

Ostrander Point Wind Energy Park



WELCOME

to the

Ostrander Point Wind Energy Park

PUBLIC OPEN HOUSE

August 28, 2008

4:00pm - 6:00pm and 7:00pm - 9:00pm

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Please Sign In

Please sign in at the front desk.

**If you would like to be included on our mailing list
and receive future notices regarding this project
please also provide your mailing address and/or email.**

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What is the Purpose of this Open House?

- To update you on the status of the Ostrander Point Wind Energy Park Project and the Environmental Screening Process.
- To share with you the results of the studies that have been completed to date.
- To receive stakeholder input on the Project and identify stakeholder issues to be considered during the Environmental Screening Process.

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About Gilead Power

- Gilead Power Corp. (Gilead) is an Ontario-based, renewable energy development company dedicated to converting biomass, wind, and hydro into clean energy for Ontario.
- Focused on collaborating with the local community and government agencies to responsibly develop sustainable energy solutions.
- Committed to working in a spirit of openness and to build strong ties with communities in which they operate.

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What is Gilead Planning to Build?

- Gilead is working to develop up to 12 wind turbines on the Ostrander Point Crown Land Block in Prince Edward County.
- These turbines will have the capacity to generate approximately 20 MW of clean, renewable energy for the Province of Ontario.
- This is enough energy to power 5,000 typical homes (1 MW = 250 typical homes).

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The Ontario Government and Renewable Energy

- The Ontario Power Authority (OPA) is responsible for determining the long term energy supply mix for the Province of Ontario.
- Through the Integrated Power System Plan, the Government of Ontario has set targets of doubling the amount of energy derived from renewable sources by the year 2025 and specifically increasing the amount of renewable energy produced by 2,700 MW by the year 2010.
- To reach these goals, the government has committed to increase the energy derived from wind by 1,251 MW by the year 2010, and is planning another increase of wind energy by 3,039 MW by the year 2025.

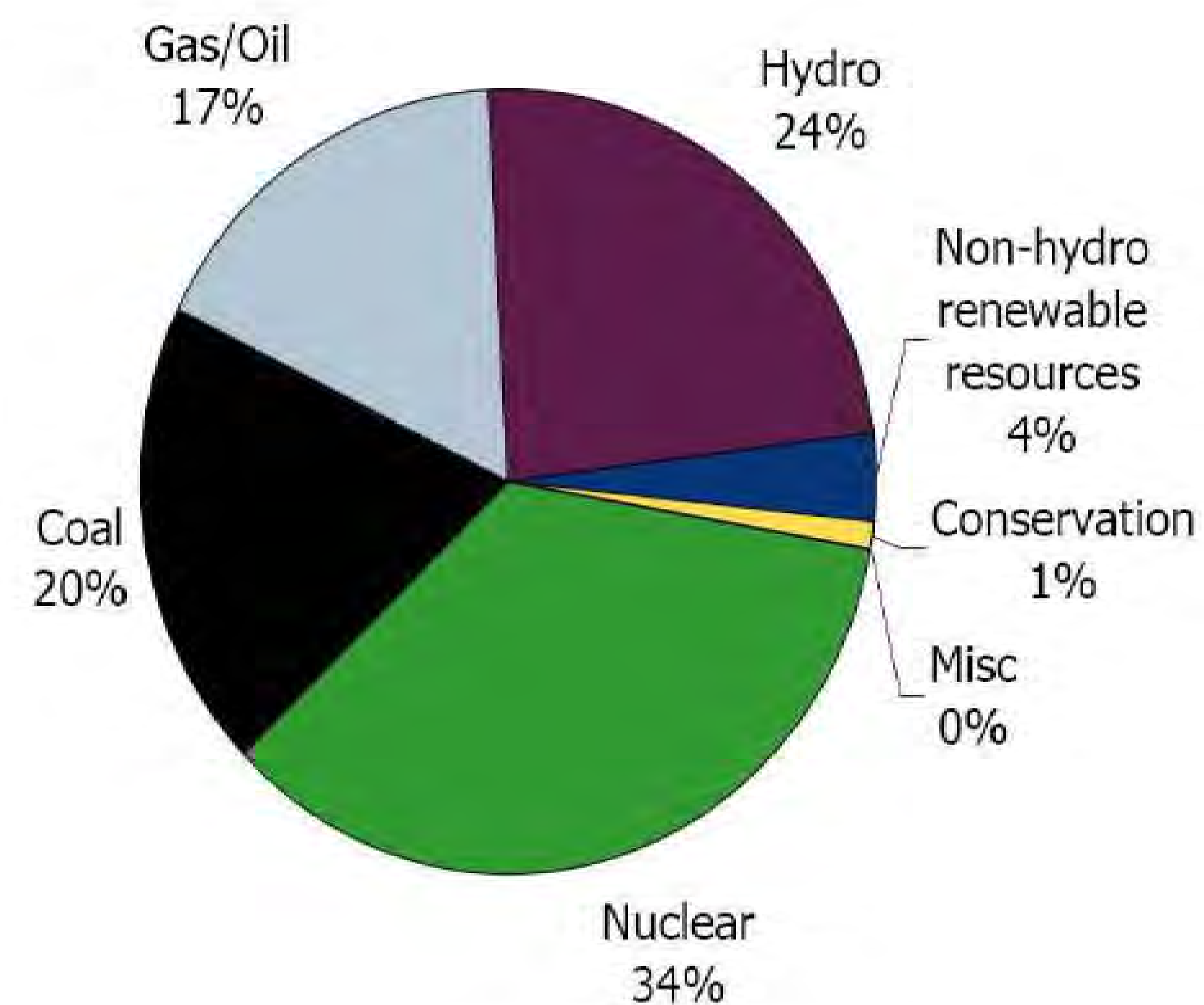
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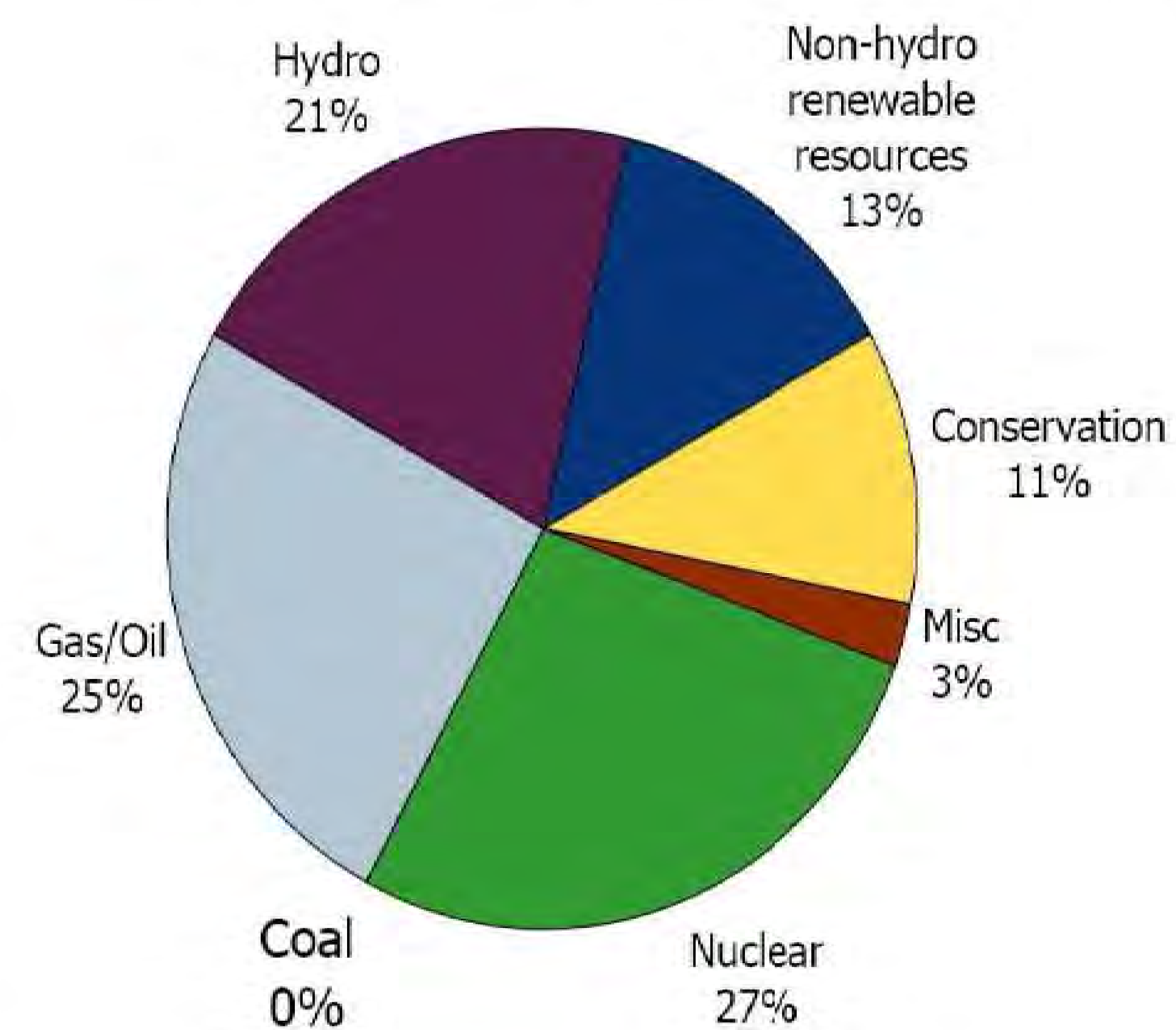
Ontario's Energy Mix

- As of August 2007, 395 MW of energy was derived from wind, thus illustrating the need for new wind power developments in order to meet Ontario's objectives.
- It is through renewable initiatives, like the Ostrander Point Wind Energy Park, that the Government of Ontario is working to achieve its energy objectives.

Installed Generation and Conservation 2007



Planned Generation and Conservation 2027



Source: Ontario Power Authority. 2007.

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Prince Edward County and Renewable Energy

- Prince Edward County has adopted the principles of sustainable development and this Project will establish Prince Edward County as a contributor in the effort to bring clean, renewable energy to the Province of Ontario.
- The Project is consistent with the Provincial Policy Statement, which strikes a balance between environmental sustainability and the economic and social well being of Ontarians.
- The Municipal Economic Development Office has identified wind projects as a way to stimulate economic development.
- Through wind power development, Prince Edward County and its residents can set a positive example and become part of the solution to global climate change.

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Economic Benefits

- The following benefits to the local community may be expected:
 - Increased employment is expected for the local area during the Construction Phase;
 - Use of local goods and services during the Construction Phase of the Project;
 - An increase to the local tax base from annual municipal property assessment while limited to no increased demand on local services such as garbage collection and water/wastewater service; and,
 - Additional revenue to the Province through land lease payments made by the Project.

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Environmental Benefits

- The following are the environmental benefits of wind energy:
 - It is pollution free.
 - It doesn't contribute to smog or acid rain.
 - Compared to other forms of conventional electricity generation, wind power leaves a small environmental footprint; and,
 - Generating energy from wind leaves behind no hazardous or toxic wastes, uses no water and doesn't contribute to climate change.

Environmental Impact of Electricity Sources Summary Table

	Wind	Nuclear	Coal	Natural Gas
Global Warming Pollution	None	None	Yes	Yes
Air Pollution	None	None	Yes	Limited
Mercury	None	None	Yes	None
Mining/Extraction	None	Yes	Yes	Yes
Waste	None	Yes	Yes	None
Water Use	None	Yes	Yes	Yes
Habitat Impacts	Yes	Yes	Yes	Yes

Source: AWEA/fact sheets/Wind Energy and Wildlife/If Not Wind, Then..?

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About the Environmental Screening Process

- The Environmental Screening Process (ESP) is a self-assessment process, outlined by the Ontario Ministry of the Environment for electricity projects under Ontario Regulation 116/01 of the Environmental Assessment Act.
- Through the ESP, all projects are required to undertake an Environmental Screening; projects which require further study, are subject to an Environmental Review.
- As a result of the more detailed studies and assessment being undertaken for the project, Gilead has voluntarily elevated the Environmental Screening Report to an Environmental Review Report (ERR).
- The ERR will be a comprehensive document that will include multiple separate technical studies.
- Gilead believes an ERR is the appropriate level of assessment for this renewable energy initiative.

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Other Key Approvals Needed for the Project

Permit / Authorization	Administering Agency	Rationale
Aeronautical Obstruction Clearance	Transport Canada - Aviation Division	Turbine marking and lighting
Land-Use Clearance	NAV Canada	Aeronautical safety mapping and designations
Certificate of Approval - Air	Ministry of the Environment	Environmental noise emissions Archaeological and heritage resources
Archaeological Clearance	Ministry of Culture	Area has archaeological potential
Regulation of Development, Interface with Wetlands and Alterations to Shorelines and Watercourses	Quinte Conservation Authority	Work within wetlands, floodplains, watercourses, and shorelines
Land-Use Permit	Ministry of Natural Resources	Disposition of Crown lands
Leave-to-Construct	Ontario Energy Board	Development of a 44 kV transmission facility

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Socio-Economic Studies

- Hardy Stevenson and Associates Ltd. is conducting a Socio-Economic Impact Assessment (SEIA) for the Project.
- SEIA's identify potential impacts of projects on the surrounding community. SEIA's also provide recommendations for mitigation of issues over the course of a project.
- Preliminary observations indicate that Prince Edward County's regional economy is characterized by tourism, recreation, arts and culture, agriculture (notably viticulture), and cattle operations.
- A door-to-door survey was conducted from Aug. 20 to Aug. 23 in the immediate vicinity (up to 2.5 km) of the proposed site. The preliminary findings indicate that:
 - Two thirds of the residents are permanent (66%) and the remaining (34%) are seasonal residents.
 - People often expressed appreciation for the natural landscape and quietness of the way of life.
 - Most people interviewed are in favour of wind energy being installed in the community; 62% (compared to 89% in favour of wind energy being installed in Ontario).
 - 22% are not in favour of wind energy in the community (compared to 8% not in favour of wind energy being installed in Ontario).
- Noise (during construction and operation) and visual impacts are the two issues that interviewed residents identified as being their main concerns.

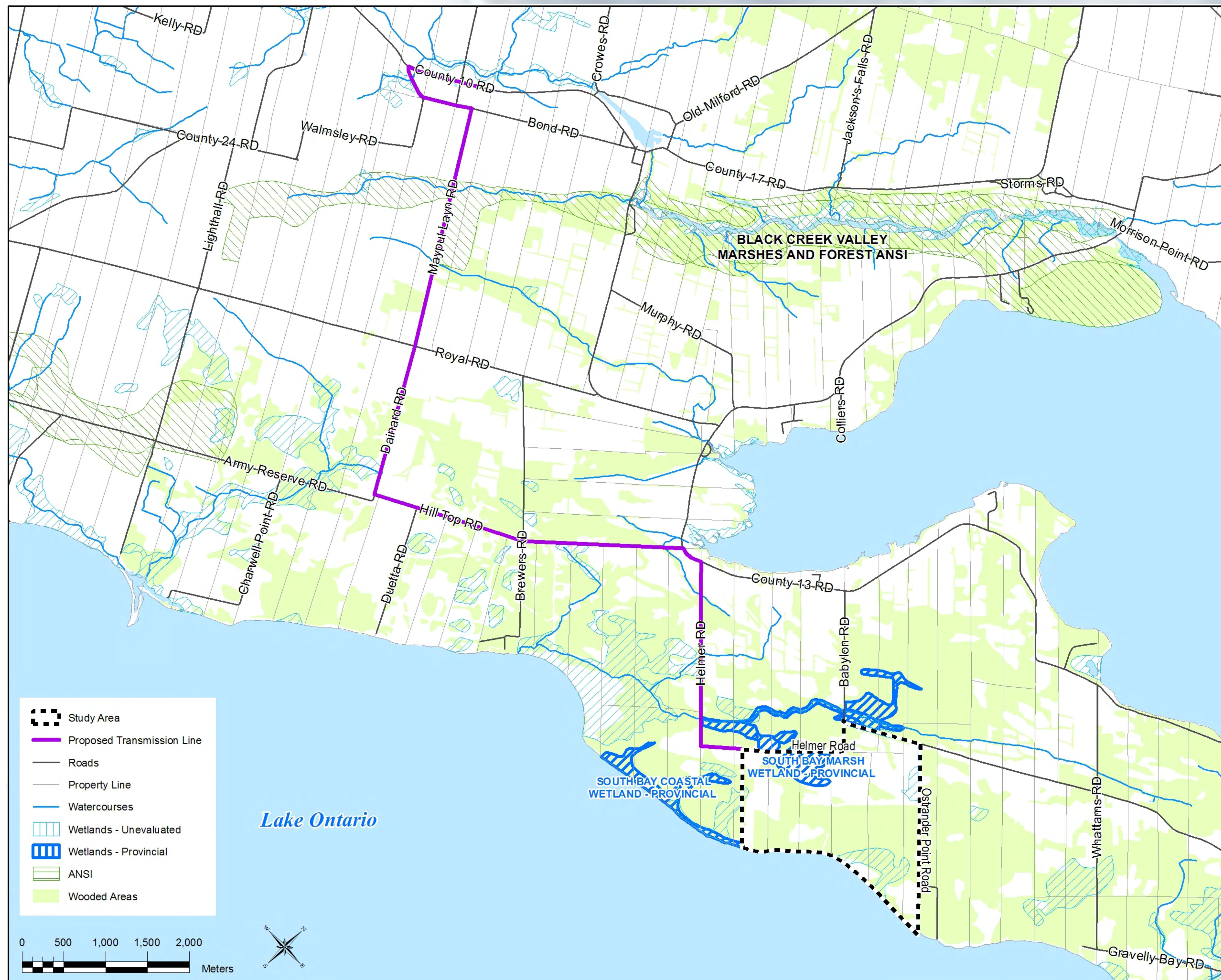
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Environmental Research

- Technical research such as bird, bat and aquatic studies have been and continue to be carried out on site (amphibian surveys, a staging waterfowl study during spring migration and breeding bird work was completed in the spring and summer of 2008).
- A radar study of spring migration was completed in cooperation with Acadia University in May of 2008. The results are currently being analyzed. A radar study of fall migration is ongoing in conjunction with an acoustic study of bats.
- Few waterfowl were observed within the Study Area and the breeding bird community in the Study Area was characteristic of scrubland, with few grassland birds. No rare or significant bird species are known to occur in the Study Area. Blanding's turtle, a federally and provincially threatened species, has been found within the Study Area.
- Additional studies include: shadow flicker analysis, environmental noise impact assessment, property value assessment and visual impact assessment.
- Ontario data suggests that wind farms have a neutral or positive effect on property values; which is consistent with international trends and experiences.
- Gilead will be adhering to the most stringent noise guidelines during the operation of the wind plant.

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**Natural and
Socio-Economic
Features**

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Visual Impact Assessment

- A Visual Impact Assessment with photorealistic simulations has been done to understand and illustrate the extent of potential visual change that the proposed Project will have on the surrounding landscape.
- The visual simulations are photorealistic depictions of proposed wind turbines within the landscape.
- The simulations are an important communication tool because they illustrate the existing conditions as well as the potential visual change for the proposed wind energy project in an accurate and realistic way, long before construction occurs.
- The simulations represent a number of different vantage points in order to illustrate a wide range of views towards the Project.
- Based on feedback from the first Public Open House and stakeholder comments, the visual impact assessment has been improved and an additional recommended vantage point was added.

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Visual Simulations

Vantage Point 1



Vantage Point 2



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Visual Simulations

Vantage Point 3



Vantage Point 4

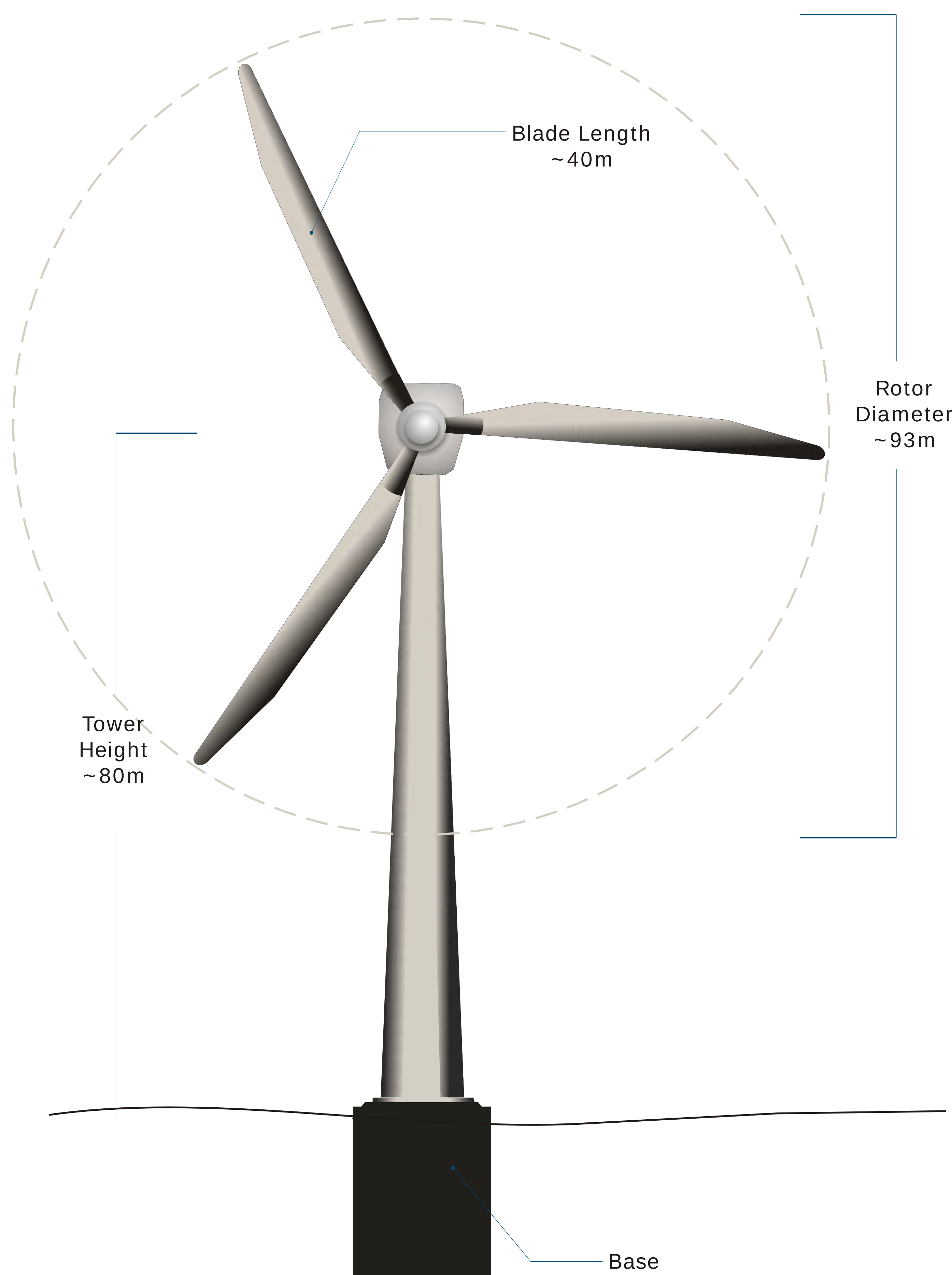


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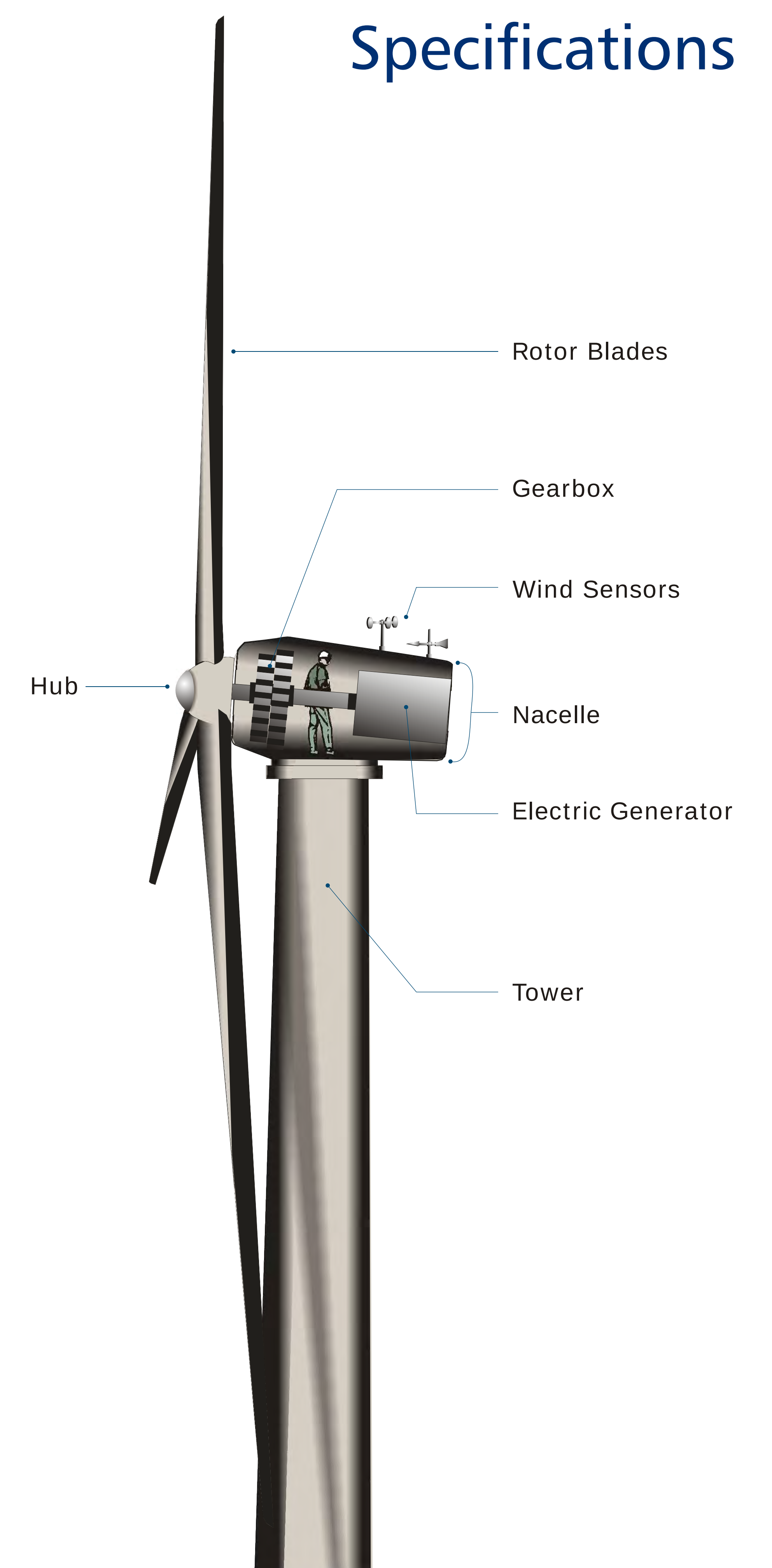
What a Typical Wind Turbine Looks Like

Approximate Dimensions



1. Main Carrier
2. Yaw Motors
3. Annular Generator
4. Blade Adaptor
5. Rotor Hub
6. Rotor Blade

Specifications



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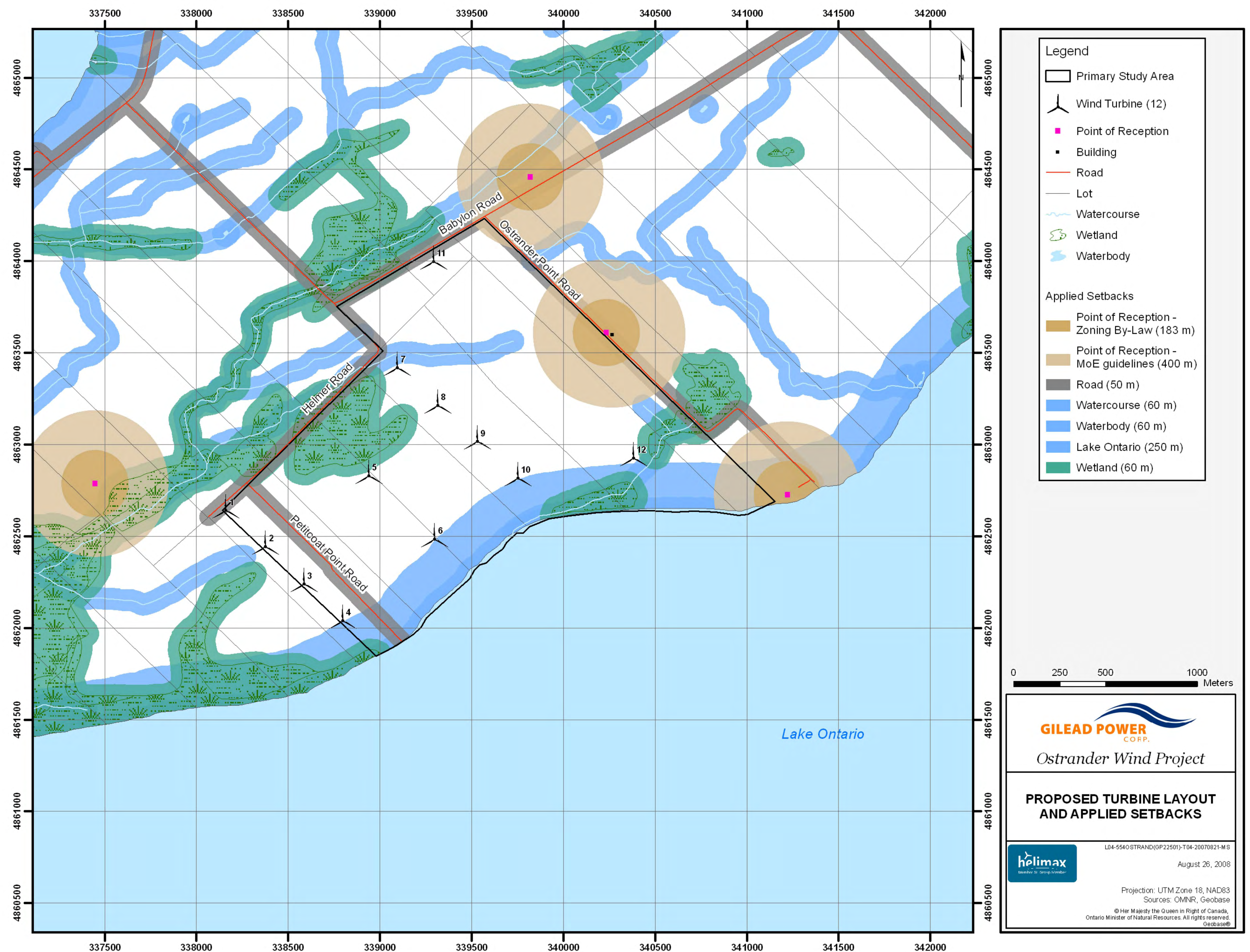
Turbine Siting

- Siting wind turbines and other project infrastructure is a complex process that involves many factors and variables.
- Consistent with the principles of avoidance, setbacks ensure that environmental and social constraint areas will be avoided to the greatest extent possible.
- The following setbacks were applied in the siting of the turbines:
 - Point of Reception - 400m
 - Road - 50m
 - Property Line - 50m
 - Watercourse - 60m
 - Waterbody - 60m
 - Lake Ontario - 250m
 - Wetland - 60m

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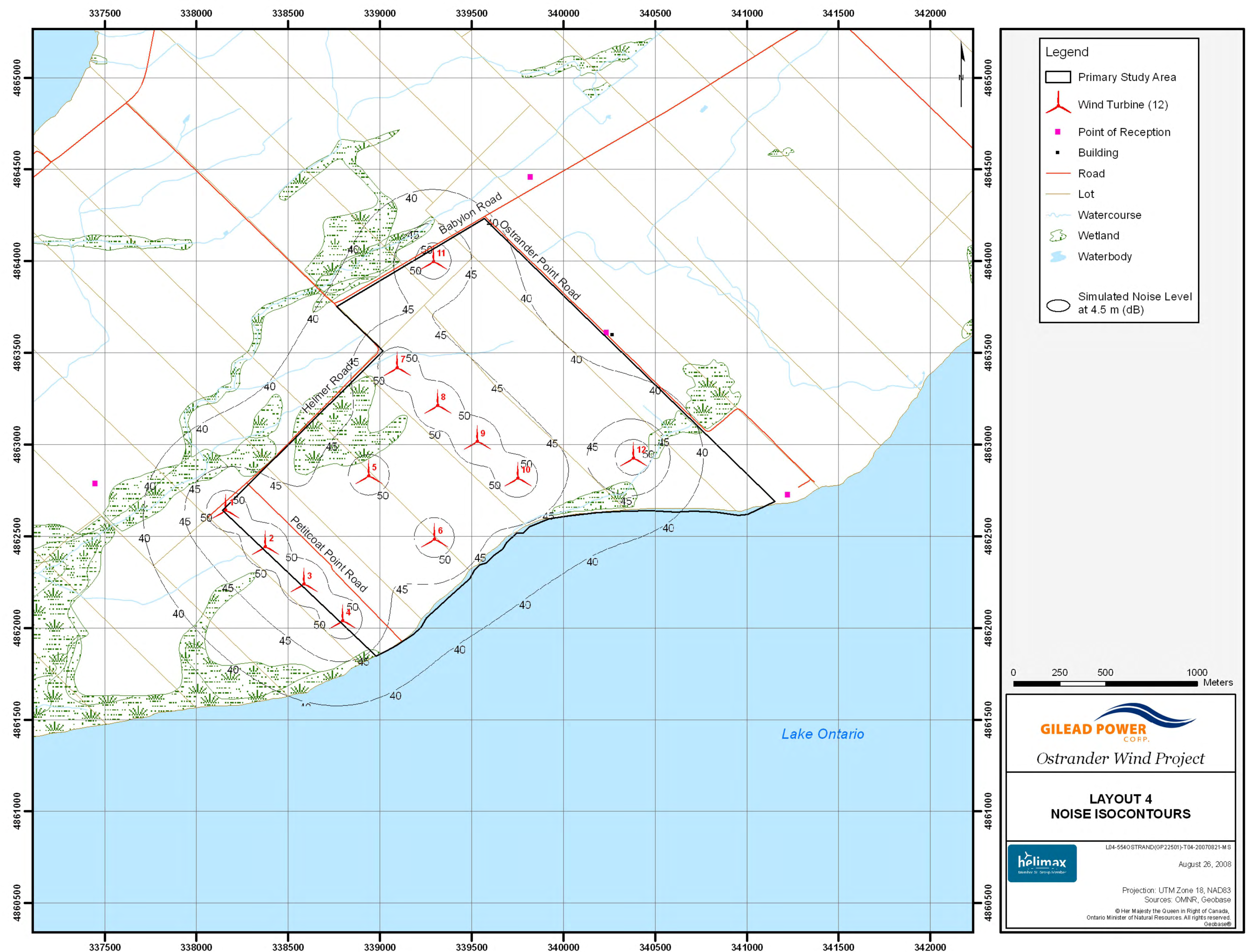
Proposed Turbine Layout



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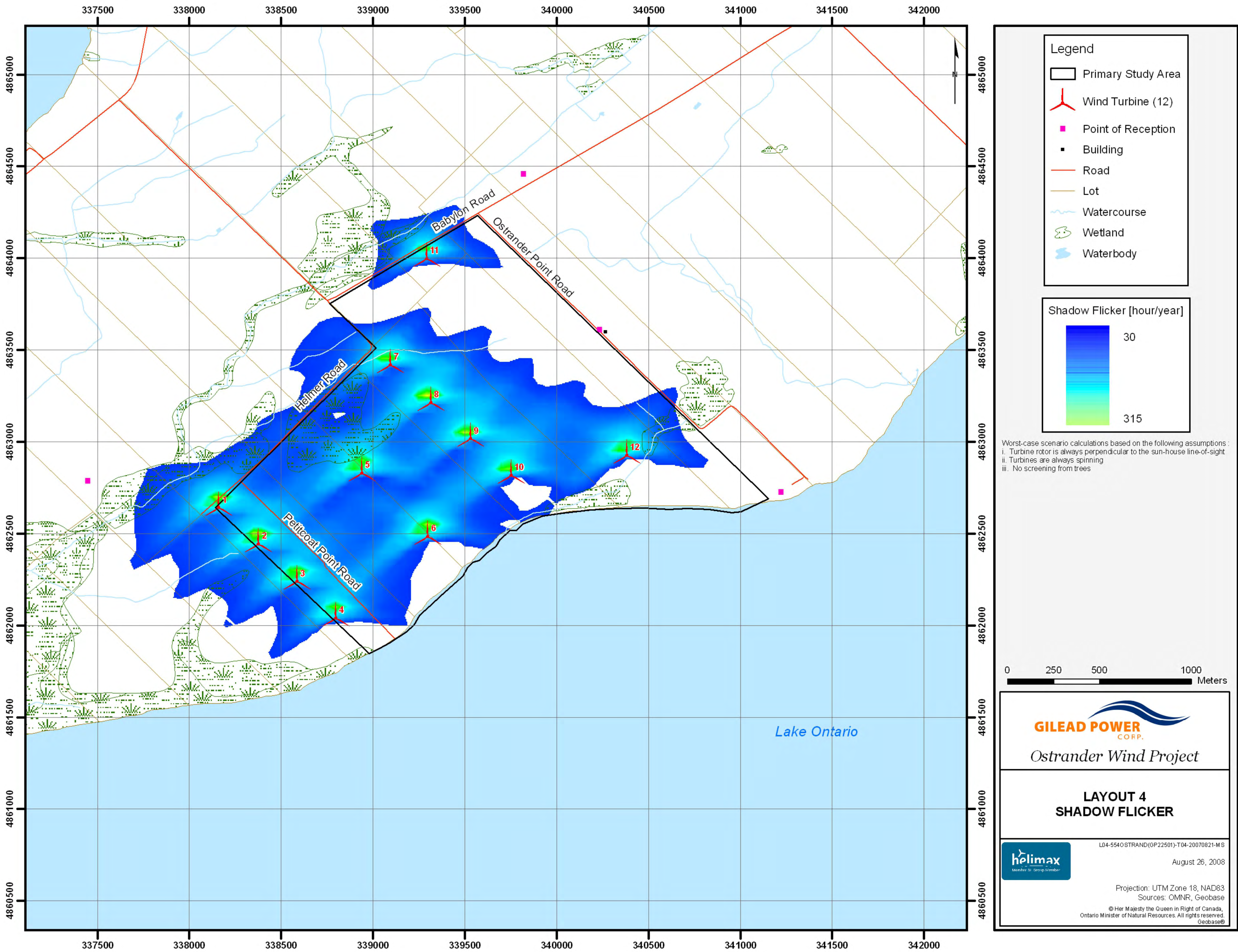
Proposed Turbine Layout and Noise Contour



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Proposed Turbine Layout and Shadow Flicker



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Transmission Lines

- Electricity produced by the turbines will be connected to the proposed Ostrander Point Substation via an on-site collection system of 13.5 kV lines - further work will be conducted to determine whether these lines will be located above or buried below ground.
- The 44 kV transmission line proposed to connect the Project's substation (to be located near the turbines) to the Milford Distribution Station is currently proposed as a road pole line, similar to the existing distribution lines within the area.

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Anticipated Schedule

- Release of Draft ERR for stakeholder review is anticipated for November/December 2008.
- Key construction dates:
 - Surveying and Site Layout - early Summer 2009
 - Development of access roads - late Summer 2009
 - Laying underground collector lines (if required) - Fall 2009
 - Foundation excavation and pouring of turbine foundation - Fall 2009
 - Construction of transmission line - Winter 2010
 - Turbine delivery - Winter 2010
 - Equipment lay-down and turbine assembly - Winter 2010
 - Clean-up and reclamation - Spring 2010
 - Turbine operation - Spring 2010

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Your Input is Important

- Please share your questions/comments with us by filling out a questionnaire/comment card.
- Please feel free to take extra questionnaires/comment cards with you and share them with friends and family.
- You can further contact us by:
 - Fax: 519-836-2493
 - Website: www.gileadpower.com
 - Email: ostranderpoint@stantec.com
 - Phone: 519-836-6050 (call collect)
 - Or write to us:
Stantec Consulting Ltd.
Attn: Mark Kozak
Project Manager
361 Southgate Drive
Guelph, Ontario
N1G 3M5

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Thank You

- Thank you for attending our Public Open House
- We hope that we have answered all of your questions and that you have learned valuable information about our Ostrander Point Wind Energy Park
- Copies of the display boards are available on the Project website (www.gileadpower.com)

