

## Wind Project – FAQ

### Agricultural and Environmental Preservation

#### How much farmland will be taken out of use?

Depending on the access design the total footprint for the turbine base and access road usually takes up between 1 and 2 acres. The turbine base itself typically occupies less than half an acre. Where possible, existing access roads and tracks will be upgraded to minimize impacts. The surrounding land will remain in agricultural use. Following the decommissioning of the project the area used for the wind project is restored to its original state and can be used as farmland again.

#### How might wind turbines affect existing farming activities?

The potential effects of wind projects can vary since each farm and project is unique. wpc Canada is committed to collaborating closely with landowners and farmers to understand their operations, address their concerns, and incorporate their insights into the design process.

Wind projects typically require minimal land. Livestock can graze and crops can be harvested in close proximity to a turbine. Furthermore, studies have demonstrated that wind project operations do not negatively impact livestock.

#### What steps will minimize wildlife impact?

In accordance with provincial guidelines, preliminary layouts generally avoid the placement of infrastructure (such as turbines and roads) on pre-existing natural features and habitats to mitigate the impact on high-value environmental features. Several impact assessments, including Environmental Impact Assessments, will be conducted to assess the potential impacts and to establish mitigation measures. Assessments are conducted pre-construction and post-construction for up to three years. Please refer to project webpages, for more information on project-specific impacts and assessments.

### Safeguarding Water Sources

#### How will water contamination be prevented?

Before construction commences, a geotechnical study is completed at the potential turbine sites to determine ground water depth and the necessary parameters required for foundation design. For stability reasons, turbine foundations cannot be built in

areas where the groundwater is too close to the surface. If water is encountered during construction, good construction practices will be used, such as minimizing the length of time that the excavation is open and monitoring seepage.

A comprehensive stormwater management plan will be developed as well and implemented during construction to prevent any runoffs or spills by utilizing construction best practices like silt fences.

## **Noise and Health Effects**

### **Could wind turbine noise cause adverse health effects?**

Extensive global research, including studies by Health Canada, show no direct association between wind turbine and adverse health effects.

Wind projects are designed to operate at noise levels equal to or lower than outside noise levels when located at appropriate setback distances. The sound impacts from wind turbines are governed by strict regulatory guidelines. Any proposed project is required to demonstrate that sound levels experienced at dwellings will not exceed these regulated limits prior to operation. This must also be demonstrated during operation and mitigation measures implemented if a project is found to be non-compliant.

Here are links to a few studies that have been carried out to assess whether wind turbine have any impact on health.

- The Municipality of Kings County in Nova Scotia undertook an expert review of the potential health and safety impacts from large-scale wind turbines. [Report http://www.countyofkings.ca/residents/planning/windturbines.aspx](http://www.countyofkings.ca/residents/planning/windturbines.aspx) – “2012.05.17 Final consultants report” under “Project Reports”.
- [“Spatio-temporal differences in the history of health and noise complaints about Australian wind projects: evidence for the psychogenic, “communicated disease” hypothesis”](#) by Simon Chapman, professor of public health at Sydney University. This study suggest that health problems attributed to wind energy are a “communicated disease” – or a sickness spread by the suggestion that something is likely to make a person sick.
- [A report released by the South Australian Environment Protection Authority \(EPA\)](#), concluding that “...the level of infrasound at houses near the wind turbines assessed is no greater than that experienced in other urban and rural environments, and that the contribution of wind turbines to the measured

infrasound levels is insignificant in comparison with the background level of infrasound in the environment.”

- Ontario’s Chief Medical Officer of Health: According to the scientific evidence, there is no direct causal link between wind turbine noise and adverse health effects. (Summary P.3 / Wind Turbine Regulation in Ontario P.8-9 / Main Conclusions P.10) [The Potential Health Impact of Wind Turbines](#)
- In 17 Canadian hearings to date “courts found that wind projects would not and do not cause health impacts,” concluded in a [review by the Energy & Policy Institute](#).

## Setback Planning

### How are wind project locations selected?

Various factors are considered when selecting a site for a potential wind project. Sites need to have adequate wind resource, proximity to transport and electrical infrastructure and sufficient open space to host the project components. Once an area of interest is identified projects must be designed to comply with setback distances from pre-existing environmental features. Setback distances are established by the Ministry of the Environment, Conservation and Parks. Examples of setback requirements include:

Feature	Setback Requirement
Non-participating receptor (Receptors are existing buildings (e.g. homes) or vacant lots that are or could potentially be used for overnight accommodation or as an educational facility, health care facility, day nursery or place of worship)	550 metres from turbine base
Public road right-of-way and railway right-of-way	Turbine blade length plus 10 metres from turbine base
Significant woodland	120 metres
Significant wildlife habitat	120 metres

Provincial Parks	Turbine blade length plus 50m
National Parks	Turbine blade length plus 50m

## **Property Values**

### **Have studies evaluated the impact of wind turbines on property values?**

Numerous studies have assessed the potential impact of wind turbines on property values. There are several factors which may affect the value of a property, making it challenging to determine the impact of any single factor. However, studies have found no evidence that wind energy projects are having negative effects on property values. Below are links to a few of these studies:

- [2012 Assessment Base Year Study conducted by the Municipal Property Assessment Corporation \(MPAC\)](#) found no statistically significant impact on the sale prices of residential properties near wind turbines due to their proximity.
- Assessment Review Board: In the Assessment Review Board hearing, MPAC argued that there was no evidence to show that construction and operation of wind turbines had reduced the current value of the landowner's property. [Decision of the Assessment Review Board, File No: WR 113994. Township of Frontenac Islands \(P.36\)](#)
- Canning Consultants Inc. conducted a study of 83 properties in the Chatham-Kent region. They discovered that, in areas where wind farms were visible, there was no empirical evidence showing that rural residential properties sold for lower prices than comparable residential properties located outside the view shed of a wind turbine within the same area. - [Wind Energy Study – Effects on Real Estate Values in the Municipality of Chatham-Kent, Ontario](#)

## **Community Consultation and Transparency**

### **What steps are being taken to ensure meaningful consultation?**

We will provide stakeholders clear and timely information regarding projects to ensure meaningful consultation through various channels. Information could be shared through open houses, emails, newsletters, and project websites. Additionally, we will provide stakeholders opportunities to make inquiries and/or to offer feedback. Project teams will assess, review, and respond to feedback received promptly.

## **Project Benefits**

### **How will the community benefit from the wind project?**

Our projects provide various benefits to host communities such as job creation, increased tax revenues and indirect economic benefits through increased revenues for local service industries as well as increased activity during construction and operational phases.

When wpc Canada engages with a community, we make an effort to learn about and meet the needs of the locals by talking to residents, business owners, and government officials. We will tailor local support initiatives or community benefit programs based on the feedback received from hosting communities. We are committed to contributing to the communities that host our project and will support local initiatives during all phases of our project.

## **Public Safety**

### **What safety measures are in place for incidents like ice throw or equipment failure?**

Advanced monitoring systems detect when there is excessive ice build up on the blades and shut the turbines down to reduce the risk of ice throw. Turbines automatically shut down in extreme weather conditions, and regular maintenance ensures safety mechanisms are operating correctly.

## **Minimizing Construction Impacts**

### **What disruptions could residents expect during construction?**

Impacts may differ between different project sites; however, they could include temporary disruptions, including increased traffic and noise. Public roads will be used to deliver building components and materials during construction. Project teams will consult municipalities within the project area and submit a traffic management plan for their review before construction starts. Notifications will be sent to community members to inform them of potential impacts as construction activities are scheduled.

### **How will sensitive soils be managed?**

An Agricultural Impact Assessment (AIA) will be conducted by a third-party for all projects located on Prime Agricultural Areas during the planning phase. The assessment will assess soils and include mitigation measures to minimize potential impacts. Site-specific conservation measures could include topsoil salvage and erosion control.

## **End of Life and Decommissioning**

### **What is the plan for decommissioning?**

The Project's owner operator is responsible for decommissioning and any associated costs. Decommissioning requirements are captured under contractual obligations through provincial and municipal permitting processes and our host landowners. Each project will have its own comprehensive decommissioning plan to safely dismantle turbines, remove infrastructure, and restore land accordingly.

### **Will landowners have a say in post-decommissioning land use?**

Yes, landowners will be consulted to align restoration efforts with their preferences.