

Kootenay Clean Energy Transition:

Market Transformation and Capacity Building

Overview

Through the Community Energy Manager workplan over the past two years, significant focus has been placed on supporting the building industry in preparing for policy changes in new home construction. There has been significant success in that realm, with a recent BC Housing study revealing the Kootenay Region as the jurisdiction in BC with the highest level of knowledge of the BC Energy Step Code above industry. Carefully designed and implemented training, on-site workshops, building science sessions and policy support have resulted in a shift in the confidence, knowledge and practice of the building industry in the Kootenays.

Retrofit initiatives have been previously supported, primarily through the 'East Kootenay Energy Diet'. The initiative had decent uptake for the offer of home energy assessments, but had a low rate of follow-through in terms of implementation of energy efficiency retrofits. The challenge with incentive and rebate focused programs is the gap and limitation around long-term impacts within the industry. In short, a rebate or incentive program does not support the deep market transformation that is necessary for long-term impact.

The Regional District of East Kootenay has seen success in leading regional collaborations, most recently with Accelerate Kootenays, which has led the Kootenay region to have the highest rate of growth in electric vehicle adoption compared with any other jurisdiction in BC. Collaborating with the Regional Districts of Central Kootenay and Kootenay Boundary would result in a high-impact project that would have the ability to leverage additional funding and capacity, and lead to market transformation.

The Opportunity

Federation of Canadian Municipalities is interested in seeing an application to their 'Signature Projects' funds, which offers up to \$500,000 match funding toward projects that have unique opportunity to see significant greenhouse gas emission reductions through innovative and unique approaches. This funding typically requires about 10% contribution from local government, as similar to the Accelerate Kootenays funding structure. With three regional districts participating, \$10-15,000 allocation per year for two years would provide the match funding required to leverage this additional funding.

Further, Kootenay Employment Services (KES) and Community Energy Association (CEA) have created a partnership that would further formalize the opportunity for market transformation. KES would be supporting the project providing significant organizational and administrative support, as well as capacity through their regional branches.

The Project – Kootenay Clean Energy Transition

KES and CEA have collaborated in the development of an innovative and high-impact initiative with the following key objectives:

- Reduce GHG emissions in the Kootenays, targeting the two highest emitting sectors: Built Environment (heating & cooling of buildings) and transportation (60 % of community wide emissions in the Kootenays)
- Address key barriers to low carbon technology adoption: knowledge, cost and local access
- Provide training and capacity building in the workforce to support a transition toward the low carbon and clean energy sectors
- Increase local climate and emissions literacy
- Aggregate the procurement of key low carbon technologies
- Evaluate the success of the pilot to inform expansion and scaled up delivery

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The overarching purpose of the Kootenay Clean Energy Transition Pilot is to expedite the adoption of greenhouse gas emission reduction actions by Kootenay residents while supporting broad market transformation.

The 'Why'

The Paris Climate Agreement, the International Panel on Climate Change (IPCC), and numerous global organizations have established the imperative for significant emission reductions and a transition to a low carbon economy. British Columbia's CleanBC Plan commits the Province to reducing 40% of our annual GHG emissions by 2030 and 80% by 2050 (based on 2007 GHG emissions). Since 2007, BC has only reduced its GHG emissions by 2.1% indicating that new, innovative approaches to driving GHG emission reduction is necessary.

All Kootenay local governments are signatories to the Climate Action Charter, committing them to work towards carbon neutrality in corporate operations, and support community-wide emission reductions. Some communities have gone further, adopting a resolution to work towards 100% renewable energy by 2050. Communities are interested in supporting initiatives that respond to climate change through locally relevant low carbon solutions in ways that will not only support effective market transformation, but do so in a way that will yield benefit and growth in the clean energy industry.

The 'How'

Preliminary engagement with both residents and the trades sector will identify and confirm some of the key barriers and challenges associated with low carbon options when it comes to the built environment and transportation. Through other research and market studies, some of the key barriers to adoption of low carbon alternatives include:

- Financial – incremental upfront cost over traditional technologies
- Awareness – lack of trusted information or time/knowledge to do sufficient research
- Complexity – navigating processes, scope of work, business case, etc.
- Capacity and Training – primarily among the trades and contractors for new technologies

The intent of this Pilot Project is to address and eliminate these barriers through three key activities:

1. Communications and Messaging around Clean Energy Alternatives:

- a) Develop strong brand and shareable marketing materials
- b) Provide consistent messaging, actions, and consolidated resources on central website
- c) Leverage existing relationships for regional, strategically-timed, collaborative marketing

2. Address cost and access to low carbon technologies:

Develop bulk purchase packages (created through Requests for Proposals/Partnerships), installed by pre-qualified contractors. Pre-qualified contractors will have engaged in trade-specific training and education. The products proposed for coordination of bulk purchases and/or product specific discounts will include:

- a) Energy Efficiency Audits
- b) Electric Vehicles
- c) Level 2 Chargers
- d) Air Source Heat Pumps
- e) Solar PV Arrays
- f) Electric Bicycles

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Further, the Pilot will identify opportunities to develop new and leverage existing rebate programs. New financing options will be explored with local financiers.

3. Workforce and business sector development:

Identified as a potential key player in driving the adoption of low carbon options for retrofits, contractors/trades have a direct connection with the consumer, and are therefore well suited to be the avenue for provision of energy efficiency and low carbon retrofit solutions. The Pilot project will aim to deliver training for contractors, job seekers and students including:

- a) Deliver new solar installer courses
- b) Deliver BC Solar Installation Specifications to existing installers
- c) Explore Project Based Labour Market Training (PBLMT) opportunities with WorkBC Centres

Next Steps

KES and CEA are seeking more funding partners and hope to begin work on the project in January 2020. The full project scope is anticipated to be a 2-year, \$1.2 Million project that will provide two opportunities to engage in a time-limited bulk purchase of one or more of the products listed under the low carbon technologies above. In advance of the delivery of this project, CEA will be conducting interviews, community engagement and focus groups through the Community Energy Manager position in the East Kootenay to better understand the opportunities and barriers to trades and contractors engaging in the delivery of this program.

Through the Clean Energy Transition Pilot, the Kootenays will lead BC in reaching CleanBC's 2030 and 2050 GHG emission reduction targets, and will provide an approach that can be replicated in other regions across BC and Canada. The Pilot will develop a trained and capable workforce, creating capacity to support the promotion and installation of low carbon technologies beyond the project timeline. The project will support the growth of the clean energy industry, creating economic resilience and strength.