

Nova Scotia Department of Energy
Annual Accountability Report For The Fiscal Year 2005-2006

December, 2006

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1.0 Accountability Statement

The accountability report of the Department of Energy for the year ended March 31, 2006, 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 2005-2006. 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, Honourable Bill Dooks

Deputy Minister, Alison Scott

2.0 Message From the Minister

It's an honour to submit the accountability report on behalf of the Nova Scotia Department of Energy for the 2005-2006 fiscal year. This is my first accountability report as Minister of the Department of Energy and the fourth for the Department since its creation in June 2002. The following accountability report highlights the contributions of the Department of Energy toward the development of a world-class energy sector in Nova Scotia in terms of sustainability, responsibility and opportunity.

Over the past year, the Nova Scotia Department of Energy has made great strides on many fronts. The Department has focused a lot of energy on the continued growth, expansion and promotion of the province's promising onshore and offshore industries—an endeavour to which we will commit over the long-term.

With energy and home-heating costs at an all-time high, helping Nova Scotians conserve energy and save money have also been key priorities for the Department of Energy this period. By providing Nova Scotians with the information needed to make smarter energy choices, we can all do our part in making Nova Scotia a cleaner, greener province for our generation and for generations to come.

With these thoughts, I look forward to the continued expansion of our province's energy industry and to the growth of our economy.

Hon. Bill Dooks,
Minister of Energy

3.0 Message From the Deputy Minister

When the Nova Scotia Department of Energy was established in 2002, the Nova Scotia Energy Strategy served as the foundation upon which the Department's mission and mandate were built.

To this day, the Energy Strategy still guides the Department of Energy in its planning and decision-making. It also provides the Department with a means to monitor its success, based on the objectives outlined in the strategy.

In the 2005-2006 fiscal year, the Nova Scotia Department of Energy made considerable progress toward the long-term goals set out by the government in the Energy Strategy. The enclosed accountability report provides an overview of these achievements—achievements which translate into economic, environmental and social benefits for Nova Scotians.

By working closely with key stakeholders and by embracing challenges that may arise with a positive, can-do attitude, together, we will continue to seize every opportunity to develop our province's resources and strengthen our position in the global energy market.

It is with great pleasure that I offer the following accountability report on behalf of the team of energy experts who are helping bringing our province's vision to fruition.

Alison Scott
Deputy Minister of Energy

4.0 Introduction

In 2005-2006 the Department of Energy was guided by two documents – the department’s 2005-2006 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 Economic Activity and Benefits

5.1.1 Priority - Improve Regulatory Effectiveness:

- *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. Play a lead role in the Atlantic Energy Roundtable III which partners industry and government in making improvements to the regulatory system, such as eliminating overlap and duplication, creating guidelines for Environmental Assessments and establishing best work practices that address workers safety.*

Atlantic Energy Roundtable (AER). An AER Dinner was held on November 16, 2005. Much of its original agenda is now complete. It still represents a forum to report on progress and flag new issues. The AER’s Implementation Committee is to report back to Ministers at the next AER meeting on new mandate and structure required to continue the work of AER.

In 2006, Nova Scotia, Newfoundland and Labrador and the federal government finalized key policy decisions on amendments to the Offshore Accord Acts to introduce a proper legal framework for occupational health and safety in the offshore. By year’s end, the federal

government was in the process of confirming agreements made at the officials level.

Offshore Renewable Energy Regulatory Policy. The Department of Energy has lead responsibility on developing offshore renewable energy in Nova Scotia. In the spring of 2006 the Department started working with other departments, provinces and the federal government to help develop a regulatory regime for offshore renewable energy. Department staff met with federal regulatory agencies in March 2006.

- *Provincial Red Tape Reduction Initiative. The Department of Energy administers regulations that impact business. In accordance with the Red Tape Reduction initiative, the department is committed to ensuring that these regulations are not unduly burdensome on business. The department has drafted a new comprehensive Energy Act and submitted it to the Legislation Committee for review and stakeholder consultation. Once the new Energy Act is enacted, the department intends to review all existing onshore regulation and draft new regulations taking into consideration Red Tape Reduction issues addressed by the Province.*

In fiscal 2005-2006, the department made substantial progress developing a regulatory approach and identified key policy decision required for modernized energy legislation and regulation including a new *Energy Act*. The new legislation will take into account opportunities for clearer regulatory guidance and electronic filing to reduce administrative burden. The new *Act* will clarify and simplify legislation, regulations and Codes of Practice that apply to energy in Nova Scotia. We have been completing a review of technical and policy issues. There will be public consultation on the *Act* when ready.

- *Develop a plan to modernise offshore regulations in partnership with federal and other provincial governments. Objectives of this plan are to make regulations more flexible and responsive to emerging industry best practises and technological change and also more goal-oriented rather than prescriptive. A result of this plan will be a reduction of potential drilling costs due to unnecessary regulatory testing requirements.*

The Frontier and Offshore Regulatory Renewal Initiative (FORRI) was developed in 2005 to renew and modernize the regulatory environment in Canada for the frontier and offshore oil and gas sector. We are working with the federal government, Newfoundland & Labrador, and regulators to develop new goal-oriented drilling and production regulations, diving regulations and changes to the drilling regulations to add flexibility to the requirement to flow test an offshore well bringing Canada in line with other major offshore jurisdictions and reduce costs faced by industry. A draft Diving Regulation guidance document was completed; a draft of the new goal-oriented Drilling and Production regulations was developed; and the flow testing amendment to the drilling regulations was approved by our Minister.

We are also finalizing work with other provinces and the federal government to establish a consistent set of rules for seismic activities across Canada known as the *Statement of Canadian Practice for Seismic*. The Statement and a Background Paper were in the final

stages of drafting by the end of fiscal 2005-06.

5.1.2 Priority - Build a Competitive Industry:

- *In co-operation with industry, initiate a scholarship program that complements the Energy Training Program for Students and supports oil and gas related research activities in the Province.*

The Pengrowth-Nova Scotia Energy Scholarship Program was implemented early in fiscal year 2005-2006 with 15 students accessing the scholarship program. There are two main components of the program, the Energy Scholarship Program and the Petroleum Innovation Grant.

The Energy Scholarship Program awarded scholarships valued at \$10,000 (\$2500 renewable over 4 years) to 10 Nova Scotia students attending universities. In addition, 4 (\$2500 non-renewable) scholarships were awarded to Nova Scotia students enrolled in trades and technology programs at the Nova Scotia Community College. There was one recipient of the Petroleum Innovation Grant for 2005-2006.

At the end of fiscal 2005-06, the Department made an additional \$500,000 investment in the program.

- *Assess and promote business opportunities for Nova Scotia energy supply and service companies in international markets such as Mexico, Trinidad & Tobago, and China.*

In fiscal 2005 - 2006, the department made contacts and promoted Nova Scotia business in the China market by sending a representative on the province's first trade mission to that country, organized by the Atlantic World Trade Centre and Nova Scotia Business Inc. (NSBI). A trade delegation of 8 companies was led by the department to the Trinidad And Tobago Petroleum Conference and accompanying exhibition. The Mexican market has continued to be monitored and incoming business leaders and Pemex officials were introduced to appropriate business leaders.

- *Support Nova Scotia industry at major international trade and technology exhibitions in Houston and Aberdeen and encourage technology transfer opportunities.*

In May of 2005, the Department of Energy in partnership with the Offshore Technology Association of Nova Scotia (OTANS) led a delegation of 31 Nova Scotia companies and agencies to Houston, Texas to attend the Offshore Technology Conference. The result being that Nova Scotia companies were able to secure contracts, identify future business opportunities, and maintain existing working relationships with companies involved in the international petroleum industry.

In September of 2005, the Department of Energy in partnership with the OTANS led a delegation of 10 Nova Scotia companies to Aberdeen, Scotland to attend the Offshore Europe. The results being that Nova Scotia companies were able to identify opportunities, look at new technologies, and maintain existing working relationships with companies involved in the international petroleum industry.

- *Prepare strategies for maximizing industrial and employment benefits from development of Deep Panuke and a Sable Project “Tier III”.*

This objective was significantly advanced in 2005-06 and completed in the following quarter with respect to Deep Panuke. Detailed discussions were held with EnCana on the capabilities and capacity of NS suppliers for the project. In addition, a consultant was engaged to give an independent analysis of which benefits to focus on with respect to that project. The result was a draft Offshore Strategic Energy Agreement (OSEA) with EnCana guaranteeing minimum benefits with finalization and signing in the following quarter.

- *Develop a strategic plan for identifying energy research and development priorities.*

The Department worked across a number of fronts to identify research priorities and opportunities that will lead to the creation of an energy R&D strategy. In the summer of 2005, Department staff attended an International Workshop on Marine Sound in Halifax and hosted a meeting with international industry representatives to understand opportunities to cooperate globally on offshore energy seismic-related research.

In addition, the Department worked with the province’s research universities and industry in planning for the second NS Energy R&D Forum in the spring of 2006. As a result of our growing cooperation on the energy R&D agenda, the province worked with these organizations to create two Offshore Energy Research Associations to build knowledge and close science gaps in offshore energy research.

The Offshore Energy Environmental Research Association (OEER) was established in March, 2006 with \$2.6 million in government funding to fund research on energy and the marine environment to help the regulatory system make better science-based decisions. This investment will improve regulatory decisions and make them more predictable.

The Offshore Energy and Technical Research Association (OETR) was established in March, 2006 with \$2.6 million in government funding to fund studies that will help answer questions about Nova Scotia’s offshore oil and gas potential and thus encourage new exploration investment.

The Department also helped to advance the R&D agenda through a \$1 million grant to the Canada Nova Scotia Offshore Petroleum Board to enable them to make improvements in their handling of geophysical data and make it available to attract investment in the Nova Scotia offshore. A \$175,000 grant was also made to Dalhousie University to improve geoscience facilities.

5.1.3 Priority - Manage the Energy Resources:

- *Monitor onshore seismic and drilling activity to ensure regulatory compliance and minimize the effect on the environment and community.*

Activity in the onshore area is increasing and additional departmental effort is being directed to this area. The addition of petroleum technical support has allowed a redirection of effort to meet our regulatory obligations.

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

The Department directed a significant amount of resources in 2005-06 toward the negotiation of the Offshore Strategic Energy Agreement on Deep Panuke with EnCana. In addition to the economic and industrial benefits outlined earlier, the Department also achieved significant gains in royalties in the draft agreement achieved in 2005-06 and finalized in the following quarter. The OSEA is an important strategic gain for the province's offshore because it maintains activity at a time when the exploration cycle is on the downtrend.

- *Conduct a royalty audit and assessment of the Sable Offshore Energy Project and preparation of royalty forecasts for existing and future projects.*

The Audit Reports were substantially developed in 2005-06 and will be issued to the Sable Offshore Energy Project partners in the 3rd quarter of 2006 - 2007.

- *Work with First Nations, fishing organizations, federal & municipal governments, the business community and the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) to address issues related to the development of Nova Scotia's offshore oil & gas industry.*

The Department conducted presentations, information gathering sessions, and the Minister of Energy hosted a forum for aboriginal input. As a result, a foundation for further discussions with the aboriginal leaders was laid. This work is being carried out with significant input and advice from the office of Aboriginal Affairs.

Work to involve community and business leaders is conducted routinely. The business community and the Department regularly consult with each other through the Offshore-Onshore technologies Association and the Canadian Association of Petroleum Producers. There is also significant dialogue with community/municipal leaders on all energy issues including offshore oil and gas.

- *Establish protocol for community and aboriginal consultations on energy-related activities.*

Departmental officials conducted presentations, information gathering sessions, and the

Minister of Energy hosted a forum for aboriginal input.

5.1.4 Priority - Increase Investment Attractiveness of Onshore and Offshore Nova Scotia:

- *Conduct geological analysis of recent drilling results in the Sable Island area, rationalizing why recent success was not achieved, how explorers might be more successful in the future and identifying additional targets.*

This work was completed by the Canada-Nova Scotia Offshore Petroleum Board.

- *In conjunction with the Newfoundland & Labrador and Canadian governments, complete a fiscal analysis of Atlantic Canada's oil and gas industry to make a case for federal tax reductions.*

During 2005-2006, background research on comparable jurisdictions was undertaken and a consultant was retained to advise on the scope of further work in this area. Work in this area will be continued through a combination of internal work and cooperation with the federal government.

- *Undertake a Rights Issuance Analysis to investigate short and long term policy incentives to reinvigorate Nova Scotia's offshore oil & gas industry.*

Department of Energy Staff met with regulators in Norway, Ireland and the United Kingdom to explore options. Additionally, research of other relevant jurisdictions was conducted.

- *Promote Nova Scotia's offshore and onshore at the North American Prospect Exchange (NAPE) in Houston. This is the world's largest forum for companies who are looking for exploration opportunities outside mainland USA.*

A Nova Scotian delegation attended NAPE and promoted Nova Scotia's offshore and onshore.

- *Host a Calgary workshop in April to promote Nova Scotia's onshore oil and natural gas potential, which includes providing information on the rights issuance process and how the regulation of onshore exploration activities is coordinated by the Department.*

In fiscal 2005-2006, department officials met with a total of 14 individual companies in Calgary and Houston to promote Nova Scotia's onshore oil and natural gas potential, which included providing information on the rights issuance process and detail regarding flexibility to continue holding lands and maximizing expenditure commitments through consolidation of lands.

- *Complete analysis work pertaining to Deep Panuke in preparation for a potential project agreement with EnCana.*

Negotiations on an Offshore Strategic Energy Agreement (OSEA) with EnCana for the Deep Panuke Project began in fall of 2005 which was finalized on June 30, 2006.

- *Conduct a review of the high level economics and business decisions that would impact the tying-in of existing significant discoveries into the Sable Offshore Energy Project (SOEP) infrastructure. Examine the potential costs and considerations related to tying-in small offshore deepwater discoveries into existing offshore infrastructure.*

This work was deferred to fiscal 2006-2007 and is now ongoing.

- *The department will hire a Resource Assessment Technician to provide technical support to senior geologists/geophysicists. The technician will create a database of seismic and well information using a map-based format in an effort to make such data available to exploration companies, thus enhancing industry exploration efforts.*

A Geo-technician was hired on a casual basis and is currently performing this work. Such database development will provide the foundation for a Petroleum Registry System. This work is considered essential to the future success of the department.

- *In coordination with the Geological Survey of Canada (GSC) and Newfoundland & Labrador, prepare a digital atlas of information relating to the offshore potential of the Atlantic region.*

A lack of funding and commitment by the GSC resulted in this work being postponed. It may be undertaken in 2006-2007.

- *Complete a deepwater drilling analysis to investigate any drilling issues and complications that need to be addressed in offshore Nova Scotia. This analysis will take into consideration the latest experiences of deepwater drilling in Nova Scotia's offshore.*

This work was replaced by with a Petroleum Systems Modelling Project that was undertaken in 2005-06 and completed in the first quarter of 2006-07.

- *Compile the information gathered from Strategic Environmental Assessments, Canadian Environmental Assessment Agency Comprehensive Studies, Panel Reviews, and Screening studies completed in the region. This will serve as a reference to work already performed.*

This work was deferred and may be undertaken in fiscal 2006-2007.

- *Analyse the coalbed methane potential for Nova Scotia. Collate and assess previous information collected from coalbed methane exploration activities to create a database that will enhance further exploration efforts.*

This work is in progress.

5.1.5 Priority - Security, Reliability and Efficiency of Markets:

- *Represent Nova Scotia at regulatory hearings. Actions include intervening at regulatory hearings such as the Open Access Transmission Tariff (OATT) hearing and the Nova Scotia Power Outage Hearing.*

The department formally intervened on two Nova Scotia Utility and Review Board (UARB) regulatory hearings: 1) NSPI's 2005 Application to Raise Rates in 2006; and, 2) NSPI's Application regarding its Proposed Emission Reduction Strategy. These interventions involved: review of significant volumes of evidence filed by the various intervenors; the preparation and formal submission (with assistance from Department of Justice lawyer) of information requests; attendance and cross examination of experts during stakeholder technical sessions of the formal hearing processes; and the preparation and submission of closing arguments. We also formally intervened at the National Energy Board (NEB) on the Brunswick Pipeline project. Additionally, an MOU was established between the department and the Office of Public Safety at the Department of Environment and Labour for inspection of natural gas and LNG facilities.

- *Develop and implement policy commitments. Actions include developing and updating acts and regulations such as: Under-water gas pipelines, new Energy Act, Energy Efficient Appliances Act Regulations, Liquefied Natural Gas Regulations/Code of Practice, regulations for Electricity Act, and Gas Plant Facility Regulation amendments.*

Work commenced on updating the Province's Energy Efficiency Appliances Act Regulations to reflect the current industry standards. The department retained a consultant in the summer of 2005 to assist with the development of draft renewable energy regulations. A Market Rules Development Committee (MRDC) was established by the department in December 2005 and, with the assistance of a qualified consultant, the MRDC began its work to develop an initial set of Wholesale Market Rules that will be required to open Nova Scotia's Wholesale Electricity Market to competitive supply.

- *Participate on intergovernmental and multi-stakeholder committees to address energy-related market issues. Actions include participation/involvement with the CAP Assessment Program; Atlantic Energy Ministers' and Canadian Energy Ministers' Conferences; New England Governors and Eastern Canadian Premiers (NEG/ECP) Conference; Federal, Provincial, Territorial (FPT) Committees; the National Energy Board (NEB) and Federal Energy Regulatory Commission (FERC).*

In fiscal 2005-2006, Department of Energy officials participated in the following:

- Canadian Council of Energy Ministers Meeting, St. Andrews, New Brunswick, September, 2006;
- Atlantic Energy Ministers' Meeting, New Brunswick, July 2005;
- Atlantic Electricity Working Group Meetings in Charlottetown, October, 2005, and

- Moncton, February 2006;
 - FPT ADM Electricity Reliability Working Group - Participated on several Meetings and Conference Calls;
 - FPT Working Group on Renewable Fuels; and
 - FPT Renewable Energy Working Group.
- *Assist Nova Scotians in converting to natural gas through Gas Market Development Fund (GMDF) incentives and information that focus on efficiency, safety and benefits of natural gas.*

During the 2005-06 fiscal year, the GMDF assisted homeowners to install energy efficient gas burning appliances and by doing so leveraged federal matching grants. Some 190 commercial and 155 residential customers were connected in the Dartmouth region and some 46 commercial and 37 residential customers were connected in the Amherst area. Also, an additional 301 commercial and 243 residential customers in the Dartmouth area, and 82 commercial and 125 residential customers in the Amherst region signed Distribution Supply Agreements.

- *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.*

During fiscal 2005-2006, comments were submitted regarding changes to the *Pipeline Act* gas plant regulations were amended to include LNG facilities; and an LNG Code of Practice was adopted.

5.1.6 Priority - Energy Efficiency Initiative:

- *Nova Scotia Energy Efficient Housing Program - \$14.7 million: Provides for low-income home owners, seniors and family public housing, non-profit and community groups, and working families to achieve the permanent reductions in energy use through energy efficiency improvements and strategic use of renewable energy.*
- *Identify, promote and deliver energy efficiency initiatives. Actions include: enhancing the energy efficiency components of low-income/not for profit initiatives; continuing to promote benefits and uptake of enhanced energy efficiency measures in new and existing housing (e.g. home audit programs, the federal EnerGuide program and R2000 housing); promoting energy efficient transportation (e.g. Bus Rapid Transit Program and LED traffic lights); and encouraging district heating and co-generation.*

Nova Scotia's \$10 million *Smart Energy Choices Program* was launched on October 12, 2005. The following is a summary of the SEC's activity from October 12, 2005 to March 31, 2006:

- EnerGuide for Existing Homes/Additional Modest Income Incentives for Seniors provided \$ 30.00 energy kits to some 1,368 homeowners who had “A” audits and provided \$30.00 energy kits and provincial matching EnerGuide grants of up to \$1,000.00 to 343 homeowners who had “B” audits. The average provincial grant payments were \$ 766.00. The program provided the \$150 EnerGuide “A” audit rebate to 65 seniors, however no seniors’ \$400 top-up grants were paid in the 2005-06 fiscal year. The total Provincial Expenditures on this program as of March 31, 2006 was \$325,366.00.

In recognition of the fact that the approximately 4,700 homeowners in Nova Scotia had received an “A” audit prior to October 12, 2005 and would therefore potentially be eligible to apply for a “B” audit any time within 18 months of their “A” audit, the Department of Energy subsequently established a payable to cover the cost of providing an additional 3,000 “B” audits under the assumption that there would be a 60% take up rate of homeowners who had an “A” audit.

- EnerGuide for New Homes - the program works as follows:
Participants are eligible to be reimbursed up to \$350.00. These houses still need to be completed and tested to receive their rebate. Through an initial \$350.00 analysis, a qualified energy technician estimates the future energy bills and examines options based on the home’s building plans. An actual on site audit is done when the home is completed. The Department of Energy will then rebate the entire cost of the EnerGuide audit (\$350 + HST) if the final building receives an EnerGuide rating of 77 or above or \$175 + HST if the home’s final energy rating is below 77.

The program is administered by the Nova Scotia Homebuilders' Association and new homeowners must apply to them. Energy efficiency analysis was conducted on over 70 new home designs, however, no houses were completed in time for follow-up new home audits to be conducted during the 2005-06 fiscal and therefore no grant payments were made during this period.

- Wood Stove Rebates:
The Department of Energy is offering a \$200 rebate to Nova Scotians who purchase Environmental Protection Agency (EPA) certified wood or wood pellet stoves between October 12, 2005 and August 31, 2007. As of March 31, 2006 about 500 rebate cheques worth \$100,000 were issued. The Province also paid WET-NS \$15,800 in program admin expenses. Applications were made available at all Access NS centres, at most wood heat dealers and on the Department of Energy’s website.
- Solar Water Heating Rebate:
The Department of Energy is offering a 10% rebate towards the cost of a domestic or commercial solar hot water system up to a maximum rebate of \$5,000. As of March 31, 2006 two rebates worth a total of \$ 911.80 were issued. Applications are available on the Energy website and at solar equipment suppliers.
- LED Traffic Signal Replacement Program:

The Department of Energy cost-shared the conversion of 4,700 traffic signals with the Halifax Regional Municipality, New Glasgow, Digby, Yarmouth, Annapolis Royal, and Bridgewater. The Province spent \$173,658 and the municipalities matched that amount and were also responsible for the cost of installing the equipment.

- **Fuel Efficient Vehicle Incentive:**
The department invested \$500,000 in a transit project at Cape Breton University to help fund two new buses, increase service frequency and construct a transit shelter on campus.
- **Public Education:**
In November 2005, the department sent a Quick Tips booklet to every Nova Scotia household. The booklet featured easy, cost effective ways to reduce energy costs. The initiative also included a short television advertising campaign. Additionally, the Province is working with other Atlantic jurisdictions on SAVE - a Shared Atlantic Vision for Energy Efficiency. Nova Scotia is investing \$150,000.00 for three years. Phase I of the campaign is now complete and included newspaper, radio, and cable television advertising. Phase II of the campaign is under development and will focus on social marketing initiatives.
- *Government House-in-Order Program. Work with government, industry and organizations through partnerships, sponsorship, and contracted program funding to improve energy efficiency and encourage energy conservation throughout the province. Actions include programs such as the Province's Public Buildings Initiative (PBI) - first block of retrofits initiated; and adoption of the procurement policy for the Department of Energy - a stepping stone to province-wide involvement.*

Behaviour Change Pilot Program:

The Rethink Program- greener choices at work pilot program was launched at the Department of Energy. Four initiatives have been rolled out to date: office equipment shutdown, reducing paper consumption by double sided printing and conservation, the purchase of 30% recycled paper for the Department, and the purchase of a hybrid vehicle. The program has not yet been evaluated or rolled out to other Departments.

Buildings:

All new buildings constructed by Transportation and Public Works meet the Commercial Building Incentive Program (CBIP) Standard. The province is trying to build to LEAD standards as well although no policy is in place yet to do so.

The Energy Retrofits project has been initiated. An Request for Quotations was sent out and the province now has a list of 5 qualified Energy Service Contractors (ESCOs). A Request for Proposals has been written and is ready to be sent to tender. The RFP can't be sent out until Tangible Capital Assets money for the project is approved.

Procurement:

A Greening Procurement Committee was struck to look at how the government could green its procurement practices. The committee, through subcommittees, has looked at three procurement areas to date: vehicles, IT and communications, and food:

Vehicles: A Greening the Fleet Subcommittee examined options to ensure the government purchases more fuel efficient and environmental vehicles.

IT and Communications: A subcommittee has been struck and are currently developing recommendations.

Food: A subcommittee has been struck and are currently developing recommendations.

- *Keep the Heat - Home Heating Rebate and Energy Efficiency Program. In 2004-2005, the Department of Energy and Service Nova Scotia and Municipal Relations (SNSMR) introduced Keep the Heat - a program to provide immediate relief for low-income Nova Scotians who are faced with the increasing cost of home heating fuel. The program also addresses the longer-term problem of rising fuel prices by offering Nova Scotians help to reduce energy use and costs. Low income Nova Scotians who qualify for a rebate are also offered a furnace tune up, and a chance to receive a free do-it-yourself energy savings kit. The Department of Energy, in collaboration with SNSMR, will evaluate the success of the program to determine needs and actions for 2005-2006.*

The Department of Energy assisted Service Nova Scotia and Municipal Relations with this initiative by taking the lead on the procurement, assembly, and mail-out of 37,000 energy saving kits that were sent to every participant of the 2005-06 initiative. In addition, the department developed and made available a pilot electronic thermostat replacement initiative that was offered to all program participants that heat their homes with electricity. A total of 4,100 applications were subsequently received for this initiative. A turn-key service contract was put out to tender to retain a service provider to supply and install up to 3 programmable electronic thermostats per eligible applicant.

- *Identify the potential and explore options for Demand-side Management (DSM). Actions include: promoting the adoption of DSM measures and establishing new DSM initiatives.*

It was decided that this activity would be deferred to the fiscal 2006-2007 period to enable this activity to be coordinated with NSPI's DSM study.

5.1.7 Priority - Renewable Energy:

- *Create a market for renewable energy. Actions will include: implementing the Electricity Marketplace Governance Committee (EMGC) Regulations pertaining to renewable energy through acts/regulations by January 2006; implementing regulations to reduce emissions from wood burning appliances; and exploring opportunities to implement government commitment for “greening” of purchases.*

The Department of Energy retained a consultant in the summer of 2005 to assist with the development of draft renewable energy regulations.

A Market Rules Development Committee (MRDC) was established by the Department in December 2005 and, with the assistance of a qualified consultant, the MRDC began its work to develop an initial set of Wholesale Market Rules that will be required to open Nova Scotia’s Wholesale Electricity Market to competitive supply.

- *Promote community-based renewable projects. Actions will include: establishing partnerships to advance community-based projects and establishing a baseline.*

The department continues to work with prospective proponents of community based renewable energy projects in an effort to assist with the development of potentially viable business cases designed to secure funding commitments from all levels of government.

- *Assess renewable energy and bio-fuels potential.*

The department supported a proposal from BioVision to secure federal research and development money from the federal government’s Sustainable Technology Development Initiative to develop a technology to convert cellulose-based plant material to ethanol.

5.2 Climate Change

5.2.1 Priority - Address Climate Change:

- *Review and develop climate change policy through the following actions: Consult and negotiate at regional, national and international levels to advance Nova Scotia's interests regarding Canada’s national climate change plan, including federal large final emitter and offsets programs; ensure consistency between climate change policy and program/project activities, in particular those in the areas of energy efficiency, renewable energy and electricity; and assess existing provincial policy and develop new policy approaches as required.*

Developed *Cleaner Energy Choices...the Green Energy Framework* as a basis for discussion with Ottawa on climate change funding. Worked with other provinces and territories and the

federal government on the National Offsets Quantification team to develop of greenhouse gas reduction credit protocols. Led a Nova Scotia Power -Government working group on impacts of greenhouse gas reduction scenarios on utilities. Participated in national and international discussion on global climate policy in the lead up to and during the United Nations Climate Change Conference in Montreal, December 2006.

- *Implement Climate Change Action Plans. Actions include: coordinating the delivery of climate change commitments under the Energy Strategy and New England Governors/Eastern Canadian Premiers Climate Change Action Plan and identifying and facilitating greenhouse gas (GHG) emissions reduction initiatives in partnership with other governments, the private sector and non-government organizations.*

The department funded and participated in HRM's Climate Smart Project - a community based climate change mitigation and adaptation initiative. We produced a sustainable practices guide for small and medium-sized Nova Scotia municipalities in co-operation with Service Nova Scotia and Municipal Relations and the Union of Nova Scotia Municipalities.

Department officials participated in the Meeting of Governors and Premiers held in August 2005. Briefing material was prepared providing an update on implementation. New analysis of renewable energy and energy efficiency options for the region were also prepared and presented.

The department funded the Climate Change Centre at Clean Nova Scotia in partnership with Environment Canada. The centre delivered awareness and education programs on climate change. We also worked with the Carbon Capture and Storage partnership headed by Dalhousie to develop a plan for developing Nova Scotia's carbon capture and storage potential.

- *Address impacts of a changing climate and adaptation. Actions include: increasing engagement within government and supporting research.*

The department completed an Issues paper on Climate Change Impacts on Nova Scotia (in co-operation with the provincial Department of Environment & Labour) and shared the information with an inter-departmental committee.

We worked with the Climate Change Adaptation and Impacts Regional Network on several workshops on climate change impacts in specific sectors such as tourism and forestry. Also, we have started discussions with Department of Natural Resources regarding integrating impacts and adaptation in strategies and planning activities.

5.3 Public Education

Public education encompasses many functions from communications to social marketing to

stakeholder consultations. Public education is a component of all core business areas and is therefore considered to be an overarching priority for the Department of Energy.

5.3.1 Priority - Inform Nova Scotians:

- *Continue to implement a multi-year public education plan that addresses two key areas: Our Energy Use (including energy efficiency, renewable energy, climate change, electricity and gas distribution) and Our Energy Opportunities (careers, skills and economic benefits of the energy sector).*

Our Energy Use:

- *Develop and implement a social marketing campaign to educate Nova Scotians about energy efficiency and encourage behavioural change. The campaign will be based on seasonal themes and will employ a variety of tools including web-based resources, direct mail, advertising and promotions, and community outreach. To maximize funding opportunities, the campaign will complement the federal One Tonne Challenge program.*

Nova Scotia is working with governments in Atlantic Canada on a joint initiative to increase public awareness around energy conservation and efficiency. This campaign is titled SAVE (A Shared Atlantic Vision of Energy Efficiency). In phase I of this campaign, radio, cable television and newspaper advertisements were used to educate the public about energy conservation. This is a multi-year campaign. In phase 2, social marketing techniques will be used to introduce CFLs (compact fluorescent lightbulbs) to Nova Scotians.

As part of the Keep the Heat program, the Department of Energy sent energy savings kits to all rebate recipients. The kits had a number of items that recipients could install to save energy and a booklet explaining the kit contents and their approximate energy saving value. The kits provided up to \$100 in energy savings and included items like low-flow shower heads, weatherstripping, and compact fluorescent light bulbs.

As part of the Smart Energy Choices program, the department sent a quick tips booklet by mail to every household in Nova Scotia. The energy savings tips focussed on ways homeowners and renters could reduce their energy use. The campaign was augmented by newspaper and television advertising.

The Department of Energy launched a re-brand of its website. The new website includes an area for consumer information. The new area highlights energy savings tips, information on energy efficient transportation, links to current energy prices, information on rebates and incentives, and links to publications for download or mail order.

- *Build on successful partnerships with other governments, industry and non-profit organizations to enhance our programs and provide Nova Scotians with the tools they need to better understand energy issues. This will be achieved through joint educational*

initiatives, the creation of public education working groups, and partnerships on promotional campaigns.

The Department of Energy worked with the Southwest Shore Energy Office to pilot a school fundraising project based on the energy savings kits used in the Keep the Heat program. The project engaged students in the Tri-County Regional School Board to sell energy savings items like compact fluorescent lights and low flow showerheads to members in their communities. The students were also educated about the importance of energy efficiency and used these messages as they sold the items in their communities.

- *Develop and implement a long-term strategy to improve the energy efficiency of government operations. The strategy will be implemented in a phased approach, beginning with a pilot program within the Department of Energy (Phase I). The pilot will be further developed and promoted within other government departments (Phase II) and municipalities, universities, schools and hospitals (MUSH sector - Phase III).*

Improving energy efficiency and conservation in government operations is being implemented through two programs. The first is actual energy efficiency upgrades to buildings. The second is changing the energy use behaviour of government employees. The Department of Energy launched a energy efficiency community based social marketing campaign to help educate employees about energy efficiency and conservation. The program is called Rethink: Greener Choices at Work and encourages employees to power down the office, print double-sided, print only what is needed, and to take public transit. The program will be rolled out to other government departments once the one year pilot program is complete.

5.4 Human Resources

5.4.1 Priority - Occupational Health & Safety:

- *The Department of Energy values the health and safety of its employees and is committed to providing a safe and supportive working environment. In order to ensure that its goals are met in this regard, the department has formed a Joint Occupational Health and Safety (JOHS) Committee. This Committee's priority is to work in partnership with employees to minimize the risk of occupational injury and illness in the workplace. The Committee has established a Safety Program and will continue to identify and report workplace hazards, ensure employee access to training and take all necessary measures to promote health and safety.*

The Joint Occupational Health Committee (JOHS) met as prescribed in its mandate throughout 2005 – 2006. A committee report was prepared in accordance with JOHS requirements and submitted to the departmental Deputy Minister.

5.4.2 Priority - Affirmative Action/Valuing Diversity:

- *The Department of Energy will develop and submit a three-year Affirmative Action Plan following the completion of an Employment Systems Review. The results of this review will identify areas where the department can improve the representation of designated groups. The review will also assist in establishing department goals, activities and implementation measures to identify and remove barriers to employment and improve the overall awareness of and appreciation for diversity within the department.*

In fiscal 2005-2006, the department developed and submitted an Affirmative Action Plan outlining initiatives for 2006-2007. Also, we provided a Progress Report of our efforts and progress during 2005 - 2006 in working toward the department's diversity and affirmative action goals.

5.4.3 Priority - Bilingual/French Language Services:

- *The department will review the French-Language Services Act legislation and determine how it will contribute to implementation of the new legislation, and support french language training of staff.*

The department has made efforts in support of the French-language Services Act through its participation on the French-language Services Coordinating Committee and the French-language Consultation Sub-committee. We have been investigating ways of communicating, sharing information, and promoting services available in French. Employees have been informed about the government's commitment to provide French-language services and the French Communications Guidelines and French Translation Services Guidelines have been provided to staff.

The department is also supporting French-language services development, planning and delivery and is examining the level of services in French within the department and we have assessed the capacity for offering services and identifying priority areas.

5.4.4 Priority - Responses to Employee Survey/Opinion:

- Results from the Employee Survey demonstrated that Department of Energy strengths include, as examples, teamwork, employee involvement, and safety. Opportunities for improvement include, as examples, workplace ethics, compensation, department leadership, diversity, retention, and merit. In response to these results, the department took the following actions in 2005/06:
 - *Implement the "whistle-blower" legislation in accordance with the Disclosure of Wrongdoing Policy in the Human Resources Management Manual 500. The department will continue to facilitate proper information exchange as per the Freedom Of Information and Protection Of Privacy (FOIPOP) process. In addition,*

the department will offer whatever assistance it can to Government initiatives to examine why employees expressed concern about workplace ethics and support the development of a process to address this issue.

A presentation was made to each division on the “Disclosure of Wrongdoing Policy” as published in the Human Resources Management Manual 500, Chapter 20. After the presentation, there was discussion regarding the steps and processes for reporting a “wrongdoing.”

The department is supporting the Government initiatives of “Business Continuity Planning” process, the Government Services Inventory Control (GSIC) replacement project by providing copies of our current inventory and discussing how the new system will meet the department’s requirements.

- *Promote leadership by creating a succession management plan which will identify successors to each key position. Development plans for these potential successors will be created and strategies for the appropriate knowledge transfer will be established.*

During the fiscal year 2005-2006 key senior officials responsible for developing the plan left the Department. As a result this item was deferred until fiscal 2006-07.

- *Foster employee retention by establishing development plans as part of performance management plans for all staff. These development plans will include a number of facets such as a skills inventory, an assessment of the skills needed by the department to meet future operational requirements, individual training requirements and individual development plans to meet the requirements.*

As part of the Performance Management process each employee had an opportunity to identify training and work related experience needs that would help them grow within the corporate structure. Where and when appropriate, the department accommodated these requests.

- *Support the Public Service Commission in continuing its merit/staffing audits which will help determine if merit-based hiring practices are utilized in the Government of Nova Scotia.*

The responsibility for overseeing the process for departmental staffing has been centralized in the Strategic Policy and Services division. This has resulted in a consistent adherence to corporate hiring practices.

5.4.5 Priority - Performance Review:

- *The Department of Energy is committed to supporting the growth and development of employees through effective performance management. In 2005-2006, the department will ensure that employee performance appraisals are completed. Each employee will have a*

performance appraisal conducted annually, or on a change of position or appointment, or more frequently as required, and will be provided with a copy of the appraisal.

A process of performance management was adopted throughout the department supported by training from Human Resources CSU for both staff and management.

6.0 BUDGET CONTEXT

Division	2004-2005 estimate	2004-2005 actual	2005-2006 estimate	2005-2006 actual
Administration	2,138	2,249	2,136	1,806
Policy	1,789	1,585	6,218	16,670
Business and Technology	1,298	1,364	N/A	N/A
Resource Assessment and Royalties	895	881	N/A	N/A
Canada/Nova Scotia Offshore Petroleum Board	1,230	756	1,265	2,139
Energy	7,350	6,835	9,619	20,615
Funded Staff	41	39	46	45
Revenue	(20,130)	(89,281)	(30,185)	(183,652)

Notes:

- * Due to internal restructuring , Resource Assessment and Royalties and Benefits and Training have been rolled into Policy for 2005-2006.
- * In accordance with the public accounts, all estimates/actuals have been rounded to the nearest thousand.

7.0 Measuring Our Performance

7.1 Outcome: *Greater awareness of energy issues, programs, services and operation.*

Measure: *Energy Awareness Index as defined in 2003/04 public survey. (Thinkwell Research).*

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 2005-2006 business plan, the department plans a followup awareness survey in 2007-2008.

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

The goal of public education is to increase the overall energy awareness index by 15 points, to 65. In fiscal 2007-2008, the survey will be repeated to determine if there has been an increase in awareness of energy issues, programs, services and opportunities.

7.2 Outcome: *Increased investment attractiveness of onshore and offshore Nova Scotia to petroleum explorers and developers as well as the service and supply sector.*

Measure: *Number of targeted promotional events and technical meetings that took place at local, national and international venues.*

WHERE ARE WE NOW?

In fiscal 2005-2006, the Department of Energy participated in 4 Trade Shows and 20 Technical Meetings to promote Nova Scotia's onshore and offshore to potential investors.

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

The department plans to increase its efforts to promote Nova Scotia's onshore and offshore potential to investors. In fiscal 2006-2007, we plan to participate in a greater number of national and international promotional and technical events and are targeting 6 Trade Shows, a minimum of 30 Technical Meetings with industry in Halifax, Calgary, Houston, Dallas, etc., and at least 2 workshops.

7.3 Outcome: *Increased opportunities for training in the energy sector.*

Measure: *Number of students accessing scholarship program.*

WHERE ARE WE NOW?

The Pengrowth-Nova Scotia Energy Scholarship Program was implemented early in fiscal year 2005-2006 with 15 students accessing the scholarship program. There are two main components of the program, the Energy Scholarship Program and the Petroleum Innovation Grant.

The Energy Scholarship Program awarded scholarships valued at \$10,000 (\$2500 renewable over 4 years) to 10 Nova Scotia students attending universities. In addition, 4 (\$2500 non-renewable) scholarships were awarded to Nova Scotia students enrolled in trades and technology programs at the Nova Scotia Community College. There was one recipient of the Petroleum Innovation Grant for 2005-2006.

WHERE DO WE WANT TO BE IN THE FUTURE?

The Department of Energy will continue to look for ways to increase opportunities for Nova Scotia students to gain training in the energy sector here in Nova Scotia. Our goal is to increase funding for and participation in the Scholarship Program in future years.

7.4 Outcome: *Improved energy efficiency and conservation within government operations.*

Measure: *Number of government operations participating in the energy efficiency program.*

WHERE ARE WE NOW?

The Energy Retrofits pilot project has been initiated. A Request For Quotations was sent out and the Province has a list of 5 qualified Energy Service Contractors (ESCOs). A Request for Proposals has been developed and is ready to be sent to tender pending Tangible Capital Assets (TCA) approval of funding for the project.

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

Implement pilot program within the Department of Energy (Phase I). Further development and promotion of pilot program within other government departments Phase II). Municipalities, universities, schools and hospitals (Phase III).

7.5 Outcome: *Reduction in harmful air emissions and green house gases.*

Measure: *Successful development and implementation of a Climate Change Action Plan.*

WHERE ARE WE NOW?

The department continues to work on implementation of NEG/ECP 2001 Climate Change Action Plan as well as implementation of climate change measures outlined in Nova Scotia's 2001 Energy Strategy. Preparation of new climate change actions are contingent on plans to move ahead on updating the Energy Strategy.

Greenhouse gas emissions in Nova Scotia continue to rise, although at a rate slower than that of the country as a whole. The rate of increase of emissions in 2004 for Nova Scotia was fifth highest among Canadian provinces.

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

Our goal is to complete the development and implementation of a Climate Change Action Plan.