



Letter of Intent on Collaboration between the International Renewable Energy Agency and Mission Innovation

Malmö, Sweden - 23 May 2018

The International Renewable Energy Agency (IRENA) is an intergovernmental organisation that supports countries in their transition to a sustainable energy future, and serves as the principal platform for international collaboration, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy. With a mandate to play a leading role in the global energy transformation active engagement of its near-universal membership (156 Members and 26 countries in the process of accession), IRENA encourages governments to adopt enabling policies for renewable energy deployment, and facilitates knowledge sharing and technology transfer to provide clean, sustainable energy for the world's growing population.

Mission Innovation is a global initiative of 22 countries and the European Union aimed at accelerating global clean energy innovation. As part of the initiative, participating countries have committed to seek to double their governments' clean energy research, development and demonstration (RD&D) investments over five years, while encouraging greater levels of private sector investment in transformative clean energy technologies.

There are clear synergies between the missions and objectives of Mission Innovation and IRENA – particularly in the shared goal of accelerating the development of renewable energy solutions. Twenty of the twenty-three members of MI are also IRENA Members and two are currently in the process of joining.

The urgent need for a transformation to a low carbon energy system is widely accepted and innovation is critical to successfully delivering that. Encouragingly there has been a substantial increase in activity internationally on clean energy RD&D and innovation in recent years and there has been impressive progress in some key technologies, such as solar and wind which are now cost competitive with fossil fuels in many circumstances. However, the pace of innovations is still a long way short of what is needed to achieve global climate change objectives.

Both Mission Innovation and IRENA have a crucial role to play in accelerating progress. The increased investment pledged by Mission Innovation members, coupled with Mission Innovation's focus on identifying the most critical innovations needs, highlighting gaps and opportunities and on fostering greater cross-border and public-provide collaborations is a key enabler of accelerated progress.

IRENA's activities range from analytical work, to the development of tools and the provision of direct assistance to countries in policy formation, financing, and knowledge generation. Fostering innovation in renewable energy is key part of the agency's strategy and high priority of its Members. IRENA's innovation focus goes beyond technology RD&D, to innovation in systems, markets and business models, and novel approaches for driving deployment of renewable energy.

The Agency's close interaction with its global membership gives it a unique convening power and provides broad perspectives and insights into the progress and challenges of the energy transition. IRENA has collated extensive data on renewable projects and historic and current costs. The Agency also has detailed modelling capability which provides insights into future energy system needs. In recent years, IRENA has published a wide variety of reports providing insights into innovation and progress that is relevant to Mission Innovation's objectives. This expertise, insights, networking and convening capability and data could be of support to Mission Innovation in pursuing its mission of accelerating clean energy innovation.

MISSION INNOVATION Accelerating the Clean Energy Revolution

International Renewable Energy Agency

IRENA and Mission Innovation agree to develop a process of collaboration, building on synergies in their respective areas of work. It is intended that this collaboration should strengthen global renewableenergy innovation efforts and accelerate innovation through more effective policies and greater crossborder collaboration. The detailed scope of the collaboration will be subject to mutual agreement between the two parties and to resource availability. Mission Innovation and IRENA will initially explore the following areas of collaboration:

- a. **Tracking Innovation Progress.** IRENA and Mission Innovation intend to work together in order to improve the quality of data and insights on progress in renewables and energy system technologies and better inform high-level decision-making processes related to clean-energy innovation. In particular, IRENA and Mission Innovation could collaborate by exchanging data and analyses relevant to the technical and economic progress of renewable energy technologies, including evaluating the role of RD&D and other factors that have driven progress, identifying innovation goals as well as defining actionable plans. Subject to further scoping, IRENA's analytical expertise and data sources, such as its extensive Renewables Cost Database, could support the Tracking Progress work stream of Mission Innovation and assist in communicating technical and economic improvements of renewable energy technologies to Mission Innovation Ministers. In turn, relevant data and insights collected by Mission Innovation on clean-energy technology progress could be shared with IRENA.
- b. Strengthening cross-border collaboration on innovation. Innovation Challenges (IC) are collaboration platforms aimed at accelerating RD&D in technology areas where Mission Innovation members believe increased international attention would make a significant impact in the shared fight against climate change. ICs have already benefited from the participation of several stakeholders, including experts from IRENA, and as they move into a new phase of creating new cross-border collaborations, IRENA's experience and expertise could further support these activities. IRENA and Mission Innovation could explore the scope to provide tailored support to specific ICs, for example by facilitating the identification of IC-relevant research priorities, monitoring the evolution of the technological frontier, and helping to identify relevant innovation gaps.
- c. Sharing insights and knowledge on innovation policy priorities and strategies. IRENA has longstanding expertise in providing advice to its Members and its extensive databases, analytical tools and reports could be leveraged to provide useful information both to the Mission Innovation Secretariat and Mission Innovation members. This could be undertaken by, for example, providing insights from IRENA reports on accelerating renewables innovation. Where appropriate, this could include insights from new reports tailored to the needs of Mission Innovation, such as the brief being prepared for the MI-3 Ministerial on innovation priorities. Mission Innovation could, for its part, identify areas where further analysis would be beneficial, facilitate and support new analysis and provide input into and feedback on future reports.

IRENA and Mission Innovation will appoint representatives to meet periodically to identify specific topics of mutual interest which are relevant to the above collaboration activities and outline their possible wish to proceed jointly in implementing these topics. IRENA and Mission Innovation will each be responsible for their own costs involved in such meetings and scoping activities.

This letter does not in any way commit either party to financial or human resource obligations. Commitment of financial and human resources by IRENA and/or Mission Innovation for each agreed activity or project shall be clearly set out through the conclusion of appropriate agreements and shall be subject to each party's policies and procedures.





The collaborative arrangements, as set out in this letter of intent between IRENA and the Mission Innovation shall be reviewed after two years and any further collaboration mutually agreed at that time.

Signed in 2 (two) original copies, both of them in the English language:

For and on behalf of Mission Innovation

For the International Renewable Energy Agency

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Minister for Policy Coordination and Energy, Sweden

Director-General, International Renewable Energy Agency