

# Renewable Energy Climate Adaptation Project (RECAP)

Project Overview

The Fraser Basin Council, in partnership with Natural Resources Canada and other key collaborators, is leading the Renewable Energy Climate Adaptation Project (RECAP). This initiative, which runs January 2024 to December 2026, focuses on enhancing the resilience of British Columbia's renewable energy systems.

### Background

The low-carbon energy sector in Canada is experiencing rapid growth, driven by advancements in clean energy technologies and renewable energy sources such as solar, micro-hydro, wind and biomass. In April 2024, BC Hydro issued a Call for Power to secure new sources of renewable, zero-emission electricity and to expand on-grid clean energy projects. A significant proportion of the projects are expected to be led by First Nations communities.

The expansion of renewable energy infrastructure in B.C., however, coincides with escalating climate risks, including rising temperatures, erratic precipitation patterns, sea-level rise and more frequent extreme weather events. The devastating wildfire season of 2023 highlighted an urgent need to bolster the resilience of the province's energy systems against climate-driven disruptions.

As an organization focused on sustainability, the Fraser Basin Council (FBC) recognizes the critical intersection of renewable energy development and climate risk management. FBC is leading the **Renewable Energy Climate Adaptation Project** (**RECAP**) through collaborative efforts and by leveraging expertise from diverse partners. RECAP will interest First Nations, local governments and those who work with them on energy systems.

## **RECAP Objectives**

- 1. Strengthen communities' capacity to integrate climate risk into the planning of solar and biomass renewable energy projects.
- 2. Compile and share insights from previously implemented adaptation actions for renewable energy projects.
- 3. Develop guidance on integrating future climate risk information into solar and biomass project development.
- 4. Enhance community safety through proactive management of safety risks in renewable energy systems.
- 5. Facilitate peer learning among practitioners engaged in climate-resilient renewable energy systems.



## **RECAP Outputs to Support Communities**



#### **Research Report**

- Conduct in-depth research on climate change impacts and adaptation options specific to solar and biomass renewable energy systems across Canada.
- Include insights from interviews with key actors, community representatives and technical experts from B.C.



#### **Case Studies**

- Develop 3 detailed case studies showcasing successful adaptation actions in renewable energy projects across B.C.
- Collaborate with communities and project partners to compile and present comprehensive case study narratives in both publications and a webinar.



#### **Guidance Documents**

- Develop 2 guidance documents tailored to solar and biomass energy projects.
- Include practical insights on considering future climate risks, adaptation strategies, community safety concerns and resilience measures.



#### Peer Learning

- Organize Learning Lab workshops twice a year, focusing on the theme of climate resilience in renewable energy systems.
- Create opportunities for community practitioners to address project challenges, share experiences and learn from each other.

## **Project Partnership**

This project is supported by Natural Resources Canada's Climate Change Adaptation Program, with additional in-kind support from other project partners including B.C.'s **Ministry of Energy**, **Mines and Low Carbon Innovation (EMLI)**, **Emergency Management and Climate Readiness (EMCR)**, **Climate Action Secretariat**, **New Relationship Trust (NRT)**, **Technical Safety BC and Pacific Climate Impacts Consortium (PCIC)**.

## Learn More

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We are grateful at the Fraser Basin Council to live and work on the unceded ancestral territories of the Indigenous Nations of British Columbia.



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