see Figure 1) finance, innovation, and policy.

Development of alternatives to carbon-intensive industrial processes calls for redirecting investments toward net zero processes. Finance for impactful innovation includes government support. Industrial innovation will inform financial flows.

Net zero aligned industries must be able to support continued economic development in G7 members and bolster economic growth, including emerging economies.

Intelligent policy can accelerate an inclusive energy transition through appropriate incentive structures necessary to develop and deploy net zero technologies at greater speed.

Ultimately, we aim to encourage the creation of international markets within which net zero and green products can compete, accelerating the achievement of net zero industrial sectors.

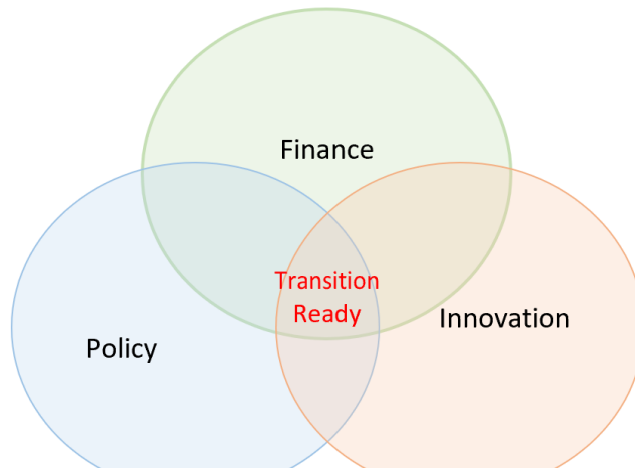


Figure 1: Cooperation spheres for deployment

Mandate

The IDA Coordinating Committee will hold its first meeting after the G7 Climate and Environment Ministerial (20 to 21 May 2021).

At which it will agree an initial programme of work and schedule of meetings, including a mechanism to review progress by the end of the year, and agree future governance arrangements and a timeline for broader inclusion of other important countries over the longer-term.

Conclusion

The goal of IDA is to advance the G7's collective ambitions for net zero by coordinating efforts already underway across myriad engagements, both within G7 members and across multilateral organisations, such as the Clean Energy Ministerial.

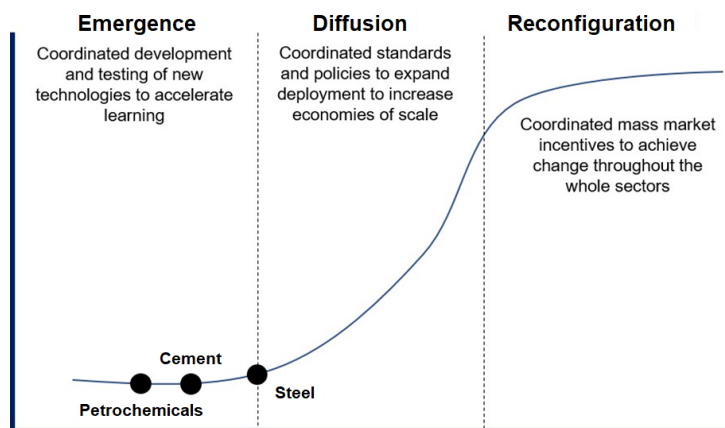
Joint efforts under this initiative seek to mitigate the 'first mover' problem by diffusing the risks associated with early adoption across the G7 economies.

Through the power of coordinated innovation, we the G7 members can leverage our agile and unique innovation cultures to develop robust, durable, and impactful common approaches to net zero outcomes while spurring green market growth.

Annex A: outline of the landscape for international industrial decarbonisation collaboration

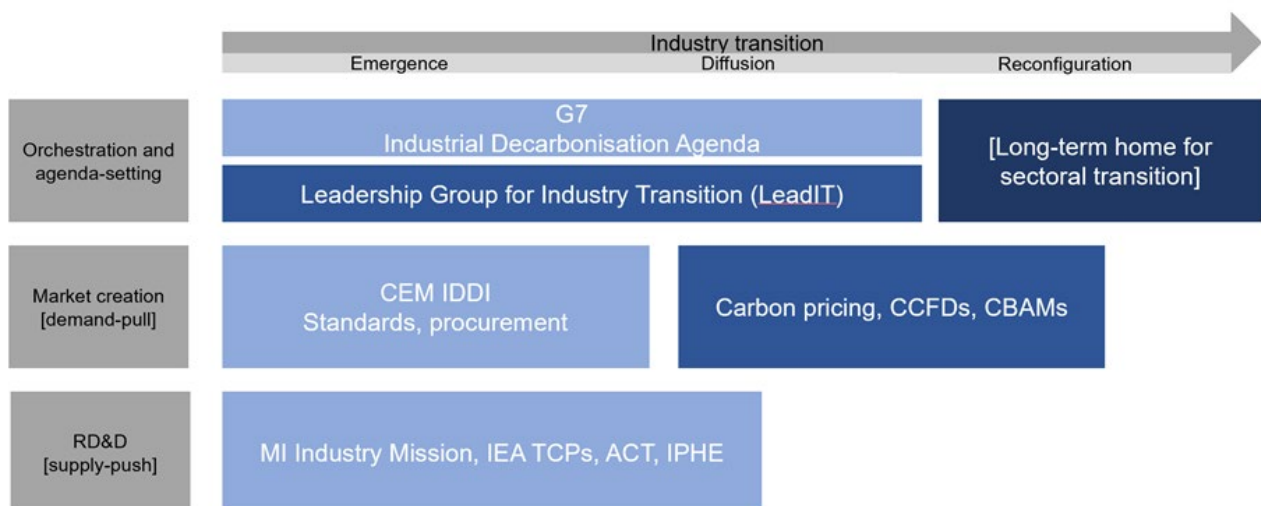
Clean energy technologies require support to reach mass market adoption. Most low-carbon heavy industry solutions are on the cusp of diffusion (see chart below), requiring policies to expand deployment.

Coordinated action on industrial decarbonisation should prioritise early-stage technology adoption through measures such as green product standards, public procurement and collaborative RD and D.



The IDA initiative represents an additional forum to provide an orchestration and agenda-setting role for major economies to collaborate on key topics of industry decarbonisation.

This is most important during the early stage of the transition, where countries should focus on developing and testing new technologies. This would not duplicate existing initiatives but rather provide a G7 platform to align on priorities for industry decarbonisation.





Key initiatives

Clean Energy Ministerial (CEM)

The Clean Energy Ministerial (CEM) brings together the world's biggest and leading economies, accounting for over 75% of global emissions and 90% of clean energy investments, alongside companies and international experts to accelerate the deployment of clean energy.

The CEM's flexible bottom-up model allows countries to form or join specific technology and sector workstreams in line with their domestic priorities.

The CEM's open platform gives leading international organisations and businesses the chance to actively participate in its work programme.

Due to high interest from its members, the CEM will begin hosting an Industrial Deep Decarbonisation Initiative (IDDI) this year, which will help create markets for low-carbon industrial products by building a green buyers alliance.

This will include work on product standards and public procurement commitments.

The Leadership Group for Industry Transition (LeadIT)

The Leadership Group for Industry Transition (LeadIT) gathers countries and companies that are committed to action to achieve the Paris Agreement.

It was launched by the governments of Sweden and India at the UNCAS 2019 and is supported by the World Economic Forum (WEF).

LeadIT secretariat is hosted by the Stockholm Environment Institute (SEI). Activity under LeadIT has been organised into three areas so far:

- partnerships: bringing together a network of public and private stakeholders
- evidence: understanding the barriers to industry transition
- pathways: developing expertise to advise countries and companies on roadmap documents

Mission Innovation (MI)

Mission Innovation (MI) brings together 25 governments responsible for less than 80% of public sector investment in clean energy innovation.

It is entering its second phase, under which new innovation missions are set to be launched in six areas where further innovation is essential to enable net zero transitions.

These will be announced over the course of this year and will create a new generation of global public-private alliances.



Built around ambitious and inspirational goals backed by voluntary commitments that can rapidly lead to tipping points in the cost and scale of clean energy solutions.

A mission on industry is currently being co-led by Austria, with a focus on demonstrating zero carbon industrial technology clusters.

Multilateral research and development programmes

[The IEA's Technology Collaboration Partnerships Programme \(TCP\)](#)

The IEA's Technology Collaboration Partnerships Programme (TCP) brings together a series of independent, international groups of experts that work to advance research, development, and commercialisation under a number of priority topic areas.

The Industrial Energy-Related Technologies Systems TCP has been running for several years, with the participation of 10 countries.

[Accelerating CCUS Technologies \(ACT\) programme](#)

The Accelerating CCUS Technologies (ACT) programme was established under the European Commission's Horizon 2020 programme focused on funding CCUS innovation.

Since 2018 has been open to participation from any country and through support from MI has expanded to include UK, USA, Italy, India, Canada, France and Germany.

[International Partnership for Hydrogen and Fuel Cells in the Economy \(IPHE\)](#)

The International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE) comprising 20 countries, was established by the USA in 2003 to develop international cooperation on:

- hydrogen and fuel cell research and development
- common codes and standards
- information sharing on infrastructure development