

Wedgeport Wind Turbine Project

About the Project

Scotian WindFields is working towards installing a wind turbine in Wedgeport. The proposed project is located between Upper Wedgeport and Little River Harbour, just off Black Pond Road. Scotian WindFields is in the early stages of this multi-year project and is currently planning to collect data about the nature of the wind regime using a meteorological tower on the site. This study will help us learn about the characteristics of the wind and properly site the turbine.

The proposed capacity of the turbine we expect to put on site is just under 2 Megawatts, producing enough energy to power 500 to 600 households. The tower for this turbine is projected to be approximately 80 meters high, with each blade measuring about 45 meters in length.

Why we've contacted you

We understand some people have concerns about wind energy. We are here to listen to your concerns and help you understand the facts. Wind turbines are not a new technology, but they may be new to your area. We are distributing this newsletter to inform you about the proposed project and to dispel some of the myths surrounding wind turbines. But this is just the beginning. This is the first in a series of informational letters and public meetings that will keep you in the loop. This project represents an important opportunity for Wedgeport to transition to renewable energy sources, and we are here to help foster a sense of community pride surrounding it.

Turbines near Wedgeport

The nearest large wind turbines to Wedgeport are located at Pubnico Point Wind Farm, near Lower West Pubnico. These turbines is about the same height and size of the turbine that Scotian WindFields intends to install near Wedgeport, and has been in operation since 2005.

Visiting a turbine is a great way to get a sense of the sound and scale of today's industrial wind turbines.



Proposed location of turbine

Community Electricity

The provincial government has established clear targets for clean energy: 25% of our electricity is to be renewable by 2015, with a goal of 40% by 2050. The Community Feed-In Tariff (ComFIT) program is designed to help our province meet that goal. The program recognizes that small community-owned projects are an effective way to reach our goals in a way that maximizes benefits for all Nova Scotians while strengthening the electricity grid. This vision will shift ownership from the virtual monopoly currently held by Nova Scotia Power to a decentralized structure that would see many small groups owning our electricity sources.

In order for Wedgeport to be eligible for the ComFIT program, at least 25 citizens from the county in which the turbine will be installed must invest in it.

The ComFIT program is beneficial because all of the electricity produced by the turbine will be consumed at a truly local level; only the people who are connected to the same electrical substation as the turbine can use its power.

You're not alone

Wind energy is cited by the International Energy Agency as the world's fastest growing energy resource. Worldwide, the combined capacity of all wind turbines is over 195 GW; the equivalent of 100,000 of the turbines Scotian WindFields proposes installing in your community.

In Nova Scotia, there are already over 100 of these turbines installed throughout the province. Communities across Nova Scotia are taking responsibility for the generation of their energy and enjoying the benefits that come with local electricity production.



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Wind Power In Nova Scotia

Better health with wind

Several peer-reviewed studies have focused on the impacts of wind turbines on human health. In 2009, Ontario's Chief Medical Examiner concluded that though some people find the sound of wind turbines "annoying". She could find "no conclusive evidence that turbines have an effect on health." Scotian WindFields is committed to ensuring that none of our projects have a negative impact on the health of those who live nearby.

According to Statistics Canada, Nova Scotia consistently leads the nation with the highest asthma rates in Canada and is the leader in most forms of cancer. These detrimental and deadly health effects are related to our dependence on coal-fired generation as our chief electricity source and the associated toxic emissions.

Nova Scotia's per capita emissions of carbon monoxide, particulate matter, sulphur oxides, and volatile organic compounds are higher than the averages of any industrialized country worldwide.

Community Dividend

In the past, Nova Scotia's electricity has been supplied by a handful of centralized power plants owned by Nova Scotia Power. New technology and legislation allows for the opportunity to distribute the ownership of power generation to Nova Scotians, among many small energy projects. This will bring community's one step closer to gaining democratic control over their energy suppliers, marking the end of an era of monopoly ownership of Nova Scotia's electricity.

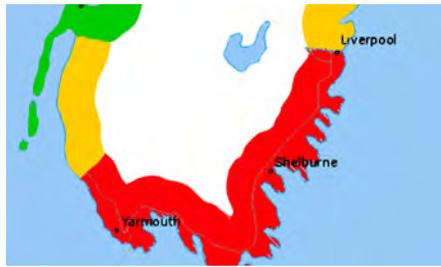
We're listening

We're here to answer your questions and find out what you think about this project. We need your help to make this project happen. Get in touch!

Gay Harley
902-482-4308

gay.harley@scotianwindfields.ca

The southern tip of Nova Scotia is one of the most vulnerable areas to sea level rise in Nova Scotia



Climate Change

The southern tip of Nova Scotia is one of the most vulnerable areas to the effects of climate change in the entire province. Sea level rise presents a grave risk to coastal infrastructure, as can be seen in the Coastal Sensitivity to Sea Level Rise map from Natural Resources Canada, shown above.

Climate change is happening at a rapid pace. During the twentieth century Nova Scotia's sea level rose approximately 30 centimeters. Researchers expect an additional increase from 70 to 140 cm over the next century.

The province has 13,300 kilometers of coastline, which makes it particularly sensitive to coastal impacts. The relative rise in sea level and more intense storms, cause larger storm surges. This means more damage to people, property, infrastructure, wildlife, and ecosystems across the province.

By using wind power to lower our greenhouse gas emissions, Nova Scotia is helping in the fight to curb global climate change.

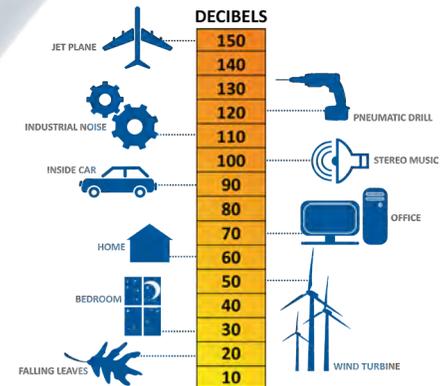
The Eastern Shore of Nova Scotia is one of the most vulnerable areas to the effects of climate change in the province.

Sound

Over the past 30 years, more than 60,000 wind turbines have been installed around the world. Each turbine must meet strict environmental requirements, including: abiding by minimum setbacks from nearby homes that limit the possibility of noise pollution.

New technologies have allowed the sound produced by industrial turbines to decrease substantially over the years.

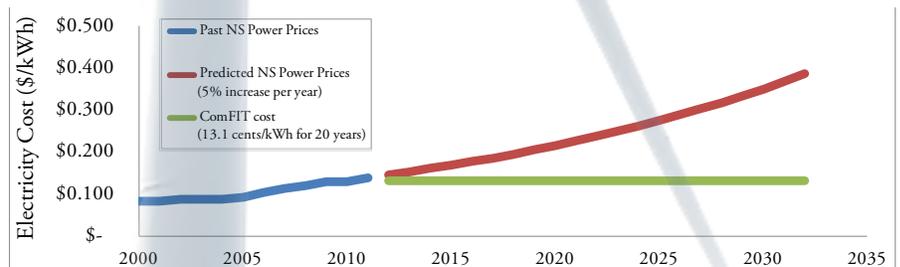
Thousands of people have been living near large wind turbines for decades, a relatively small number of those people experiencing negative effects.



The levels of noise intensity associated with various everyday sounds.

Energy Security

Wind is a safe, locally produced source of energy that will lessen our dependence on foreign sources of fuel. Once a wind turbine is installed, it produces electricity at a fixed price for 20 years, as shown in the figure below. With the price of oil and coal expected to keep rising with each passing year, wind power offer Nova Scotians assurance electricity bills won't do the same.



The power from the turbine would be sold at the same price for 20 years while coal and oil costs continue to rise