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WELCOME!

Thank you for coming to the First Public Meeting Under the Renewable Energy Approval (REA) Process for the Romney Wind Energy Centre.

We are here to share information with you about this clean, renewable energy project. Please keep in mind that we are in the early stages of the project and currently completing various studies and reports, before we finalize the project design. Today's intent is to show you the general project area and collect additional input from the community, to incorporate into our design.

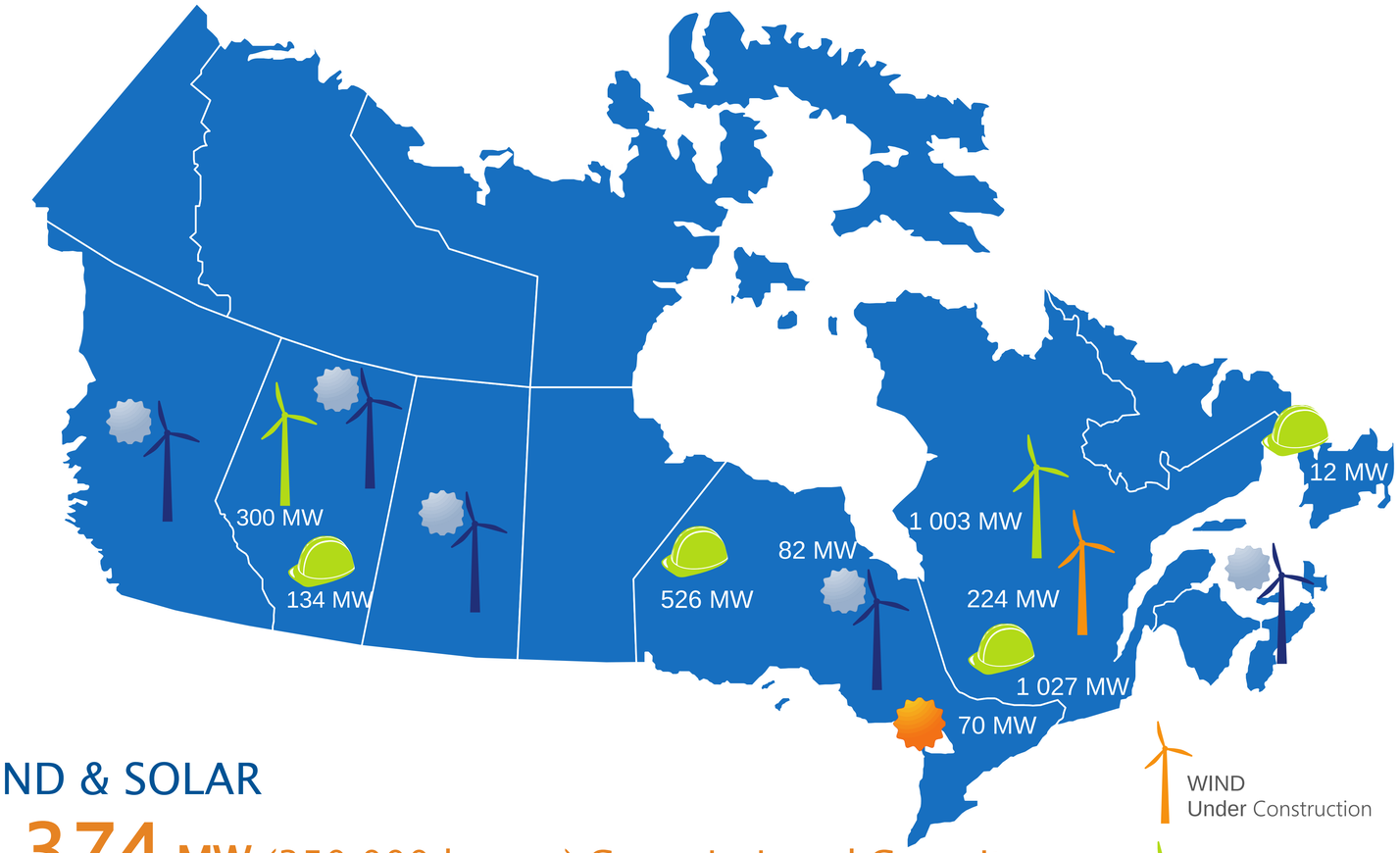
Please review the display boards and feel free to ask us any questions you may have.

We want to hear from you!

Please complete a comment form to share your feedback. If you would like to be added to the Project mailing list, please sign up at the front desk.

EDF EN CANADA

1 600+ MW OF WIND AND SOLAR ACROSS CANADA

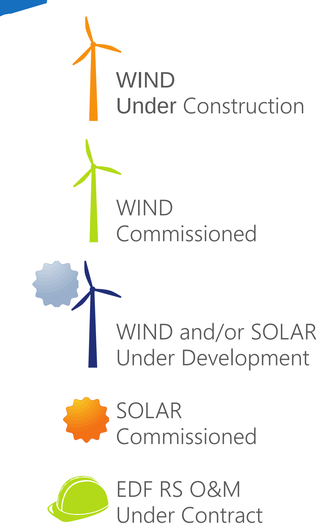


WIND & SOLAR

1 374 MW (350 000 homes) Commissioned Capacity

224 MW (54 900 homes) Under Construction

82 MW (20 100 homes) In Development



OPERATIONS & MAINTENANCE

1 173 MW Wind

526 MW Solar

>$3.5 billion invested in Canada since 2008

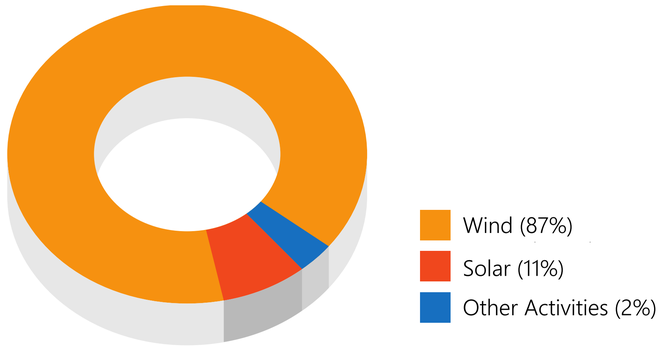
EDF EN

A LEADER IN RENEWABLE ENERGY

Among the Top 10 Global Players

GENERATION ACTIVITY

- **8 989 MW**
  gross installed
- **1 620 MW**
  gross under construction*
- **10.4 billion kWh**
  of green electricity generated in 2015



COMPLEMENTARY ACTIVITIES

- **3 201 MW**
  developed, built and commissioned
- **14 323 MW**
  in operations and maintenance*

** For own account and for third-parties*

21 countries throughout North America, South America, Europe, Africa, the Middle East, and India

> 3 000 employees

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PROJECT DESCRIPTION

PROJECT NAME	Romney Wind Energy Centre
PROJECT OWNER	Romney Energy Centre Limited Partnership
HOST MUNICIPALITIES	Municipality of Chatham-Kent, Town of Lakeshore
RENEWABLE FUEL	On-Shore Wind
CONTRACT CAPACITY	60 MW

PROPOSED CONNECTION POINT

The project will connect to an existing 230kV line located, just south west of Tilbury, near Richardson Sideroad and Centre Road in the Town of Lakeshore.

TRANSMISSION LINES

No long transmission lines are required for this project. There will be a small section (around 500 m) of 230kV line to connect the project substation to the existing transmission line.

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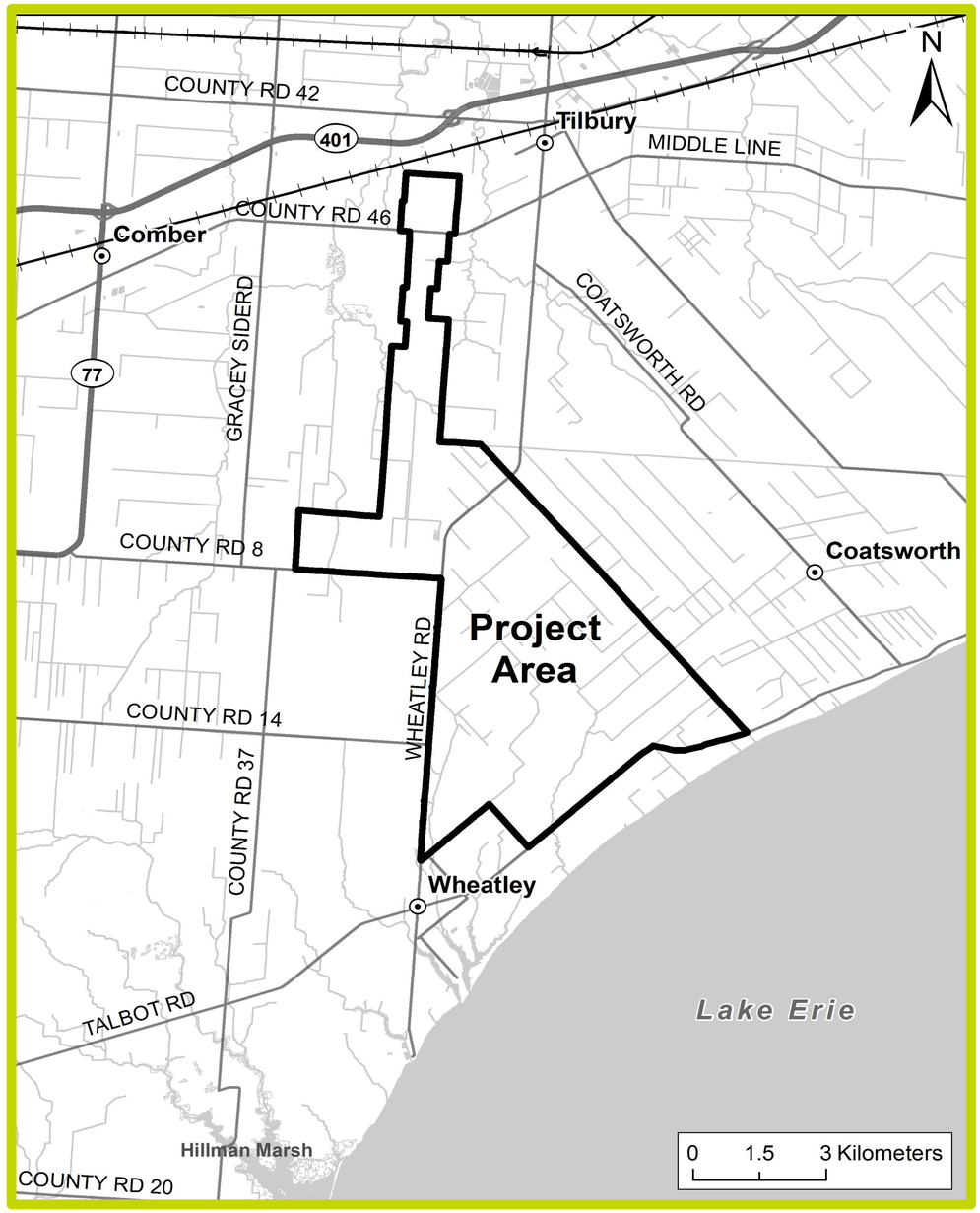
GENERAL PROJECT MAP

The proposed Project would be situated on more than 10 000 acres of privately-owned land. The Project boundary closely aligns with the following roads: Middle Road (North), Talbot Trail (South), Campbell Road (East), Richardson Side Road (West).

- Our aim is to avoid or minimize potential impacts of the project on the environment, the community and cultural heritage.
- Final locations of project infrastructures will be considered later on through public consultation and engineering/environmental studies.
- The substation will be located in the Town of Lakeshore and will connect to an existing 230kV transmission line south of Tilbury.
- There will be no turbines located in the municipality of Leamington.



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LAKESHORE MUNICIPAL AND LOCAL COMMUNITY BENEFITS

- ## A community benefit agreement has been put in place with the Town of Lakeshore

  The Town of Lakeshore will receive a payment of **$25 000,** every year, for 20 years, to spend in the local community for hosting the project substation and some buried electrical collector line in the road right of way;

- ## Additional property tax revenues

  Paid by the project to offset increasing municipal services or infrastructure costs;

$25 000 annual community benefit X 20 years = $500 000

- ## Construction jobs

  Approximately **200** construction jobs at the peak of construction;

- ## Long-term operator positions

  Full-time positions from within the local community to support and service the facility for it's 20+ year life span;

- ## Local investment

  Significant investment into the local economy during the development, construction and operation phases of the project in equipment materials and services.

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CHATHAM-KENT MUNICIPAL AND LOCAL COMMUNITY BENEFITS

- **A community benefit agreement has been agreed with the Municipality of Chatham-Kent**
  $2 500 per MW installed in Chatham-Kent or around $150 000/year

- **A >15% equity partnership agreement has been agreed with the Municipality of Chatham-Kent**
  Creating a potential net return of $2 196 000 for Municipality

- **Additional property tax revenues**
  Paid by the project to offset increasing municipal services $56 250/year

$150k community benefit
$2.1M equity deal
$56 250 property taxes
$180 000 maintenance contract

X

20 years

=

$8 million

- **Maintenance Contract for Entegrus**
  $180 000 per year contract for Municipally owned utility

- **Building Permit Fees**
  Around $300 000

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LOCAL ECONOMIC BENEFITS

EDF EN Canada values the long-term benefits of working with the local community. We have entered into a **Community/Municipal Benefit Package** that will give the local community **$8.5 million over the life of the project.**

Funds will allow community to support local initiatives such as:

INFRASTRUCTURE IMPROVEMENTS • RECREATIONAL FACILITIES • ENVIRONMENTAL PROJECTS • EDUCATIONAL PROGRAMS

Please contact your local municipality to discuss how these funds might be spent, or offer your ideas for worthy causes or initiatives.

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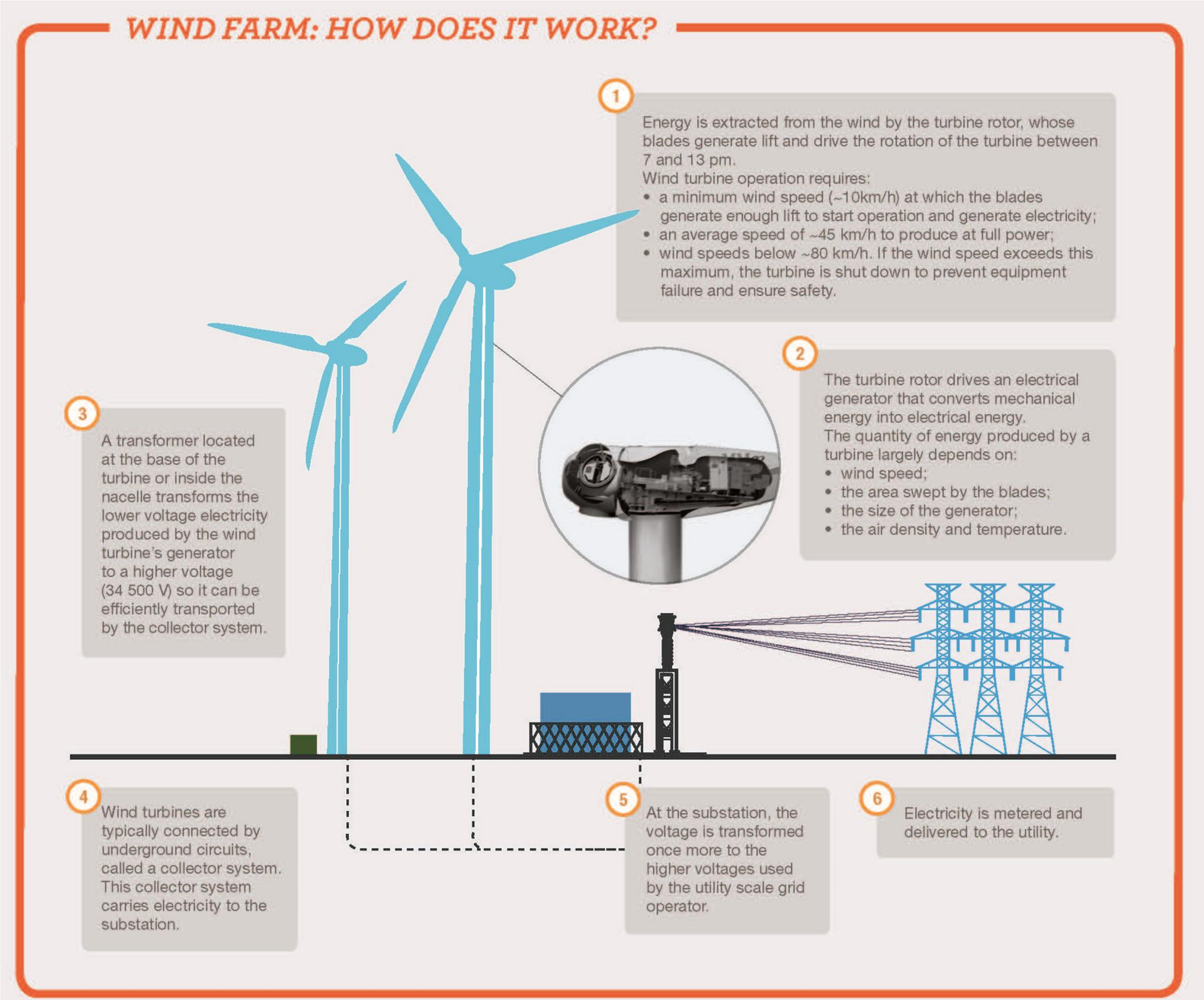
WIND ENERGY: HOW DOES IT WORK?



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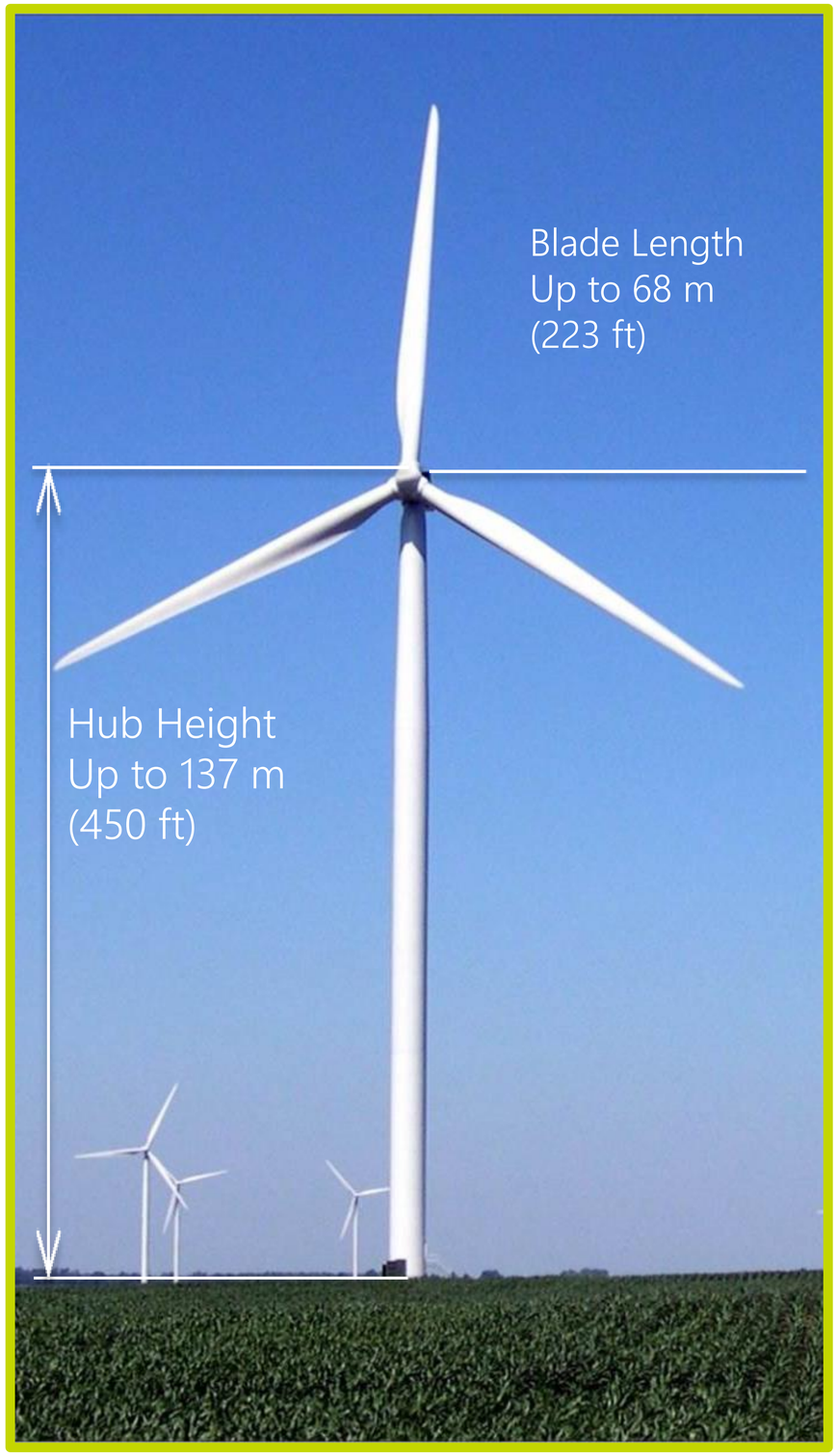
TYPICAL PROJECT INFRAS-TRUCTURE

- Wind Turbine
  - Blades (up to 68 m)
  - Hub Height (up to 137 m)
  - Foundation
  - Capacity (up to 3.0-3.6 MW)
- Access Roads
- Temporary laydown areas
- Collector System
- Substation
- Operation and maintenance building



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TIMELINE

Project Timeline

August 2015
Public Community Meeting

September 2015
Project Submitted to IESO during LRP 1 RFP Process

September 2016
Notice of a Proposal to Engage and Notice of Public Meeting released to public, agencies, municipalities and aboriginal communities

Draft Project Description Report released to public, agencies, municipalities and aboriginal communities

Municipal Consultation Form provided to Municipalities

May 2017
Final Public Meeting

June 2017
Submission of REA application to MOECC

June 2018
REA issued by MOECC (anticipated)

Repowering/ Decommissioning

2015 | 2016 | 2017 | 2018 | 2019 | 20 or more years after Commercial Operation Date

March 2016
LRP contract award

May 2016
REA technical studies and field programs commence, ongoing into fall

June 2016
Initiate Renewable Energy Approval (REA) Process

February 2017
Draft REA Reports and Municipal Consultation Form provided to Municipalities (90 day review)

March 2017
Draft REA Reports to Public for 60 day Public Review & Comment

February 2019
Start of Construction

December 2019
Commercial Operation Date (COD)

We Are Here

October
Public Meeting

Ongoing consultation with municipal staff, landowners, aboriginal communities, government agencies, special interest groups and members of the community.

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WHY WIND MAKES SENSE

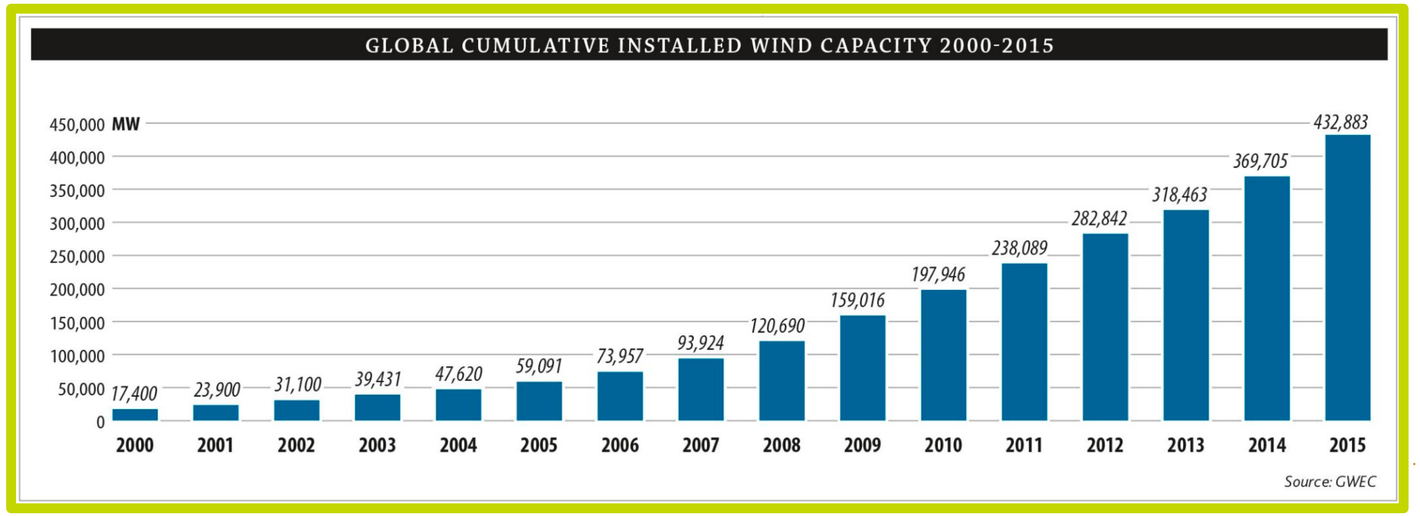
1 MW Turbine ~ 300 homes

= 25 Households

Every 1 000 MW of new wind energy drives $2.5 billion in investments, creates 10 500 person-years of employment, and provides enough clean power for over 300 000 Canadian homes.

Source: CanWEA http://windfacts.ca/community-property

Global Installed Wind Capacity 2000–2015



Clean power — Wind energy reduces dependence on other forms of electricity generation that contribute to greenhouse gas emissions

Local job opportunities — Contractors, suppliers and local businesses benefit from the direct and indirect economic activity the project brings to the local economy.

Clear air — Wind energy emits no greenhouse gas during the production of electricity.

Water conservation — Wind turbines do not use water to produce electricity

Predictable pricing — Wind generated electricity prices are fixed and stable, unlike natural gas or oil which have volatile and unpredictable pricing

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ENVIRONMENTAL AND TECHNICAL ACTIVITIES UNDERWAY

Wind Collection

Meteorological towers, used to collect wind speed data across the Project site, determine the best type of turbine and optimal placement.

Geotechnical Assessment

Determine the type of soils and depth to bedrock to better understand how the turbine foundations will be designed and built.

Environmental Field Work

Studies of birds, bats, rare plants and sensitive species ensure we account for all sensitive species as we develop a preliminary project layout.

Interconnection Assessment

Interconnection studies are performed by the Independent Electricity Service Operator (IESO) to ensure the safe and reliable integration of wind energy. The assessment confirms the ability to connect to the grid.

Engaging technical stakeholders

Consult technical stakeholders such as cable and internet providers, pipeline owners, and utilities, on the location of infrastructure to avoid any disruptions to your services during construction and operation.

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HEALTH STUDY

In 2014, Health Canada commissioned a $1.2 million study on the potential impacts of wind turbines on human health.

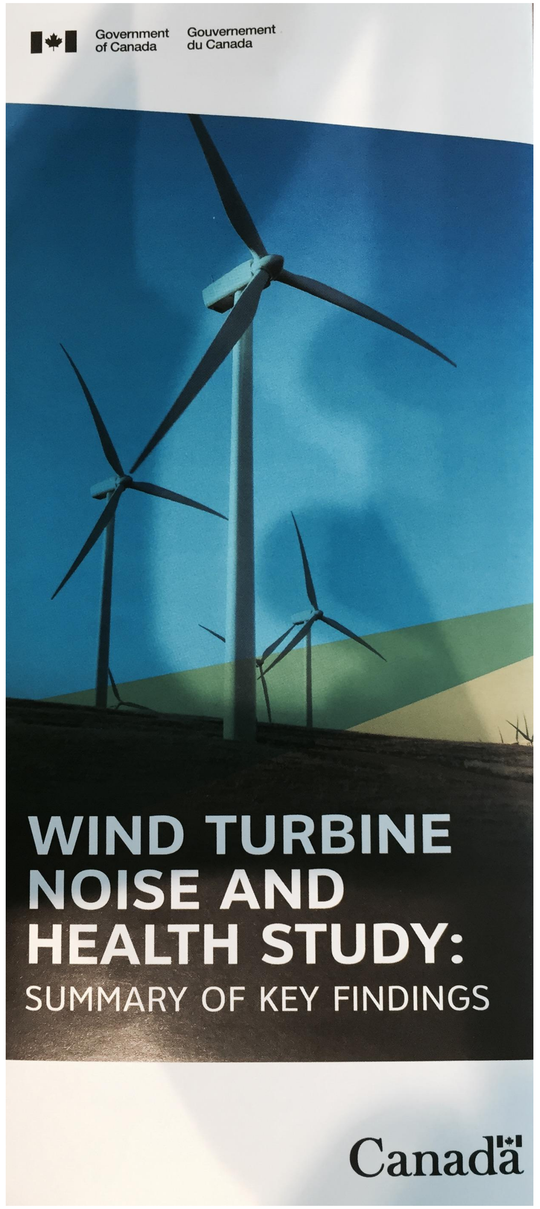
A hardcopy of the study is available, and also a summary of the key findings brochure. Please ask any EDF EN staff for a copy.

- ## Illness and disease
  No evidence was found to support a link between exposure to wind turbine sound and any of the self-reported illnesses and/or chronic conditions.

- ## Stress
  No association was found between the multiple measures of stress and exposure to wind turbine sound.

- ## Sleep
  No association between wind turbine sound and self-reported or measured sleep quality.

- ## Annoyance and quality of life
  No association was found with any significant changes in reported quality of life, or with overall quality of life and satisfaction with health.*



Ontario Chief Medical Officer's 2010 report which concluded:

There is "no scientific evidence of any direct causal link between wind turbines and adverse health effects."

**Assessed using the World Health Organization's Quality of Life Scale.*

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ONTARIO'S RENEWABLE ENERGY APPROVAL PROCESS

The Renewable Energy Approvals (REA) Process is a requirement for large wind power projects under Ontario's Green Energy Act.

The Ministry of Environment (MOE) will assess the application and perform a technical review to determine whether to issue an approval, based on some of the mandatory reports below:

- Project Description Report
- Archaeology and Cultural Heritage Assessment Reports
- Natural Heritage Assessment Report
- Sound Assessment Report
- Water Body and Water Assessment Report
- Construction Plan, Design and Operation, Decommissioning Reports
- Consultation Report
- Wind Turbine Specifications

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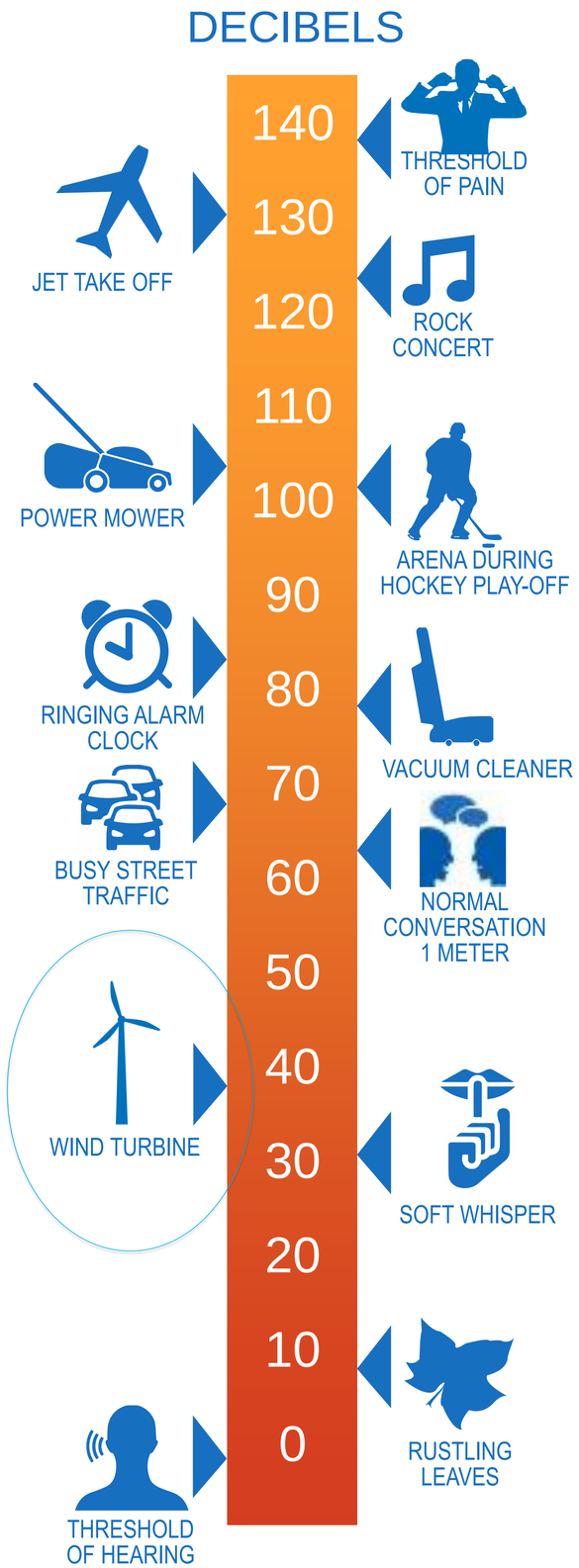
WIND AND SOUND

- Ontario has some of the most stringent regulations governing residential sound levels, limiting sound to 40 decibels.
- Detailed sound assessments confirm turbine locations are sited taking into account these regulations.

We will complete a noise impact assessment report which will examine the specific conditions of the site area and this will be submitted to the Ministry of Environment and Climate Change for review and approval



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WIND AND PROPERTY VALUES

Studies have indicated no decrease in the property values resulting from the construction of wind power projects in the area of the Municipality of Chatham-Kent (2010); and Township of Melancthon, Township of East Luther Grand Valley and County of Dufferin (2006).

According to CANWEA, studies have consistently shown there is no causal relationship between wind farms and negative impacts on property values.

"The Board finds there is no evidence to allow the Board to conclude that since the construction of the wind farm properties on what [the landowner] defines as the west side of the Island have sold for less than properties on the east side."

(Source: Ontario Assessment Review Board. File No: WR 113994. Municipality: Township of Frontenac Islands)

In 2014, MPAC (Municipal Property Assessment Corporation) performed a study that looked at all properties close to 1 157 turbines in total, and concluded that "there is no statistically significant impact on sale prices of residential properties in these market areas resulting from proximity to an industrial wind turbine."

(Source: Municipal Property Assessment Corporation)

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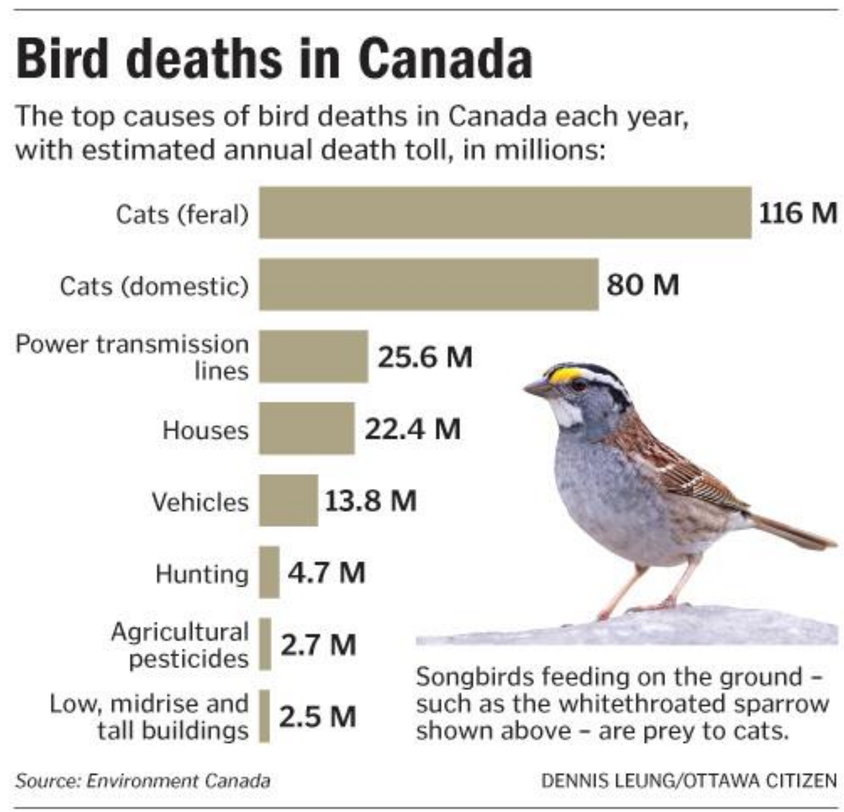
AVIAN IMPACTS

"It is estimated that more than 10 000 migratory birds are killed in Toronto between the hours of 11:00 p.m. and 5:00 a.m. in collisions with brightly lit office towers."

Source: www.flap.org

Well sited wind projects should have minimal impacts upon local bird and bat populations.



Wind turbines don't make the list

- Working collaboratively with the Ministry of Natural Resources, EDF EN Canada Development will undertake significant bird and bat studies to quantify potential risks and develop mitigation tools to ensure sustainable development.
- Potential impact on birds, bats and raptors will be documented in the Natural Heritage Assessment and Environmental Impact Studies
- We are already working with local stakeholders to create new habitats for birds and bats in advance of our project being built.

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IN HARMONY WITH AGRICULTURE

- EDF EN Canada recognizes that you can't have a project without the support of local landowners and we work diligently to make sure we listen and co-operate.
- Well designed wind energy, complements farming activity with minimal disruption.
- Turbines for the Romney wind energy center will be placed at the best possible locations for optimal dual-use of the land, whilst respecting other constraints.
- EDF EN works very closely with our landowners to ensure the road and cable design fits in with current and future uses, using existing laneways and locating along fence lines where possible.

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LOCAL PARTNERS

EDF EN Canada believes the secret to successful development is working closely with landowners, communities, municipalities and First Nation partners. The Romney Wind Energy Centre is a partnership between EDF EN Canada, the local municipality and a First Nation.

FIRST NATION
AAMJIWNAANG

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EDF
energies nouvelles

Municipality of
Chatham-Kent
Cultivating Growth, Shore to Shore

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ONTARIO'S RENEWABLE ENERGY APPROVAL PROCESS

- The Renewable Energy Approval (REA) process, outlined in Ontario Regulation 359/09, is a requirement for large wind power projects under Ontario's Green Energy Act.
- Romney Energy Centre LP will submit a Renewable Energy Approval application to the Ontario Ministry of the Environment and Climate Change (MOECC) for the project.
- The MOE will assess the application for completeness and then undertake a technical review to determine whether to issue an approval.
- Other agencies, including the Ministry of Natural Resources and Forestry (MNRF), the Ministry of Transportation (MTO), the Ministry of Tourism, Culture and Sport (MTCS) and local conservation authorities and municipalities will provide input.

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REPORTS INCLUDED IN APPLICATION

- **Project Description Report** – to provide an overview of the project and a summary of all the required REA reports
- **Archaeology and Cultural Heritage Assessment Reports** – to identify potential effects on archaeological or cultural heritage resources
- **Natural Heritage Assessment Report** – to identify potential effects on birds, bats, other wildlife, woodlands, wetlands, areas of natural and scientific interest, etc.
- **Noise Study Report** – to ensure the project is in compliance with noise regulations
- **Water Body and Water Assessment Report** – to identify potential effects on streams, seepage areas and lakes
- **Construction Plan, Design and Operation, Decommissioning Reports** – to describe these activities and identify any potential effects resulting from the various project phases
- **Consultation Report** – to demonstrate how Romney Energy Centre LP engaged local and Aboriginal governments, as well as the public, during the project
- **Wind Turbine Specifications** – to describe the turbine technology selected for the project

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ABORIGINAL ENGAGEMENT

- Canada's Constitution Act, 1982, recognizes the rights of Aboriginal peoples (First Nation, Inuit and Métis).
- Ontario Regulation 359/09 has specific requirements for Aboriginal engagement.
- The IESOs Large Renewable Procurement program reinforces the importance of Aboriginal engagement.
- Project proponents are delegated the "procedural aspects" of Aboriginal engagement.
- Romney Wind Energy Centre has received a list from the MOECC of local First nations communities who may have an interest in the project and will work to inform and engage with these communities as the project develops.

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ABORIGINAL ENGAGEMENT

- Aboriginal engagement may include environmental, archaeological, cultural and spiritual issues
- Romney Energy Centre LP is working closely with Aboriginal communities and leadership as good practice to:

  - ✓ Offer meaningful information about its projects
  - ✓ Seek information that helps ensure good planning to avoid or minimize impacts
  - ✓ Openly discuss issues, interests and concerns
  - ✓ Seek workable and mutually acceptable solutions
  - ✓ Foster relationships of mutual respect
  - ✓ EDF EN Canada have entered into a partnership with Aamjiwnaang First Nation to develop the Romney Wind Energy Centre

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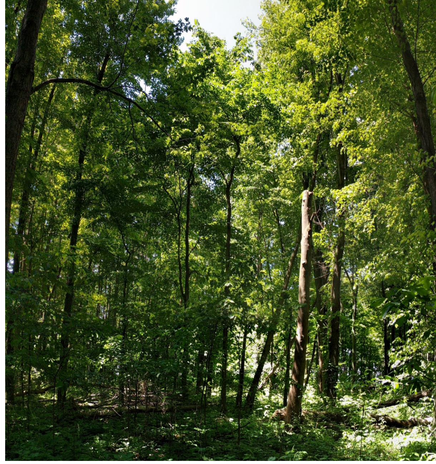
NATURAL HERITAGE



- A Natural Heritage Assessment (NHA) will be completed for the Project, as required by Ontario Regulation 359/09.
- Information regarding natural features within 120m of the Project Location will be collected as part of this assessment. Natural features include provincial parks, wetlands, woodlands or wildlife (e.g. bird or bat) habitats.
- Any identified features will be investigated by biologists and evaluated for significance according to provincial criteria. Where significance of a feature is confirmed, an Environmental Impact Study (EIS) will be conducted.
- The EIS will identify potential negative effects on the environment, proposed mitigation measures, residual effects and their significance, and describes how the environmental effects monitoring plan and construction plan address any potential negative environmental effects.
- For each natural heritage feature, potential effects will be assessed and mitigation measures/monitoring commitments will be proposed based on the type of project infrastructure affecting the feature.

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WATER ASSESSMENT

- A Water Assessment and Water Body Report will be completed in accordance with Ontario Regulation 359/09 to identify and address any water bodies within 120m of the Project Location. A water body includes a lake, permanent stream, intermittent stream and seepage area.
- A background review will be conducted as part of the water assessment and field investigations will be completed to confirm the presence of water bodies within 120m of the Project Location.
- If a water body is identified within 120m, an Environmental Impact Study (EIS) will be conducted.
- The EIS will identify potential negative effects on water bodies, the degree of any potential impacts, and proposed mitigation measures.
- For each identified water body, potential effects will be assessed and mitigation measures/monitoring commitments will be proposed based on the type of project infrastructure affecting the water body.

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WATER WELLS

There have been some concerns raised lately that wind turbines could potentially affect water wells and therefore this is something we intend to investigate diligently before any construction works would begin.

Whilst we understand most people in the project area are on mains water – we also know there are some wells too, so if you do have a water well in the project area and have concerns, please speak with a member of staff, so we can locate your well and consider it in our design.

- Once a near final layout has been determined, Romney Energy Centre LP will undertake a geotechnical evaluation at each proposed turbine location to determine foundation requirements
- Appropriate foundation types will be selected based on the results of the geotechnical investigation at each proposed location
- If an existing well is found to be near a proposed turbine, Romney Energy Centre LP will evaluate the need for a hydrogeological assessment of the location. Based on those results, and if required, Romney Energy Centre LP will select a qualified firm to prepare a testing and monitoring plan.

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ARCHAEOLOGY

We will work closely with local First Nations communities to ensure we have First Nations monitors on-site during assessment windows and will share our reports.

- Archaeological assessment of the site will be completed by licensed archaeologists according to the Ministry of Tourism Culture and Sport (MTCS) standards
- The study will be submitted to the MTCS for review and will:
  - Identify Archaeological resources within the study area
  - Describe potential negative effects on archaeological resources during construction, operation and decommissioning
  - Propose mitigation measures to avoid or minimize negative effects on those resources

A Stage 1 and Stage 2 Archeological Assessment is planned to be conducted for the study area in fall of 2016 and Spring 2017. Desktop studies and pedestrian surveys will be conducted to identify/collect any artifacts found in areas of potential disturbance. The results of the Stage 2 Assessment will determine if further assessment will be required.

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HAS THE GOVERNMENT CANCELLED RENEWABLE ENERGY PROJECTS?

On September 27th 2016, the Minister of Energy suspended Large Renewable Procurement II (LRP II) - but confirmed that Large Renewable Procurement I (LRP I) contracts would remain in place. The Romney Wind Energy Centre received a contract for 60MW under LRP I and therefore will proceed as planned.

The decision to suspend LRP II was based on the the latest planning outlook, provided by the Independent Electric System Operator (IESO), which showed that the 1,000MWs planned for procurement under LRP II is simply not needed at the current time. The Minister wishes to complete a new Long Term Energy Plan (LTEP) to review the electrical needs of the Province for the next 10 years and then procure, or build new transmission or generation facilities as required.

It's important to note that the electricity contracted from projects including Romney Wind Energy Centre under LRP I was significantly lower than previous renewable contracts awarded, with an average for wind energy at:

8.59 cents/kWh

This is very cost competitive with all new sources of generation and is predicted to be lower than new nuclear and large scale hydro, meaning LRP I was very successful as a procurement of low cost and stable electricity for Ontarians.

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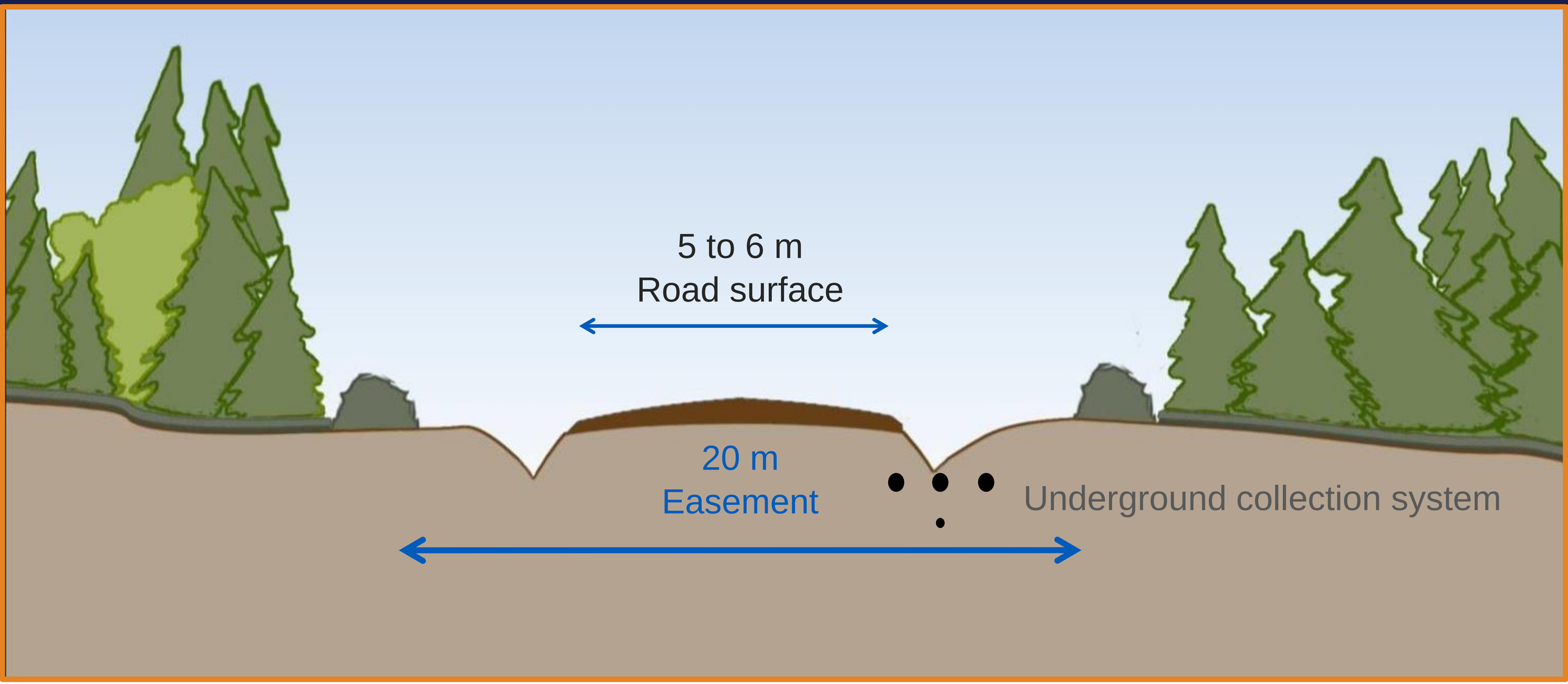
ACCESS ROAD



During construction, the width of the access road will be 20 meters. Once the project will be commissioned, the width will be reduced to 5 or 6 meters.

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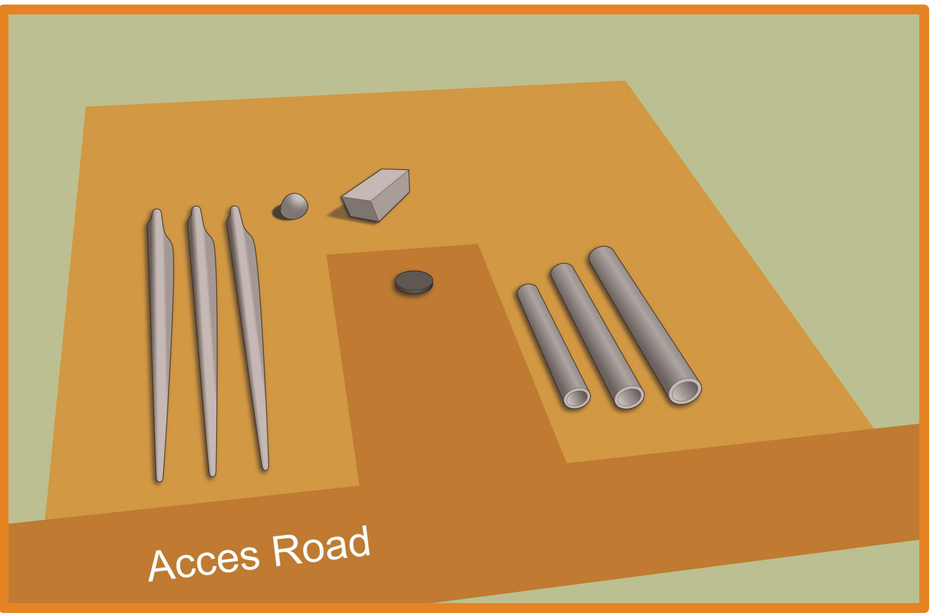
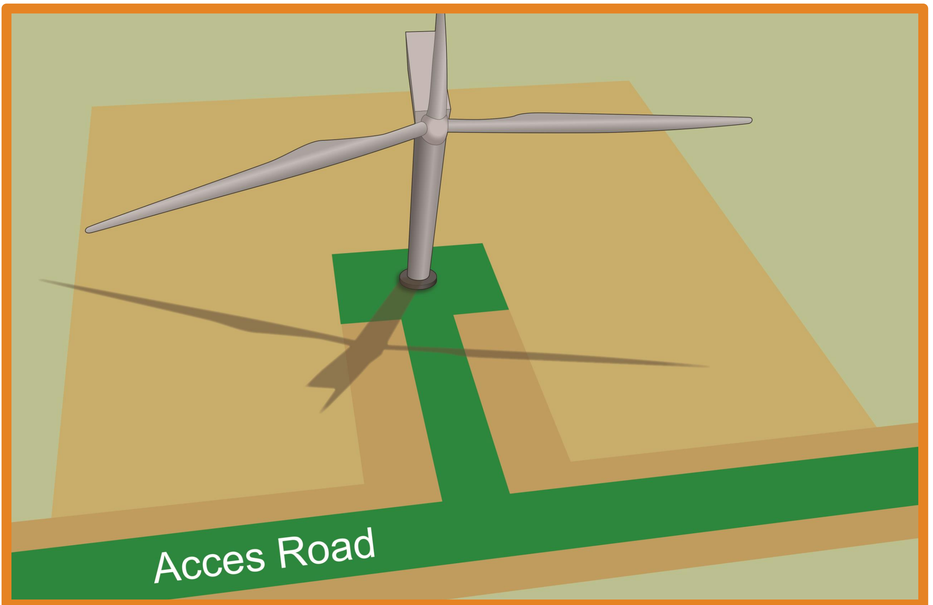
ACCESS ROAD & TURBINE PAD

Construction Phase - 5 acres / turbine



A temporary turbine pad area of about 80m diameter will be created at each turbine location, in order to deliver all the required turbine components on each turbine pad.

Exploitation Phase - 0,25 to 0,5 acres / turbine



After construction, the access road width and the turbine pad will be reduced to limit impacts on agricultural use.

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TURBINE ASSEMBLY

Transportation of turbine components
11 to 13 trucks are required for delivery of a complete turbine.

Tower assembly
6 to 7 tower sections

Nacelle installation
The nacelle weighs about 65 tons.

Single blade assembly
The blades will be installed one by one

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OPERATION AND MAINTENANCE BUILDING & MET TOWERS

- An operation and maintenance building will be built for the purpose of monitoring the day-to-day operations of the project and supporting maintenance efforts. A small parking lot will be constructed to accommodate staff vehicles.
- A temporary construction staging area will be created close to the O&M Building for the purpose of staging and storing equipment during the construction phase. It will host equipment, refueling apparatus, construction offices, parking lot, toilet facilities, rinsing and water facilities.
- Once the Project is completed, this temporary area will be reinstated for agricultural use.

- Wind speed, wind direction, temperature and humidity will be measured by means of a permanent meteorological tower(s). The tower(s) will remain on site for the duration of the Project.

TURBINE FOUNDATION & COLLECTION SYSTEM CONSTRUCTION

- The turbines will be installed on top of a buried, cast-in-place reinforced concrete foundation.

Foundation excavation. Diameter approx. 20 m

Reinforcing steel installation. Between 40-50 tons of rebar

Concrete pouring. Approx. 400-600 m3 of concrete per foundation

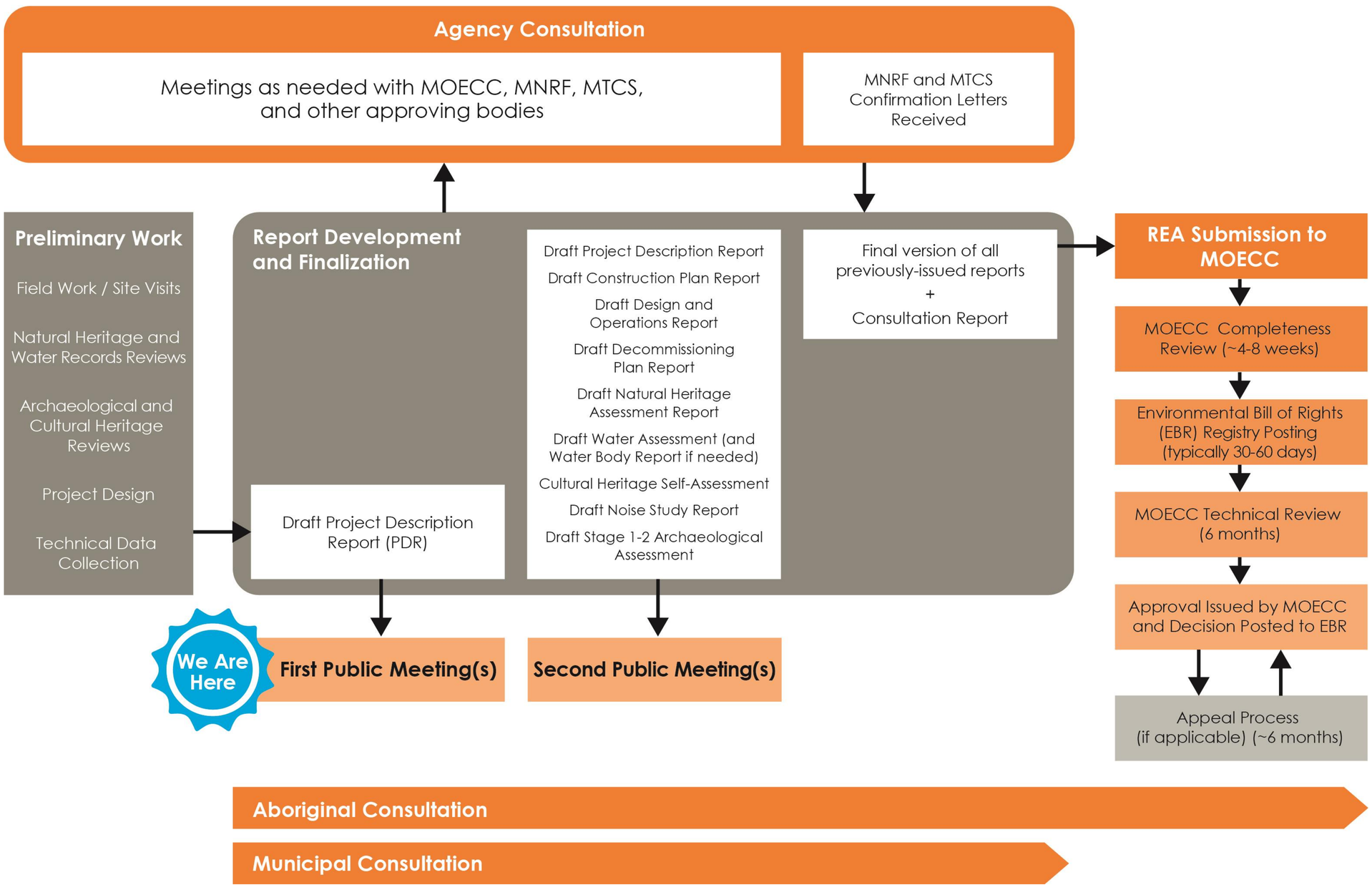
- The electrical collection system will consist of underground cables or overhead lines, junction boxes and a substation. Ploughing, trenching and directional drilling will be used to install underground cables. The cabling will be buried at a depth that will not interfere with normal agricultural practices.

Buried collection system

Substation connecting the project to the Hydro One 230 kV transmission line

THE RENEWABLE ENERGY APPROVAL PROCESS

Overview of Renewable Energy Approval Process



- Issued under Ontario Regulation 359/09 under the Environmental Protection Act.
- Stringent environmental approval process that needs to be satisfied before construction.
- Specifies how the Project will be designed, built, operated and decommissioned so that the environment is protected.

POWERING PROGRESS WITH COMMUNITY PARTNERS

"Our community is very proud to be a part of such an important renewable energy project. There are tremendous economic benefits to our community including the more than 350 jobs that were created during construction and another 20 permanent operations and maintenance jobs."

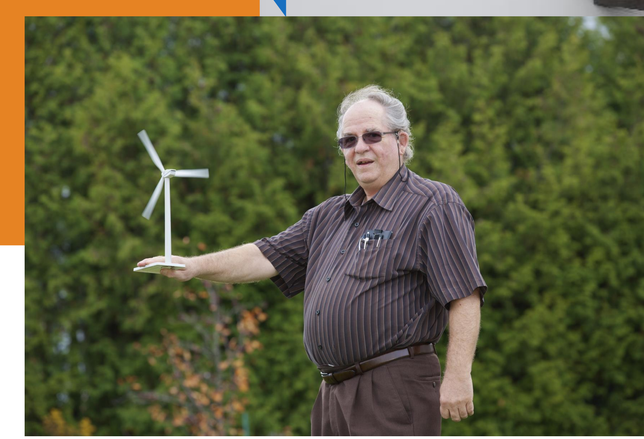
Kym Nichols,
Mayor of Carmangay, AB

Blackspring Ridge Wind Project (300 MW)

"EDF EN Canada has established an open and honest communication process. They shared with us their plans and have delivered exactly on their promise. This is the key to success."

Jeannot Lachance and Michel Polin,
Mayors of Saint-Robert-Bellarmin, QC

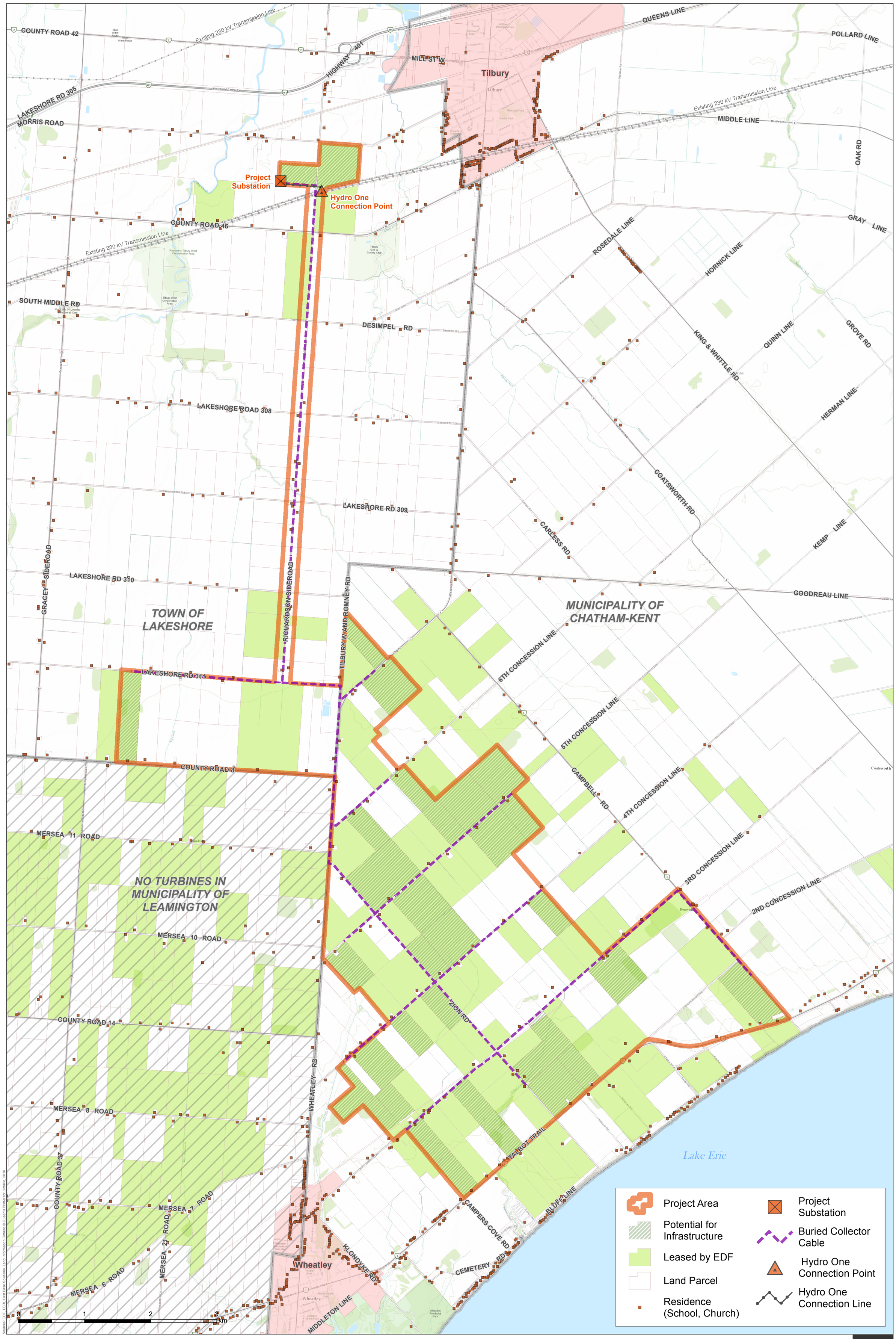
Saint-Robert-Bellarmin Wind Project (80 MW)
Le Granit Wind Project (24,6 MW)



"I consider the work done for this wind project to always have respected the important values of the MRC du Granit. Moreover, respecting the vision of the MRC, EDF EN Canada was able to put the citizens and the environment
at the heart of their priorities in the development and construction of this valuable wind project."

Maurice Bernier,
Prefect of Granit MRC, QC *(2005-2014)*

Le Granit Wind Project (24,6 MW)



PROJECT LOCATION

Romney Wind Energy Centre | Chatham-Kent and Lakeshore, Ontario

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SUBSTATION & HYDRO ONE CONNECTION

Romney Wind Energy Centre | Chatham-Kent and Lakeshore, Ontario

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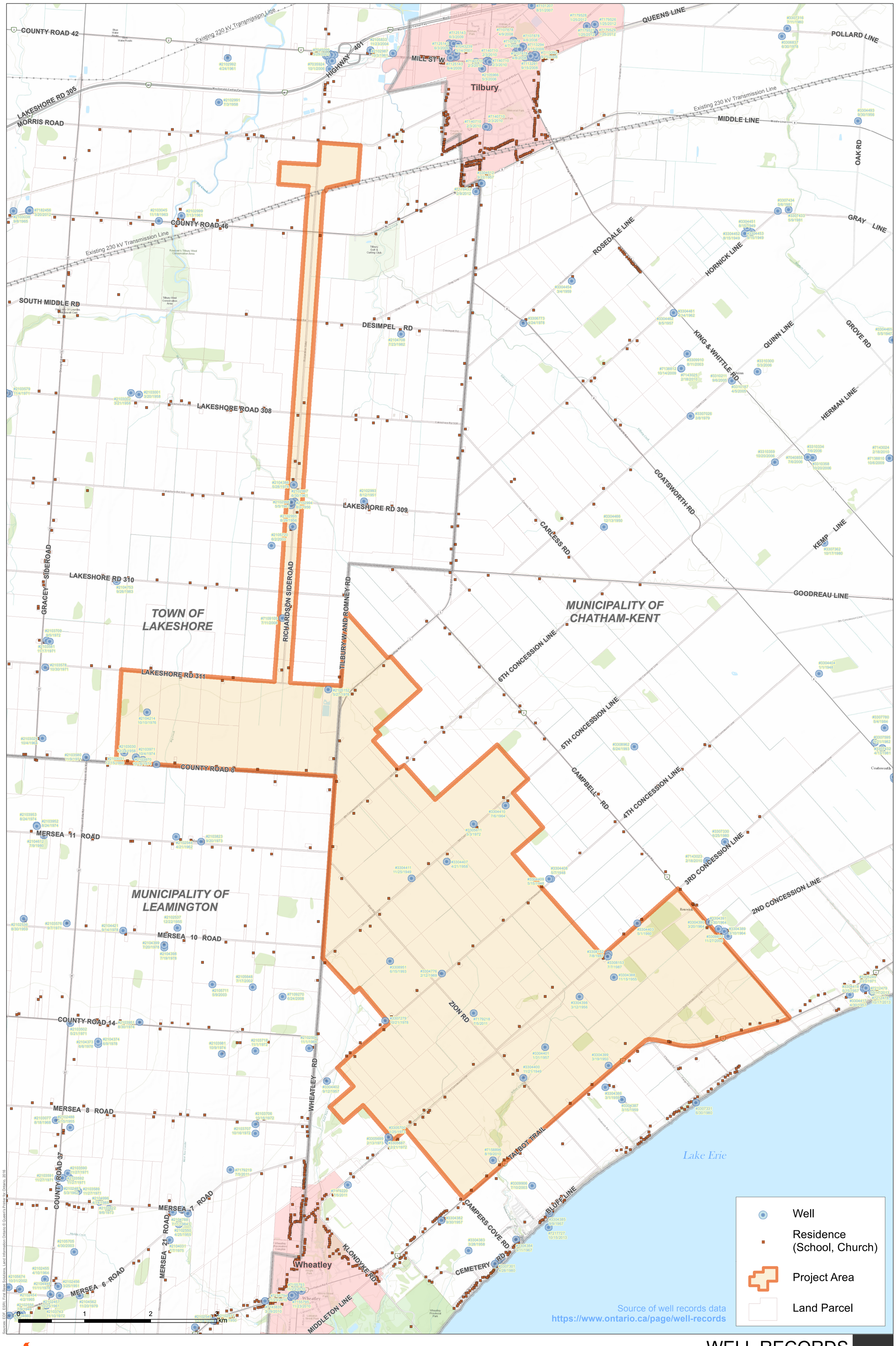

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WELL RECORDS

Romney Wind Energy Centre | Chatham-Kent and Lakeshore, Ontario

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