



# POWERING PROGRESS



## OUR MISSION

Turning **innovative renewable energy ideas** and **long-term relationships** into ethical, high-value sustainable business.

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# SUSTAINABILITY STARTS HERE

EDF EN Canada is a green energy pioneer and market leader with over 1,600 MW of wind and solar energy in varying stages of development, active construction, and operation. With offices in Toronto, Montreal and Calgary, we develop and build renewable energy projects that harness the earth's renewable resources – helping to drive the green energy economy and create industries of the future.

We are experts in all areas of project development, including site selection, resource assessment, procurement of equipment, financing, permitting, project planning and construction, long-term management, operations and maintenance, and project decommissioning and repowering.

With experience and meticulous attention to detail, we ensure that green electricity is practical and profitable. By striking the optimal balance between the health of the planet, and the well-being and prosperity of the businesses and communities that partner with us, we generate clean energy for a sustainable future.



EDF EN Canada's strength is grounded in the extensive experience the Company has gained across the spectrum of services required for the development and long-term operation of successful renewable energy projects. Our core expertise lies in [Project Development and Operations & Maintenance](#).

## EXPERTISE

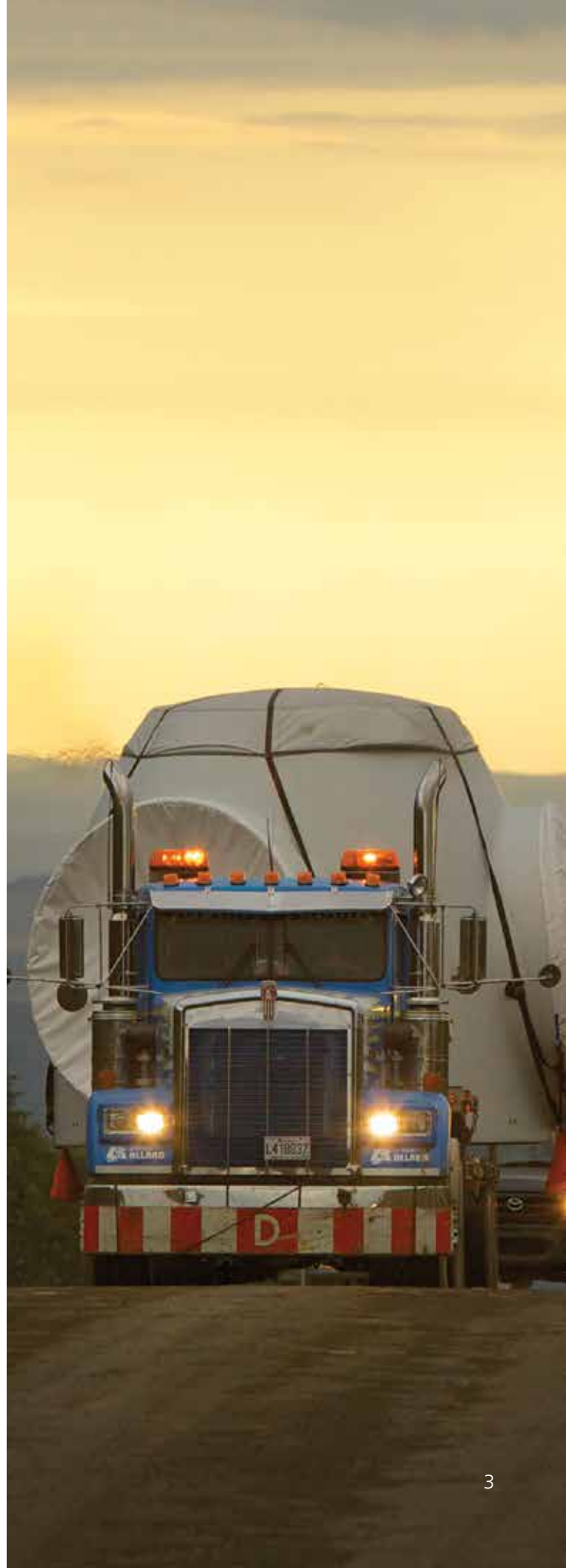
EDF EN Canada has significant experience in a variety of wind and solar installations. We have [developed more than 1,600 MW](#) of wind and solar projects and have built long-standing relationships with utilities, municipalities, regulatory agencies, and the communities in which we operate. These strengths enable us to expertly navigate the development process, ensuring our projects' successful completion and operation.

## INNOVATION

Whether building a 10 MWp solar project, a 20 MW storage project, or a 300 MW wind project, EDF EN Canada simplifies the entire process by consolidating all of the services needed under one roof. We manage the project every step of the way, from site analysis, system design, procurement of equipment, financing, construction, to operations and maintenance. As a member of the EDF group, we have access to a [global network of expert engineers, developers, and supply agreements](#), enabling us to design and build the most cost-effective energy solutions. EDF EN Canada enjoys the financial strength and backing of the leading electricity company in the world, ensuring that our commitments are always met.

## COMMITMENT

We proudly stand behind our installations and our name. We believe every installation is the beginning of a lasting partnership. Our project development, operations, and finance experience means we deliver the most trustworthy energy systems with the capabilities to support the projects with long-term management. EDF Renewable Services' Operations & Maintenance Team has over 10.5 GW of renewable energy under contract throughout North America. Not only do we ensure the successful development of our projects, but we [ensure long-term profitable operations](#). We are backed by one of the largest electric utilities in the world, and have the resources, experience, and balance sheet to develop, construct, and operate utility scale renewable energy solutions.



# CORPORATE BUYERS

## DELIVERING RESULTS FOR CORPORATIONS TO MEET SUSTAINABILITY GOALS

Corporate sustainability leaders can choose to meet their company's clean energy requirements in a variety of ways. The goal often is to meet a certain percentage of energy with clean power that creates additionality\* and saves long-term energy costs. Our origination team has worked with companies like Yahoo!, Microsoft, Google, and Procter & Gamble to lock in power prices, hedging against the volatility of fossil fuel prices. Our team of experts can help organizations make the right decision in reaching sustainability goals.



The size of the corporation name is indicative of the renewable energy they have purchased

## RENEWABLE ENERGY OPTIONS

### Power Purchase Agreement (PPA) or Virtual Power Purchase Agreement (VPPA)

Company agrees to purchase, directly or indirectly, power at a negotiated price from a wind or solar project over a predetermined number of years.

### Direct Investment

Company invests in a wind or solar project.

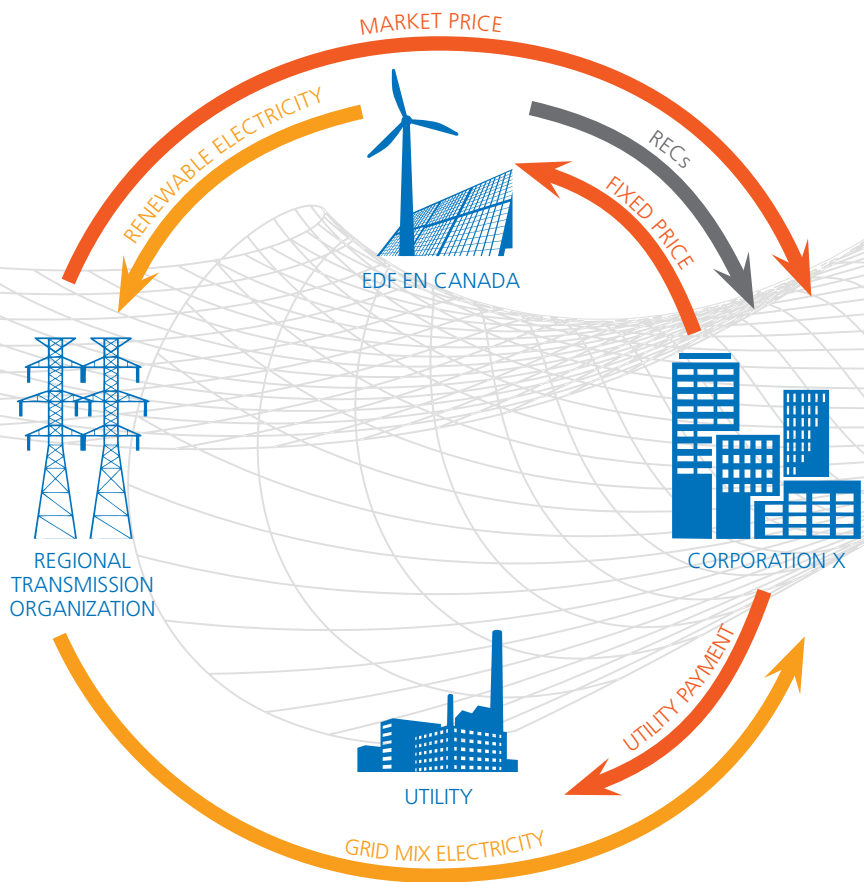
### Renewable Energy Credit (REC)

Certificates that prove one megawatt-hour (MWh) of electricity was generated from a renewable energy resource. Once the power producer has fed the electricity into the grid, the RECs received can then be sold on the open market as a commodity. Corporations often buy and sell these secondary-market RECs.

\*Additionality is the extent to which a new source adds to the existing source (instead of replacing) and results in a greater aggregate.



# HOW A VIRTUAL POWER PURCHASE AGREEMENT WORKS



## PURCHASE

Corporation X buys electricity from EDF EN Canada in the form of a VPPA.

## SELL

Corporation X will then sell that power back into the grid at the local, wholesale price. This may result in paying slightly higher prices now for the renewable energy since conventional grid power is cheaper, but as electricity becomes more expensive over time, the price Company X locked in will lead to a savings relative to what they would have paid for grid power, whose cost is expected to rise. In the process of selling the electricity the RECs are retired so that no other party can claim credit for the green aspect of Company X's purchase.

## CREDITS

Lastly, Corporation X will apply those RECs to the energy used at their facilities.

# PROJECT LIFE CYCLE EXPERTISE

EDF EN Canada's Project Development team is dedicated to creating value by managing projects from **origination to commercial operation**. Initial efforts involve identifying potential project sites, establishing business relationships with landowners, and securing permits and transmission rights. As each project progresses, our team executes all contracts, secures financing, procures equipment and assures timely construction towards commercial operation.



## ORIGINATION

EDF EN Canada engages in a rigorous process to **identify and evaluate** the potential of prospective sites, taking into account the energy resource, transmission, interconnection,

permitting and environmental concerns. A **comprehensive analysis** is conducted to identify any issues or site concerns that may jeopardize the project's progression.



## DEVELOPMENT

During the development phase, our team engages in **permitting, site design, and technology selections**. With strategic investments and global supply agreements, we have access to

a variety of technologies, ensuring the best solution for each installation.

Once a site is identified, a thorough site evaluation protocol commences. Our Resource Assessment Group performs rigorous technology, resource, and equipment analysis and evaluation.



## TRANSACTION

During the transaction phase, the Valuation and Transaction team secures a **Power Purchase Agreement or Direct Sale Agreement**. Concurrently, EDF EN Canada executes strategic

supply agreements to secure all the necessary equipment for project construction and selects a construction contractor. Our Project Finance team has closed over \$6.75 billion in financing facilities.



## CONSTRUCTION

During the construction period, the Implementation Group oversees and implements all aspects of the **system design, installation, and construction** to ensure a quality build. Because

every project is unique, extensive experience is applied to optimize every segment of the project. Strict management of engineering, procurement, transportation, logistics, and construction ensures projects are completed safely, on-time and on-budget.



## OPERATIONS & MAINTENANCE

Once the installation is complete and generating energy, EDF Renewable Services, our O&M affiliate, ensures long-term performance and profitability

of the project, providing operations and maintenance services, asset administration, and 24/7/365 monitoring and real-time response from our Operations Control Center. Servicing over 10.5 GW, EDF Renewable Services is the **leading third-party provider** of renewable energy operations and maintenance in North America.



## DEVELOPMENT & SALE OF STRUCTURED ASSETS

In addition to owning projects, EDF EN Canada sells, through the Development and Sale of Structured Assets program, equity stakes in renewable projects to

various investors. Recent partners include: utilities, infrastructure funds, pension funds, and strategic investors looking to **diversify holdings by adding renewable energy assets to their portfolio**.



## OPERATIONS & MAINTENANCE IS OUR CORE BUSINESS

EDF Renewable Services understands renewable energy facilities represent a substantial investment. With over 30 years of experience we are the trusted leader to ensure ongoing profitability for project owners and investors, whether it's a new or existing facility.

### GLOBAL EXPERTISE

With more than 10.5 GW of capacity, EDF Renewable Services is the leading provider of third-party operations & maintenance services in North America.

As part of a global organization with utility-scale wind, solar, biomass, biogas, and storage across Europe and North America, we bring a depth of experience and expertise to every project.

By choosing EDF Renewable Services as your O&M provider, you are choosing a partner with a proven history of successful project performance, who brings an owner-operator sensibility to all projects. We treat third-party projects as if they were our own, with the knowledge, experience, and proficiency over 30 years as the industry leader.

### Transparent Service

Operations and maintenance service is our [core business](#). Our goal is to optimize your plant performance and maximize availability, [regardless of technology type](#). We've honed our expertise over the last two decades and will bring completely transparent service offerings to your asset.

Our full range of services begins [prior to commissioning and goes through decommissioning](#). During the warranty period, we provide scheduled and unscheduled maintenance options such as balance-of-plant management, remote monitoring, and OEM oversight. We also provide total project operations & maintenance during the post-warranty period.

Our team has extensive experience with a variety of equipment and provides the highest quality maintenance services performed by trained and certified EDF Renewable Services technicians under [stringent safety standards](#).

# MAXIMIZED PERFORMANCE WITH ASSET MANAGEMENT

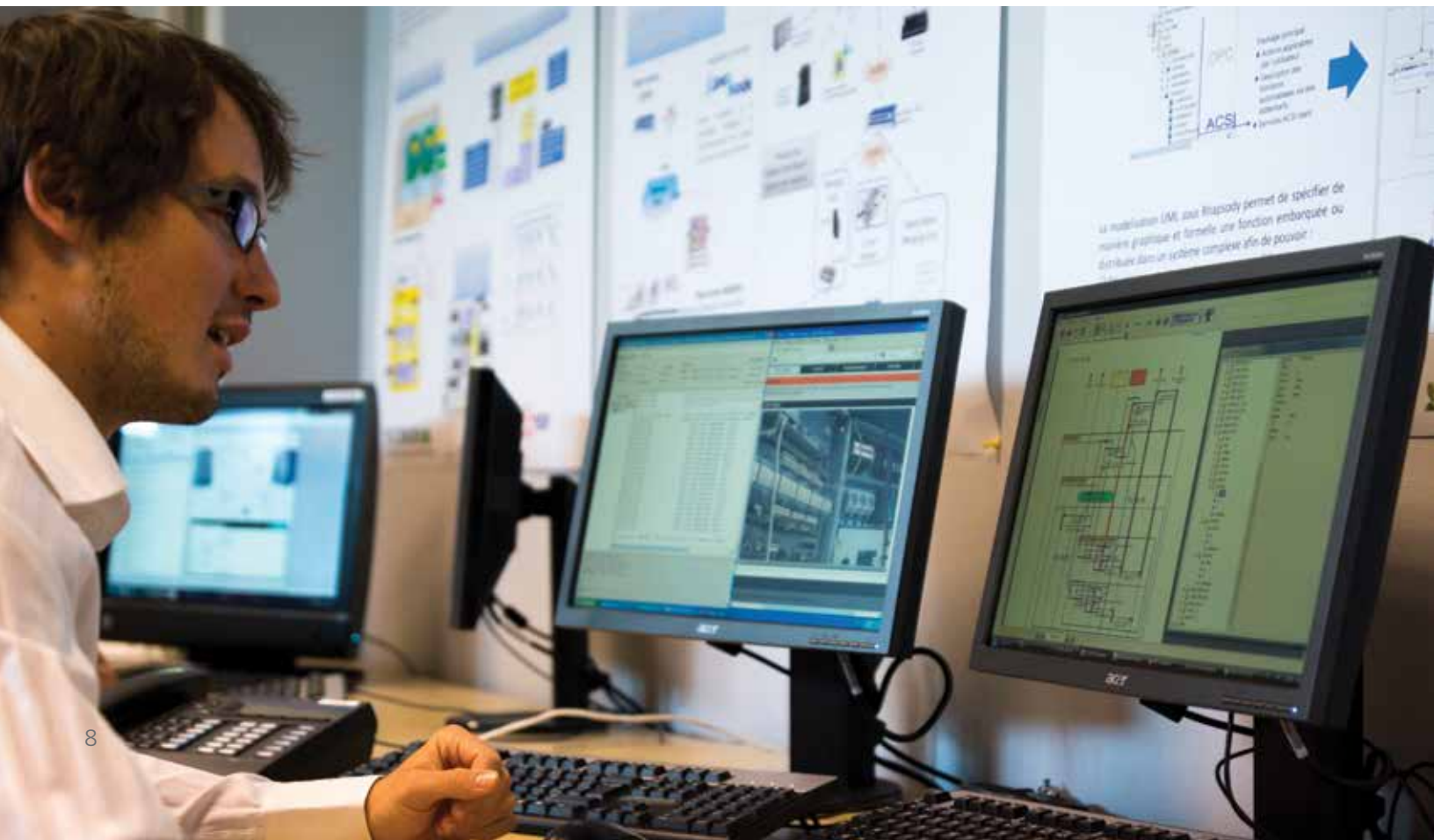
The Generation/Asset Management Group at EDF EN Canada recognizes the management of physical assets is key to long-term operational performance. The team delivers the expertise that owners need to optimize the project performance and profitability while ensuring the respect of health, safety and environment aspects.

As an owner's representative, we provide oversight of wind and solar projects by managing the projects and all applicable agreements (commercial, municipal, provincial), certifying compliance and optimization of returns over the project's lifecycle.

Early involvement of the group in the project development process allows efficient collaboration with all stakeholders, ensuring that all interests are respected, and for timely input regarding environmental and regulatory frameworks, operational requirements and optimum equipment selection.

- Commercial agreement management (including claim management, end of warranty inspections, etc.)
- Operational oversight (including Health & Safety, Environment, etc.)
- Financial management
- Business reporting
- Project performance optimization
- Monitor and implement federal, provincial and municipal policy and permit requirements
- Stakeholder management

**Strategic management  
to optimize your return  
on investment**





## INTEGRATED TECHNOLOGY AT THE OPERATIONS CONTROL CENTER

### ADVANCED TECHNOLOGY TO INCREASE REVENUES

EDF Renewable Services provides critical 24/7/365 remote monitoring, diagnostics, and troubleshooting from its state-of-the-art Operations Control Center (OCC), increasing equipment availability, minimizing downtime and reducing operational and maintenance costs.

The OCC combines control center, SCADA and O&M auxiliary services into a technical services hub, with a “One Touch” integrated front-end monitoring system to improve response times and more effectively track key performance indicators.

The OCC is equipped with scalable technical infrastructure with component redundancy capable of disaster recovery, mitigating risk and managing compliance. This enhances the OCC’s ability to monitor and diagnose plant performance and to provide additional sophisticated O&M services.

The OCC uses advanced technology to optimize equipment availability and profitability, increasing customers’ revenue around the clock.

### Standard and Advanced Service Options for Flexible Solutions

We understand the need for flexible solutions. From our Standard Services or Advanced Services offerings, we have a breadth of experience that guarantees we create the optimized solution for your assets’ needs:

#### ■ Standard Services

- 24/7/365 remote monitoring
- Fault notification & remote resets
- Technician/EMS dispatch notification
- Curtailment management

#### ■ Advanced Services

- SCADA support
- Balance of plant
- Performance monitoring
- NERC compliance support



# PARTNERSHIPS



## DEVELOPERS

Secure the success of your project

There's a lot at stake when you take on a large-scale renewable energy project – an investment of time, financial resources, and your reputation. With our expertise, EDF EN Canada is the right partner to help manage any or all aspects of your prospective project to ensure it gets built on time and on budget.

As a partner, we will:

- Consolidate services and simplify the process;
- Work closely with you and others in the community to maximize the project's success;
- Manage the environmental and other regulatory approval and permitting processes;
- Oversee all stages from site analysis to construction management, operations and asset management;
- Provide the financial strength required to complete large-scale projects;
- Consider diversified technical options for each project;
- Supply ongoing support to ensure the long-term sustainability of your project.



## LANDOWNERS

A relationship that works

Entering a lease agreement relationship with EDF EN Canada enhances the productivity of your land – increasing and diversifying your income sources. What's more, it incurs no cost to you, requires little effort on your part and has minimal impact on your current activities.

Partnering with EDF EN Canada:

- Gives you steady, long-term income – no matter what the weather;
- Integrates with other land uses, such as agriculture, forestry and hunting or livestock grazing;
- Has no impact on water, air or climate, and leaves no hazardous waste;
- Lets you continue to exercise stewardship for the land and environment;
- Offers the peace of mind that comes from working with a team of specialists from start-to-finish.





## ABORIGINAL COMMUNITIES

High regard for relationships and traditions

EDF EN Canada believes strongly in sustainable stewardship of our natural resources, and the continued development of clean and renewable energy. Harmonious cooperation and development with Aboriginal communities is core to our mission and can create tremendous opportunities to partner in the development process and as project owners.

We understand the unique nature of community development partnerships for renewable energy projects and we value and respect the traditions and culture of Aboriginal peoples. We also have the financial strength, development capital and experience to develop projects that help communities create a revenue source from renewable energy.

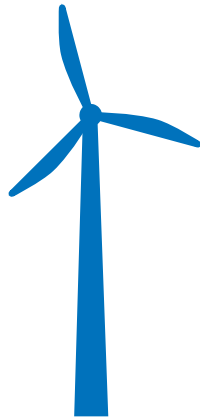
Renewable energy benefits:

- Generating local electricity;
- Providing economic benefits and opportunities that lead to capacity building initiatives and help strengthen the ability of Aboriginal peoples, communities, and businesses to participate in economic opportunities beyond the renewable energy project;
- Creating jobs and training programs for community members in areas such as construction, and project operations and maintenance;
- Respecting and recognising local traditions, concerns, and priorities.

**Our global development experience ensures that we are the trusted partner to develop, build, operate and maintain any renewable energy project.**

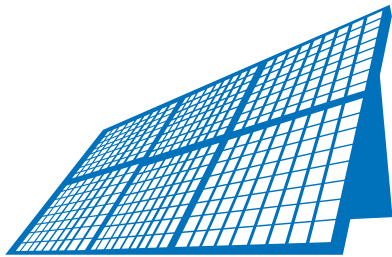


# PROJECT DEVELOPMENT



## WIND

Romney	2019	60.0 MW
Nicolas-Riou	2017	224.4 MW
Mont-Rothery	2015	74.0 MW
Rivière du Moulin	2014/2015	350.0 MW
Blackspring Ridge	2014	300.0 MW
La Mitis	2014	24.6 MW
Le Granit	2014	24.6 MW
Lac-Alfred	2013	300.0 MW
Massif du Sud	2013	150.0 MW
Saint-Robert-Bellarmin	2012	80.0 MW



## SOLAR

Pendleton	2018	15 MWp
Barlow	2018	12 MWp
St. Isidore A	2010	11.5 MWp
St. Isidore B	2011	11.8 MWp
Elmsley East	2010	11.9 MWp
Elmsley West	2011	11.9 MWp
Arnprior	2009	23.4 MWp

