

Mission Innovation for accelerating clean energy innovation

The Second Global Forum of Funders

April 27th 2021 9:05-10:15 EDT (15:05-16:15 CET)

Drew Leyburne, Assistant Deputy Minister, Energy
Technology Sector, Natural Resources Canada, and
Vice-Chair of the Mission Innovation Steering
Committee

Mission Innovation Launch

- Launched at Paris Climate Conference in 2015
- 20 heads of state initially signed on and committed to double their spending on clean energy innovation
- Five other members later joined the initiative, bringing membership up to 25



-  1. Substantially boost public sector investment
-  2. Increase international collaboration
-  3. Increase private sector engagement and investment
-  4. Raise awareness of the transformational potential of energy innovation



Mission Innovation 1.0



- Mission Innovation members committed to double clean energy research and development investment over five years
- Focus on innovations that could be scalable for different economy and energy market conditions
- In total, spending on clean energy innovation increased by almost \$5 billion
- Most members are on track to meet doubling goal
- 8 Innovation Challenges (IC) were established to support national RD&D activities
- The ICs facilitate global networks and increasing communications between governments, researchers, institutions and private industry

Mission Innovation Success Stories

- Since launch in 2015, Mission Innovation members have:



Breakthrough Energy

Through MI's public-private sector collaboration with the **Breakthrough Energy Coalition**, Canada and the EU have respectively launched initiatives with the **Breakthrough Energy Ventures** to increase the impact of clean energy investments and enhance the pace and scale of the adoption of clean energy technology.

Canadian Successes with Mission Innovation

Breakthrough Energy Solutions Canada (BESC) seeks to advance breakthrough technologies that have the potential to reduce GHG emissions by 0.5 gigatonnes annually in 2050 in manufacturing, electricity, transportation, and buildings

Impacts of the BESC initiative:

- Catalyses more collaboration within the Canadian ecosystem and attracted additional investors into this patient capital space
- Other Canadian funders joined the initiative including the Business Development Bank of Canada and Export Development Canada
- Additional interest from other Canadian and International cleantech investors



Mission Innovation 2.0

MI 2.0, will build upon:

- The international collaboration established in phase one to enhance **clear common commitments** and accelerate knowledge transfer
- Commitments of achieving net zero emissions in the coming decades
- Tangible outcomes over the next five to ten years to further accelerate the pace of innovation and drive the sustainable energy transition



Political leadership supported by the private sector and end-use actor champions.

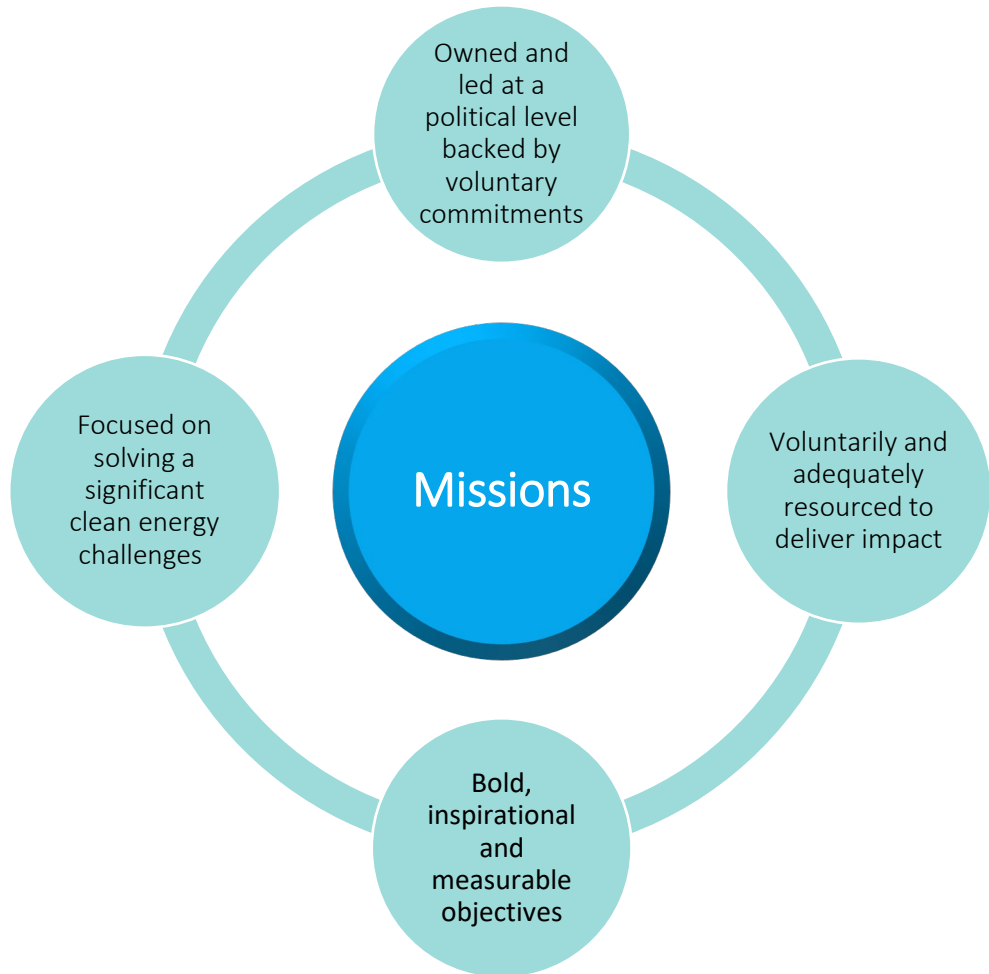


Innovation alliances created around inspirational, ambitious and measurable goals that address clean energy challenges to achieve tipping points in cost and performance, backed by voluntary commitments.



A strengthened global platform to increase impact of MI members' investments and shorten innovation times by building capability, enhancing collaborations and accelerating learning.

MI Missions



- MI is building new public-private innovation alliances, called **Missions** that will focus on solving a major, energy-related problem
- Plan to launch three Missions at the sixth MI Ministerial in June 2021 and we anticipate launching additional Missions at COP26 in November
- Elements of mission-oriented science in the MI Missions include recognizing:
 - Political buy-in is critical to the success of the Missions
 - Partnerships are at the heart of these Missions
 - Missions are designed through a bottom-up approach
 - There's no one-sized-fits-all solution to these complex challenges

Canadian Innovation Successes



- **Government of Canada is moving toward more mission-oriented innovation** in collaboration with provinces and territories, other levels of government, industry and academia
- In 2018 and 2019, the Government of Canada launched the **Impact Challenge initiative** which has allocated \$75 million over four years to deliver a series of clean technology challenges to identify and deliver breakthrough solutions
- Six clean technology challenges have been launched under this initiative, all of which include a focus on the idea of ‘co-creation’ and ‘inclusivity’.
- ‘**Power Forward**’ challenge was co-designed with colleagues from the UK Department of Business (BEIS)

Take-Aways

- Mission Innovation was **launched COP21 in 2015**, focusing on doubling spending on energy innovation and brought governments and the private sector together to innovate on clean energy
- An **increase of almost 5 billion dollars in clean energy innovation spending** from MI members and an acceleration of innovation in the eight critical areas identified by the Innovation Challenges
- MI successes build momentum to launch **MI 2.0**, shifting from a more input-based objectives to an **outcome orientated approach** (with MI Missions)
- The Missions will be built around ambitious and **inspirational goals** backed by **commitments** that can **lead to tipping points** in the cost and scale of clean energy solutions. These will attract **bottom-up investments** and **support clusters of effort** between governments and the private sector.

Thank You

For additional information about Mission Innovation
please see our website

<http://mission-innovation.net/>

You may contact the Mission Innovation Secretariat at

secretariat@mission-innovation.net