



INNOVATION SANDBOXES

Backgrounder

Energy systems worldwide are in a state of transition. We are seeing the rapid development of distributed energy resources and digital technologies, the development of new fuels, the emergence of new energy players, the changing role of consumers, and the imperative to reduce greenhouse gas emissions to fight climate change.

In Canada, all of our energy systems — whether competitive or regulated, vertically integrated or unbundled — have regulation and market oversight as well as consultation processes and policies that strive to provide safe, reliable, and affordable energy to consumers. These energy systems were developed and structured to accommodate large-scale and centralized supply and business models. They are not well adapted to our climate targets, customers' new preferences, or the pace of technological change. They may act as barriers to developing more decentralized and flexible energy systems and experimenting and diffusing more agile and innovative energy services or business models.

Innovation Sandboxes promote innovation by allowing for **collaboration and experimentation** to safely happen in a real-world environment.

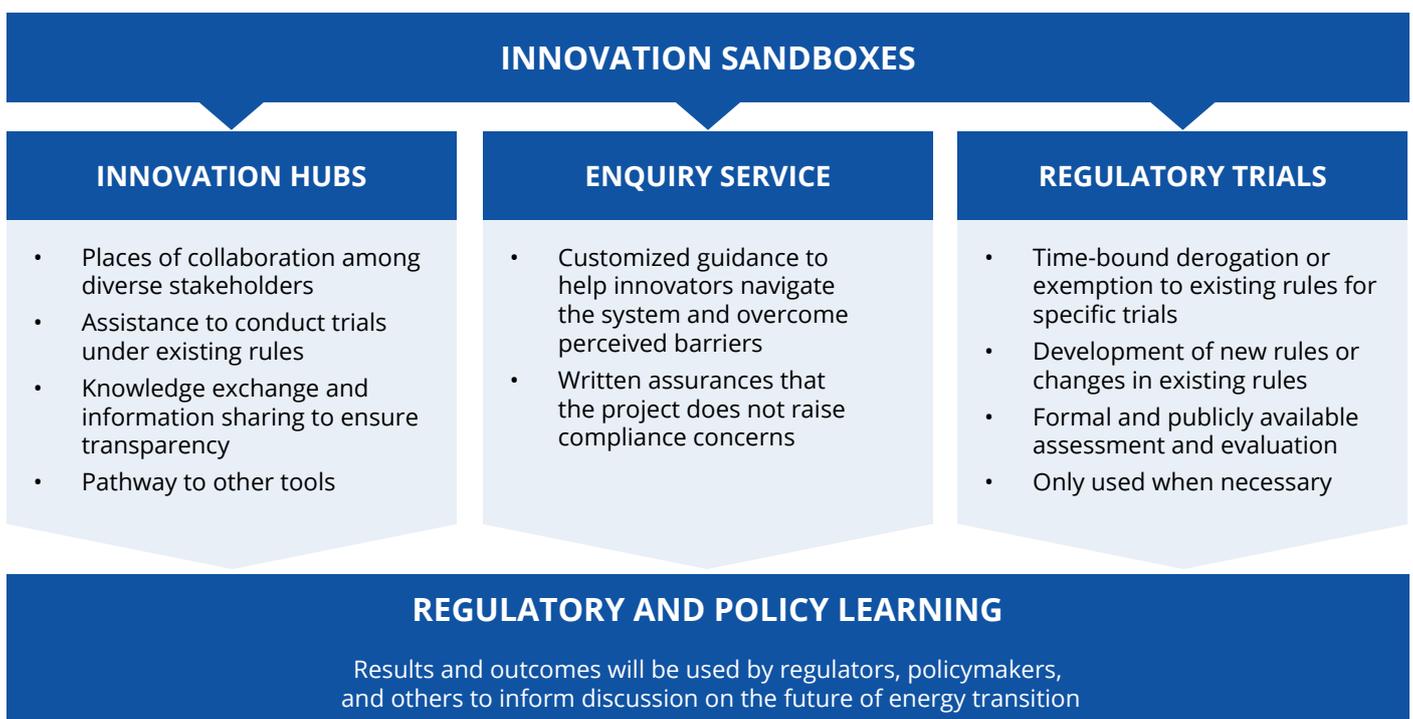
Innovation Sandboxes promote innovation by allowing for collaboration and experimentation to happen safely and in a controlled way in a real-world environment. Innovation Sandboxes include **Innovation Hubs**, where knowledge exchange is encouraged, and **Innovation Enquiry Services**, where innovators are helped in navigating the regulatory system and perceived barriers. **Regulatory trials** are another element that look at overcoming actual regulatory barriers to innovation and work to identify the costs and benefits of removing those barriers through real-world experimentation.

Innovation Sandboxes are a policy tool that uses collaboration to create conditions to enable a safe and controlled space to test new products, services, and business models in a real-world environment.

Innovation Sandboxes provide the opportunity to change how processes and procedures, or how rules or regulations are applied.

Innovation Sandboxes aim to meaningfully incorporate institutional and long-lasting changes in the current regime and landscape in order to support the diffusion of innovation that benefits consumers, and society at large.

Innovation Sandbox Toolkit



By learning through these experiments, Innovation Sandboxes enable governments, policymakers, regulators, utilities, entrepreneurs, and other stakeholders to identify barriers to innovation and remove them by introducing meaningful institutional changes. Jurisdictions worldwide have implemented or are looking to implement sandboxes to accelerate the transition of energy systems.

Project Objective

Canada requires multi-faceted solutions to arrive at a low-emissions energy system and economy quickly, effectively, and fairly. Innovation Sandboxes have proven to be an effective tool for accelerating the energy transition, and one that, in concept, already has some traction in Canada.

The goal of this project is to create foundational policy frameworks for energy systems innovation. The foundational frameworks can then be used by provincial, territorial and federal policymakers, regulators, and other stakeholders to create more effective policies, regulations, and programs to accelerate the transition to a low-emissions future efficiently and fairly using a multi-sectoral, collaborative process.

Characteristics of Innovation Sandboxes

1. Support Multiple Forms of Innovation

An Innovation Sandbox may serve to advance technological innovation, business model and energy services innovation, or new ways-of-doing

business — from consultation and engagement processes to collaboration and knowledge exchange.

2. Foster Collaborative Approach

Innovation Sandboxes are spaces where regulators, utilities, industry, innovators, civil society and energy consumers can collaborate to establish a shared and transparent framework to experiment with new services and business models.

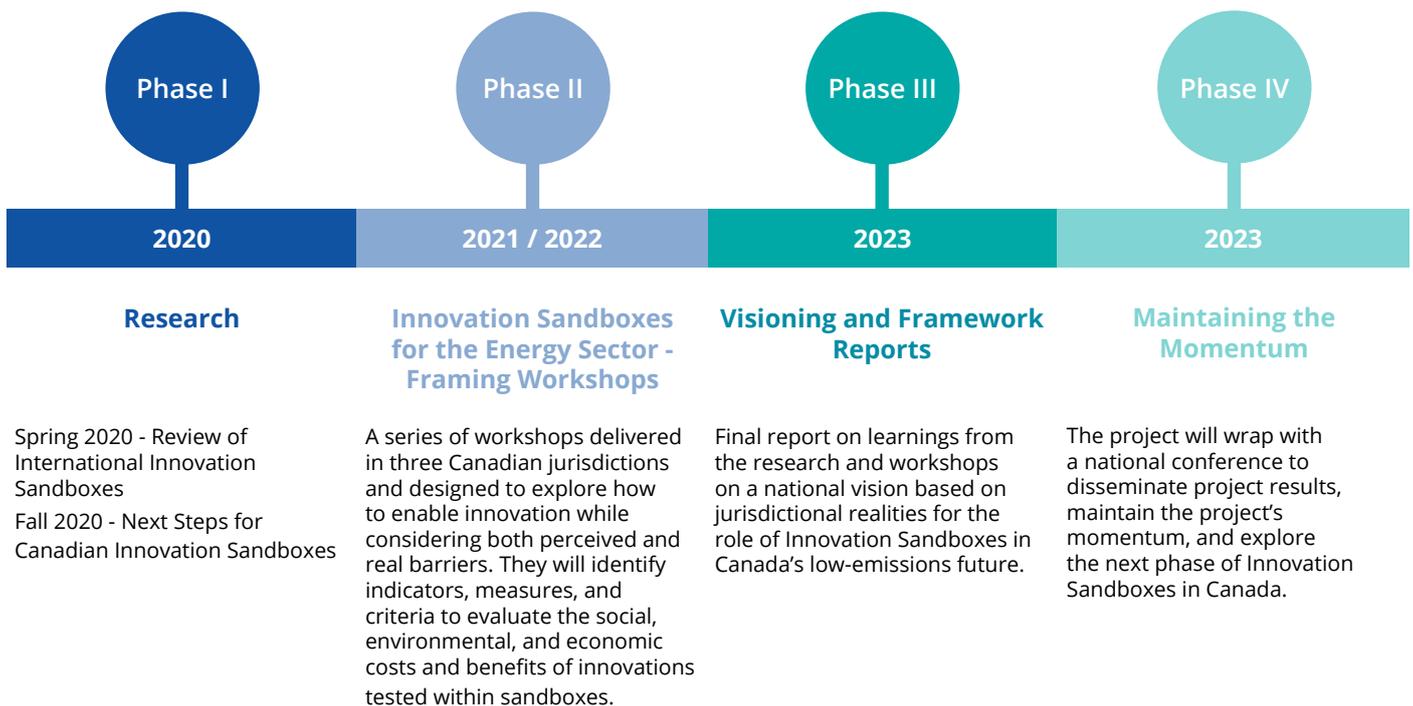
3. Learn by Doing

By allowing experiments to take place in a real-world environment, Innovation Sandboxes provide evidence of what works and does not work, and inform policymakers, regulators, utilities and entrepreneurs on what to change to overcome barriers to innovation.

4. Introduce Long-Lasting Structural Changes

The lessons learned during the experiments allow regulators and policymakers to identify barriers and make more informed decisions to introduce meaningful and long-lasting changes such as changes in regulation or standards, new business models, adoption of new policies, or the introduction of new consultation and collaboration processes.

PROJECT TIMELINE



How to Get Involved

- Sign up to our [Innovation Sandboxes mailing list](#) to get regular updates on the project
- Contact [Laura Gareau](#) if you are interested in participating in the project

Project Partners

QUEST



Project Funders



SUNCOR
ENERGY
FOUNDATION