

# Goshen WIND ENERGY CENTRE NEWS

VOL. 4



## WELCOME

In this newsletter, you will find the latest update on the proposed Goshen Wind Energy Centre, located in the Municipalities of Bluewater and South Huron, in Huron County, Ontario.

Over the last year, we have been conducting archeological and biological studies of the area, as well as consulting with the local community, in preparation to submit our Renewable Energy Approval (REA) application for review by the Ministry of the Environment.

In May, we hosted public meetings at the South Huron Recreation Centre in Exeter and the Stanley Complex in Varna to update community members on the status of the project. We were pleased that over 150 local residents attended to ask questions and learn more. Within this newsletter, we have provided details on the transmission line and addressed many of the most common questions that were raised at those meetings.

The final public meetings for the proposed Goshen Wind Energy Centre are scheduled to take place on January 9 and 10, 2013, at the South Huron Recreation Centre and Zurich Arena, respectively. All documents pertaining to the REA application for the Goshen project are available at the municipal and county offices, as well as online for public review in advance of the meetings.

Should you have any questions, comments or suggestions, we encourage you to contact us directly. **Your voice counts and your opinion matters.** We look forward to continued engagement with the community as we work toward developing emissions-free electricity in Ontario.

Kind regards,

Nicole Geneau  
Director  
Goshen Wind Energy Centre

## CONTACT US

For more information or to contact us directly:

- CALL OUR TOLL-FREE NUMBER:  
1.877.257.7330
- EMAIL:  
Goshen.Wind@NextEraEnergy.com
- VISIT OUR WEBSITE:  
[www.NextEraEnergyCanada.com/projects/Goshen.shtml](http://www.NextEraEnergyCanada.com/projects/Goshen.shtml)
- WRITE TO:  
NextEra Energy Canada, ULC  
390 Bay Street, Suite 1720  
Toronto, ON M5H 2Y2

## IN THIS EDITION

- Welcome
- About NextEra Energy Canada
- About the Goshen Wind Energy Centre
- Project Update
- Transmission Route
- NextEra Energy Canada in the Community
- The Feed-in Tariff (FIT) Program
- Frequently Asked Questions
- Environmental Studies Update:  
Avian Monitoring
- Selecting a Wind Farm Site

## ABOUT NEXTERA ENERGY CANADA

- Goshen Wind, Inc. is the owner of the Goshen Wind Energy Centre and a subsidiary of NextEra Energy Canada, ULC.
- NextEra Energy Canada, ULC is a subsidiary of NextEra Energy Resources, LLC, the largest generator of renewable energy in North America.
- NextEra Energy Resources operates 100 wind projects in 4 provinces and 19 states with over 10,000 megawatts of generation.
- NextEra Energy Resources is focused on developing clean, renewable energy and approximately 95 per cent of our electricity comes from clean or renewable sources.



We value your privacy. Information will be collected and used in accordance with the Freedom of Information and Protection of Privacy Act, and will be maintained on file for use during the planning process for the proposed wind centres.

## ABOUT THE GOSHEN WIND ENERGY CENTRE

- The Goshen Wind Energy Centre will be located on privately-owned land in the Municipalities of Bluewater and South Huron in Huron County, Ontario.
- The project's 63 turbines will generate up to 102-megawatts (MW) of clean energy, enough to power over 25,000 homes in Ontario.
- Local economic benefits of the project include employment opportunities, added tax base for municipalities and landowner lease payments. The Goshen Wind Energy Centre will create an estimated 200-300 construction jobs and 7-10 full time local operations jobs.

## TRANSMISSION ROUTE

NextEra Energy Canada will build a 115 kV electrical transmission line from the collection transformer station to the connection point with the Provincial electricity grid. The transmission line will be located on private property or within existing road rights-of-way.

The electricity collected via the 34.5 kV underground collection lines will converge at the transformer substation where the electricity will be "stepped-up" to 115 kV for transmission and then routed to a breaker switch station at the point of interconnection. The breaker switch station will occupy less than 0.6 hectares (one and a half acres) of land and is the point the electricity joins the Provincial system on the existing Hydro One transmission line.

### FACTORS CONSIDERED WHEN SELECTING A TRANSMISSION ROUTE

- Distance between the transmission line and other structures.
- Easement widths located on private property. Variance occurs due to special features of a particular parcel and/or engineering requirements.
- Location of environmentally sensitive features.
- Existing local land use.

NextEra Energy Canada is committed to working with landowners within the corridor to find a mutually acceptable route for the transmission line.

## PROJECT UPDATE

Natural and built heritage, archaeological and other environmental studies required to support the Renewable Energy Approval (REA) application for the project have been completed and submitted to the Ministries of Natural Heritage and Tourism, Culture and Sport. These, as well as all of the draft REA reports, including the Project Description, Site Plan, Construction, Design & Operation and Decommissioning Reports have been made available for public review, question and comment online at [www.nexteraenergycanada.com/projects/goshen.shtml](http://www.nexteraenergycanada.com/projects/goshen.shtml) or at the offices of the Municipalities and the County. Questions/comments can be made on an ongoing basis to the project email address or by attending our upcoming Public Meetings on January 9 and 10, 2013 and speaking to one of our subject matter experts.

## NEXTERA ENERGY CANADA IN THE COMMUNITY

NextEra Energy Canada is committed to working with, and getting to know, our neighbours. This year, we had the opportunity to sponsor and meet some of you at the Gord Sprang Memorial and the Scatcherd Charity Golf Tournaments, the Hensall Fair and the Rotary Club's Autumn Indulgence event. We look forward to continued engagement with the community.

## THE FEED-IN TARIFF (FIT) PROGRAM

The Feed-in Tariff (FIT) program was created by the Ontario Power Authority (OPA) in an effort to encourage the development of renewable energy projects, such as wind and solar energy centres, in the province. The program was designed to promote investment in renewable energy projects thereby helping to build a reliable and sustainable energy system in Ontario. In addition, the FIT program supports the following objectives:

- Helps Ontario phase out coal-fired electricity generation by 2014 – the largest climate change initiative in Canada
- Boosts economic activity and the development of renewable energy technologies
- Creates new green industries and jobs

The FIT program has been in place for two years and, in that time, has undergone review

by both the OPA and residents of Ontario to identify necessary changes and ensure it is sustainable in the long-term. The OPA recently announced changes to the program, some of which are listed below. All of the changes are designed to:

- Continue Ontario's commitment to clean energy
- Streamline processes and create jobs
- Encourage greater community and Aboriginal participation
- Improve municipal engagement
- Reduce price to reflect lower costs
- Grow Ontario's clean energy economy

It is important to note that NextEra Energy Canada projects were awarded FIT contracts prior to the recent changes, and are subject to the original program requirements.

### KEY CHANGES TO THE FIT PROGRAM INCLUDE:

- Submission of applications only during an application window, and no longer on an ongoing basis
- Each application to be assigned points and prioritized based on applicant type, municipal support, Aboriginal support, project readiness and electricity system benefit
- Ten per cent of remaining capacity to be reserved for projects with significant participation from local or Aboriginal communities.
- Prices to be reduced by approximately 20 per cent for solar projects and 15 per cent for wind projects

For more information on the FIT program, please visit [fit.powerauthority.on.ca](http://fit.powerauthority.on.ca).

## FREQUENTLY ASKED QUESTIONS

**Q:** WHY ARE THE PUBLIC MEETINGS HOSTED AS OPEN HOUSES RATHER THAN THE TRADITIONAL TOWNHALL FORMAT?

**A:** NextEra Energy Canada hosts public meetings in the open house format to allow attendees to visit at any time during the event and to have one-on-one conversations with our subject experts. We have received feedback that this is valued. This format enables us to have a large number of questions answered throughout the event as opposed to only a few questions that may be addressed during a townhall-style meeting.

**Q:** WHAT ARE THE ECONOMIC BENEFITS OF WIND ENERGY?

**A:** Wind energy provides:

- Tax income to rural communities – to schools, libraries and other public services benefiting the entire community.
- Diversified income to farmers and ranchers, enabling them to continue using their land, as they always have to help feed the world. With wind energy, they are also helping power North America with clean, renewable electricity.
- Indirect income to local businesses, including motels, caterers and office supply companies.

**Q:** WHAT ARE THE ENVIRONMENTAL BENEFITS OF WIND ENERGY?

**A:** Wind energy:

- Is clean, relying solely on the wind to generate electricity – therefore, it creates no greenhouse gases or other air pollutants
- Uses no water resources to generate electricity
- Provides a renewable fuel supply
- Creates no waste by-products for disposal
- Results in no hazardous cleanup at the end of a project's productive life

\*For example, see: Ernest Orlando Lawrence and Berkeley National Laboratory - The Impact of Wind Power Projects on Residential Property Values in the United States: A Multi-Site Hedonic Analysis (Dec 2009) and CanWEA - Wind Energy Study - Effect on Real Estate Values in the Municipality of Chatham-Kent, Ontario (Feb 2010)

**Q:** WILL THIS PROJECT AFFECT THE PROPERTY VALUES OF OUR HOMES?

**A:** Multiple studies<sup>1</sup> have found that property values of homes are not impacted by the existence of a wind facility in the area. According to the 2010 study 'Effect on Real Estate Values in the Municipality of Chatham-Kent', Ontario:

"In the study area, where wind farms were clearly visible, there was no empirical evidence to indicate that rural residential properties realized lower sale prices than similar residential properties within the same area that were outside of the view-shed (the area in which the turbines can be seen) of a wind turbine. No statistical inference to demonstrate that windfarms negatively affect rural residential market values in Chatham-Kent was apparent in this analysis."



## ENVIRONMENTAL STUDIES UPDATE: AVIAN MONITORING

As part of the facility siting and pre-construction activities, studies completed by independent consultants help uncover potential issues related to birds, bats and the selected site. Specialized consultants collect the following information on birds and bats in relation to candidate sites:

- Current use of the site, including important seasonal or specialized wildlife habitats
- Threatened and endangered species present in the areas
- Existing records of species in the area
- Bird/bat habitat
- Potential risks
- Recommendations for studies
- Interviews with agencies and environmental organizations

In addition, we assess any nearby wetlands and determine local permitting requirements relating to environmental protection. We avoid or minimize impacts to wetlands, a common habitat for many species of birds, and other environmentally sensitive areas during siting and layout of the project.

Through these efforts, we help to identify the:

- Number and type of birds/bats present at a proposed site
- Behaviour of birds/bats while they are present at the project site
- Possible risks to birds/bats

If issues are identified during the evaluation phase, we take corrective action, such as:

- Modification of turbine layouts to avoid wetlands
- Establishing setbacks
- Reducing potential for raptor collision by utilizing best available data
- Avoiding inter-waterway flight paths or sensitive contiguous habitats for grassland birds
- Moving individual turbine locations to reduce potential collisions

Finally, the REA submission will include an Environmental Effects Monitoring Plan (EEMP) to monitor potential impacts on bird and bat species during the first three years of commercial operations.

# SELECTING A WIND FARM SITE

Selecting a site for a wind farm involves many steps. The ultimate objectives of choosing a site are to make certain there is minimal impact to the environment and community and – only when this is ensured – identify areas with the best potential to generate electricity from wind.

The team responsible for selecting a site considers a number of factors. Each factor is critical in the decision making process and can be broadly separated into two categories:

1. What features are required to meet the needs of a wind energy site (logistical and regulatory)
2. What features must be avoided to meet the needs of a wind energy site (logistical and regulatory)

### FEATURES REQUIRED

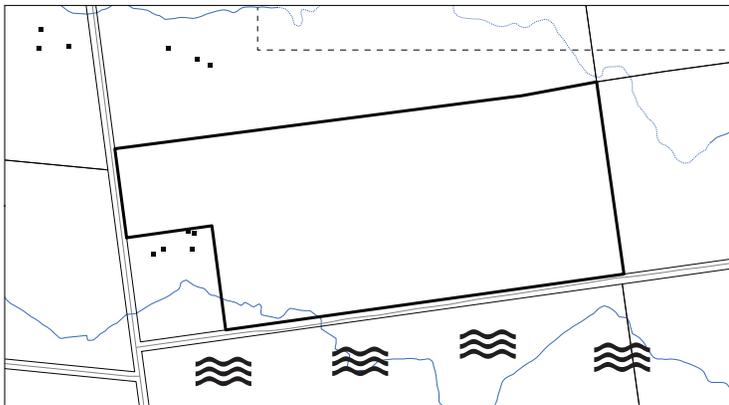
- Land situated near a consistent wind resource (steady flow of wind)
- Access to and availability on high voltage transmission lines (to transmit wind energy from the turbine to the power grid)
- Land owners willing to participate in the project

### FEATURES THAT MUST BE AVOIDED

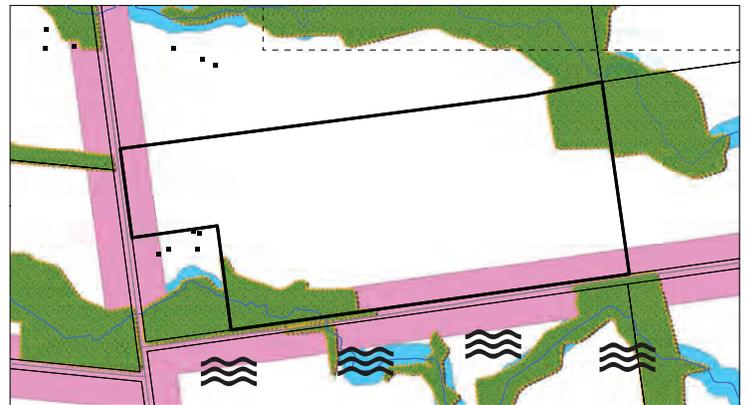
- Natural features such as wooded areas, wetlands, wildlife habitat
- Aquatic features such as streams and water bodies
- Infrastructure such as roads, railways, property lines, and houses that do not want to participate in the wind project

The image below shows how different factors – including features required and features to be avoided – each contribute to how a site is selected.

**STEP 1:** Identify site with all required features



**STEP 2:** Identify biological, aquatic and local infrastructure constraints



**STEP 3:** Identify residences and property lines. Conduct community consultation and then site wind farm in remaining space



### LEGEND

#### Required site features

- Close to wind source
- Access to transmission lines
- Available land/participating landowners

#### Features to be avoided

- Biological constraints
- Aquatic constraints
- Local infrastructure constraints
- Land (residence/property line) constraints

#### Final wind farm site

- Turbine collection line
- Wind turbine

NextEra Energy Canada is committed to meeting or exceeding all of the regulatory requirements and working with the community to ensure we select the most appropriate sites for generating wind energy.