

**Nova Scotia Department of Energy**

**Business Plan**

**2008 - 2009**

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Honourable Richard Hurlburt  
Minister

## MESSAGE FROM THE MINISTER

Energy holds many different meanings to Nova Scotians. It is a source of income, an opportunity, and a story of future possibilities. To respond to these definitions, the province strives to both grow the economy and protect the environment through the energy sector.

In practical terms, this means promoting our petroleum resources and our renewable technologies like wind, tidal and biomass. It means setting fair rules so that the private sector invests in offshore and onshore gas exploration, and in the growing green energy sector.

EnCana Corporation has announced plans to develop the Deep Panuke natural gas field, with first gas scheduled for 2010. The project guarantees work for Nova Scotians, including engineering, design, procurement, fabrication and manufacturing jobs.

Companies are also showing interest in our onshore natural gas, our coalbed methane and shale gas. In 2007, Stealth signed Nova Scotia's first onshore coal-gas production agreement. Elmworth is planning to drill six to eight wells in the Windsor area this year. And more recently, Alton Natural Gas Storage announced plans to build a gas storage project in the province, and is considering plans for a second gas pipeline to the United States.

With world-class average wind speeds and the highest tides in the world, renewable energy has great potential to play a larger role in electricity generation in Nova Scotia. Wind turbines are expected to grow from 40 to over 300 in the next six years, and by 2010 we could have North America's first tidal energy centre up and running in the Bay of Fundy.

By 2013, Nova Scotia will generate almost 20 per cent of electricity through renewable energy. This target will bring an additional:

- 500 megawatts of clean power
- 100,000 homes powered on clean power
- 750,000 tons of greenhouse gas displaced from our air
- \$1 billion in new investment in Nova Scotia's economy

This year, we will continue to encourage local content in our projects with legislation, educate our workforce to compete at home and abroad, and partner internationally to create world-class expertise and experience. This business plan lays out these efforts in detail – to grow our economy while protecting the environment.

Honourable Richard Hurlburt  
Minister of Energy

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## **1.0 MISSION/MANDATE/PROFILE**

### **1.1 Mission Statement**

The mission of the Nova Scotia Department of Energy is to advance the interests and concerns of the Province with respect to energy and achieve optimum economic, social and environmental value from the sector. This will be achieved by promoting the efficient, effective and environmentally responsible development of energy resources by developing and implementing energy policies and programs directly and in partnership with governments, industry, other provincial departments and local communities.

### **1.2 Mandate**

The Department of Energy's mandate is to manage and promote energy resources in order to achieve optimum economic, social and environmental value from the energy sector.

This mandate includes developing and implementing energy policies and programs, conducting research, analysis as well as exploration and development of energy resources, liaising with governments and all stakeholders on energy matters. Lead responsibility for Climate Change was transferred to the new Department of Environment as of April 1, 2008.

### **1.3 Department Profile**

The Nova Scotia Department of Energy was created in June 2002 to serve as the Government's focal point in developing and managing the Province's energy resources. Building our energy sector and making the most of the opportunities in our offshore continue to be priorities for the Department of Energy. These priorities are balanced by our commitment to improving our environment and promoting the use of renewable energy resources and technologies.

The department currently consists of six divisions:

- Business and Technology
- Communications
- Energy Markets
- Fiscal Affairs
- Legal Services
- Resource Assessment
- Strategic Policy, Planning and Services

This organizational structure is currently under review to ensure plans, policies and programs are developed and delivered in an integrated, effective manner.

## **2.0 LINK TO CORPORATE PATH**

In November 2007, the Government of Nova Scotia released its five (5) immediate priority areas:

- Educating to Compete;
- Protecting our Environment;
- Better Roads and Infrastructure;
- Safer, Healthier Communities; and
- Shorter Wait Times.

These priorities require significant government financial support; this support is partially provided through revenues from the energy sector. Offshore revenues are the third largest source of government-owned funding; these revenues are invested in our schools, our roads, and our hospitals.

The Department of Energy considers protecting the environment as a major direction for the Department's business plan while our other two directions, creating wealth and efficient and effective regulation are considered to be the necessary underlying preconditions for all of the Government's Priorities.

### **2.1 Creating Wealth**

Around the world, new energy opportunities are emerging. In order to compete, Nova Scotia needs to ensure a competitive business climate and a diverse resource base that will attract private investors. The Department of Energy works to ensure Nova Scotia has a fiscal, policy and regulatory framework that encourages investment in our natural gas, oil and renewable energy resources.

The Department of Energy works with individual companies, business associations, other levels of government and learning institutions to market our resource potential, our competitive business climate and our trained and educated workforce.

A global perspective on investment attraction is particularly important with respect to offshore oil and gas and renewable energy. The cumulative scale of investment in these projects can range from \$100's of millions in the exploration stage to billions at the development stage. Private sector investment decisions of this magnitude compete on an international basis. The Department of Energy works to create wealth for our Province that will attract these large-scale investments, facilitate significant economic benefits for businesses and their employees, and accrue very large financial benefits for the province of Nova Scotia and its people.

### **2.2 Protecting our Environment**

The majority of Nova Scotia's heating, transportation and electrical needs are met through the burning of fossil fuels, primarily oil for transportation and heating and coal for electricity.

This has an affect on air quality and health and contributes to climate change. To reduce this impact, the Department of Energy is developing policies and regulatory requirements that encourage the use of cleaner energy resources and technologies. Resource development has potential environmental impacts as well. The Department is committed to ensuring the appropriate technologies and industry/regulatory best practices are put in place to address the risks identified as well as supporting research into understanding and mitigating these risks. Moving towards a green and clean economy provides fiscal benefits and a leadership opportunity for Nova Scotia.

### **2.3 Effective and Efficient Regulation**

The Government of Nova Scotia is committed to a better regulation initiative that will see the reduction in paper requirements to business of 20% by 2010 and will streamline services for our business community. To support this effort the Department of Energy has been involved with many energy initiatives.

The Department of Energy has been a partner with Canada and Newfoundland and Labrador in creating the modern goal oriented drilling, production and conservation regulations that will be implemented in 2008. The regulations apply to offshore drilling production and conservation under the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act*. They will serve as the foundation for a series of changes to all the offshore regulations leading to what could eventually be a consolidated Offshore Operations Regulation.

The Department is also moving forward with the development of similar, goal-oriented approaches to the *Petroleum Resources Act* and the *Pipeline Act* as well as the related regulations. The exploration growth on onshore oil and gas projects warrants a modern integrated approach to dealing with various public interests in health, safety, environmental protection, resource conservation as well as our onshore oil and gas business community. Modernizing our regulations will allow us to deal with new economic opportunities while protecting the critical public interests. The Atlantic Canadian Premiers support a consistent approach to onshore drilling and production regulations in Atlantic Canada.

### **2.4 Commitment to Review the Province's Energy Strategy**

In October 2007, the Government released the Consultation Paper: *Nova Scotia's Renewed Energy Strategy and Climate Change Action Plan* and background paper on Climate Change. The Department of Energy has held many stakeholder meetings within the Province, invited citizens to respond to the paper and has worked closely with other government departments to bring forward policy initiatives that will enrich the Province's environment and economy and that will develop a sustainable renewable energy infrastructure. The renewed Energy Strategy (from the Department of Energy) and the Climate Change Action Plan (from the Department of Environment) are expected to be released in 2008. They will address the three priorities in a fully integrated strategic manner.

## **3.0 PLANNING CONTEXT**

### **3.1 Overview**

Energy heats our homes, powers our workplace, fuels our cars, and drives much of our economy. It is fundamental to life as we know it. Nova Scotia's domestic energy supply (renewable and non-renewable) is small compared to its energy imports. Our domestic supply, derived mostly from fossil fuels, provides heating (natural gas, biomass), electricity generation (hydro power, biomass, wind, tidal, natural gas, domestic coal), and vehicle fuel (biofuels from fish-oil).

Domestic sources of energy (non-renewable and renewable) provide business opportunities and employment. Offshore natural gas also provides significant public revenues. This includes employment (over 8000 person years since 1998), royalties (more than \$500 million estimated for 2008/09), and economic spin-offs (more than \$2 billion in exploration and development since 1996). We need to continue to encourage investment in all our domestic energy sources in the most prudent way possible.

In recent years, demand for energy in Nova Scotia has been growing faster than population growth. But there are technologies, building designs, and practices that are affordable and effective in reducing energy use. One priority in addressing both the price of energy and climate change is to reduce energy consumption/demand. Another priority is to improve energy security through diversity. This risk diversification approach presents the best way of dealing with significant unknowns including changes in energy supplies, demand and technological innovation. The Department is working to help balance market fluctuations and supply disruptions by developing a diverse energy supply with both local and regional energy sources.

A number of major changes in energy have taken place since the turn of the decade. These include:

- a continual rise in energy prices for our homes and our economy
- major shifts in our knowledge and policy from energy exploration
- public awareness and desire to address climate change and energy use
- emerging technologies

### **3.2 Current Energy Situation**

The supply of reliable energy sources is an important factor to consider. We can help balance market fluctuations and supply disruptions by developing a diverse energy supply with both local and regional energy sources. Regardless of what we use and where we get it, Nova Scotians need a reliable supply of energy.

The current cost of many green energy sources (such as wind, solar, and tidal) is more than conventional energy supplies. Nova Scotians want more green energy, but they also need the price of essentials like power and home heat to be reasonably affordable. We need to find ways to help

those without the financial resources to make the investments that lead to energy efficiency and conservation savings.

Due to major global changes in supply and demand, the price for fossil fuels has risen dramatically over the past six years. In Nova Scotia this has meant a substantial increase in the price of gasoline, home heating fuel, and to a lesser degree, electricity. (See Table 1 below.) Since **88 per cent** of our **electrical** power currently comes from fossil fuels, the cost of our electricity is also rising, although at a slower pace, since coal is still the least expensive and most available fossil fuel. **92 per cent** of our **total energy** needs (transportation, residential and farm heating, electricity use, and industrial production) comes from fossil fuels. Most of these are imported.

Given the global price trend and its impact on our lives and economy, our challenge is to be far more efficient with energy use and to develop local or regional sources, thereby reducing our over-dependence on imported fossil fuels. The complexity of prices includes the fact that price increases tend to encourage both resource exploration and development as well as energy efficiency and conservation.

Table 1: Nova Scotia consumer price increases for energy: prices are annual average and include taxes applicable in that year.

<u>Energy Source</u>	<u>2001 Price</u>	<u>2008 price</u> <u>Jan–March</u>	<u>% Increase</u> <u>2001–2008</u>	<u>% Increase</u> <u>above CPI</u>
Gasoline (litre, regular)	\$0.73	\$1.13	55%	41%
Furnace fuel (litre )	\$0.54	\$1.01	87%	73%
Electricity (Kwh- residential)	\$0.1119	\$0.1297	16%	4%

\*2008 is average price for Jan–March 2008.

## UPDATE

One of the major shifts in policy and public perspective since 2001 is the realization that the geology of our offshore energy resources has not been as well understood and predictable as expected. Offshore energy activities have been a very significant benefit to our economy, to our livelihoods, and to our fiscal stability. Our natural gas production can also help reduce our dependency on imported fuels. Fiscal 2007 – 2008 experienced a record production period for the Sable Offshore Energy Project, project sanction of the Deep Panuke offshore natural gas project with first gas expected in 2010, and an onshore production agreement with Stealth Ventures Ltd. Continued exploration and development expands our knowledge about our energy resources, so we must take additional steps to ensure this knowledge continues to grow.

The budget estimate for fiscal 2008–09 shows petroleum royalties at more than \$500 million after achieving a record-breaking \$400 million in 2007-08. These royalty revenues represent the third largest provincial source of revenue after individual income taxes and HST (Harmonized Sales Tax). The new record high is being reached this fiscal year due to higher natural gas prices; production from the Sable Project is expected to start to decline in 2009.

### 3.3 Energy Strategy 2008 Renewal and Climate Change Action Plan

Environmental sustainability and, in particular, the concern about climate change have emerged as a crucial public issue. Climate change resulting from greenhouse gas (GHG) emissions is mainly an energy issue. The renewed *Energy Strategy* will do its part to address Climate Change with a focus on:

- **Using less energy:** Our demand for energy is increasing. If we want to cut emissions, we need to reverse this trend. Energy efficiency and energy conservation programs will help us achieve this.
- **Using renewable energy:** We can also cut emissions by using greener sources of energy. The wind, sun, tides, and earth are potentially significant sources—and emission free.
- **Using cleaner fossil fuels:** To meet all our energy demands, we still need fossil fuel. To adapt and make it sustainable, we need practical approaches now, such as using natural gas, recycling wasted heat, and adjusting how we use transportation. We also need to explore ways to trap emissions from coal.
- **Leading by example:** As the largest purchaser and employer in the province, government can play a role not only in cutting emissions, but also creating a market for greener products and services.

As mentioned above, effective policy and planning solutions include measures that address energy efficiency and conservation, as well as strategies and plans to diversify our energy supply by expanding on our local and regional renewable resources as well as supporting private sector investment to help find new supplies of gas onshore and offshore.

A focus on diversified energy supplies needs to consider energy sources by type and geography. Distributing our generating capacity within the province and importing power from neighbors in the Atlantic region could contribute significantly to stability of supply. We are considering policies that encourage import of power from clean sources as part of our effort to meet GHG targets, and diversity as well as stability of supply.

The renewed energy strategy will encompass sustainable prosperity in the following areas:

- **renewable resources** – sustainable energy, significant opportunities
- **air quality** – cleaner air, better health
- **energy conservation and efficiency** – investments that save
- **electricity** – energy security through diversity
- **natural gas** – a major economic and fiscal benefit for Nova Scotia
- **energy opportunities** – building business and technology

- **government action** – meeting its own obligations
- **government intervention** – influencing, enabling, and requiring action by others

#### **4.0 STRATEGIC INITIATIVES**

The Department of Energy has established three strategic directions that it will focus on to deliver its mandate.

- Creating wealth by investing in our energy future with particular focus on renewable energy and offshore and onshore oil and gas development.
- Protecting the environment through the development and use of cleaner and green energy and by developing energy responsibly.
- Effective and efficient regulation through protecting the public interests for health, safety, environment, conservation and economic growth.

#### **4.1 Creating Wealth through Investment**

On March 31, 2008, Premier Rodney MacDonald announced that 10 per cent of the Crown Share payment, up to \$25 million, would be granted to two offshore energy research associations to fund geoscience and marine research.

Our goal is to put new geological ideas in front of both current and potential explorers. Geoscience research will not only help us understand our geology, it will build a case for further offshore exploration.

The Department has initiated a multi-year oil and gas investment attraction initiative. This initiative will result in an enhanced marketing effort over the coming years that will showcase the province's infrastructure and energy resource opportunities to targeted companies. For 2008-09, extra effort will be put into developing geoscience initiatives related to the onshore. Marketing of Nova Scotia's potential takes place through a number of avenues including hosting of international conferences and workshops, one-on-one meetings with exploration companies, and active participation at international trade shows and conferences.

The Department also works closely with industry associations to facilitate export development as well as monitor economic activity resulting from local energy projects in order to identify, develop and implement strategies that will increase Nova Scotia's related business opportunities locally and abroad.

The Department works continuously to identify niche markets to support Nova Scotia business development. International opportunities are emerging for Nova Scotia-developed alternative energy technologies. The Department is collaborating with the Department of Environment to identify additional opportunities.

The Department's Business and Technology division continues to focus its attention on industrial development and for local businesses on a global scale. With the project sanction of Encana's Deep Panuke project, local businesses will be able to compete for business opportunities that will enable them to continue to hone their technical and trade skills that are in demand in the global marketplace. The Business and Technology division is also abreast of the emerging renewable energy technologies and creating opportunities for the local supply and service industry.

Increasing the amount of renewable sources for electricity in Nova Scotia will diversify our electrical generation, bring environmental benefits, provide some economic opportunities locally, and help position the province to meet future energy demands. Nova Scotia is now conducting a technical study to determine the optimal amount of wind capacity to keep the system reliable, sustainable, and affordable. The direct cost of most renewable power is currently higher than coal-fired generation.

Since the release of the 2001 Strategy, approximately 60 megawatts of renewable power projects have been either built or are committed to be built. In 2007, NSPI called for proposals for an additional 130 MW of renewable energy generation. On November 19, NSPI announced they had accepted wind project proposals totalling 240 MW, nearly double the original tender.

**Renewable Energy Standard:** By 2013, more than 500 megawatts of new renewable energy capacity will be added to the system. That translates into over 100,000 homes powered by renewable energy, up to 750,000 tonnes of greenhouse gas emissions displaced from the atmosphere, and new business opportunities for independent power producers. It is also expected to generate up to \$1 billion in new investment in the Nova Scotia economy.

**Wind energy** will fulfill most of the 2013 standard. Nova Scotia enjoys world-class average wind speeds, and the number of turbines in the province is expected to grow from 40 to more than 300 in the next six years.

**Tidal power** in the Bay of Fundy may one day add strongly to our renewable power mix. Although tidal power is intermittent, it is predictable, and therefore valuable as a source of electrical energy. We currently have a 20 MW barrage tidal plant in Annapolis. But recent research estimates a potential 300 MWs from two sites in the Bay of Fundy (14 per cent of total capacity now in power grid) using emerging "in-stream" tidal technologies.

This industry is in its infancy, and the future of tidal in the Bay of Fundy depends upon further studies to ensure the environmental sustainability of the project. This includes a demonstration of the technologies to ensure their environmental sustainability. It also includes a need to demonstrate a variety of different technologies, as there is no one proven device that is considered the leading technology at the present time. Through demonstration, we can determine which devices will survive the strong currents in the Bay of Fundy and we can understand what possible effects they may have on the environment and surrounding communities and standards.

**Hydro power** in Wreck Cove (225 MW capacity, almost 10 per cent of NSPI total capacity) has been a foundation of renewable power in the province for years. Large hydro resources in other provinces, such as the Lower Churchill in Labrador, may be economically viable and could play a large role in both diversifying our supply and meeting our climate change goals.

**Solar energy** (thermal and photo-voltaic) will become increasingly viable options for homes and buildings as prices become higher and the return on investment becomes more attractive.

**Biogas energy** from landfill sites has potential, but modern waste practices in Nova Scotia divert much of the material used to produce methane away from landfills.

**Biomass** from forestry waste is now burned in some locations, and it is a potentially larger source of energy in Nova Scotia. Although biomass fuel emits carbon dioxide, it is considered carbon neutral because as forests regenerate they use CO<sub>2</sub>. However, the impacts from particulates also need to be considered.

**Biofuel** can reduce vehicle and home heating emissions significantly. Biofuels are a developing technology and have some challenges to overcome. For example, some biofuels have less potential energy by volume than conventional fuels, and emissions of some air pollutants increases with biofuels. But innovation may open up opportunities for Nova Scotia in the future.

**Cellulosic ethanol** uses stalks of various plants, but this complex technology is still experimental. Nova Scotia has about 215,000 hectares of cleared farmland of which 40,000 hectares are under-utilized. One near-term possibility would be to cultivate canola plants on that land with potential production in the order of 48 million litres a year of biodiesel. To help expand these business ventures, as of July 2006, the province has exempted biodiesel produced in Nova Scotia from the 15.4 cent per litre Motive Fuel Tax.

**Offshore petroleum** exploration and production helps sustain the current royalty revenue base and provides new business and employment opportunities for Nova Scotians. The Province is currently receiving strong fiscal benefits: in 2007-08, royalties added up to \$400 million; project royalties are estimated to be \$514 million in 2008-2009. Total project-life revenues are forecast to be in the range of \$2.2 to \$3 billion.

In October 2007, the Nova Scotia government accepted the Federal government's new equalization formula and a commitment from the Federal government that the Crown Share Adjustment Payment would be considered. A Federal-Provincial Panel is now reviewing legislation that addresses Crown Share and the value to Nova Scotians is being determined.

### **Forecast Drilling - Offshore**

There are no firm exploration drilling plans for 2008 due to a combination of a tight market for drilling rigs and geological uncertainties. However, both BEPCo and Canadian Superior

have indicated publicly that they may be in a position to drill in 2008 or 2009. There are ten (10) active exploration licenses offshore Nova Scotia, six (6) of these licenses are expected to expire by the end of 2008. The Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) has a Call for Bids on two blocks that will close on June 30, 2008.

### **Creating Wealth Through Knowledge**

Wealth is created through knowledge of opportunities available to Nova Scotians. An important focus of the Department of Energy's plan is to inform stakeholders of initiatives and opportunities in the energy sector.

In the offshore, these efforts will be improved by funds up to \$25 million provided for geoscience initiatives (outlined above).

As well, new technologies are emerging to provide opportunities for more choices and greater energy efficiency usage that in the longer term creates wealth and a cleaner environment. The Department provides public education opportunities and educational grants through the Pengrowth Scholarships and support of the Nova Scotia Community College (NSCC) Techsploration Program.

In 2008/09, we will continue to build an increased understanding of our onshore and offshore petroleum geology in the public, private and academic sectors by promoting and facilitating research and development and technological innovation as well as performing geoscience research within the Department. In addition, the Department is supporting research initiatives to understand the relation of gas and oil activity to our marine environment. Working with our post-secondary institutions, we are helping to provide the skilled workforce required to support the expansion of our energy sector opportunities. The Department provides assistance with purchasing equipment and building infrastructure to support these opportunities. The Department is also conducting research to better understand Nova Scotia's competitive position globally for international oil and gas investment capital.

### **4.2 Protecting the Environment through Technology and Efficiencies**

Government is working closely with the private sector and non-governmental organizations (NGO) to achieve diverse, competitively priced and sustainable energy supplies in Nova Scotia. In 2007, the Department received significant advice from the general public and specific stakeholders on energy and climate change policies as part of our Energy Strategy Renewal (ESR) and development of a Climate Change Action Plan (CCAP). The release of the ESR and the CCAP in 2008 will lay a solid foundation for future energy direction in our Province.

Between 2008 and 2010, the Department will collaborate with the Department of Environment to oversee the Nova Scotia Ecotrust for Clean Air and Climate Change. The Ecotrust will provide Nova Scotia municipalities and businesses with grants totaling \$17 million towards new technologies and efficiencies.

By promoting and facilitating targeted research and development and technological innovation, the Department supports the development and demonstration of alternative energy technologies. The Department conducts policy research and development to fully understand issues that affect Nova Scotia's energy supplies such as the implications of the federal response to the Kyoto Agreement. The Department's public education initiatives enhance understanding of opportunities for alternative forms of energy. To provide Nova Scotians with appropriate information to maintain their lifestyles, climate change impact analysis and adaptation strategies have to be undertaken.

The Department will perform internal geoscience analysis and encourage additional coordinated geoscience studies with Geological Survey Canada (GSC), CNSOPB, academia, Petroleum Research Atlantic Canada (PRAC) and the private sector.

In addition, the Department will continue to garner reliable geoscience information and theory and a better understanding of the inter-relation of both seismic testing and tidal electrical generating systems with the marine environment. This research effort will be conducted through research and studies initiated by the two independent research associations – Offshore Energy Technical Research (OETR) Association and Offshore Energy Environmental Research (OEER) Association. These associations were established in March 2006 through a \$5.2 million provincial grant. In March 2007, the Associations were granted a further \$500,000 and as of March 31, 2007, they will also receive a portion of the Crown Share Adjustment Settlement. The portion could be worth as much as \$25 million.

Direct economic spin-offs, such as job creation, business growth and an increased royalty and tax base, can accrue to Nova Scotia from energy sector projects. However, these projects tend to be cyclical in nature. To ensure that our capabilities, capacities and workforce are maintained in Nova Scotia during periods of minimal activity, the Department of Energy will continue to work with industry stakeholders to target export markets for our energy sector goods and services.

The Province of Nova Scotia loses part of its emerging and established workforce to other areas such as Ontario and Alberta. To offset this, the Department will continue to provide student pay subsidies to local companies to ensure competitive career opportunities are developed locally, collaborate with learning institutions and other levels of government to provide specialized training equipment and infrastructure and partner with private sector companies to provide scholarships and other forms of assistance to Nova Scotian students. The department will work with our learning institutions to extend their energy-related training capacities beyond the borders of Nova Scotia.

#### **4.3 Effective and Efficient Energy Regulation**

The energy sector has numerous regulations from exploration through to development, production and transmission. The Department leads initiatives to improve the effectiveness of this regulatory system for both renewable and non-renewable forms of energy.

The development of new Energy legislation is ongoing. This focus continues in 2008 with technical and expert review to ensure our regulatory approach is consistent with best practices in other parts of Canada and protects the public interest of Nova Scotians. The Department has plans for further stakeholder consultation and policy issue identification and analysis.

Work is progressing on the *Pipeline Act*; the Department will be finalizing this legislation in 2008-09.

Through the Frontier and Offshore Regulatory Renewal Initiative, the Department is working with the government of Canada and other provinces to modernize the existing regulatory framework into a single goal oriented regulation. This modernized framework addresses challenges identified by the Atlantic Energy Roundtable, reflects new federal and provincial regulatory policies and approaches, and builds on lessons learned from experiences in Canada and other jurisdictions.

The Department, along with other key government departments, is finalizing the draft offshore Drilling and Production Regulations which are written in a goal-oriented style to replace the current Drilling Regulations and the Production and Conservation Regulations.

A Seismic Statement of Practice for Geophysical Operations in the offshore has also been developed. This Statement specifies nationally consistent minimum standards of mitigation required for marine seismic surveys. It is a risk-management approach that is applied when decisions must be taken in the absence of full scientific certainty to address significant risks to the natural environment.

Other efforts to improve regulatory efficiency include the coordinated Regulatory Review Process for Deep Panuke. The Department worked with the federal government and regulators to streamline the regulatory process and integrate environmental assessment with the regulatory approvals for the Deep Panuke offshore gas development project. The development of a concurrent environmental and technical review process resulted in an efficient and effective regulatory process with federal-provincial coordination and improved overall timelines for industry approvals.

The Departments of Energy, Labour and Workforce Development and Intergovernmental Affairs are working closely with our partners in the federal and Newfoundland and Labrador governments to ensure, through legislation, that offshore workers have the same kind of protection as onshore workers. NS, NL and the federal government agreed on amendments to the Offshore Accord Acts to introduce a proper legal framework for occupational health and safety in the offshore. NRCan and Federal Labour officials are currently working with federal Justice lawyers and drafters to put the policy decisions into legal language for all three jurisdictions to introduce in their legislatures/Parliament in 2008.

The Department's Regulatory Innovation group has been working to improve internal processes, following the principles of prioritizing and planning; stakeholder engagement;

minimizing overlap and duplication; making informed decisions based on science, stakeholder and legal input; and moving towards goal-oriented regulation.

In 2007, the Department developed a Regulatory Roadmap and Guidance Note for proponents interested in developing offshore renewable energy in Nova Scotia. This sets out a clear framework for a multi-jurisdictional, coordinated approach to regulation of offshore renewable energy projects.

## **5.0 CORE BUSINESS AREAS**

The core business areas of the Department of Energy have been grouped by the departmental divisions as follows:

### **5.1 Resource Assessment**

The Resource Assessment Group is responsible for the development of the programs and initiatives to ensure Nova Scotia's non-renewable petroleum resource potential onshore and offshore is identified and marketed to private sector investors. The resulting activities are monitored and where appropriate, regulated in the public interest. Resource Assessment works collaboratively to develop the policy, legislation, and regulations for the exploration and development of the Province's petroleum resources.

Onshore, this group administers the granting of petroleum rights and co-ordinates the regulation of exploration, development and operational activity.

While the Canada-Nova Scotia Offshore Petroleum Board regulates day-to-day offshore petroleum activity; the Resource Assessment Group, as stewards of onshore and offshore geological knowledge, actively promotes and markets Nova Scotia's onshore and offshore petroleum potential to global oil and gas companies interested in new investment opportunities.

The onshore activities will be focused on dealing with activity applications for conventional petroleum as well as coal gas and shale gas operations. Proposed activities are expected to include onshore seismic, exploration drilling and development drilling. Additionally work will begin in developing an onshore atlas of geo-science information as well as planning for an onshore data registry to electronically warehouse onshore geo-science information.

In the offshore, activities will be focused on recommended actions that were identified in 2007/2008's Strategic Offshore Plan. These actions are central around enhancing geo-science knowledge, implementing new policy initiatives, continual regulatory enhancements and the ramping up of promotional activities. Promotional highlights for 2008/2009 will include CNSOPB's Call for Bids NS07-1, new call for bids 2008/2009 and the promotion of Nova Scotia's oil and gas potential at PETEX and the NAPE '09.

Highlights on the regulatory and policy areas include working with the CNSOPB and Natural Resources Canada (NRCan) to further refine areas where legislative regulatory and policy amendments can be made to make offshore Nova Scotia a more competitive and attractive place to invest.

## **5.2 Energy Fiscal Affairs**

The Energy Fiscal Affairs division forecasts and monitors the financial results and fiscal implications of petroleum exploration and development; administers, audits and assesses royalties from petroleum projects; undertakes fiscal policy research and analysis and provides related recommendations; and performs a central role in fiscal negotiations when required.

In the area of offshore royalties, preparatory work will begin for the audit and administration of Deep Panuke royalty.

With respect to onshore royalties, the royalty regulations are now under review and will be finalized for application to Stealth's Spring Hill coal gas project as well as other projects that may be proposed in 2008/2009.

## **5.3 Business and Technology**

### **5.3.1 Offshore Benefits**

The Department of Energy has a legislated responsibility to represent the interests of the Province in the negotiation and implementation of benefits plans. As with other international offshore jurisdictions, this process builds the local capacity and capabilities that are critical to attracting future investment. It ensures Nova Scotians are able to compete on a best value basis for local business and employment opportunities related to the development of a Nova Scotian non-renewable resource.

All proponents of offshore work must first submit a benefits plan to the Canada-Nova Scotia Offshore Petroleum Board. Benefits plans must provide manufacturers, consultants, contractors and service companies in Nova Scotia and in other parts of Canada with a full and fair opportunity to participate on a competitive basis in the supply of goods and services used in any proposed work or activity referred to in the benefits plan. Key elements of the plan include establishing a local office, local employment, education and training initiatives, and research and development to be conducted in the province.

### **5.3.2 Business Development**

Working with energy sector stakeholders, the department promotes investment in the energy-related capabilities of Nova Scotia. We provide opportunities for local companies to meet potential joint venture partners and participate in investment missions abroad. We maximize business opportunities for local suppliers of goods and services and identify areas of labour

demand and possible skill shortages to develop strategic approaches to ensuring maximum participation of Nova Scotians in major energy projects and undertake partnerships in training projects and initiatives.

The key areas of focus for 2008-2009:

- Capture the value of the benefits of the Deep Panuke Project through the Offshore Strategic Energy Agreement (OSEA). The development phase of every project is where the material amount of benefits will be identified whereas the exploration phase benefits are relatively small.
- Sustain a local skilled workforce. Today, our skilled labour force and professionals see export opportunities in western Canada, Newfoundland and Labrador, western and offshore Trinidad & Tobago and Venezuela. To market such opportunities, the division attends established events in certain anchor markets (OTC, World Petroleum congress, Global Petroleum show). Attending such trade shows has a dual purpose: investment attraction and promoting resources and science and supply capabilities. The division's efforts are closely linked to the Resource Assessment division.
- Improve the Department's support role for Nova Scotia companies and institutions. The Business & Technology group is client focused and is looking to improve information sharing with the Offshore/Onshore Association of Nova Scotia (OTANS), the local business community and training opportunities within our academic institutions.
  - The Division is working with Venezuela's national oil company, Petroleos de Venezuela, S.A.(PDVSA). PDVSA's challenge for industry growth is human resources. The division is assisting the business community to balance the supply and demand of services on a global basis.
  - Working with SBM, operator of the Deep Panuke project, is an important opportunity for the local supply and service sector to build export marketability. Local businesses need to ensure their contracts are commercially competitive.
- The Renewable Energy sector is a key area of focus for the division to build its strengths and develop expertise in-house. It is imperative to understand the real market opportunities for Nova Scotia and the local supply and service industry, issues around warranty, insurance barriers to entry as well as potential opportunities from tidal energy.

### **5.3.3 Marketing**

The Department of Energy provides a wide range of services and programs to Nova Scotians and Nova Scotia's business community. These services and programs range from export development and investment attraction to scholarships and research partnerships, including

employment incentives to hire students. All marketing and promotional activities are delivered in a manner consistent with the Province's brand initiative.

The Province continues its "Come to Life" brand initiative for all marketing activities undertaken by the Government of Nova Scotia. The Department of Energy has incorporated the Provincial brand in all of its energy initiatives and programs. It is developing a strategic framework to ensure all activities and programs meet corporate objectives to achieve maximum value delivery.

#### **5.3.4 Energy Sector Technology Acquisition**

The Department identifies and supports opportunities for Nova Scotian firms competing within the energy sector to benefit from the transfer of technology critical for expanding business opportunities within the sector. Joint ventures and other partnership approaches have levered industry - specific technology competency development under industrial benefits agreements like the oilfield equipment fabrication project under Encana's Deep Panuke Offshore Strategic Energy Agreement (OSEA).

The Department also leverages federal and private sector investment in state-of-the-art energy related educational and training infrastructure in Nova Scotia's post-secondary educational institutions. It has also worked to ensure Nova Scotia's energy related educational training modules and standards meet employer needs.

#### **5.3.5 Research and Development**

Nova Scotia benefits from 11 universities, an extensive college system, federal and provincial government organizations, private sector firms and others who undertake energy research. The Department of Energy ensures that research priorities are identified, supported and enhanced through partnerships and leverage opportunities that ensure best value.

### **5.4 Energy Markets**

This Division within the Department of Energy develops and implements policies and programs dealing with natural gas transmission, underground storage, distribution and use; electricity generation, transmission, distribution and use; refined petroleum products; and renewable energy. Government policies, plans and actions on all of these issues are being examined through the renewal of the Energy Strategy.

#### **5.4.1 Electricity and Renewables**

The 2001 Energy Strategy identified high level changes to Nova Scotia's electricity system including:

- A focus on enhanced renewable energy development opportunities
- Competition for new supply

- Creating open and non discriminatory access to Nova Scotia's transmission system
- Opening the wholesale market (municipal utilities) to competition
- Reducing emissions from electricity generation
- Promote enhanced energy efficiency

Legislation was passed in fall 2004 providing for opening the wholesale market, setting minimum requirements for renewables in our electricity mix, and requiring an Open Access Transmission Tariff. Market rules for users of the transmission system and setting time lines and thresholds for renewables requirements were established in January 2007.

The renewal of the 2001 Energy Strategy opens up the opportunity to address a number of issues with respect to electricity markets, including the Council of Atlantic Premiers (CAP) policy recommendation to re-examine electricity market structure and determine the feasibility of the integration of regional electricity markets of the four Atlantic provinces. Options for restructuring the transmission systems and operations will require modifications that can have far-reaching implications for consumers and power producers throughout the region.

With respect to renewable energy, all strategies are moving in the direction to decrease GHGs in accordance with the renewable energy standard (RES) and the province's legislated goal to cut GHGs to 10% below 1990 levels by the year 2020.

Longer term the opportunities for generating electricity include:

- importing from Lower Churchill Falls and New Brunswick through a subsea interconnection;
- investing in carbon capture and storage research to determine if this technology could be used in Nova Scotia to reduce the environmental footprint of coal fired electrical facilities;
- developing large-scale natural gas combined-cycle or co-generation facilities; and
- developing energy storage facilities and/or a combination of increased renewable energy sources balanced by rapid response natural gas back up.

Under each of these opportunities there are implications for the province's electrical transmission system. These options will be weighed carefully and the renewed energy strategy will ensure the issues and solutions for generation and transmission will be closely integrated.

Pending advice from a Strategic Environmental Assessment, in 2008-2009 the Department will continue work on the development of a tidal in-stream technology demonstration facility in the Bay of Fundy.

With respect to natural gas, the division will continue to provide expansion opportunities under the Sable Project funded Gas Market Development Fund (GMDF). The Department of Energy is responsible for the program and its rules. Funds continue to be available to Heritage Gas for residential conversions as well as larger projects such as the Capital Health project and universities in Halifax. In 2008-2009, \$1 million from the fund will be used to

help convert Saint Mary's University to natural gas. These larger conversion projects enable Heritage Gas to build out its distribution and then economically serve smaller customers.

#### **5.4.2 Natural Gas Transmission, Distribution and Storage**

The Department assists Nova Scotians in converting heating systems to natural gas through Gas Market Development Fund (GMDF) incentives and information that explains the efficiency, safety, convenience and environmental benefits of natural gas. The GMDF was provided by the Sable Offshore Energy Producers specifically to encourage the use of natural gas in Nova Scotia. The Province, with its schools, hospitals, and other buildings, can make the expansion of the gas distribution system economical.

The Department works 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.

A private sector proponent is proceeding with the first commercial underground hydrocarbon storage project in NS at Alton.

A consultation paper has been drafted outlining changes to the *Pipeline Act and Regulations* and stakeholder consultation is planned for spring 2008.

#### **5.4.3 Energy Markets**

The Department intervenes on behalf of Nova Scotians at Utility and Review Board (UARB) and National Energy Board (NEB) hearings related to such issues like electricity pricing, gas distribution and new capital developments,

### **5.5 Strategic Policy, Planning and Services**

The division is responsible for the coordination of energy policies, strategies, plans, and services. It gathers information on Nova Scotia and other jurisdictions' experiences, policies and activities as well as the general business climate for energy investments and provides analysis with respect to the effectiveness, public policy objectives and relevance to Nova Scotia's energy sector. In carrying out its responsibilities, the division works closely with other divisions in the Department.

#### **5.5.1 Strategic Policy Analysis**

The division has a responsibility to understand the external economic and social policy climate with respect to energy, supply, demand and pricing. More specifically, the division analyzes economic impacts and implications of energy development, policies and strategies. It also monitors and reports pricing for gasoline, diesel and fuel oil and provides public information on the comparative costs for different energy sources of space and domestic hot

water heating.

Understanding the business conditions for investment attraction requires analysis and advice on Nova Scotia's competitive position as well as research and policy development on investment strategies, our competitive advantages and financial implications of energy policy, plans and strategies.

The renewal of the Province's Energy Strategy is a critical task for the division in 2008-2009. It will be completed based upon extensive stakeholder consultation, policy analysis and coordination among all divisions, other government departments and agencies. Implementation of the renewed Strategy will require a parallel process of legislative and regulatory development using modern regulatory tools and approaches.

### **5.5.2 Regulatory Innovation**

The division is responsible for the coordination of general regulatory development and corporate initiatives such as Better Regulation. This commitment includes the goal of reducing administrative paper burden through electronic registries and services delivery. The division also works closely with the federal government and other jurisdictions, industry and key stakeholders to develop an efficient and effective regulatory regime for offshore and onshore energy activities.

The division is working with our partners in the Atlantic Energy Roundtable (AER) to focus on improving the investment climate in our offshore. The division supports the Province's interests in the initiatives that are related to the AER including the Frontier and Offshore Regulatory Renewal Initiative to modernize offshore regulations and the development of the Statement of Practice for Marine Seismic.

The division is also working to introduce a proper legal framework for occupational health and safety in the offshore. The amendments are being developed by blending of federal and provincial approaches on occupational health and safety in a fashion specific to the offshore.

The Department, through the Regulatory Innovation division is a key player in the Province's coordinated approach to coastal and ocean management issues in Nova Scotia. Energy continues to participate in and support other integrated coastal and ocean management planning initiatives and processes including Regional Committee on Oceans Management (RCOM) and the Eastern Scotian Shelf Integrated Management Initiative.

The development of a coordinated regulatory framework for offshore renewable energy has also been a key mandate of this group. The Regulatory Innovation staff work closely with tidal energy developers, federal and provincial regulators and stakeholders to develop policies and strategies aimed at creating efficient and effective regulatory processes for this new industry.

### **5.5.3 Energy Research**

Nova Scotia Energy works with partners in the province's energy research community to help build the knowledge required to resolve energy challenges and close the knowledge gaps that are barriers to our success. These partners include federal research organizations such as the Geological Survey of Canada (GSC), the Centre for Offshore Oil and Gas Environmental Research (COOGER) and general energy research groups such as Petroleum Research Atlantic Canada (PRAC). The Strategic Policy, Planning and Services division is responsible for supporting and providing Board-level liaison between the two research associations which are helping to remove some of the barriers to sustaining prosperity for our offshore energy resources.

The Offshore Energy Technical Research (OETR) Association will be granted up to \$20 million from the anticipated Crown Share Settlement reached with the federal government in addition to its previous grants of \$2.6 million in March 2006 and \$250,000 in March 2007. The Department is a member of the Association as are Dalhousie University and Saint Mary's University. The Association funds geoscience and other initiatives that help develop new theories and models on the location of commercial offshore oil and gas deposits.

The Resource Assessment Division works closely with OETR on developing and implementing the geoscience technical research mandate. OETR is also developing a mandate for marine renewable technology research. The Energy Markets division will work closely with OETR in developing and implementing this mandate.

The Offshore Energy and Environment Research (OEER) Association will receive up to \$5 million from the same Crown Share Settlement in addition to the \$500,000 it received in March 2008, the \$250,000 in March 2007 and the original \$2.6 million in March 2006. These funds help improve science knowledge and facts with respect to offshore energy impacts on the marine environment. This work includes a focus on the environmental impacts of both the non-renewable oil and gas resources and emerging renewable resources such as in-stream tidal energy technologies. The Department is a member of OEER as are Cape Breton, Acadia and St. Francis Xavier Universities.

The Strategic Policy Planning and Services division works closely with OEER on developing and implementing the energy environmental impact and mitigation research mandate. Key research priorities include marine sound impacts – particularly those that may impact upon invertebrates – technology and best practice assessment and science work required in advance of the Georges Bank Moratorium review as well as tidal energy environmental effects modeling and monitoring.

### **5.5.4 Aboriginal Consultation**

The Department of Energy is a leader on aboriginal consultation for the Province and prides itself in working with the aboriginal community to collaboratively and positively foster the mutual benefits of Nova Scotia's onshore and offshore energy sector.

In July 2007, Canada, Nova Scotia and the Mi'kmaq signed a Consultation Terms of Reference which is currently in a one year pilot phase. The Terms of Reference (ToR) lays out a process to be followed when departments make a decision to consult with the Mi'kmaq.

In February 2008, the Department developed a policy on Aboriginal Consultation on energy projects which incorporates many of the principles of the Province's Interim Consultation Policy which was released in June 2007. An Aboriginal Coordinator was also appointed by the Minister of Energy to represent the Department at consultation meetings with the Mi'kmaq for all energy related projects.

The Department of Energy has worked with the Mi'kmaq to establish an Energy Consultation Table where provincial energy issues are tabled and discussed as well as any issues or concerns that may impact the Mi'kmaq's treaty rights, Aboriginal rights or Aboriginal title claims. The lead Chief is Chief Gerard Julian of Paq'tnkek First Nation.

Work with aboriginal people continues on all energy projects and policies that may have an impact or are of concern to their communities.

#### **5.5.5 Corporate Services**

The Strategic Policy, Planning and Services division also coordinates corporate activities related to business planning, budgeting, financial management and control, human resources, procurement, records management, information management, submissions to cabinet and reporting. In 2008-2009 the division will begin implementation of electronic records management and will assist Resource Assessment in the planning and development of a Petroleum Registry.

#### **5.6 Communications and Public Education**

The Communications division provides information to the media, the public, and other individuals and organizations with an interest in the energy sector. The division promotes broad awareness and understanding of the issues and opportunities in energy, including renewables, oil and gas exploration and development, electricity, education and training.

The division provides services through various media, including materials for print, radio, video, events, presentations, advertising and the web. Energy is an important topic for Nova Scotians, and Communications is charged with keeping them informed on the Department's activities.

Communications is also responsible for helping to meet the priorities in the business plan. It is involved in public education programs, conferences, development of communications and marketing materials for major initiatives, trade missions, scholarship programs, stakeholder consultation sessions, and the building of new economic opportunities for Nova Scotia's renewable and non-renewable energy sector.

In 2008-2009, special emphasis will be placed on helping the department meet its strategic initiatives (such as renewal of the energy strategy and its related projects: investment attraction, and effective and efficient regulation and operations) as outlined in this business plan.

## 6.0 PRIORITIES

The renewed Energy Strategy will outline the direction and actions to be undertaken by the Department in the short, medium and long-term. As such it represents a comprehensive longer-term business plan. As all major Departmental initiatives will be integrated into the new strategy, the major priority for the Department in 2008-2009 is to complete the renewal of the Strategy and begin its implementation. The renewed strategy will be implemented through the business plans of the Department and the goals and objectives established will for the basis of new performance measures going forward.

Section 2 of the 2008-2009 Department of Energy business plan, Link to the Corporate Path, describes the three priorities as identified in the Section 7, Performance Measures.

## 7.0 PERFORMANCE MEASURES

Priority : Create Wealth				
<u>OUTCOME</u>	<u>MEASURE</u>	<u>DATA</u>	<u>Annual TARGET</u>	<u>Strategic Actions to achieve target</u>
Increased awareness of our offshore potential by exploration companies	- Number of targeted promotional events and technical meetings that take place at local, national and international venues	- 2006/2007 baseline	2008/2009 - meet with exploration companies identified as prime potential investors - attend 3 promotional events	- implementation of actions under the renewed energy strategy
Exportation of goods and services related to the energy sector	-Number of trade shows/missions attended - Satisfaction of non-departmental participants	- 2005/2006 baseline  - 2006/2007 baseline	2008/2009 - minimum of 2 trade shows/year  - 75%	- implementation of actions under the renewed energy strategy
Increased opportunities for education and training in the energy sector	-Number of students accessing the energy scholarship program.  -Number of students who have had private sector work experience in energy related industries through the Energy Training program	2005/06 was baseline year.  2005/ 2006 was baseline year	2007/08- (59 participating students)  2007/2008(40 participating students)	- implementation of actions under the renewed energy strategy

Priority : Create Wealth				
<u>OUTCOME</u>	<u>MEASURE</u>	<u>DATA</u>	<u>Annual TARGET</u>	<u>Strategic Actions to achieve target</u>
Investment in renewable energy	Number of renewable energy sources - Options for Electricity Market Structure		08-09 240 MW of wind begin construction @ .5 billion investment	- implementation of actions under the renewed energy strategy
Expand Natural Gas Opportunities	15-20 million has been invested from the GMDF to build infrastructure and convert major facilities to natural gas			- implementation of actions under the renewed energy strategy

Priority : Protect the Environment				
<u>OUTCOME</u>	<u>MEASURE</u>	<u>DATA</u>	<u>TARGET</u>	<u>Strategic Actions to Achieve Target</u>
Global Business export capabilities of local businesses re: environmental remediation				- implementation of actions under the renewed energy strategy
Greater reliance on renewable energy	Converting to cleaner fuels			- implementation of actions under the renewed energy strategy
Greater awareness of energy issues, programs, services and operation.	Energy Awareness Index as defined in 2003/04 public survey. (Thinkwell Research)	Baseline (2003/04) = 50%. awareness; improved to 57% (2007/08)	Increase Energy Awareness Index to 65%.	- Website, direct mail, media, advertising, school tours and community tours.
Increased understanding of our geological systems	-Number of research studies initiated -Number of research studies completed	2006 / 2007 is baseline year		- implementation of actions under the renewed energy strategy
Increase regulatory certainty from a better scientific understanding of the interaction of renewable and non-renewable energy activities with the marine environment.	-Number of research studies initiated -Number of research studies completed	2006 / 2007 is baseline year		- implementation of actions under the renewed energy strategy

Priority : Effective & Efficient Regulations				
<u>OUTCOME</u>	<u>MEASURE</u>	<u>DATA</u>	<u>Annual TARGET</u>	<u>Strategic Actions to achieve target</u>
Tidal Demonstration Facility Plans	Corporate Entity established  Site selection and baseline science work identified. Project Description received		2008	Finalize agreements with Developers.  Initiate science and coordinate baseline work required.  Work with OEER and OETR.  Review and respond to Strategic Environmental Assessment.
Regulatory Development for Onshore Operations	Promulgate Drilling and Production and Pipeline Act and Regulations  - timely approvals for production related activities		2008/09	Approval of Policy recommendations on D&P and Pipeline Act /Regulation changes  Stakeholder Consultation- spring/summer 08  Introduction of legislative amendments to Resources and Pipeline Acts
A single goal oriented regulation for offshore petroleum regulations.	Incorporate the geophysical, installation, certificate of fitness, diving and spill and debris liability regulations and draft Drilling and Production regulation into a single goal oriented regulation that will apply to areas under jurisdiction of the CNSOPB, CNLOPB and NEB.		2008- Consultation on Drilling and Production Regulations  2008- Prepare Consultation Draft of Mega Regulation	Support FORRI initiative.  Public Consultation

## 8.0 HUMAN RESOURCE STRATEGY

### 8.1 Employee survey – Energy

The results of the 2007 “How’s Work Going” Survey was released in August 2007. The survey had a 63% response rate as compared to an overall government employee response of 37%.

The Department of Energy had many favourable responses with an overall positive work environment. The senior leadership has committed to addressing the areas that need improvement to continue to promote a fair and respectful workplace. Under the direction of the Employee Survey Committee work is underway to address areas of the work environment. The next employee survey is not expected to be issued until 2009.

### HR Framework Implementation

In 2005 the Nova Scotia Public Service Commission initiated Nova Scotia's Corporate Human Resource Plan 2005-10.

The plan has five goals:

- To make a difference through a skilled, committed and accountable public service;
- To be a preferred employer;
- To be a safe and supportive workplace;
- To be a diverse workplace; and
- To be a learning organization

The Department of Energy is committed to diversity in its recruitment of employees. It will review its hiring practices with emphasis on improving the representation of designated groups such as African Canadians, Aboriginals and women in non-traditional roles within its ranks. To this end, the department will actively work with the Human Resources Client Services Unit to ensure that individuals on their list of qualified diversity candidates have been given first opportunity for casual placements.

As part of succession management planning, the department will continue to encourage employee participation in GoverNEXT events, including networking and mentorship opportunities and career development initiatives. In order to support this, the Department will provide a representative for the Steering Committee.

In 2008-2009 the Department will implement the HR Strategy that was developed in 2007-2008. The areas that will be given specific attention are:

### Succession Management

Senior Management has been identifying resource requirements for their divisions and providing staff with resources required for skill development.

### **Orientation of New Hires**

The employee based committee for new hire orientation has been working on gathering information for a welcome folder. Presentations are also planned for the coming year.

### **Career Development Plans**

The Department will require each employee to complete a Career Development Plan (CDP) for the 2008-2009 fiscal. Management classification employees will complete their CDPs this September followed by professional, technical and administrative employees.

### **Talent Reviews**

Senior management will conduct talent reviews once the career development plans are completed. Talent reviews and succession management will be aligned with the goals of the Department.

### **Diverse Employer**

The Department supports the HR Strategy in its direction to be a diverse employer.

## **8.2 Occupational Health and Safety**

The Department of Energy values the health and safety of its employees and is committed to providing a safe and supportive working environment. The departmental Joint Occupational Health and Safety (JOHS) committee ensures that these goals are met. 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 will continue to work with all employees to identify, report and resolve workplace hazards; ensure employee access to training and take necessary measures to promote health and safety.

## **8.3 French Language Services**

The Department is supporting Government's commitment to enhance French language services within Nova Scotia. The Department will implement the French Language Service Plan for Energy in accordance with the *French Language Services Act and Regulations*. The Department will also continue to encourage employees to take French language training to increase their capacity to deliver French language services to its clients.

## 9.0 BUDGET CONTEXT

<b>Thousands of Dollars</b>			
	<b>Estimate 2007 - 2008</b>	<b>Forecast 2007 - 2008</b>	<b>Estimate 2008 - 2009</b>
<b>Revenues</b>	<b>420,685</b>	<b>502,64</b>	<b>513,964</b>
<b>Recoveries</b>	<b>1,509</b>	<b>1,477</b>	<b>1,630</b>
<b>Expenses</b>			
Salaries and benefits	<b>3,861</b>	<b>3,477</b>	<b>3,913</b>
Operating costs and other contributions less chargeable to other Departments	<b>4,673</b>	<b>5,235</b>	<b>4,375</b>
CNOSPB (before recoveries)	<b>3,018</b>	<b>3,168</b>	<b>3,260</b>
<b>Conserve NS</b>	<b>10,218</b>	<b>9,020</b>	<b>10,269</b>
<b>Total Expenses</b>	<b>21,770</b>	<b>20,900</b>	<b>21,817</b>
<b>FTEs</b>	<b>54</b>	<b>52</b>	<b>49</b>