

Background: Energy and the Economy

Nova Scotians want to protect the environment; they also want a strong economy. Nova Scotia's Environmental Goals and Sustainable Prosperity Act reflects these goals, including a target to raise Nova Scotia's economic performance to the Canadian average or better by the year 2020.

Both the 2009 Energy Strategy and the Climate Change Action Plan are designed with this target in mind; smart energy choices are essential to meeting the 2020 deadline.

THE CHALLENGE

We must act now despite future uncertainty around pricing, technology and resource potential.

THE PATH

Two big potential drivers to future economic growth and greenhouse gas reductions are renewable energy and offshore natural gas. We will realize this potential by investing in research (e.g., geoscience, tidal, carbon capture and storage) and encouraging exploration growth.

Renewable energy: The number of commercial wind turbines in the province has the potential to grow from 40 to over 300 by 2013. The Bay of Fundy could also become an important environmental and economic resource if tidal power technology becomes viable on a large scale. A 300-megawatt project could provide up to 10 per cent of the province's power needs.

Renewable Energy Standard

By 2013, the RES is expected to generate over \$1 billion in Nova Scotia investment.

ecoNova Scotia Environmental Technology Program (ETP):

Launched in November 2007, the \$9.5-million ETP fund's primary focus is developing new renewable energy and energy-efficiency technologies. Eleven projects are already underway, supported by over \$2 million from ETP, helping to cut emissions and green the economy. For more information, go to www.gov.ns.ca/ecoNovaScotia.

Offshore natural gas: With an estimated 40 trillion cubic feet of natural gas potential in Nova Scotia's offshore, this energy source has played a critical role in the province's economy. Less obvious is its role in protecting our environment: natural gas burns more cleanly than oil or coal, produces fewer emissions and can easily back up intermittent sources like wind and tidal. Nova Scotia is making it easier for industry players to explore, with lower-cost licences, new geoscience research and publicly available seismic data. (See the Nova Scotia Offshore Renewal Plan at www.gov.ns.ca/energy.)

Onshore natural gas: Onshore exploration puts millions of dollars into Nova Scotia's economy. One company alone has

spent an estimated \$30 million searching for shale gas, with about half of that being spent in Nova Scotia. Two companies have signed production agreements. In 2008, four onshore wells were drilled and three seismic programs were carried out. To spur more exploration, the Department of Energy will work with New Brunswick to identify areas where regulations can be harmonized, so that explorers can move efficiently between the provinces. This makes it easier for companies to share limited resources such as land rigs.

R&D: The Nova Scotia government is investing significant dollars in R&D initiatives over the coming years, more perhaps than at any time in the province's history. These investments—\$30 million in two research associations since 2006—will help solve the geological puzzle in offshore Nova Scotia and answer questions related to ocean energy (both renewable and non-renewable) in our marine environment. The answers may lead to new oil and gas discoveries and help move forward projects such as in-stream tidal power. Additionally, the investment is leveraging vast amounts of research funding. So far, roughly \$2 million, in actual dollars spent, from the Offshore Energy Technical Research Association and the Offshore Energy Environmental Research Association has leveraged about \$32 million from other sources.

The next project: The upcoming Deep Panuke project is important to Nova Scotia. This \$750-million project represents the next stage of offshore development and a significant investment in Nova Scotia's economy. All sectors of the economy will benefit—from engineers to consultants to fabricators. Deep Panuke is scheduled to begin production in 2010.

Public Program Funding Sources

1. income tax
2. sales tax
3. offshore royalties (contribute to all core program areas: education, health care, debt reduction).

Sable Offshore Energy Project

- \$2.3 billion in royalties so far
- 1,175 direct jobs and 770 indirect jobs each year
- \$980 million per year to Nova Scotia's GDP
- \$2.3 billion in contact awards between 1996 and 2006

Deep Panuke Natural Gas Project

- top-tier net revenue rate: 32.5%
- 1.35 million hours of guaranteed work in Nova Scotia
- 850,000 hours of work by Nova Scotians

