

Nova Scotia Department of Energy

Business Plan

2005 - 2006

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Deputy Minister

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Minister

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i. MESSAGE FROM THE MINISTER

When government developed the Nova Scotia Energy Strategy, we held public consultations that told us we should:

- ▶ think long term
- ▶ learn from lessons elsewhere
- ▶ maximize economic benefits to Nova Scotia
- ▶ improve the environment
- ▶ increase renewable energy production
- ▶ take a cautious approach to introducing competition in the electricity sector

We've taken that advice to heart, and since it was formed, the Department of Energy has made that advice part of our business planning. That remains the case this year, as the Department presents its business plan for 2005-2006.

We will continue our successful efforts to make sure that Nova Scotians benefit from the resources that belong to them; to seek out new ways of bringing additional alternative and renewable energy sources into our energy mix; and to promote energy efficiency. We will continue to work toward ensuring Nova Scotians have access to a reliable electrical system that is priced fairly.

We remain committed to the Energy Strategy's goal to create a world-class energy industry in Nova Scotia. Our training and education initiatives will continue to bring new opportunities for Nova Scotians wanting to pursue careers in energy; and we will continue to promote Nova Scotia's capabilities and development potential around the world.

In all of this, we will hold true to the long-term vision you asked us to maintain as we develop the great potential that is Nova Scotia's Energy.

Honourable Cecil Phillip Clarke
Minister of Energy

ii. MESSAGE FROM THE DEPUTY MINISTER

Change remains a constant challenge for all of us in the Department of Energy as we meet our business planning responsibilities - change in world energy markets; change in economic circumstances here and abroad; change in the technologies that drive our economy and the energy sector itself.

In this, the third business plan developed by the Department of Energy, we continue to manage these challenges with programs and activities that build on the excellent foundation laid by the Nova Scotia Energy Strategy.

We are working to further integrate the diverse functions within our department – from encouraging oil and gas exploration and development, to securing a reliable energy supply for Nova Scotians, to addressing energy efficiency and climate change. While all of these are equally important, our challenge lies in managing our resources and our planning to meet emerging and shifting priorities in the global, national and local energy sector.

The Energy Strategy guides the vision and objectives of our Department. It provides us with the day-to-day goals for our work and the means to measure our success so that we can ensure responsible business planning in the public sector.

You'll see from this plan that we measure our success by the benefits that a healthy energy sector can bring to Nova Scotia. That's exactly what the Strategy calls on us to do and we look forward to working with all Nova Scotians to continue our success.

Allison Scott
Deputy Minister of Energy

1.0 MISSION

The Energy Department's mission is to deliver maximum economic, social, and environmental benefits from the energy sector by creating partnerships with governments, industry, other provincial departments and local communities to develop, establish and manage the province's energy policies.

2.0 PLANNING CONTEXT

Energy markets across North America and around the world are constantly changing. In North America, the natural gas supply has traditionally exceeded demand. However, in the past few years, this has reversed and natural gas prices have risen. This has the industry and governments focusing on finding new sources of supply. Continued political instability in areas of the world and increasing demand, particularly in China and India, have contributed to higher world oil prices. Electricity markets are increasingly opening to competition across the United States and parts of Canada. These market changes have led to pressures in electricity pricing and supply in some jurisdictions.

The entry into force of the Kyoto Protocol on February 16, 2005 has led to an increased urgency to implement climate change measures in Canada. The Federal Government continues to increase its focus on energy efficiency, cleaner fuels and renewable forms of energy such as wind, solar, and biomass. The department is actively participating in the national process as well as on provincial and territorial committees to ensure Canada achieves real greenhouse gas reductions that are cost-effective and do not impose undue burden on our province.

The signing of the Offshore Resource Revenue Agreement on February 14, 2005 made Nova Scotia the principal beneficiary of its offshore resource revenues, guaranteeing the province 100 percent of provincial source petroleum revenues, including royalties. In order to capitalize on the revenue opportunities from Nova Scotia's offshore, there is a need to encourage offshore exploration. Due to the time restrictions of the offshore agreement, this may be a limited opportunity. The Department of Energy has therefore made it a priority to increase the investment attractiveness of Nova Scotia's offshore to petroleum exploration and development companies as well as the service and supply sector.

The Department of Energy's major responsibilities include climate change, oil and gas, electricity, renewables, energy utilization, energy efficiency, energy research and development, energy economics and policy and related support services. The department has the responsibility to coordinate provincial and federal inter-governmental interactions on energy issues and partner with non-government organizations, advisory groups, regulators, and industry associations. In addition, the department works with the private sector companies that provide the technology and capital investment required to develop and expand Nova Scotia's energy resources. The department continues to provide a key role in informing Nova Scotians of the implications of developments in the energy sector on the lives of Nova Scotians.

2.1 Opportunities for Growth in Nova Scotia's Energy Sector

2.1.1 *Oil and Natural Gas*

Our onshore and offshore petroleum resource potential presents significant economic growth opportunities for Nova Scotia. These opportunities are in the following forms:

Exploration:

Oil and natural gas exploration activity creates and sustains jobs and defines the potential value for this non-renewable resource. Continued exploration in Nova Scotia creates business development opportunities, especially in the marine and environmental goods and services sector. It will also set the stage for future development project opportunities.

Development:

Future projects should also contribute to the growth of the oil and natural gas service and supply sector. There are opportunities for enhancing our engineering and related technology services, fabrication, construction & assembly, and creating new investment in our infrastructure and capacity. We can create new opportunities for all Nova Scotians. Revenue from the offshore such as royalties and corporate taxes are expected to rise as projects recover their investments and operating costs.

Production:

The production of new supplies of natural gas and oil will create long term jobs over the life of the project.

Distribution:

The establishment of gas distribution systems not only makes gas available to Nova Scotians, it also has a major economic impact through construction activity.

2.1.2 *Renewable Energy*

Nova Scotia has significant opportunities when it comes to expanding our renewable energy base and use of alternative fuels. The current planned increase in wind-produced energy is only the first step in a move to generate a larger portion of our electricity from sustainable, renewable sources. As sustained wind energy becomes available at numerous locations throughout Nova Scotia, so will the potential economic opportunities from its development.

2.1.3 *Energy Efficiency*

Energy efficiency is a cost-saving, valuable energy resource that can help to moderate demand. Energy efficiency opportunities will serve to reduce our dependence upon all energy sources, make business more competitive, reduce consumers' energy bills, and reduce impacts on the environment. Opportunities exist for Nova Scotia's energy industry to design, build, market and install renewable energy and /or energy efficient technologies, products and services not only within Nova Scotia, but on a global scale to help address environmental issues such as climate change.

2.1.4 *Training, Research and Development*

Training, research and development opportunities cut across all aspects of the energy sector. Energy industries and the supply sector that supports them require highly trained employees who are well compensated for their skills. With respect to research and development, the energy agenda extends from clean coal technologies, to improving our understanding of the ocean environment, to developing new technologies for the remote and harsh environments seen in the deep waters off the Scotian Shelf. The federal government has lead responsibilities in many of these areas and has established programs to fund research. It is necessary to access these funds to enhance energy opportunities in Nova Scotia and encourage federal initiatives to address Nova Scotia energy priorities.

2.1.5 *Economic Opportunities Arising from Climate Change Response*

As homeowners and businesses invest in new equipment and technologies to reduce greenhouse gas emissions from energy use, a significant amount of activity will be generated in the construction, retail, consulting and transportation industries. This spin-off activity has the potential to create and sustain a significant number of jobs in Nova Scotia.

2.2 Challenges Facing Nova Scotia's Energy Sector

Even with the potential of local oil and natural gas and relatively low cost electricity, the energy sector in Nova Scotia faces significant challenges as highlighted below. As we continue to plan and provide for the province's energy future, we must be mindful of the challenges we face both around the globe and here at home.

2.2.1 *Climate Change*

In 2002, Canada became the 100th country to ratify the Kyoto Protocol and, with Russia ratifying the accord in November 2004, the protocol officially came into force on February 16, 2005. The federal government has committed to reduce greenhouse gas emissions to 6 percent below 1990 levels by 2012. By the end of 2000, Canada's emissions were estimated to be 730 megatonnes, 160 above the country's Kyoto target. With clarity from the Government of Canada, Nova Scotia will proceed with doing its share in reaching this target and will require significant effort from industry, governments and citizens. The Province is moving forward on several initiatives that support the objectives of the Kyoto Protocol while awaiting greater clarity on federal strategy and programming.

2.2.2 *Offshore Oil and Natural Gas*

Nova Scotia's production of oil and natural gas is a relatively new activity. To achieve the full potential of the offshore, significant challenges must be overcome. These challenges include: harsh weather conditions, especially in the winter; established marine interests that need to be better understood and addressed; activities that are regulated extensively by two levels of government and subject to strict and extensive environment and safety requirements; and very high exploration and development costs.

As a partner in the national and international oil and natural gas sector, Nova Scotia continues to develop policies and programs that provide a competitive business climate, encourage needed investment and allow the Province to achieve maximum benefit from its offshore resources.

2.2.3 *Onshore Oil and Natural Gas*

Nova Scotia is believed to have significant onshore petroleum potential but there have been no commercial oil or natural gas discoveries in the province to date. Some of the key infrastructure to deliver onshore natural gas discoveries to market is now in place. Exploration interest is increasing for conventional oil and gas as well as coalbed methane. Continued exploration work is required in order to realize Nova Scotia's onshore petroleum potential.

2.2.4 *Renewable Energy*

Nova Scotia currently produces over 8% of its electricity from renewable sources including hydro power. Increasing the amount of renewable energy by an additional 5% in our province will have local and global environmental benefits and will help position the province for the future. The challenges are to properly assess the province's renewable energy and alternate fuel potential, and find ways to encourage the development and use of renewable energy sources, several of which are not yet fully cost-competitive with traditional large scale electrical generation.

2.2.5 *Conservation*

Efficient use and conservation of energy equate to cost-efficient sources of new supply and have important environmental benefits. The challenge for energy consumers is to make wise energy choices. Government has accepted the challenge to demonstrate leadership in the wise and efficient use of energy by: incorporating high energy-efficiency standards for provincially funded new schools, hospitals, and office structures; supporting energy-efficient transportation projects such as U-pass, the Ecology Action Center's TRAX project, or Metro Transit's new Rapid Transit Bus project; and by incorporating strong energy - efficiency objectives in its incentive program for natural gas conversions.

2.2.6 *Electricity*

Nova Scotians have enjoyed relatively stable electricity prices over the last decade leading to our electricity being very competitively priced in northeastern North America. Globally, there is a trend towards increased competition in the industry and increasing integration of the North American electricity market place. The province's strategy adopts a cautious approach for introducing competition in our electricity sector to ensure that we are positioned to continue providing Nova Scotians with affordable, reliable energy.

Recent development in world energy commodity markets has put increasing pressure on electricity rates. Environmental regulation, for air pollution and climate change concerns, is also exerting pressure on future electricity rates.

2.2.7 Coal

Nova Scotia depends largely upon coal as a source of electricity generation. Currently, this is an advantage because coal is competitively priced. However, increasing environmental standards create significant challenges with respect to the air emissions of coal-burning facilities. Meeting these challenges may include development and application of clean coal technologies, and will require both a move to cleaner fuel supplies as well as requirements to use electricity more wisely.

2.2.8 Refined Petroleum Products

The last few years have seen a great deal of price volatility at the gasoline pumps and with home heating oil. This has prompted the department to expand the price reporting information on its website for both gasoline and furnace oil. The department will continue its efforts to engage industry and to inform consumers.

3.0 STRATEGIC GOALS

The department has developed strategic goals listed below, which guide our core business areas, priorities, day-to-day operations and yearly performance measures:

3.1 Economic Growth

The Goal - A world-class energy sector that achieves sustainable economic development.

Nova Scotia is fortunate to have access to a wide variety of indigenous energy resources including coal, natural gas, wind, wood fibre and hydro power. Nova Scotia will continue to reap the benefits of a growing energy sector that makes significant contributions to our economy. The energy sector will also provide opportunities for Nova Scotia-based businesses to become internationally competitive. Nova Scotia strives to attract new business world-wide through innovation and the commercialization of research and development in the energy sector. To encourage private sector investment, Nova Scotia continues to make its offshore and onshore regulatory systems more efficient and effective, thereby creating a more stable and predictable business climate.

3.2 Social and Economic Benefits

The Goal - Enhance the economic and social benefits of the province's expanding energy sector.

Our energy industry has significant potential for oil and gas discoveries, renewable energy projects and development of technologies and capacity to address global climate change. As a result, additional activity provides employment opportunities for Nova Scotians, revenue to the provincial government, and direct and indirect benefits to the economy. Through industry growth, Nova Scotia will become a more self sufficient and prosperous province with a skilled workforce ready to take on opportunities in the energy industry.

3.3 Environment

The Goal - A healthy environment and a better quality of life for Nova Scotians.

As our energy sector evolves, we are positioned to support a sustainable environment. The impacts of oil and gas development on our oceans are being addressed and monitored. We are working to cut air emissions, reduce greenhouse gases and continue to encourage investment in renewable and alternative energy sources. Through promotion of energy efficiency, conservation, renewable energy resources and the responsible development of our petroleum resources, Nova Scotia will continue to improve the quality of our environment and contribute to the national effort to address climate change.

4.0 CORE BUSINESS AREAS

The Department of Energy's core business areas that support its strategic goals are as follows:

4.1 Economic Activity and Benefits

Programs and services in this area are designed to encourage the growth of the Nova Scotia economy through local procurement, employment and training while ensuring a secure supply of energy to the provincial economy. Existing and new energy opportunities will continue to provide a significant component of the provincial economy. The Province, through the Department of Energy, will pursue opportunities to maximize the value of all its energy resources.

Program components and activities focussed on economic activity and benefits are:

4.1.1 Resource Management & Assessment

- Promote Nova Scotia's onshore and offshore potential to investors;
- Manage the onshore rights issuance process and other onshore and offshore regulatory obligations;
- Steward the Province's policy regarding the management of its offshore petroleum resources;
- Assess the petroleum potential in various onshore and offshore basins through projects and research to provide more insight into the petroleum systems, thus enhancing and encouraging industry's efforts;
- Serve on a variety of committees (federal/provincial government, industry and private sector) to ensure minimal environmental impact from oil and gas related activities.

4.1.2 Royalty Administration & Assessment

- Administer offshore royalty regulations;
- Prepare royalty forecasts for existing and future projects;
- Ensure the collection of economic rents.

4.1.3 Business and Technology

- Encourage resource development options that consider potential for Nova Scotia business and employment opportunities;
- Support energy-related employment in Nova Scotia;
- Enhance opportunities for Nova Scotia companies engaged in oil and gas activities in local, national and international markets;
- Maximize business development and employment benefits that flow from targeted oil and gas research & development initiatives;
- Identify and support training opportunities for Nova Scotians within the energy sector;
- Support the development of formal opportunities for training and apprenticeship to enable Nova Scotians to gain employment in the energy sector.

4.1.4 Energy Management and Markets

- Encourage efficient and responsible management of the production, transportation and use of energy in Nova Scotia;
- Establish policies for the gradual introduction of competition in our electricity markets;
- Represent provincial interests before regulators in energy matters.

4.1.5 Offshore Regulatory Policy

- Maximize the efficiency of offshore regulatory process;
- Create a more predictable and stable regulatory process.

4.1.6 Energy Efficiency Initiative

- Improve energy efficiency and encourage energy conservation throughout the province;
- Identify, promote and deliver energy efficient initiatives.
- Identify the potential and explore options for Demand-side Management.

4.1.7 Renewable Energy

- Create a market for renewable energy;
- Promote community-based renewable energy projects.

4.2 Climate Change

Programs involve addressing climate change and Nova Scotia's role in the implementation of the Kyoto Accord. Nova Scotia partners with provincial, federal and territorial governments to establish emission reduction objectives and works with industry to achieve these in the most cost effective way possible.

Program components and activities focussed on climate change:

4.2.1 Address Climate Change

- Manage Nova Scotia's interests through the national climate change plan;
- Develop partnerships to reduce greenhouse gas emissions;
- Address impacts of a changing climate.

5.0 PRIORITIES

The Department of Energy's priorities for the upcoming 2005/06 fiscal year include the following:

5.1 Economic Activity and Benefits

5.1.1 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.
- 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.
- 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.

5.1.2 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.
- Assess and promote business opportunities for Nova Scotia energy supply and service companies in international markets such as Mexico, Trinidad & Tobago, and China.

- Support Nova Scotia industry at major international trade and technology exhibitions in Houston and Aberdeen and encourage technology transfer opportunities.
- Prepare strategies for maximizing industrial and employment benefits from development of Deep Panuke and a Sable Project “Tier III”.
- Develop a strategic plan for identifying energy research and development priorities.

5.1.3 Manage the Energy Resources

- Monitor onshore seismic and drilling activity to ensure regulatory compliance and minimize the effect on the environment and community.
- 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.
- Conduct a royalty audit and assessment of the Sable Offshore Energy Project and preparation of royalty forecasts for existing and future projects.
- 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.
- Establish protocol for community and aboriginal consultations on energy-related activities.

5.1.4 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.
- 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.
- Undertake a Rights Issuance Analysis to investigate short and long term policy incentives to reinvigorate Nova Scotia’s offshore oil & gas industry.
- 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.
- 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.

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

5.1.5 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.
- 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.
- 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 Committees; the National Energy Board (NEB) and Federal Energy Regulatory Commission (FERC).

- Assist Nova Scotians in converting to natural gas through Gas Market Development Fund incentives and information that focus on efficiency, safety and benefits of natural gas.
- 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.

5.1.6 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.
- 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.
- 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.
- 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.
- Identify the potential and explore options for Demand-side Management (DSM). Actions include: promoting the adoption of DSM measures and establishing new DSM initiatives.

5.1.7 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.
- Promote community-based renewable projects. Actions will include: establishing partnerships to advance community-based projects and establishing a baseline.
- Assess renewable energy and bio-fuels potential.

5.2 **Climate Change**

5.2.1 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.
- 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.
- Address impacts of a changing climate and adaptation. Actions include: increasing engagement within government and supporting research.

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 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.
- 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.
- 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).

Our Energy Opportunities:

- Promote opportunities in the oil and gas industry and the energy sector in general by developing materials and strategies to support attendance at trade shows and industry events.
- Educate Nova Scotians about jobs, careers, and training opportunities in the energy sector by promoting the Energy Training Program and a new energy scholarship program. This will include marketing strategies targeted to employers, schools, and students, as well as broad-based advertising.

General:

- Develop an annual Report to Nova Scotians to educate the public on issues in the energy sector and inform them of progress with Nova Scotia's Energy Strategy. The report will be highlighted on the department's web site and distributed through direct mail and/or newspapers.
- Conduct public consultations to identify opportunities and needs and to gather input on changes to legislation, regulations, codes of practice, policy, etc.

5.4 Human Resources

5.4.1 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.

5.4.2 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.

5.4.3 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.

5.4.4 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 will take 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.

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.

Develop and submit a three-year Affirmative Action Plan 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.

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.

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.

5.4.5 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.

6.0 BUDGET CONTEXT

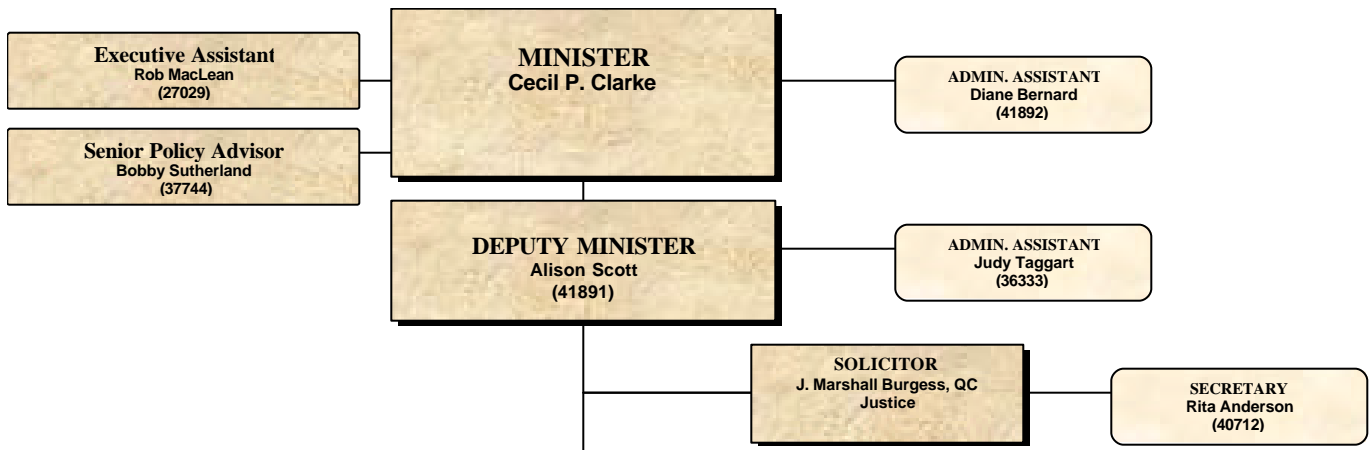
Division	2004-2005 estimate	2004-2005 forecast	2005-2006 estimate
Administration	2,650,000	2,670,300	2,136,200
Policy	1,277,000	1,160,700	6,217,800
Business and Technology	1,298,000	1,298,000	N/A
Resource Assessment and Royalties	895,000	895,000	N/A
Canada/Nova Scotia Offshore Petroleum Board	1,230,000	1,230,000	1,265,000
Energy	7,350,000	7,254,000	9,619,000
Funded Staff	41.0	38.3	46.0
Revenue	-27,235,000	-22,006,221	-30,184,600

Notes: Due to internal restructuring , Resource Assessment and Royalties and Benefits and Training have been rolled into Policy for 2005-2006.

7.0 OUTCOMES & MEASURES

Core Business Area: Economic Activity and Benefits				
OUTCOME	MEASURE	DATA	TARGET 2005 - 2006	Strategic Actions to achieve target
Greater awareness of energy issues, programs, services and operation.	Energy Awareness Index as defined in 2003/04 public survey. (Thinkwell Research)	Baseline measure (obtained in 2003/04) shows Energy Awareness Index = 50.	2005/06 - No additional measure. 2007/08 - Followup awareness survey. Increase Energy Awareness Index to 65.	- Website, direct mail, media, advertising, school tours and community tours.
Increased investment attractiveness of onshore and offshore Nova Scotia to petroleum explorers and developers as well as the service and supply sector.	Number of targeted promotional events and technical meetings that took place at local, national and international venues.	2005/06 is baseline year.	2005/06 - Trade Shows and Expositions, Conferences: 10 Technical Meetings with Industry in Halifax, Calgary, Houston, Dallas, etc. : minimum 30.	- Attend and present at Offshore Technology Conference (OTC), American Association of Petroleum Geoscientists (AAPG) Conference, Offshore/Onshore Technologies Association of Nova Scotia (OTANS) Conference, Newfoundland and Labrador Offshore Industries Association (NOIA) Conference, Offshore Europe Conference, Canadian Offshore Resources Exposition (CORE) Conference and Trade Show, North American Prospect Exchange (NAPE), etc.
Increased opportunities for training in the energy sector.	Number of students accessing scholarship program.	2005/06 is baseline year.	2005/06 - Establishment of scholarship program - 15 students accessing scholarship program..	- Initiate a scholarship program that complements the Energy Training Program for Students and supports oil and gas related research activities in the Province.

Core Business Area: Economic Activity and Benefits				
OUTCOME	MEASURE	DATA	TARGET 2005 - 2006	Strategic Actions to achieve target
Improved energy efficiency and conservation within government operations.	Number of government operations participating in the energy efficiency program.	2005/06 is baseline year - establish kWh _{equivalents} per m ² of conditioned space.	2005/06 - Development and implementation of a long-term strategy.; track kWh equivalents, GHGs and dollars saved.	<ul style="list-style-type: none"> - 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).
Core Business Area: Climate Change				
<u>OUTCOME</u>	<u>MEASURE</u>	<u>DATA</u>	<u>TARGET 2005 - 2006</u>	<u>Strategic Actions to achieve target</u>
Reduction in harmful air emissions and green house gases.	Successful development and implementation of a Climate Change Action Plan.	2005/06 is baseline year.	2005/06 - Development and implementation of a Climate Change Action Plan.	<ul style="list-style-type: none"> - Coordinate the delivery of climate change commitments under the Energy Strategy and New England Governors/Eastern Canadian Premiers climate change Action Plan. - Identify and facilitate green house gas (GHG) emissions reduction initiatives.



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Operations

