



JOINT MISSION STATEMENT
Net Zero Industries Mission

On behalf of the governments of Australia, Austria, Canada, China, the European Commission on behalf of the European Union, Finland, Germany, Republic of Korea and the United Kingdom (“Mission Members”) on 23 September 2022

The Mission

MI Missions mobilise global action behind ambitious and inspirational innovation goals that can lead to tipping points in the cost and scale of net zero energy solutions across all sectors. This Mission contributes to Mission Innovation’s commitment to a decade of clean energy innovation, galvanising actions that will enable every country to have the confidence to set ambitious clean energy and climate targets.

Energy intensive industries are responsible for around 25% of global greenhouse gas emissions. RD&D over the next decade will be critical to develop and validate innovative industrial processes and technologies that enable radical emissions reductions at lowest costs. There is a need to accelerate the development of key technologies to become commercially available no later than 2030, to ensure that they can be taken up in the market in time for the next 25-year refurbishment cycle.

Mission Goal: To catalyse the development and demonstration of cost competitive solutions for the efficient decarbonization of hard to abate energy intensive industries worldwide by 2030:

Targets/Milestones to achieve the Mission goal:

- **Implement** at least two large-scale demonstration projects for each of the Mission’s key innovation fields and sectors;
- **Fast-track** the development to TRL 8 of new and radical breakthrough low emissions technologies;
- **Target** a reduction of more than 15% in the Capex of low emissions innovative technologies.

The Mission will progress under three pillars:

- **Underpinning R&D**
Underpinning R&D in new and radical breakthrough technologies beyond 2030, allowing different and cheaper routes to decarbonize industry.
- **Creating enabling conditions**
Creating enabling conditions for demonstration projects designed and conducted in the context of sustainable development. Examples are funding Front-End Engineering Design (FEED), feasibility studies, sharing of good practices on R&I policy, definitions & methods for accounting

emissions and reporting guidelines to assess net-zero industrial production, actions and support¹, regulatory frameworks or market incentives.

- **Demonstrations**

Setting up a solutions-driven demonstration initiative, realizing a portfolio of aligned national and/or joint multi-national calls that can showcase net-zero emissions industry model solutions in large scale demonstration projects for energy intensive industry in collaboration with the private sector.

Knowledge sharing

Sharing knowledge and creating confidence in the use of innovative solutions will be key to the success of this Mission. To this end, knowledge sharing both between pillars and externally with existing networks and platforms will create alignment and a coordinated effort to emission reductions.

Mission Ambition

The Mission aims to accelerate the development of key technologies to become commercially available no later than 2030. This will help to focus and enable cost reductions to a point of parity with existing operations so that they can be taken up in the market in time for the next 25-year refurbishment cycle. The Mission will focus on unlocking these emissions reductions through demonstrations and cooperation across hard to abate energy intensive industries such as **steel, cement, chemical** etc.

Net-zero emissions is a global challenge. Innovation will be most effective if countries are able to share some of the high development and investment risks. The Mission will fill the need of:

- Increasing, connecting and helping to align both national and multinational RD&D efforts into a challenge driven initiative
- Novel technology cooperation to reduce “time to market”.
- Joining forces with existing networks, organisations and platforms to raise awareness, alignment, create knowledge and confidence in the use of innovative solutions

The Mission will focus its ambitions and efforts towards achieving the Mission goal, which will be structured around the following innovation fields: **Process optimization & efficiency improvement; fuel & feedstock switch; electrification of end use activities; CCUS; digitalization and flexibilization; sector coupling and circular economy.**

Together these actions of Mission members will contribute to the overall objective that by 2030, there is a suite of technical solutions available that are sufficiently effective and proven to facilitate the full decarbonization of energy intensive industry in multiple regions of the world, by 2050.

¹ see also [Working Group III contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change](#), April 2022

All members of the Mission commit to:

- **Joint roadmap and Mission action plan:** members agree on the joint roadmap and will work together to publish an action plan for the Mission that refers to the national and international effort needed over the next decade to achieve the Mission's goal.
- **Work within one or more pillar areas:** nominate focus areas to provide insights, resources, and project examples to add to the collective knowledge base of the Mission under an agreed knowledge sharing framework.
- **Invest in RD&D:** Provide funding or demonstrated committed funding of >€2m/ year investment in at least one innovation area.
- **Operational staff:** members will ensure that they have the necessary operational staff dedicated to work for the Mission and nominate for specific roles within or across pillars.
- **Including national stakeholders:** members will include national industrial stakeholders from the private sector, for example innovation leaders of big industry companies or technology providers, in order to identify potential demonstration sites, project consortia etc.

In addition, Co-Leads of the Mission commit to:

- **Large investments in RD&D projects (to fund demonstration projects & others):** members will contribute to the foreseen RD&D activities by providing >€5m/ year demonstrated commitment of funds to relevant innovation areas, leveraging co-investment from the private sector. This can include identifying at least 1 large- scale demonstration project.
- **Ministerial engagement:** This commitment should be underpinned by an active involvement at the ministerial level or nominated senior representative.
- **Operational staff resourcing,** including Mission Director, Mission Coordinator and Mission Secretariat (2-3 FTEs)

NGO's, IGO's and private sector representatives of the Mission commit to:

- **Nomination of a contact person:** members will have to nominate at least one person to actively support the further development and implementation of the Mission with the following activities: counterpart for roundtables, workshops and interviews, contribution to working papers, engagement of other stakeholders, as well as communication and dissemination of results

The Mission is founded on the principles of strengthen cooperation among member nations to accelerate and enable the industry adoption of decarbonization technologies. Members of the Mission will advance this work by also adhering to the following principles:

- **Cooperation:** members will engage and work with other countries, their respective research, technology and laboratory agencies, the private sector and other related initiatives and organisations nationally and internationally.
- **Transparency:** members will share information, expertise, and analysis, as appropriate, to help advance Mission objectives in accordance with the structures and frameworks as set by the Mission. The Mission acknowledges the importance of protecting intellectual property rights (IPR). IPR will be negotiated amongst individual project consortia.



- **Participation:** members will provide dedicated points of contact for Mission engagement, including regular attendance in meetings, including a commitment to attend meetings at a rotating time zone to accommodate all members inclusively, and actively support Mission objectives of the pillar of interest through providing access to analysts, private sector industry experts or project management capabilities as needed.
- **Accelerate action:** members will agree and focus on key barriers and challenges to speed up innovation towards the stretch goal and stimulate more action, either individually or collaboratively, through new and existing policies, programs, roadmaps or funding.
- **Build demand:** members will identify the 'demand-pull' efforts needed to diffuse and deploy solutions that emerge through the Mission and partner with initiatives or actors that can deliver those activities.
- **Review, reflect, improve:** members will remain agile, reviewing progress and modifying actions to remain at the frontiers of innovation and ambition, and being flexible to changing national circumstances of members.

The Mission will report to the MI community annually on Mission progress and shall meet at least annually at the MI Ministerial.

This joint statement builds on the [Mission Innovation 2.0 Launch Statement](#) and does not constitute a legally binding commitment. This Joint Mission Statement will commence on *23 September 2022* and will continue in effect for four years, with the option to be amended by Mission members. After this period, the Mission may be extended for a further five years to support the delivery of the Mission goal by 2030, subject to a review of Mission achievements.

Members

The Mission will bring together a dynamic, ambitious, and delivery-focused alliance of governments, corporations, investors, and research institutes to accelerate innovation on industrial decarbonization.

The following governments and organisations commit to demonstrate global leadership through active participation and cooperation towards the goals of the Mission on industrial decarbonization.

Co-leads:

- Australia, Department of Climate Change, Energy, the Environment and Water
- Austria, Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology

Core coalition MI members:

- Canada, Natural Resources Canada
- China, Ministry of Science and Technology
- European Commission, DG Research and Innovation
- Finland, Ministry of Economic Affairs and Employment

- Germany, Federal Ministry for Economic Affairs and Climate Action
- Republic of Korea, Ministry of Trade, Industry and Energy
- United Kingdom, Department for Business, Energy and Industrial Strategy

Support members:

- CEM Industrial Deep Decarbonisation Initiative (IDDI)
- The International Energy Agency (IEA) Technology Collaboration Programme on Industrial Energy-related Technologies and Systems (IEA IETS)
- The International Renewable Energy Agency (IRENA)
- The Leadership Group for Industry Transition (LeadIT)
- Mission Possible Partnership (MPP)
- A.SPIRE
- World Steel Association
- Global Wind Energy Council (GWEC)
- The United Nations Industrial Development Organization (UNIDO)

Other countries, international initiatives, investors, organisations from research and industry will be encouraged to join in the future.

MI member ministers' quotes

"The development and accelerated deployment of breakthrough technologies are prerequisites for decarbonizing heavy industry and for achieving climate neutrality. I am delighted that, together with Australia as co-lead, alongside a significant number of Mission Innovation members, we will be working together to make the Net-Zero Industries Mission possible."

Leonore Gewessler, Federal Minister for Climate Action, Environment, Energy, Mobility, Innovation and Technology, Austria

"The Net-Zero Industries Mission will accelerate the development and deployment of emissions reduction technologies in industry, crucial to reaching net zero by 2050. We are excited to co-lead this Mission and work together with our international partners. Australia brings to the Mission world-leading expertise from researchers and private sector in renewable energy and industry innovation."

Chris Bowen MP, Minister for Climate Change and Energy, Australia

"To reduce emissions and fight climate change, it is imperative that we develop and deploy clean technology, especially in heavy and hard to abate industries. Through initiatives like the Net-Zero Industries Mission, we can align both national and multinational efforts to scale up emerging



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technologies, share best practices, and implement low-carbon solutions across our economies. I look forward to working with member countries to make real progress towards achieving our climate goals.”

The Honourable Jonathan Wilkinson, Minister of Natural Resources, Canada

“Finland has prepared sectoral climate roadmaps showing the way of various industries towards climate neutrality. Finland is committed to the Net-Zero Industries Mission.”

Mika Lintilä, Minister of Economic Affairs and Employment, Finland