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Mission Innovation: Sustainable Biofuels Innovation Challenge

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CanmetENERGY
Leadership in ecoInnovation

Canada

Canada's strategic objectives under Mission Innovation

- Double federal government investment in clean energy R&D over five years from $387M to $775M by 2019-20.
- Encourage private sector investment in early-stage clean energy innovation companies in Canada.
- Increase domestic and international collaboration to advance Mission Innovation goals.

Canada is playing an active role in the implementation of Mission Innovation by supporting the three sub-groups, including co-leading the Analysis and Joint Research sub-group.

MI: Innovation Challenges

Innovation Challenges are global calls to action aimed at accelerating research, development, and demonstration (RD&D) in technology areas where international collaboration will significantly impact the fight against climate change.

MI: 7 Innovation Challenges

1. **Smart Grids Innovation Challenge** – to enable future grids that are powered by affordable, reliable, decentralised renewable electricity systems
2. **Off-Grid Access to Electricity Innovation Challenge** – to develop systems that enable off-grid households and communities to access affordable and reliable renewable electricity
3. **Carbon Capture Innovation Challenge –** to enable near-zero CO emissions from power plants and carbon intensive industries
4. **Sustainable Biofuels Innovation Challenge –** to develop ways to produce, at scale, widely affordable, advanced biofuels for transportation and industrial applications
5. **Converting Sunlight Innovation Challenge –** to discover affordable ways to convert sunlight into storable solar fuels
6. **Clean Energy Materials Innovation Challenge –** to accelerate the exploration, discovery, and use of new high-performance, low-cost clean energy materials
7. **Affordable Heating and Cooling of Buildings Innovation Challenge –** to make low-carbon heating and cooling affordable for everyone

Sustainable Biofuels Innovation Challenge (SBIC)

Objective: **to develop ways to produce,**
at scale,
widely affordable,
sustainable, advanced biofuels
for transportation and industrial applications.

SBIC Work Programme

Fourteen countries have joined SBIC and together we have developed a work plan based on three parallel streams approach to allow each country to focus on areas in which they have the greatest interest and expertise:

A. Improve the large-scale production and supply of biological feedstocks including cultivation, harvesting, collection, handling, transport and pre-treatment practices;

B. Overcome barriers to commercializing technologies for at-scale production of biofuels meeting end-use specifications; and

C. Research and improve upon new technologies for the high efficiency utilization of biofuels in transport and industry.

SBIC: Key Deliverables

- A “mapping” survey (jointly with Biofuture Platform and IEA Renewable Energy Division) to better understand the landscape of biofuels, technologies and production in member countries technology and identify research gaps, priorities and collaboration opportunities;
- A Scale-up “Lessons Learned” Review to better understand and overcome the challenges of scaling up advanced biofuels production;
- Joint workshops, the next one jointly with the Biofuture Platform in India (February, 2018) to prioritise innovation needs and collaboration opportunities and to develop:
- An SBIC Action Plan for Mission Innovation Ministerial, May 2018, Malmo/Copenhagen

For further information on SBIC please contact:

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MISSION INNOVATION
Accelerating the Clean Energy Revolution