Economic benefits of climate action and case studies of regional collaboration

SILGA, April 29, 2025





Accelerating bold action by local governments and Indigenous Communities related to climate and energy.



LOCAL CLIMATE IMPACTS

Increased frequency & intensity of wildfires, heat waves, drought.

Seasonal flooding

Warmer winter temperatures leading to pine beetle infestations

Changes to stream flow affecting salmon populations

Stresses to natural ecosystems and agriculture.

Source: City of Kamloops

WHAT IS LOW CARBON RESILENCE?





BIG MOVES



Transportation

vehicles

Shift Beyond the Car

Encourage active & accessible transportation and transit

Electrify Decarbonize Passenger Commercial Transportation Transportation

Accelerate the Support lowadoption of carbon options for zero-emissions medium & heavy-duty vehicles

Step Up New Buildings

> Enhance energy efficiency & low carbon heating in new buildings



Buildings

Decarbonize Existing Buildings

Support deep energy retrofits & fuel switching



Waste

Close the Loop on Waste

Divert organics and capture value from waste

SHIFT BEYOND THE CAR



- Design and construction of bike lanes, sidewalks, multi-use pathways
- Planning and operation of local and regional transit
- Walkable core centres and separated bike lanes may benefit local businesses

- Lower personal transportation costs
- Healthcare cost savings due to physical benefits of active transportation
- Avoid costly road building or widening

DECARBONIZE TRANSPORTATION



Jobs & Loca	l Economic	Deve	lopment

- EV and EV charger sales
- EV maintenance
- Renewable fuels or green hydrogen production and sales

- Lower lifecycle costs of vehicles, cheaper fuel and decreased maintenance costs
- Healthcare savings from improved air quality

CLOSE THE LOOP ON WASTE



Jobs & Local Economic Development

- Circular economy initiatives e.g. reuse, repair, upcycling
- Beneficial use of organic waste
- Local food systems
- Forestry waste use

- Free up valuable landfill space
- Reuse of construction waste
- Costs savings from reuse/repaired items, reducing food waste and food recovery programs



GREEN INFRASTRUCTURE

Jobs & Local Economic Development	Savings & Avoided Costs
- Green infrastructure design, construction and maintenance	 Natural climate solutions that enhance resilience can reduce costs related to dealing with severe weather events Green infrastructure-based storm water management systems reduce capital costs and enhance property values

CIVIC FACILTIES: MUNICIPAL LEADERSHIP



Jobs & Local Economic Development	Savings & Avoided Costs
 Civic facilities upgrades: suppliers and installers of energy efficient technologies and the construction industry 	- Local Govt: lower energy and fuel costs, lower risk exposure to future volatile energy costs

DECARBONIZE BUILDINGS: EXISTING & NEW



Jobs & Local	Economic Deve	lopment
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- Sales and installation of:
- energy efficiency products (e.g., insulation, windows and doors);
- Iow carbon heating and cooling systems;
- renewable energy systems;
- Iow carbon buildings materials

- Lower energy bills
- Retrofits increase home values
- More resilient homes may withstand less damage from severe weather events

SOUTHERN INTERIOR SOLAR OPPORTUNITIES

- Low carbon resilience measure
- Complementary with heat pumps and EVs
- High annual sunshine hours
- Rebates available
- High job creation in a variety of positions:
 - Sales & marketing, installation, electricians, technical etc.



🕓 11 days ago 💼 Full-time

New Solar & Battery Incentives/ Rebates

Rebates for solar panels and battery storage



Save up to \$10,000 on eligible solar panels and battery storage

Related offers



Rebates for business

Meet your business' energy needs with combined rebates of up to \$50,000 on gridconnected solar panels and battery storage systems.



Rebates for multi-family buildings

Offset upfront costs with up to \$50,000 in combined rebates on eligible grid-connected solar panels and battery storage systems for qualifying multi-family buildings.



Rebates for social housing

Eligible social housing providers can apply for combined rebates of up to \$150,000 on gridconnected solar panels and battery storage systems.



Rebates for Indigenous communities

Indigenous customers living on-reserve and Indigenous governing bodies in our integrated (grid connected) area can apply for up to \$150,000 in combined rebates on gridconnected solar panels and battery storage

THE OPPORTUNITY IN BC

- EV-related jobs
- Hydrogen fuel cell production
- Renewable energy
- High performance buildings



Source: Clean Energy Canada, SFU

THE COSTS OF INACTION

- \$10.6 \$17.1 billion: estimate of the total economic costs associated with B.C.'s 2021's heat dome, wildfires, flooding and landslides (CCPA)
- Canada: \$78 \$101 billion in climate damages annually by mid-century (low and high emissions scenarios) (Canadian Climate Institute)
- Globally: 30 times cheaper to limit heating to 1.5°C than allow temperature rise of 3°C (Burke, Davis, & Diffenbaugh, 2018)



CASE STUDIES: COLLABORATION IN ACTION

RETROFIT ASSIST

RETROFIT assist

Free support for your home energy upgrades

Upgrading your home's energy efficiency is a big undertaking. Retrofit Assist offers free and knowledgeable support from start to finish of your home energy retrofit.

Retrofit Assist is currently running in the following communities, click to read about the individual programs.



About

Home

Communities Contractors

FAOs

Rossland

Squamish

Whistler

BENEFITS OF COLLABORATION



Sharing resources:

- Program development
- Project website

Replicability:

- Further communities can join the program
- Tailor to local context

= Greater outcomes for less effort



SOUTH OKANAGAN SIMILKAMEEN EXTREME HEAT RESILIENCE PROJECT



- Maps to understand vulnerability, tree canopy, distance to emergency facilities etc.
- Heat risk grant funding from UBCM
- Partnerships better for regional understanding, joint grant application, streamlined engagement





40 Communities | 13 DCFC's | 40 Level 2's 1,870kms connected electric vehicle travel



Enhance Kootenay Tourism Connect Kootenay communities

Leave more money in your wallet

Make dear mother nature happy

Source: acceleratekootenays.ca

THE POWER OF NETWORKS: SUPPORTING COLLABORATION



BC Municipal Climate Leadership Council

- Purpose: supporting local elected officials across BC to drive climate action and resilience in their communities.
- BCMCLC is facilitated by Community Energy Association (CEA) and funded by:





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For more info, contact: bcmclc@communityenergy.ca



THOMPSON-OKANAGAN CLIMATE ACTION NETWORK

Peer network for staff:

- Quarterly meetings and presentations
- Steering Committee co-develops agendas

TOCAN priorities:

- Building sector knowledge and skills development
- Regional EV charging network
- Adaptation and resilience coordinated approach

Emerging capacity-building topics:

• climate communications, community activation, multi-sectoral relationship building, economic sustainability

PEER NETWORKS: VALUE & IMPACT

BC Hydro

Power smart

- Networks are providing an expedited way to move forward on policy, funding and implementation
- Most important benefits (2023 survey):
 - Relationships & connections
 - Learning from other communities
 - Receiving important updates
 - Access to useful resources
 - Accelerates work on climate





How can we leverage climate action for maximum community benefits?



COMMUNITY NEEDS:

Reliable, predictable funding & staff capacity

CLIMATE ACTION FUNDING SOURCES

INTERNAL:

- Local Government Climate Action Program funding
- Allocation from operating budget
- Recycling, solid waste and water user fees, building permit fees and other service fees
- Climate Action Levy (Reserve Fund): taxation revenue put aside to ensure greater ability to invest in more significant projects and provide match funding for grants

EXTERNAL:

- FCM's Green Municipal Fund supports plans, studies, capital projects and pilot projects
- Provincial programs e.g. Go Electric Fleets Program, BikeBC Program, and CleanBC Communities Fund
- CleanBC energy efficiency incentives

Examples of Climate Action Levies:

- North Cowichan, BC: 0.5%/yr
- Kamloops, BC: 0.35%/yr gradually increasing to 3.5%/yr over 10 yrs
- Peterborough, ON: 0.25%/yr
- Halifax, NS: 3%/yr



SUPPORTING STAFF CAPACITY

- LGCAP funds towards staffing or consulting
- BC Hydro or Fortis BC subsidized energy management staff positions
- Shared Energy Manager (Community or Corporate)
- Internships e.g. PICS, UBC Sustainability Scholar
- Youth Climate Corps

HOW CLIMATE ACTION CAN BOLSTER YOUR WORK ON TOP COMMUNITY ISSUES

- Affordability/ Cost of Living
- Housing
- Health & Wellbeing
- Public safety
- Energy & economic security



- Accessible, low cost, transportation options
- More compact, greater diversity of housing types
- Improved air quality, physical activity, greenspaces
- More connected communities
- Renewable energy generation and local food





RECAP:

- Climate action is an investment that generates local economic development
- Collaboration brings efficiencies
- Long term funding and staff capacity is needed
- You can advance climate action while addressing other key issues in your community

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BREAKOUT DISCUSSION THEMES

TABLE 1 (PICS): What are your knowledge gaps/ capacity needs on climate issues?

TABLE 2 (CEA): What are your top priorities for regional collaboration on climate action? What efficiencies would you hope to gain from collaborating?"

TABLE 3: How is (or could) climate action contributing to economic development and other pressing issues in your community?

Optional TABLE 4: Local government and the community benefits of climate action