



# ENABLING LOW CARBON ENERGY PROJECTS FOR INVESTMENT



# EXECUTIVE SUMMARY

Communities in Canada are increasingly developing low-carbon, local energy projects, but they face road-blocks when it comes to financing these projects. Canadian investors are increasingly seeking low-carbon investments, but are challenged to find these locally and at a scale large enough for investing.

The **Enabling Low Carbon Energy Projects for Investment (ELCEPI)** project aims to add resolution to the challenges stated above, and link discovered barriers and enablers to larger social movements as a means to synergize and advance both clean energy deployment and other social movements in parallel to one another.

## INDIGENOUS RECONCILIATION IS FOUNDATIONAL TO CLEAN ENERGY OUTCOMES

The research highlighted the direct link between Canada's transition to clean energy and broader reconciliation efforts between Indigenous and settler communities as they are both based on outcomes of preservation, ecologically and culturally. In the absence of reconciliation, initiating a low-carbon energy transition on the same colonial and unfair basis as the current energy system will simply exacerbate existing disparities.

The clean energy transition is a once-in-a-lifetime opportunity that should be led by individuals and communities who have been living low-carbon lives and preserving ecosystems for millennia. The principles of Justice, Equity, Diversity, and Inclusion (JEDI), including Indigenous empowerment, must be integrated into the transition planning and implementation process.

Today, funding streams and capitalization strategies for non-Indigenous and Indigenous communities differ significantly. However, the planning requirements for both are very similar.

## BARRIERS EXIST ALONG EACH PHASE OF A LOW CARBON PROJECT LIFE CYCLE

In addition to the requirement to embed Indigenous reconciliation, including consideration of Land Back, as well as JEDI principles in every decision to develop low-carbon, local energy projects, a number of other unique and common barriers were identified at each phase of a low carbon project cycle.

### START-UP PHASE: FOUNDATION BUILDING

Foundation building involves establishing the necessary capacity, systems, and funding to conceptualize or scale community low-carbon energy projects.

Today, many funding streams don't cover the funding and capacity required for project conception, which puts champions at significant risk during the early stages of project inception. In addition, the complex legal and legislative landscape poses a significant capacity constraint, and many are unsure of where to begin or whom to approach for assistance. If funding is available and received, the bureaucratic procedures to secure and report on funding exacerbate these challenges.

### START-UP PHASE: LOCAL CONTEXT ASSESSMENT

A Local Context Assessment is the process of analyzing the local environments and community circumstances that surround a particular situation and involves examining the immediate context, such as the legislative environment (e.g. energy production and distribution sovereignty restrictions), local deficits, and existing local resources that can inform and support the situation at hand.

This can be a challenging and resource-intensive

process, particularly for communities with limited access to project development capacity. Equally, the logistics and best practices required to create the needed well-informed governance structures are not always well understood, and many communities lack the necessary resources to execute them effectively. Further, project capacity and momentum often get stalled by changes in risk tolerance or political agendas.

## START-UP PHASE: PLANNING

Planning is a critical process that involves several key components, including partnership development and contract management with the intent of creating investment-ready projects. These components are essential to ensuring that a project is planned effectively and executed successfully, as they help to establish clear communication channels and perform due diligence through studies and engagement to ensure that all parties are aligned towards achieving the project's goals.

Accessing relevant networks to find dependable and aligned partners can be challenging. To reduce project risk, technology validation, outcome projections, project viability, and securing an offtaker are critical. However, obtaining competent and cost-effective partners to execute due diligence is both time-consuming and expensive.

## DEVELOPMENT PHASE

The Development Phase begins once the project is deemed "investment ready" and concludes upon a successful project rollout.

Insufficient local capacity in communities poses a hindrance to the successful execution of planned projects. This capacity includes but is not limited to trades, project managers, financing specialists, energy specialists, building specialists, social service experts, and engineers. Lack of local capacity can result in delays, financial repercussions, and other challenges. However, a significant risk is the creditworthiness of the community entity carrying out the project. Without

sufficient credit, the project may come to a halt, preventing potential partners from engaging with the project.

## OPERATIONS PHASE

The Operations Phase of low-carbon energy projects involves the operations and maintenance of renewable energy projects, as well as post-installation monitoring for retrofit projects. This phase also generates returns to pay back project costs. Revenue models for renewable energy projects can include power purchase agreements, feed-in tariffs models and net metering, while retrofit projects can use energy savings contracts such as energy leases, energy savings, and energy-as-a-service payback mechanisms.

The absence of adequate funding programs and insufficient compensation for the electricity generated by most clean energy projects render most projects unfeasible in many jurisdictions. Even when funding programs are implemented, the merchant return structures are perceived as uncertain, adversely affecting the project's financial viability.

One key challenge for community energy projects is that profits generated often go to investors and institutions who are not necessarily invested in addressing social equity gaps or reinvesting back into the community.

Longevity of owners and operators of community energy projects are additional critical factors. If community energy projects are to deliver long-term benefits, there must be a commitment to their ongoing operation and maintenance. Private sector partners may prioritize short-term profits over long-term community benefits, leading to a lack of investment in maintaining and operating the project.

## THE SOLUTION LIES IN ENABLING VEHICLES THAT CAN DERISK PROJECTS FROM THE OUTSET

The research found that while there is sufficient funding available to support clean energy initiatives; the challenge is getting projects investment-ready. There needs to be a catalyst that mobilizes all of the existing organizations, ideas, and resources, and takes advantage of the available funding. Enabling Vehicles, sometimes referred as “hubs” were identified as a solution.

Local Enabling Vehicles (LEV) and Central Enabling Vehicles (CEV) are needed to resolve barriers by providing more specialized and efficient support to communities. LEVs have a well-connected interface with jurisdictional stakeholders while CEVs coordinate efforts across multiple LEVs, provide support, and focus on universal resolutions. By separating the two, we can avoid adding unnecessary layers of bureaucracy and ensure more efficient and specialized support for the community.

The LEV acts as regional chapters of the CEV that serves as a one-stop-shop to facilitate the community’s participation in the low-carbon economy by providing local expertise, removing barriers, and helping establish community investment-ready products while fostering community champions. This vehicle is a jurisdictional subject expert that acts as the link between the community, CEV, and networks to fill gaps that communities face. They may assist in aggregating funding opportunities and projects, engaging subject experts to expedite project delivery, developing partnerships for communities, assessing resources, and driving change in deficient sectors while promoting JEDI practices throughout all sectors. LEVs also engage local contractors and suppliers, influence policy barriers to simplify and achieve better outcomes, and act as a dot connector and resource with the expertise to identify community gaps and fill them most appropriately.

CEVs are crucial in connecting LEVs learnings and

driving the execution of broader strategic plans. CEVs play a key role in supporting LEVs through knowledge-sharing, unlocking resources, and providing best practices, while also advocating for policy changes and building relationships with external stakeholders. The ultimate goal of CEVs is to achieve effective outcomes for the community by offering technical assistance, capacity building, training and support, monitoring progress, and enforcing a JEDI-focused project development approach.

Building off this study and to address low-carbon capitalization barriers faced by communities, central and local enabling vehicles that engage with and offer leadership roles to Indigenous communities should be incubated. Providing financial and technical support for the planning, development, deployment and expansion of new and existing enabling vehicles is essential to mobilize low-carbon energy projects.

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