

Nova Scotia Department of Energy
Annual Accountability Report For The Fiscal Year 2004-2005

Table of Contents

- 1.0 Accountability Statement**
- 2.0 Message From the Minister**
- 3.0 Message From the Deputy Minister**
- 4.0 Introduction**
- 5.0 Departmental Progress and Accomplishments**
- 6.0 Financial Results**
- 7.0 Measuring Our Performance**

1.0 Accountability Statement

The accountability report of the Department of Energy for the year ended March 31, 2005, is prepared pursuant to the Provincial Finance Act and government policies and guidelines. These authorities require the reporting of outcomes against the department business plan information for the fiscal year 2004-2005. The reporting of department outcomes necessarily includes estimates, judgements and opinions by department management.

We acknowledge that this accountability report is the responsibility of department management. The report is, to the extent possible, a complete and accurate representation of outcomes relative to the goals and priorities set out in Energy's business plan for the year.

Minister

Deputy Minister

2.0 Message From the Minister

Focussed and determined - these are the words that describe the performance of the Department of Energy in the last fiscal year.

A focussed and determined effort by the Department of Energy led to Nova Scotia's success in negotiating the full benefit of all resource revenues that accrue from offshore petroleum resources. Nova Scotia's Campaign for Fairness ended successfully in January with the federal government's agreement to pay Nova Scotia an \$830 million down payment and to shield us from clawbacks of equalization payments. This payment has been applied directly to our debt, allowing us to free tens of millions of dollars every year for programs that will help all Nova Scotians.

Persistent hard work by Nova Scotia's energy industry continues to bring opportunities to Nova Scotians. Nova Scotia businesses are hard at work on our offshore and around the world.

Focussed policy development has allowed Nova Scotians to see rapid growth in the creation of electricity from renewable energy sources. Wind power in particular has been a great success, encouraged by this government's commitment to progressive energy policy. We will build on these successes in the future. Nova Scotia has some of the best opportunities in Canada to further develop wind power resources. Exciting new renewable energy developments are coming, using technologies like biomass and tidal.

We will continue to work hard to maximize the potential of our offshore petroleum resources in addition to ensuring continued progress and advancement on regulatory reform and government-to-industry collaboration.

We will continue to lead Nova Scotia's efforts toward achieving a world-class energy sector. With these thoughts, it is my honour to present this accountability report for the period 2004-2005.

3.0 Message From the Deputy Minister

This is the Nova Scotia Department of Energy's third accountability report and it is a report that shows a still-young department making good progress toward the goals government has set for it.

The Nova Scotia Energy Strategy still provides a solid foundation for the work we do. Even with the turmoil seen recently in world energy markets, we are maintaining focus on the broader goals. Indeed, turbulent times increase the need for a solid basis for planning and action; something the Energy Strategy provides. With the strategy's broad goals to guide us, our annual business planning process is the vehicle through which we adapt to changing circumstances and take advantage of new opportunities.

The talents and efforts of Department staff helped Nova Scotia be in a position to deal with the many complexities created by today's energy realities. We have achieved better regulatory efficiency to encourage offshore development. We are improving the management of Nova Scotia's energy resources by encouraging private sector investment to develop and market reliable and renewable energy sources. We are working with all Nova Scotians to improve energy efficiency.

The department is creating change and achieving results for all Nova Scotians. I am pleased to submit this progress report on behalf of staff who continue to work together with all of our stakeholders to achieve prosperity.

4.0 Introduction

In 2004-2005 the Department of Energy was guided by two documents – the department’s 2004-2005 Business Plan and the Nova Scotia Energy Strategy. When the Energy Strategy was released in December 2001, it provided a solid foundation on which to build a stronger, more vibrant energy industry. The strategy is a dynamic document – one that was designed to be strategic, yet flexible as the department meets the challenges and opportunities within the energy industry as it changes and grows. The strategy has evolved from a stand-alone initiative to a guiding force in establishing short and long-term priorities of the Department of Energy. In the coming years, continued success will depend on the department’s ability to respond to changing circumstances while making the most of new opportunities. Each year, the business plan outlines how priorities link to the themes in the Energy Strategy. Thus, this accountability report reflects not only progress made on our business plan, but on the Energy Strategy as well, making the integration of strategy and action complete.

5.0 Department Progress and Accomplishments

5.1 Core Business Area - Economic Activity and Benefits

5.1.1 Priority - Improve Regulatory Efficiency:

“Coordinate regulatory efficiency in partnership with the Federal and Provincial governments and industry to provide an efficient and effective regulatory environment for natural gas development, production and transmission through the Atlantic Energy Roundtable III.”

2004-2005 Accomplishments

- The Nova Scotia Department of Energy continues to play a lead role on the Atlantic Energy Roundtable (AER). Due to the efforts of the AER, on February 18, 2005 Nova Scotia signed a Memorandum of Understanding (MOU) with the federal government to reduce the time it takes to get offshore projects from discovery to production. The MOU includes agreement to conduct concurrent environmental and regulatory review processes which will significantly reduce the time it takes to receive approvals. This should mean that approvals will take in the range of 9 to 13 months which is consistent with the international averages outlined in a benchmarking study done for the AER.
- The AER has made an immediate commitment to develop a change in drilling regulations which would introduce flexibility and eliminate potential drilling costs in the range of \$10 to \$30 million for some wells .

- The AER has also made a longer term commitment to modernize offshore oil and gas regulations to make them more responsive to new technologies and practices through a Canadian Offshore Regulation Renewal Initiative.
- In 2004-2005, much work was accomplished through the AER on developing the “*Statement of Canadian Practice on the Mitigation of Seismic Noise in the Marine Environment*”. The *Statement* (now in final stages of development) will help clarify seismic requirements in Canadian waters.

5.1.2 Priority - Build a More Competitive Oil and Gas Industry:

“Host the Research and Development Forum and participate at industry events in Houston and Calgary to promote Nova Scotia’s resources, workforce and competitive edge to potential investors.”

2004-2005 Accomplishments

- The Department of Energy hosted Nova Scotia’s Energy Research and Development Forum at St. F.X. University in Antigonish, May 13-14, 2004. The event brought researchers, government departments and industry together to share current energy research interests and activities in the Province.

“Develop strategic alliances with key international contacts to promote joint venture and technology transfer by attending the Canada Italian Business Council Meetings in June 2004.”

2004-2005 Accomplishments

- Department of Energy business development staff attended an energy sector committee meeting of the Canadian - Italian Business Association in Montreal, June 2004. One Nova Scotia company was represented at this event. The Italian delegation provided an overview of energy related initiatives in their country.
- The Province participated in the Offshore Technology Conference (OTC) in Houston, Texas between May 3-6, 2004, which is one of the key investment attraction and business development initiatives for the Department of Energy. Enhancing Nova Scotia’s competitive workforce was addressed by participation in the Petroleum Human Resources Council of Canada national steering committee meetings, held in Calgary, Alberta. This helped identify sectoral skills gaps and devise a strategic approach to better align training programs with industry needs.

“Work with Greater Halifax Partnerships through the Economic Development Committee of the World Energy Cities to develop a trade mission to Trinidad and explore partnerships with other Energy cities.”

2004-2005 Accomplishments

- The Department partnered with the Greater Halifax Partnership to lead a multi-sectoral trade mission to Trinidad, November 14-19, 2004, coinciding with the Annual General Meeting of the World Energy Cities partnership. This facilitated discussions with other member cities about trade opportunities.

5.1.3 Priority - Manage the Energy Resources:

“Hosting Calgary workshop in April to promote Nova Scotia’s onshore oil and natural gas potential, which would include the rights issuance process and how the regulation of onshore exploration activities is coordinated by the Department.”

2004-2005 Accomplishments

- Plans to host a Calgary workshop in April to promote Nova Scotia’s onshore oil and natural gas potential, were displaced by a more effective forum (the American Association of Petroleum Geologists) that was held in Calgary in June, 2005.

“Monitor offshore activities including potential development of the Deep Panuke Project as well as other projects, including tie ins to the Sable Offshore Energy Project infrastructure.”

2004-2005 Accomplishments

- The Deep Panuke Project will be very important to the socio-economic fabric of Nova Scotia and it is important that the potential project be monitored and that the Department keep abreast of the technical (geological, geophysical and engineering) aspects of the project until the potential re-submission of EnCana’s Development Plan.
- Department technical staff met with EnCana in Calgary in July 2004 during which EnCana presented a complete technical review of the Deep Panuke field. The day was dedicated to reviewing their current resource analyses based upon new well and seismic interpretations. Many of the questions raised during the original project submission were reviewed and we now have a more complete understanding of the confidence that EnCana has with respect to re-filing the development plan.

- Nova Scotia and the Government of Canada signed the Offshore Resource Revenue Agreement on February 14, 2005 making Nova Scotia the principal beneficiary of its offshore resource revenues and guaranteeing the province 100 percent of royalties from all projects for 16 years. Nova Scotia received a prepayment of \$830 million for the first 8 years of the agreement which is the absolute minimum the province will receive during that time. The \$830 million has been paid directly on Nova Scotia's debt, resulting in annual interest savings of approximately \$50 million. The savings will be invested into government priorities such as education, health care, infrastructure and other services to benefit all Nova Scotians.

“Royalty audit and assessment of the Sable Offshore Energy Project and preparation of royalty forecasts for existing and future projects.”

2004-2005 Accomplishments

- The Department continues to work on the first audit report/assessment for the Sable Offshore Energy Project for the periods from 1995 - 1999. Additional resources were allocated to the audit through contract work in the 2004-2005 fiscal year. Royalty forecasts for existing and future projects were also prepared.

5.1.4 Priority - Secure, Reliable Energy:

“Begin implementation of the recommendations of the Electricity Marketplace Governance Committee (EMGC) by opening the wholesale market to competition, creating a competitive process for new electrical generation capacity requirements, and encouraging renewable energy and co-generation.”

2004-05 Accomplishments

- The Government of Nova Scotia tabled and passed the *Electricity Act* in the fall of 2004 containing the provisions to open the wholesale electricity market to competition; require Nova Scotia Power Inc. (NSPI) to file an Open Access Transmission Tariff (OATT) with the Utility and Review Board (UARB) and develop operational system(s) required to facilitate open and non-discriminatory access to, and use of, the transmission system by eligible market participants; and implement renewable energy standards.
- The UARB publically advised NSPI that it intends to use a competitive process as an integral part of approving any new capacity supply additions in the future.
- Atlantic Wind Power commissioned its 31 MW wind farm in Pubnico Point.

- NSPI accepted all 17 small-medium size (less than 2MW) renewable energy projects totalling 28 MW that it received from independent power producers (IPP) in response to a fixed rate, long term (15 year) renewable power purchase price offer.
- NSPI publically released another request for an additional 100 GWhs of large scale renewable energy supply from IPPs.
- NSPI filed an OATT with the UARB.
- The Department continued to work with HRM and other prospective parties who are actively pursuing potential co-generation/district energy systems.

“Work with proponents, regulatory authorities, and economic development agencies to foster the development of Liquefied Natural Gas (LNG) to increase supply diversity, fuel on fuel competition and reduce supply risk.”

2004-05 Accomplishments

- Worked with other provinces and the federal government to sort out responsibility for regulatory oversight regarding public safety of LNG regasification plants.
- Decision by the Province that it would take responsibility for LNG public safety in Nova Scotia, and that the UARB would exercise this role. The Department of Environment and Labour (DEL) retains responsibility for environmental, Occupational Health & Safety, boiler and pressure vessel issues.
- Amendments to the *Gas Plant Facility Regulations* were drafted and circulated for public review. A Code of Practice was also developed for the design, construction, operation, and abandonment of LNG regasification plants.
- Worked with the UARB, DEL, NSPI, federal agencies and proponents to advance proposed LNG projects for Nova Scotia.

“Assist Nova Scotians converting to natural gas through the Gas Market Development Fund with incentives and information to convert to natural gas for space heating and hot water that focus on efficiency and safety.”

2004-05 Accomplishments

- Amendments were made to the Province’s Pipeline Regulations to clarify the testing and inspection provisions for newly constructed pipeline facilities. This provides customers more timely access to natural gas, without compromising public safety. It also puts Nova Scotia regulations in line with federal regulations.

- Negotiated with the federal Government and Heritage Gas for matching federal/provincial conversion incentives to natural gas. Incentives are also conditional on the installation of high efficiency/*EnergyStar* equipment. The Province's incentive is through the Gas Market Development Fund, which was provided by the Sable producers to encourage natural gas use in Nova Scotia.
- Incentive programs were established for residential conversions and small and medium commercial conversions (less than 15,000 GJ/year).
- Commenced negotiation with Heritage Gas of an interest -bearing, repayable loan from the Gas Market Development Fund to assist Heritage Gas with build out of their distribution system to Amherst, Halifax Airport Industrial Park, and downtown Dartmouth/Woodside.

5.1.5 Priority - Improve Energy Efficiency

“Work with government, industry and organizations through partnerships, sponsorship, contracted program/funding to improve energy efficiency and encourage energy conservation throughout the province with programs such as the Province’s Public Buildings Initiative, home audit programs, R2000 housing, the federal EnerGuide Program, Bus Rapid Transit Program and LED traffic light conversions.”

2004-05 Accomplishments:

- Partnered with the Nova Scotia Home Builders Association to deliver ENERHouse 2005 Conference in Halifax, a major conference attended by over 200 participants.
- Funded a variety of R-2000 Promotional and Training Initiatives such as the Showcase of R2000 Homes - 18 demo R-2000 homes were open to the public for 4 weeks (thousands of the general public toured these homes); Home Show Promotional Activities; 6 Regional New Home/Renovation Public Workshops; and Builder Training for several classes of student carpenters.
- Partnered with Service Nova Scotia and Municipal Relations (SNSMR) and 6 municipalities to do LED traffic light conversions - total of 2600 lights at 60 intersections converted.
- Partnered with SNSMR to deliver the “Keep-the-Heat” initiative to low income Nova Scotians which included assembling and distributing 6000 energy retrofit kits; offering furnace tune-up vouchers; and delivering presentations at seminars.
- Partnered with Clean Nova Scotia to undertake the Energy Efficient School Campaign - Annapolis School Board and the Burn It Clean Promotion (Energy efficient and clean wood burning tips).

- Partnered with HRM to provide assistance for a Bus Rapid Transit System to provide a premium public transit express bus service from Portland Hills, Dartmouth and Lower Sackville to downtown Halifax.

5.2 Core Business Area - Public Education

5.2.1 Priority - Inform Nova Scotians

“Implement a multi-year public education program to address two key areas: Our Energy Use and Our Energy Opportunities. The program will provide Nova Scotians with the tools they need to make better energy choices and will build upon our successful partnerships with other governments, industry, and non-profit organizations.”

2004-05 Accomplishments

- The Department worked with Clean Nova Scotia to build a more comprehensive and responsive energy information line. The toll-free EnerInfo line is fully funded and supported by the Department of Energy, delivered through Clean Nova Scotia and promoted jointly. The partnership began in December 2004. The EnerInfo line was advertised extensively through radio, TV and cable TV ads throughout the duration of the Keep the Heat program from December 2004 to March 31, 2005. During that time there were over 700 calls to the EnerInfo line. The service will continue into 2005-06 and will be integrated into all public education initiatives in the area of energy efficiency and conservation.
- The Department’s web site was completely redesigned for easier navigation. The new format better highlights recent developments and includes a new section for consumer information. The new site will have better tracking ability, enabling the department to identify topics visited most often and develop content accordingly.
- A new energy scholarship program was launched in 2005. The scholarship is a partnership with Pengrowth Corporation of Calgary, one of the owners of the Sable Offshore Energy Project. The Department developed information and promotional materials to educate high school students about careers in the energy sector and to encourage them to pursue their studies in a variety of areas that support the entire energy sector, from oil and gas to renewable energy. Continued promotion of the scholarship will provide opportunities to educate the general public about energy in Nova Scotia.

- The Department developed an Energy Savings Kit that contains a number of inexpensive products to help reduce energy use in the home, such as compact fluorescent light (CFL) bulbs, low-flow showerheads, and weatherstripping samples. The kits also contain printed materials on how to reduce energy use. Kits were distributed to 6,000 Keep the Heat recipients as part of a pilot program. The evaluation was extremely positive. Since then, another 1,000 kits have been distributed through special events and seminars, and through MLAs offices. The knowledge gained from the evaluation will be used to expand the Energy Savings Kit program in 2005-06.

5.3 Core Business Area - Climate Change

5.3.1 Priority - Address Climate Change

“Be engaged in federal, provincial, and territorial discussions on building a national climate change approach by participating as chairs or co-chairs.”

2004-05 Accomplishments:

- Energy staff are members of the National Offsets Quantification Team, a federal/provincial/territorial committee co-ordinating the development of greenhouse gas offset protocols.
- Energy staff represented Nova Scotia on an F/P/T committee on international climate change issues with a focus on the Conference of the Parties to the United Nations Framework Convention on Climate Change scheduled for Montreal on November 28 - December 11, 2005.

“Develop a national climate change approach that reaches the emissions reduction targets while not placing an unreasonable burden on any one region by continuing the federal, provincial/territorial negotiations on implementation.”

2004-05 Accomplishments:

- Engaged in the development of a federal large final emitter program for reduction of greenhouse gas emissions from large industry and provided input on the draft *Greenhouse Gas Protocol*.
- Participated in bi-lateral discussions with both Natural Resources Canada and Environment Canada on targets for Nova Scotia large final emitters, including Nova Scotia Power.
- Worked with Nova Scotia Power on a government/industry working group to analyse options and costs for various strategies for meeting anticipated greenhouse gas reductions targets.

“Continue work on a bilateral agreement on climate change with the federal government and update Nova Scotia’s Climate Change Action Plan.”

2004-05 Accomplishments:

- Developed proposals for increased program spending on climate change, renewable energy and energy efficiency.
- Reviewed federal 2005 budget and identified an outline of implications for funding climate change projects and programs in Nova Scotia.

“Collaborate with industry stakeholders to achieve mandated emission reductions in the most cost-effective way. When caps and allocations have been established, implement a process of information sharing to inform all industry players of opportunities for reductions and trading.”

2004-05 Accomplishments:

- Developed proposals with Nova Scotia Power to meet anticipated emission reductions at a reasonable cost, and discussed with the federal government.
- Final federal mandated reductions have not yet been established but Energy staff continued participation in consultations with industry and governments.

6.0 Financial Results

Department of Energy	2004-2005 Authority (\$ million)	2004-2005 Actual (\$ million)	Variance
Total Program Expenses - Gross Current	8,580,000	8,439,164	(140,836)
Net Program Expenses - Net of Recoveries	7,350,000	6,834,579	(515,421)
Salaries an Benefits	2,528,900	2,499,442	(29,458)
Funded Staff (FTE's)	41	38.3	(2.7)

Notes: The Canada-Nova Scotia Offshore Petroleum board had lower operating expenses for the year and greater recoveries which accounted for most of the variance with staff vacancies accounting for the small remaining variance.

7.0 Measuring Our Performance

7.1 Outcome: *More people using natural gas.*

Measure: *Natural gas consumption by residential, commercial and public buildings.*

The objective is to encourage the gas distributor to build out the gas distribution system so more people have access to natural gas and to encourage potential users with access to natural gas to convert.

WHERE ARE WE NOW?

The Province has amended its *Pipeline Regulations* to clarify the testing and inspection provisions for newly constructed pipeline facilities. This provides customers more timely access to natural gas, without compromising public safety. It also puts Nova Scotia regulations in line with federal regulations.

Incentive programs have been established for residential conversions and small and medium commercial conversions (less than 15,000 GJ/year) using the Gas Market Development Fund. Matching federal incentives for gas conversions have also been negotiated.

Heritage Gas added approximately 18 kilometres of pipe to their system in 2004 at a capital cost of \$8 million. With first gas delivery in December 2003, approximately 230 customers in Dartmouth had committed to using natural gas by December 2004, and over 150 were connected. Over 1600 potential customers have access to gas. In addition, 150 customers in Amherst have committed to using gas, enabling Heritage Gas to plan for system build-out there in 2005.

WHERE DO WE WANT TO GO/BE IN THE FUTURE?

Incentive programs have been introduced and we will continue to set the target of increasing the number of Nova Scotians having access to and using natural gas on a yearly basis.

7.2 Outcome: *Influence streamlining of regulatory process.*

Measure: *Length of project approval time.*

The Department of Energy continues to coordinate regulatory efficiency in partnership with the Federal and Provincial governments and industry to provide an efficient and effective regulatory environment for natural gas development, production and transmission through the Atlantic Energy Roundtable III.

WHERE ARE WE NOW?

Energy continues to play a lead role on the Atlantic Energy Roundtable (AER). Due to the efforts of the AER, on February 18, 2005 Nova Scotia signed a Memorandum of Understanding (MOU) with the federal government to reduce the time it takes to get offshore projects from discovery to production. The MOU includes agreement to conduct concurrent environmental and regulatory review processes which will significantly reduce the time it takes to receive approvals. This should mean that approvals will take 9 to 13 months which is close to the international average.

WHERE DO WE WANT TO GO/BE IN THE FUTURE?

Our target is to achieve the standard international approval time average of 9 - 13 months.
**Note: Target cannot be achieved until a project is brought forward.

7.3 Outcome: *Increase in awareness of energy issues, programs, services and operations.*

Measure: *Number of Nova Scotians accessing energy information and programs and their participation in various initiatives.*

WHERE ARE WE NOW?

Improving public awareness is a long-term endeavour. An increase in awareness of energy issues, programs, services and operations will be measured through the use of the energy awareness index. This is a tool that was developed to gauge Nova Scotians' awareness and understanding of a variety of energy topics.

In 2003-04, the department conducted a survey to determine baseline awareness index for topics including renewable energy, climate change, offshore activity, electricity, natural gas, and energy training opportunities. An overall energy baseline awareness index of 50 (out of a total score of 100 points) was established.

Change in the energy awareness index is not expected within one year, nor is it feasible to repeat the survey annually. In the interim, as indicated in the 2004-05 business plan, the department will report on the number of Nova Scotians accessing energy information where measures exist.

In 2004-05, there were approximately 527,385 visits to the department web site, and more than 150 requests for information, publications, and videoz. Between December 2004 and March 2005, there were over 700 calls to the toll-free EnerInfo line. Approximately 7,000

Energy Savings Kits were distributed to low-income Nova Scotians and to others through seminars and events. All high schools, universities and community colleges across Nova Scotia received information to distribute on the Pengrowth-Nova Scotia Energy Scholarship Program.

WHERE DO WE WANT TO BE IN THE FUTURE?

The goal of public education is to increase the overall energy awareness index by 15 points, to 65. In late 2006, the survey will be repeated to determine if there has been an increase in awareness of energy issues, programs, services and opportunities.

- 7.4 Outcome:** *Increase opportunities for competition in the electricity sector.*
Measure: *Opening of the wholesale market.*

WHERE ARE WE NOW?

Government tabled and passed the *Electricity Act* in the fall of 2004 containing provisions to open the wholesale electricity market to competition; require NSPI to file an Open Access Transmission Tariff (OATT) with the Utility and Review Board (UARB) and operational system(s) required to facilitate open and non-discriminatory access to, and use of, the transmission system by eligible market participants; and implement renewable energy standards.

The UARB publically advised Nova Scotia Power that it intends to use a competitive process as an integral part of approving any new capacity supply additions in the future.

WHERE DO WE WANT TO GO/BE IN THE FUTURE?

In 2005-2006 the Department of Energy plans to set a target for increased renewables that must be met by 2010. We plan to put operational rules for the new OATT in place and develop regulations and guidelines regarding renewables for implementation in 2006.

- 7.5 Outcome:** *More use of renewable energy.*
Measure: *Renewable green power installed capacity.*

Increasing the amount of sustainable, renewable energy in Nova Scotia will have local and global environmental benefits, provide economic opportunities to Nova Scotians, and help position the province to meet future energy demands.

WHERE ARE WE NOW?

Atlantic Wind Power commissioned its 31 MW wind farm in Pubnico Point.

NSPI accepted all 17 small-medium size (less than 2MW) Independent Power Producer (IPP) renewable energy projects totalling 28 MW that it received in response to a fixed rate, long term (15 year) renewable power purchase price offer. NSPI also publically released another request for an additional 100 GWhs of large scale renewable energy supply from IPPs.

WHERE DO WE WANT TO GO/BE IN THE FUTURE?

Our target for this measure is to increase the amount of renewable green power installed capacity in Nova Scotia by 2005-2006.