



Des Sources Wind Project Potential Impacts

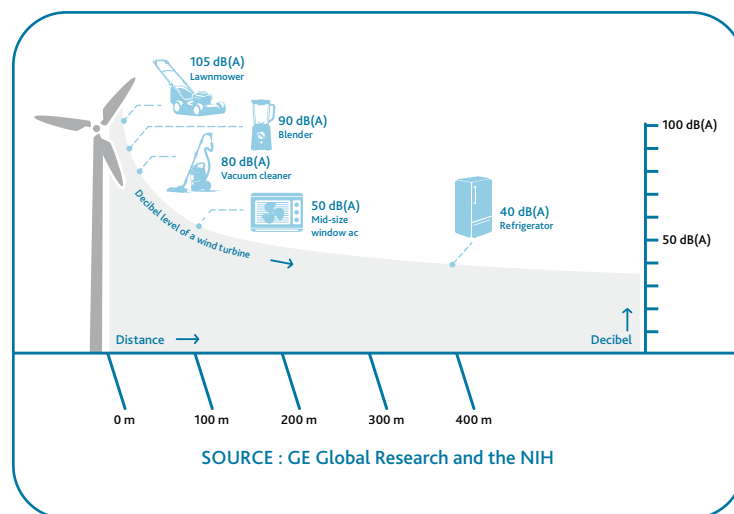
For all our projects, including the Des Sources Wind Project, we have a long-term vision and our team works in close consultation with government agencies and key stakeholders to site, build and operate our facilities responsibly. The project has the potential to generate significant economic and social benefits for the entire community, in addition to producing renewable energy locally. However, as with any form of development, there are impacts on communities. In order to avoid and minimize these impacts, BluEarth is committed to working with your community.

Below, are some of the most frequently asked questions around the project's potential impacts.

Do wind turbines make a noise?

Wind turbines emit a noise that varies and diminishes rapidly with distance. This noise depends on a variety of factors, such as the turbine model, project configuration, wind conditions, land cover (presence of forests, buildings, etc.) and surrounding topography. The graphic illustrates how the noise level varies based on the distance from a turbine, as well as how the noise level compares with various other objects.

The Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP) sets a noise limit of 40 decibels (dBA) outside each residence across the entire site of a project, which is equivalent to the sound of a refrigerator. Throughout the development of the project, sound impact modelling will be conducted to ensure that the appropriate distance from residences is maintained and to guarantee a noise level below 40 dBA outside existing residence. These impact studies will include an assessment of the project's sound impact based on detailed noise modelling and a study of the existing sound climate. Furthermore, a noise assessment will also be completed once the project is installed to verify the project is compliant with MELCCFP limits.



Do turbines have an impact on human health and sleep?

Human health remains one of our priorities, and the Des Sources project will be developed to meet or exceed all regulations and guidelines designed to protect human health. Research by organizations such as the Institut national de santé publique du Québec (INSPQ)¹ and the World Health Organization (WHO)² has established that below an exposure limit of 45 decibels (dBA) for residences wind turbines do not pose a risk to human health. The noise limit set by the Quebec government is 40 dBA, which is lower than the recommendations of the INSPQ and the WHO, ensures that the Des Sources project would not have any negative effects on health and sleep.

Would a wind project have an impact on the landscape?

Yes, the construction of wind turbines has an impact on the landscape. Throughout the project development, we will present updated visual simulations of the project, which will help visualize the layout of wind turbines in the landscape, such as the 2023 Saint-Georges-de-Windsor example presented here. It will then be possible to discuss and collaborate on project modifications to reduce potential visual impacts.



Would a wind project have an impact on property values?

Numerous studies conducted in Canada and the United States regarding the impact of wind energy projects on property values have shown that the establishment of a wind farm has little to no long-term negative impact on the values of surrounding properties. Most research concludes there is no impact on property values, however there is a small amount of research that shows an increase in property values and small amount of research that shows a temporary decrease.

For more information

- The American Clean Power Association (ACP) has produced a factsheet that summarizing studies carried out in the United States on the impact of wind projects on property values. The document presents several studies showing impacts of wind facilities on property values. The factsheet can be accessed here : <https://bit.ly/ACP-PropertyValues>
- The Lawrence Berkeley National Laboratory in the United States conducted a study in 2013. This study found no consistent statistical evidence of a measurable impact on sale prices from the operation of wind facilities. The study can be accessed here : <https://bit.ly/Berkeley-PropertyValues>
- A study conducted in Ontario in 2014 reached similar conclusions. The study can be accessed here : <https://bit.ly/Ontario-PropertyValues>
- Most recently, a 2023 University of California study confirmed that there is no significant impact to property values approximately 5 years after the start of operations. The study concluded that the implementation of a wind facility has a negative impact when a project is announced, but that residences recover their values after a few years. The study can be accessed here : <https://bit.ly/UCalifornia-PropertyValues>

¹ Institut national de santé publique du Québec (2024). Éoliennes et santé publique : mise à jour 2023. <https://bit.ly/INSPQ-2023>

² World Health Organisation (2018). WHO Housing and health guidelines. <https://bit.ly/WHO-Guidelines2018>



Would turbines be located on agricultural land?

Yes, it is likely that some wind turbines will be located on farmland and so the project is being developed to avoid or minimize impacts on farming activities. BluEarth has experience developing on agricultural land and will apply that experience in the development of the Des Sources Project. The project is also being developed in compliance with the *Cadre de référence relatif à l'aménagement de parcs éoliens en milieux agricole et forestier*, developed by Hydro Quebec and the UPA.

Would a wind project have an impact on recreational and tourism activities?

Because of their small footprint, wind projects can co-exist well with recreational activities (hiking, hunting, snowmobiling, etc.). Local bylaws specify setbacks from recreational spaces including campgrounds, golf courses, outdoor centres, municipal parks, tourist accommodations and natural conservation areas. The area currently under study takes into account the various recreational and tourism activities present in the area, and the project is being developed in such a way as to avoid or minimize impacts on these activities. Consultations will be held with local recreation and tourism groups over the next few months to ensure that the project takes all recreational and tourism activities into consideration.

The Impact Study to be carried out in preparation for the BAPE will also include an assessment of the impact on this type of activity and will identify, where appropriate, mitigation measures to limit or even eliminate the potential impacts identified.

Would a wind project have an impact on wetlands?

We are developing the Des Sources Wind Power Project in such a way as to avoid or minimize impacts on the territory, particularly on wetlands. An environmental impact study will also be carried out if the project is selected by Hydro-Québec in a future request for proposals.

Would a wind project have an impact on wildlife?

The relationship between birds, bats and wind turbines has been extensively studied in Canada, North America, and worldwide over the last several decades, and is well understood. Wind energy projects, such as Des Sources, have a low impact on birds and bats when properly sited.

As part of the development of the Des Sources Wind Project, BluEarth initiated preliminary studies on birds of prey in April 2024 by conducting a nest inventory covering a radius of 20 kilometers around the study area. This inventory was completed by the environmental consulting firm ACTIVA Environnement and found no nests belonging to birds of prey. The inventory was carried out by helicopter, in accordance with the *Protocole d'inventaires d'oiseaux de proie dans le cadre de projets d'implantation d'éoliennes au Québec*, established by the Government of Québec.

The impacts on wildlife will continue to be analyzed during the impact study of the project and will be based on comprehensive field inventories, which will allow for the accurate identification of the species present in the project area and their habitats. These surveys will be conducted in the spring and fall and will include migratory birds, protected species, and bats. Follow-up studies are mandated by the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP) and may be conducted for several years after the wind project is in operation. In the event of a problem being identified, specific mitigation measures will be developed in collaboration with the MELCCFP.

Would a wind project have an impact on the environment?

As part of the project development, we will be carrying out an environmental impact study, which will analyze the project's potential impacts on flora and fauna, noise, recreational and tourism activities, and the landscape. This study must subsequently be analyzed by the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP). The Bureau d'audiences publiques en environnement (BAPE) will manage the public consultation process associated with the impact assessment.

The full impact study will be carried out if the project is selected by Hydro-Québec in a future request for proposals.

What regulatory processes are in place to oversee these types of projects?

All projects must go through the Bureau d'audiences publiques en environnement (BAPE) process, and obtain authorizations from the Commission de protection du territoire agricole du Québec (CPTAQ) and the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP). In addition, the development of wind projects on agricultural land must respect the *Cadre de référence relatif à l'aménagement de parcs éoliens en milieux agricoles et forestier*, developed by the Union des producteurs agricoles (UPA) and Hydro-Québec.

Will there be a BAPE?

Yes, all energy projects over 10 MW must go through the MELCCFP environmental authorization process.

Would a wind project generate electromagnetic fields or stray voltages?

The wind project's collector network would be grounded and buried underground, and so would emit a magnetic field much smaller than that of the existing electrical distribution network.

For more information on electromagnetic fields, please visit Hydro-Québec's website: <https://bit.ly/HQ-ElectromagneticFields>

Also, the project would not emit stray voltages as the cables would be inside protective sheaths and buried.

A stray voltage is a well-documented and much-discussed phenomenon in farming communities, especially those with many dairy farmers. To learn more about this phenomenon, we recommend you consult the practical guide developed by the Union des producteurs agricoles (UPA), the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec (MAPAQ) and Hydro-Québec. The guide is available here (in French) : <https://bit.ly/HQ-TensionsParasites>

For more information

For more information, please see the comprehensive FAQ on the project website: dessourceswind.ca.

If you have any further questions or concerns, please do not hesitate to contact us directly at projects@bluearth.ca.

About BluEarth

BluEarth Renewables Inc. is a Canadian independent power producer that develops, builds, owns, operates and acquires wind, hydroelectric, solar and energy storage facilities across North America. Our technologically and geographically diversified project portfolio totals more than 1 GW (gross) in operation, under construction and pre-construction, and more than 7 GW under development.

