

Nova Scotia, Canada



NOVA SCOTIA'S ENERGY
Explore Our Potential

In the Canadian province of Nova Scotia, you'll find ice-free, deep-water ports, direct air links, and comprehensive road and rail systems, making it easy to reach international markets. The province's 11 universities and community college system means a highly-trained workforce as well as leading-edge research and innovation are available.



Nova Scotia has 400,000 square kilometers of offshore opportunity and more than 40 trillion cubic feet of natural gas potential, attractive onshore exploration opportunities, a world-class wind resource, and the highest tides in the world. We are a centre of energy excellence.

Our Resources: Oil and Natural Gas

Offshore

With a competitive fiscal regime, and production from five offshore gas fields being delivered to major North American markets, and with another major project now in the development phase Nova Scotia offers a competitive advantage in offshore exploration and development. Add to that a worldwide reputation for excellence in engineering, fabrication, training and supply and services and it's easy to see why Nova Scotia continues to attract attention.

Onshore

Over the past five years, onshore petroleum exploration in Nova Scotia has continued to increase. The establishment of petroleum-based infrastructure as a result of offshore production has caught the attention of a number of companies that see the potential for new exploration opportunities in Nova Scotia. Companies are now drilling for coal gas and shale gas in addition to conventional oil and gas.


NOVA SCOTIA

Department of Energy

CANADA

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Our Resources: Renewable Energy

Renewable energy has great potential to play a larger role in Nova Scotia's energy supply. The province has some of the best wind, tidal, and solar regimes in all of Canada and these renewable energy sources will play an increasingly important role in electricity generation, heating applications and transportation fuels in Nova Scotia. In fact, by 2013, Nova Scotia will generate almost 20 per cent of electricity through renewable energy.

Wind Power

Nova Scotia has a tremendous wind resource. With some of the highest average wind speeds in Canada, a wind turbine placed in Nova Scotia can generate a lot of power. Wind energy offers many advantages – it is emission-free, renewable, domestic, and relatively affordable. That explains why it is the fastest growing energy source in the world.

Tidal Power

100 billion tons of seawater flows in and out of Nova Scotia's Bay of Fundy each day – more than the combined flow of the world's freshwater rivers. When fully developed, new in-stream tidal technology has the potential to generate 300 megawatts of green, emission free energy from only two

locations in the Bay of Fundy – enough energy to power close to 100,000 homes. Nova Scotia is developing an in-stream tidal demonstration facility capable of testing multiple devices. The first devices are expected to go in the water by 2009.

Solar Power

Studies have found that Nova Scotia's mild climate but cold clear winter days combine to give its capital city, Halifax, the third best solar climate in Canada. Hundreds of passive solar houses have been built over the past few decades here in the province and the largest solar panel manufacturer in Canada, Thermo Dynamics Ltd., is located in Nova Scotia.

Nova Scotia Energy Projects

Wind Energy in Nova Scotia

Nova Scotia has a world-class wind resource that has been verified by international and national reports and studies, as well as by wind developers who want to locate their projects in our province. Currently Nova Scotia has 40 wind turbines located throughout the province, and it is the hope that by 2013 this number will grow to over 250.

Sable Offshore Energy Project

A joint venture led by ExxonMobil, the Sable Energy Project is producing just over 400 million cubic feet of natural gas every day from five fields. The Sable Project sends raw gas ashore through a 200-kilometer undersea pipeline and in 2007 a compression unit was installed that is expected to boost output by 25 per cent, significantly increasing project deliverability until 2015.

Deep Panuke Offshore Gas Development Project

Deep Panuke involves the production of natural gas from an offshore field located approximately 250 km southeast of Halifax. Gas will be transported via subsea pipeline to shore, and ultimately, to markets in Canada and the United States. This \$700-million project is expected to begin production in 2010 and is anticipated to continue for a lifespan of 13 years.

The Annapolis Tidal Generating Station

The town of Annapolis Royal is home to the first and only modern tidal power plant in North America. The Annapolis Tidal Generating Station employs the largest straight-flow turbine in the world and is capable of producing more than 30 million kilowatt-hours per year, enough electricity to power 4,500 homes.

Cohasset-Panuke Project

Canada's first offshore oil project, Cohasset-Panuke, is located about 250 kilometres southeast of Halifax. Over the course of this six-year project, 44 million barrels of light, sweet crude were produced at an average rate of 40,000 barrels per day from 11 wells.

NEW DEVELOPMENTS

Onshore Plays – Coalbed Methane, Shale Gas

Unconventional gas is quickly becoming more important in the Nova Scotia energy landscape. Stealth Ventures Limited of Calgary has received government approval to move into production on its Cumberland County coalbed methane play. Stealth has estimated a potential for one trillion cubic feet of coal gas. Other companies such as Triangle Petroleum Corporation are actively searching for shale gas across Nova Scotia, and are acquiring seismic data and drilling wells.

Future

The future of energy in Nova Scotia includes a mix of conventional and renewable sources, a commitment to research and new technologies and reliance upon our citizens to help maximize opportunities for the province.

For more information about Nova Scotia energy please visit:

www.gov.ns.ca/energy

or call:

1-902-424-4575