



Wind Energy Fact Sheets for Nova Scotian Municipalities

Supporting municipalities in making informed decisions on wind energy

Union of Nova Scotia Municipalities ■ Municipal Sustainability Office
Produced in Consultation with Verterra Group



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List of Wind Energy Fact Sheets

- 1 WIND ENERGY DEVELOPMENT IN NOVA SCOTIA
- 2 ELECTRICITY USE AND GENERATION OPTIONS
- 3 BASICS OF WIND ENERGY TECHNOLOGY
- 4 PHASES OF WIND ENERGY PROJECT DEVELOPMENT
- 5 APPROACHES TO SITING WIND TURBINES
- 6 ECOLOGICAL CONSIDERATIONS FOR WIND ENERGY
- 7 SOCIAL CONSIDERATIONS FOR WIND ENERGY
- 8 FINANCIAL CONSIDERATIONS FOR WIND ENERGY
- 9 COMMUNITY ENGAGEMENT AND WIND ENERGY
- 10 POLICY AND PLANNING FOR WIND ENERGY
- * ACKNOWLEDGEMENTS AND QUALIFICATIONS
- * FURTHER READING AND EXPLORATION



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Drawing on research from existing resources and best practices, this set of fact sheets provides Nova Scotia-specific content on topics related to wind energy development and a comprehensive source of information to help municipalities understand the opportunities and challenges of wind energy.



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Executive Summary

We have choices in Nova Scotia

In the 21st century, using local renewable electricity sources will provide energy security, help stabilize electricity prices and protect Nova Scotians from the volatility of fossil fuel pricing and costs associated with future regulation of greenhouse gas emissions. Wind has become an important part of this renewable electricity mix. We must make the best choices to ensure that wind energy is well planned and maximizes benefits to Nova Scotia.

Municipalities can realize numerous environmental, financial and social benefits from developing large and small wind energy projects; some are already delivering millions of dollars in new tax revenues in Nova Scotia alone. Other benefits include payments to local farmers and landowners, opportunities for local business, and stabilized energy prices, especially for municipalities that build their own wind turbines for electricity use.

Over the last decade, many large- and small-scale turbines have been constructed in Nova Scotia, over 200 from Cape Breton to Yarmouth. By March 2015, there was 350 MW of installed capacity from wind generation in the Province, enough to power 120,000 homes and reduce greenhouse gas production by as much as 800,000 tonnes per year.

Every technology that generates electricity, from non-renewable or renewable sources, presents challenges and opportunities. Balanced comparison from ecological, social and financial perspectives can help communities make decisions about their energy future. These fact sheets are designed give elected officials, municipal staff and interested citizens balanced information on wind energy development.

Above Photo: Irish Mountain, Nova Scotia
SOURCE: COMMUNICATIONS NS



■ Higgins Mountain, Nova Scotia

■ Lingan, Nova Scotia

Nova Scotians benefit from making informed decisions on electricity generation and its use

We use a lot of electricity every day, and while we are becoming more efficient, projections show that we are going to keep doing so. To enjoy sustainable prosperity, Nova Scotia must continue to become more energy efficient and make wise choices about how our electricity is generated.

Electricity is generated by thermal generating stations using fossil fuels and technologies that harness renewable sources (wind, tidal, hydro, biomass). Many of the coal mines in Nova Scotia that have provided cheap local electricity since the 1970s have closed; only 20% of coal supplied to Nova Scotia Power is local – the rest is imported at a higher cost.

Harnessing local electricity sources like wind, natural gas, biomass, hydro, solar and tidal provides local benefits. Our need for electricity can be met with local sources, combining and balancing thermal generation with intermittent sources like wind energy. Nova Scotia municipalities have great opportunity to develop local renewable electricity sources, including wind turbines.

Municipalities should play a significant role in deciding how to integrate wind energy in their communities. There are many different municipal policy and planning mechanisms across the Province; to make informed decisions in planning and approving a wind energy project, a community must be constructively engaged from the beginning.

This set of fact sheets focuses on wind energy in the context of other renewable and non-renewable energy sources. They can be used as a set or individually; they can be skimmed, or mined for detail. They were developed for municipal staff and elected officials as well as residents. The package of ten fact sheets concludes with web links for further reference.

As Nova Scotia enters the next phase of wind energy development, municipalities can benefit from and expand upon lessons learned, here and elsewhere, to maximize benefits to local communities.