

## DELIVERING THE MISSION INNOVATION ACTION PLAN: 2018-2020

### **THE 3RD MISSION INNOVATION MINISTERIAL MEETING (MI-3),**

marks the halfway point in Mission Innovation's initial five-year commitment to the end of 2020. This milestone is a good moment to celebrate progress to date and to reinvigorate efforts in both the public and private sector in support of Mission Innovation's aim to accelerate the pace of innovation and make clean energy widely affordable.

At the 2nd Mission Innovation Ministerial in Beijing, Ministers launched the Mission Innovation Action Plan and endorsed its four

goals. Over the past year good progress has been made in designing and launching activities in support of these goals. This document sets out a number of key ongoing and proposed activities that will benefit from international collaboration to deliver the Action Plan over the next few years.

Each of these activities is dependent on the support of MI Members and the outcomes achieved will be continually assessed to ensure that activities are delivering impact. MI members can choose which activities to participate in, motivated by their own technical and policy interests.

## GOAL 01

A substantial boost in public-sector investment in clean energy R&D at the national level of MI members.

ACTIVITIES	TIMESCALE	LEAD
<b>ANNUAL MEMBER UPDATES:</b> MI will continue to publish an annual Country Book highlighting the strategies, activities and public-sector investments (including increments to MI baselines and progress towards the doubling goal) implemented by members to advance clean energy innovation.	Annually	MI Secretariat
<b>STRENGTHEN PUBLIC AND PRIVATE SECTOR RD&amp;D DATA:</b> MI members will work with collaborating organisations, including the IEA and IRENA, to strengthen the collection of data and to facilitate improved tracking of clean energy public sector and private sector RD&D investment data at a national and global level.	Report on improving the collection & tracking of data at MI-4	MI Secretariat
<b>ENGAGEMENT UP TO AND BEYOND 2020:</b> The MI Steering Committee Chair will work with all members to encourage active engagement and to explore potential next steps for Mission Innovation beyond 2020.	Proposal on next steps at MI-4	MI Steering Committee Chair

## GOAL 02

Increased private sector engagement and investment in energy innovation, particularly in key Innovation Challenges.

ACTIVITIES	TIMESCALE	LEAD
<b>BUSINESS ADVISORY GROUP:</b> Mission Innovation will explore the creation of a Business Advisory Group made up of 10 private sector members which could provide MI Ministers and government officials with advice and recommendations on accelerating the pace of innovation from research and development to commercialisation. (Agreement to establish by September 2018 depending on endorsement by MI members)	If endorsed, first meeting by end 2018 and second meeting at MI-4	Business & Investor Engagement Sub-group
<b>ANALYSIS OF INVESTMENT OPPORTUNITIES:</b>		
• <b>Investor risk profiles:</b> Subject to available resources, Mission Innovation will conduct an analysis of market constraints and market penetration potential for particular technologies linked to innovation challenges.	First profiles presented at MI-4	Business & Investor Engagement and Analysis & Joint Research Sub-groups
• <b>Framework for assessing avoided emissions:</b> MI will launch a framework to support investors and funders to identify those system solutions and technologies that have significant ability, or potential, to contribute to reduced greenhouse gas emissions in society, so called avoided emissions.	Launch draft framework at MI-3	Sweden

### COLLABORATION WITH EXTERNAL ORGANISATIONS:

MI will continue to work with external organisations, particularly the World Economic Forum and Breakthrough Energy Coalition (BEC) to maximise engagement with the private sector to progress impact towards our shared goals.

- Building on the outcomes of MI-3, we will continue to explore and take forward with the World Economic Forum areas of highest interest and relevance to members set out in the White Paper 'Accelerating Sustainable Energy Innovation', and host joint public-private dialogue meetings at selected events organized by MI or the Forum, including Davos.
- We will support the BEC-MI member partnerships, including by facilitating meetings at relevant events, such as Ministerials.

Ongoing

Business & Investor Engagement Sub-group

**PUBLIC-PRIVATE PARTNERSHIPS:** MI will support new approaches to build public-private innovation collaborations. Including:

- **A Challenge from Sweden:** promoting disruptive innovations through public-private procurement partnerships. Winners are offered financial prizes and the possibility to test their technologies in a realistic pilot setting. Open to international partners including MI members.
- **International Incubator:** India will launch an International Incubator in Clean Energy with the aim of leveraging international collaboration to support innovators that wish to scale solutions targeting India's clean energy needs and supporting Indian clean energy innovators that wish to create impact by scaling their solutions abroad.

Launch at MI-3

Sweden

Launch at MI-3

India

## GOAL 03

Many new or strengthened voluntary cross-border networks and partnerships on energy innovation, greater engagement from innovators, and accelerated progress in addressing specific Innovation Challenges (IC).

ACTIVITIES	TIMESCALE	LEAD
<b>SMART GRIDS (IC#1):</b> Develop a partnership between IC#1 and the Bridgestone World Solar Challenge, to drive advancements in how electric vehicles interact with electricity networks, and require teams to document the practical application of their design in relation to the development of Smart Grid interface technology.	October 2019	Australia
<b>OFF-GRID ACCESS (IC#2):</b> Establish a portfolio of research and demonstration projects (in various climatic conditions) and showcase the most successful projects.	MI-4	IC#2 co-leads
<b>CONVERTING SUNLIGHT (IC#5):</b> Launch at least three synchronised funding calls in topics relevant to the challenge.	tbd	IC#5 co-leads

<b>CLEAN ENERGY MATERIALS (IC#6):</b> Launch a collaborative research project that will accelerate the discovery of organic and inorganic energy materials by autonomously performing iterative experiments.	MI-4	IC#6 co-leads
<b>HEATING &amp; COOLING OF BUILDINGS (IC#7):</b> Develop a 'comfort & climate box' to integrate heating, cooling and power functions through collaboration across the IEA Technology Collaboration Platforms.	tbd	IC#7 co-leads
<b>HYDROGEN:</b> Launch a Hydrogen Innovation Challenge (IC#8) with the aim of accelerating development of a global hydrogen market by identifying and overcoming key barriers to the production, distribution, storage, and use of hydrogen at gigawatt scale.	MI-3	IC#8 co-leads
<b>PUBLICISING SUCCESS STORIES:</b> MI will celebrate successes, new initiatives and best practices emerging from Innovation Challenges, including through infographics and news articles.	Ongoing	Analysis & Joint Research Sub-group
<b>INTERNATIONAL COLLABORATIONS:</b> New international clean energy RD&D collaborations that MI countries have engaged in since the launch of MI will be tracked through Country Book submissions.	Annually	MI Secretariat

## GOAL 04

**Greater awareness amongst MI members and the wider clean energy community of the transformational potential of energy innovation, the progress being made, and the remaining critical clean energy innovation gaps and opportunities.**

ACTIVITIES	TIMESCALE	LEAD
<b>CLEAN ENERGY INNOVATION ON THE GLOBAL AGENDA:</b> MI will highlight the importance of clean energy innovation and the work of MI through proactive participation at key events, online (via updated MI website) and through social media and targeted press opportunities.	Ongoing	MI Secretariat
<b>SUPPORTING IDEAS AND INNOVATORS:</b> MI will work with members to highlight ideas and innovators that are accelerating clean energy innovation. <ul style="list-style-type: none"> <li>• <b>MI 2020 Solutions:</b> Annually publish and promote MI 2020 Solutions success studies, celebrating the top clean energy innovation breakthroughs emerging from MI member investments.</li> <li>• <b>MI Champions:</b> MI will celebrate and support innovative individuals who are accelerating the clean energy revolution, the 'MI Champions'. The first cohort of Champions will be awarded at MI-4 with a further cohort, dependent on resources, selected for MI-5.</li> </ul>	Annually	MI Secretariat
<b>ASSESS PROGRESS IN KEY CLEAN ENERGY TECHNOLOGY AREAS:</b> MI will analyse indicators currently used by international organisations to track the technical and economic progress of clean-energy technologies and will adapt or expand them in order to assess global innovation progress in key technology areas of interest to MI.	First report for MI-4	MI Secretariat
<b>INFORMATION-SHARING:</b> we will strengthen internal communications among members in order to facilitate the dissemination of RD&D priorities, collaboration opportunities, and the sharing of best practice.	Ongoing	MI Secretariat