



RENEWABLE ENERGY CENTRE OF EXCELLENCE

Background

Canada's legal commitment to achieving net-zero emissions by 2050 has set a bold and ambitious goal that requires significant changes to the country's energy systems. Renewable energy production is expected to play a major role in this transition, with investment in renewable energy projects projected to grow significantly over the next decade. Northern Energy Capital Inc. is **committed to empowering organizations navigate the transition to renewable energy sources and achieve their renewable energy goals** by providing innovative and high-quality renewable energy services across the full planning, project delivery and operations lifecycle. According to the International Energy Agency (IEA), Canada's renewable energy capacity is projected to grow by 33% over the next decade. This growth is driven by investment in renewable energy projects, which is expected to reach CAD 23 billion in 2021 alone. Solar and wind energy are expected to account for the largest share of new renewable energy capacity, with hydro power also playing a significant role.



The Need for Renewable Energy and Indigenous Ownership

The need for renewable energy in Canada is driven by several factors. Firstly, the country's reliance on fossil fuels for energy production contributes significantly to greenhouse gas emissions. Secondly, Canada has over 200 remote and diesel-dependent communities that rely on expensive fossil fuel imports to supply diesel generators which is unsustainable, costly and highly polluting. Locally owned renewable energy solutions, such as wind, solar, and hydro power, offer an attractive alternative to diesel generators, providing reliable and cost-effective energy solutions while reducing greenhouse gas emissions. Moving from diesel to renewable energy will increase air quality, improve energy resiliency and create new and exciting economic opportunities in clean energy asset ownership.

In addition to reducing greenhouse gas emissions and providing reliable and cost-effective energy solutions, renewable energy projects also offer a new economic opportunity to Indigenous communities across Canada. NEC's knowledge, experience and track record in delivering government funded capital projects is foundational upon incorporating Indigenous values in the planning, development, ownership and operation of renewable energy projects.

Northern Energy Capital Inc. recognizes the importance of Indigenous ownership in renewable energy projects. We work closely with Indigenous communities to identify opportunities for collaboration and partnership, and to ensure traditional values are incorporated throughout the project development process. We also offer support for Indigenous ownership of renewable energy projects, providing advice and guidance on financing, federal funding, project management, and other aspects of project development.

Northern Energy Capital Inc.'s Expertise

Northern Energy Capital Inc. is committed to providing innovative and high-quality renewable energy services, empowering organizations to achieve their net-zero emissions goals. Our expertise in energy planning, project development, permitting, cost control, logistics and supply chain management, as well as our commitment to thought leadership and best practices, make us an ideal partner for organizations seeking to implement renewable energy solutions. As part of its role as a national leader in the renewable energy industry, NEC has established a Centre of Excellence (EmPower) along with a Best Practice Library.

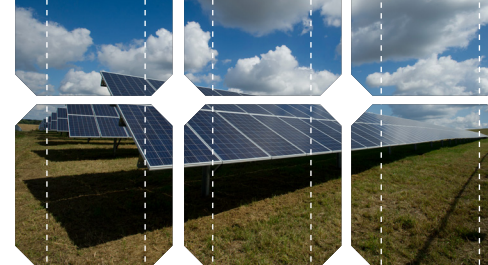
Our EmPower Centre of Excellence is a dedicated resource center that brings together experts, knowledge, and resources to support organizations in achieving their energy goals. Its focus is on providing innovative and high-quality renewable energy services to help organizations achieve their net-zero emissions goals. Within our Centre of Excellence NEC has its best practice library - a collection of proven methods, techniques, and strategies that have been developed and refined over time to achieve optimal results. These include experience with heated turbines for arctic conditions, using SoDAR to measure wind resources, and wildlife monitoring evaluating the impact of our projects on caribou.



Summary

Northern Energy Capital Inc. is committed to empowering indigenous organizations and industry to achieve their renewable energy goals by providing innovative and high-quality renewable energy services. Our expertise in energy planning, project development, logistics and supply chain management, and commercial operations, combined with our commitment to thought leadership and best practices, make us an ideal partner for organizations seeking to implement renewable energy solutions.

NEC's Areas of Service



Project Development

Northern Energy Capital Inc. has a proven track record in developing renewable energy projects from inception to operation. We work closely with our clients to develop detailed project plans, conduct feasibility studies, and secure financing. Our experienced project management team ensures that renewable energy projects are delivered on time and within budget, with a focus on quality and safety.

Logistics and Supply Chain Management

Transporting wind turbines from Europe to remote regions in northern Canada is no simple task. Effective logistics and supply chain management is critical to the success of renewable energy projects. Northern Energy Capital Inc. has extensive experience in managing complex supply chains, ensuring timely and cost-effective delivery of materials and equipment, and navigating international sea and land shipments to bring projects to operation. We work closely with our clients to identify the most appropriate suppliers and develop robust procurement strategies that meet their specific needs while managing the risk inherent in the global supply chains.

Community Energy Plans and Net-Zero Transition Planning

Achieving net-zero emissions requires a comprehensive and strategic approach to carbon transition planning. Northern Energy Capital Inc. works closely with our clients to develop customized community energy plans, energy efficiency strategies, energy reduction methods, and net-zero carbon transition plans that align with their specific goals and objectives. Our approach includes a detailed analysis of energy consumption, identification of emissions reduction opportunities, and the development of strategies to achieve net-zero emissions to offset the remaining emissions.

Resource Assessments and Feasibility Studies

For organizations and industry looking to better understand the clean energy resources available to them, NEC is right there to provide the project-specific evidence-based feasibility studies. Whether it be wind, solar, or hydro, NEC provides a best in-class resource assessment methodology that provides evidence-based resource data that projects can rely on. Our industry-leading remote and autonomous resource assessment campaigns have resulted in projects advancing to construction with highly accurate energy production estimates and financial models that provide certainty throughout the entire project development life cycle.

Clean Energy Asset Operations and Maintenance Training

Northern Energy Capital Inc. provides operational, maintenance and refurbishment planning and training services for renewable energy assets, micro-grids and systems to ensure that communities maximize their self-sufficiency and economic benefits over the life of the assets.