ENVIRONMENTAL GOALS AND SUSTAINABLE PROSPERITY ACT

PROGRESS Report 2·0·1·0

NOVA SCOTIA

Environmental Goals and Sustainable Prosperity Act

Progress Report 2010

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MESSAGE FROM THE MINISTER

The *Environmental Goals and Sustainable Prosperity Act* is a unique and important piece of legislation. It sets out a path for Nova Scotia to be a world leader by having one of the cleanest and most sustainable environments in the world with a strong and prosperous economy.

I am pleased to present this progress report, outlining our accomplishments as we work towards achieving the goals established in the Act. We've made progress toward improved air and water quality, protecting land for future generations, and reducing government's own impact on the environment. In the next year I look forward to the continued progress as we advance new government strategies in key areas such as water resource management, wetland conservation, and natural resources management.

June 2010 will mark the third anniversary of the proclamation of this act. As we mark this anniversary I am pleased with the progress that has been made. We continue to face challenges as we work toward achieving the goals and targets but, by working together with businesses, community organizations and individual Nova Scotians, we will succeed. All Nova Scotians have a role in reaching these goals and ensuring that Nova Scotia has a healthy environment, thriving communities, and a competitive economy.

Sterling Belliveau
Minister of Environment

INTRODUCTION

The Environmental Goals and Sustainable Prosperity Act (EGSPA) became a law in Nova Scotia in the spring of 2007. This act recognizes the critical link between the environment and the economy. At the time, it was considered bold and progressive. This is still true today. This report presents a frank assessment of the progress made on each of the 21 goals and two overarching objectives in the act leading up to the year 2020.

Looking back on the 2009-10 fiscal year, many EGSPA targets have been met or are well underway. Others present challenges that government and others are working hard to overcome. In some cases the bar has been raised, with successes that go beyond the targets in the act. A few highlights are profiled here and a summary of each target is found in the pages that follow. A snapshot version of this progress report is available at www.gov.ns.ca/nse.

Progress Highlights

Government recognizes the benefits of reducing the environmental footprint of buildings while saving money. A partnership with the Nova Scotia Community College has led to the construction of the Centre for the Built Environment at the Waterfront Campus in Dartmouth. This state of the art teaching facility incorporates such things as solar panels, a solar hot water system, wind turbines, geothermal heating and cooling, and a green roof to reduce heating and cooling demands. It will open in the summer of 2010, well in advance of the act's 2015 target date to construct a demonstration facility to showcase energy efficiency and sustainable design.

All government buildings are now built to LEED* Silver standards. Building projects that receive financial support from government must also meet energy efficiency and water conservation standards. Significant changes to the Building Code Act in 2009 will also have lasting positive impacts on the energy efficiency of buildings. New residential buildings, renovations or additions, as well as commercial buildings less than 600 m^2 must now meet EnerGuide 80 standards, equivalent to R-2000. Plans are in place to extend this requirement to all buildings in 2012. This is another example of a goal that was achieved early. It also goes far beyond the target set in EGSPA.

In August 2009, government adopted a sustainable procurement policy. Environmental, social and economic factors are now considered when making purchasing decisions. Over time, this will have a significant positive effect, as government spends about $800 million a year on supplies and services.

Progress has also been made increasing the amount of protected land in Nova Scotia, which now represents approximately 8.6 per cent of the province. In 2009, government designated three new wilderness areas (Shelburne River, Blue Mountain-Birch Cove Lakes, and Ship Harbour Long Lake Wilderness Areas) totalling 18,300 hectares.

*LEED stands for Leadership in Energy and Environmental Design, an international standard for the design and construction of high-performance, sustainable buildings.

In 2009-10, Nova Scotia Environment received a dedicated $1.5 million Tangible Capital Asset (TCA) allocation to acquire critical conservation lands. In September 2009, government increased the provincial TCA allocation for land purchase and improvements. As a result, more than 57,000 hectares of land was purchased for about $75 million to help meet a number of environmental, economic, and social objectives, including the goal of protecting 12 per cent of the province's land mass by 2015.

Efforts are underway to address the challenging greenhouse gas (GHG) and air pollution targets in EGSPA. In August 2009, Nova Scotia became the first province in Canada to impose regulated hard caps on GHG emissions from the electricity sector. The electricity sector is currently responsible for approximately fifty percent of Nova Scotia's GHG emissions. The caps ensure that by 2020, GHG emissions from the sector will be reduced by about one quarter. New, more stringent caps were also placed on emissions of air pollutants. These caps exceed the current EGSPA targets and take effect in 2015 and 2020.

In January 2010, Efficiency Nova Scotia was established. This independent administrator will help Nova Scotians use less energy, and reduce greenhouse gas emissions. Government is also working to ensure that more of the electricity generated in Nova Scotia comes from cleaner sources. In July 2009, government announced its goal of meeting 25 per cent of the province's electricity needs through renewable sources by 2015. This goes beyond the 18.5 per cent target for renewable energy in EGSPA. A plan to reach this new and aggressive target will be released in April 2010.

Investing in Our Future

The work to achieve the environmental goals in EGSPA is taking place in the broader context of economic prosperity. A clean and healthy environment supports a strong economy and vice versa. To achieve this goal, efforts from all levels of government, businesses, industry associations, not-for-profit organizations and citizens is needed.

Government is investing in infrastructure, promoting skills development and training, encouraging productivity and innovation, and positioning the province to engage more effectively in the international economy. This is being done while protecting the environment and helping communities affected by the economic downturn. For example, the village of Weymouth, with support from all three levels of government, is constructing a state-of-the-art library facility with a community training and resource centre.

High-speed access to the Internet across the province is creating new opportunities for communities and individuals. This initiative also supports businesses as they embrace new ways of doing things to become more productive and globally competitive.

Government investment is helping to improve environmental quality while supporting sustainable economic development. The ecoNova Scotia Fund for Clean Air and Climate Change, a $42.5 million fund, currently

supports 89 projects. Together with partners, millions of dollars are being invested in equipment and materials to implement these projects. Year after year, as of November 2009, ecoNova Scotia funded projects will result in:

- GHG reductions of 172,000 tonnes
- air pollutant reductions of 525,000 kg, by cutting emissions of sulphur oxides by 294,000 kg and nitrogen oxides by 231,000 kg
- the equivalent of 38,000 cars off the road

Many of these projects will result in spin-off emission reductions as they transform technology and encourage innovation in the province. As an added bonus, hundreds of people are employed during project development, and new jobs will be created once the projects are in place. The program will create over 55 full time jobs under the Environmental Technology Program alone.

Another government investment program, the Community Development Trust Fund, is making strategic investments to help transition key sectors and rural communities throughout Nova Scotia facing economic hardship. To date, $30.6 million has been committed to 16 community initiatives such as the Forestry Task Force Action Plan, Seafood Processing Sector Revitalization, Local Food Networks and Farmers Markets, and Tourism Niche Market Development.

Looking Forward

With all of this progress, there are still specific areas that present challenges for the government. Some goals, such as the ambitious air emissions standards set for new vehicles, rely on a national and/or regional approach. Other goals, such as meeting the standards for wastewater treatment or public municipal drinking water facilities, rely on municipal and federal partnerships and significant infrastructure investments at a time when budgets are shrinking. These are not excuses but realities that must be addressed. Government will continue to work with the Round Table on Environment and Sustainable Prosperity (see Round Table letter, page 33) and others to find creative ways to accomplish these goals.

Government is also looking to the future as the act is reviewed in 2012 and amended to reflect new environmental standards and economic objectives. This will keep our province on track to have one of the cleanest and most sustainable environments by 2020 and beyond.

EGSPA GOALS AND OBJECTIVES

The Environmental Goals and Sustainable Prosperity Act includes 21 goals related to natural capital, with strong links to social, human, built and financial capitals (see Appendix 2). Some goals commit to strategies that support stewardship of natural capital (land, water, wetlands, forests, minerals, parks and biodiversity). Other goals support clean air and water, factors critical for human health and social well-being. Infrastructure related goals, such as the requirement for primary wastewater treatment, or the drinking water facility standards, link to built capital. And all goals have a financial impact, such as the cost to the health care system of poor air quality or benefits that come from stewardship of our natural resources.

An update on progress achieving these goals and overarching objectives is found in the following sections. A high-level summary can be found at www.gov.ns.ca/nse.

The Objectives

The act presents two high-level and ambitious objectives to strive for by 2020 (see text box). Nova Scotia is demonstrating leadership through the development and implementation of progressive sustainability legislation, policies and practices. Priorities are rooted in the legislated goals contained within EGSPA. Early successes, such as the Sustainable Procurement Policy and significant changes to the Building Code Act, are already making a difference. As this report shows, progress continues with other goals, a number of which are due by the end of 2010.

4(1) The long-term environmental and economic objective of the Province is to fully integrate environmental sustainability and economic prosperity and to this end to:

4(1)(a) demonstrate international leadership by having one of the cleanest and most sustainable environments in the world by the year 2020

4(1)(b) provide certainty to all sectors of the economy through the Government's economic development strategy entitled Opportunities for Sustainable Prosperity and establish clear environmental goals while improving the Province's economic performance to a level that is equal to or above the Canadian average by the year 2020

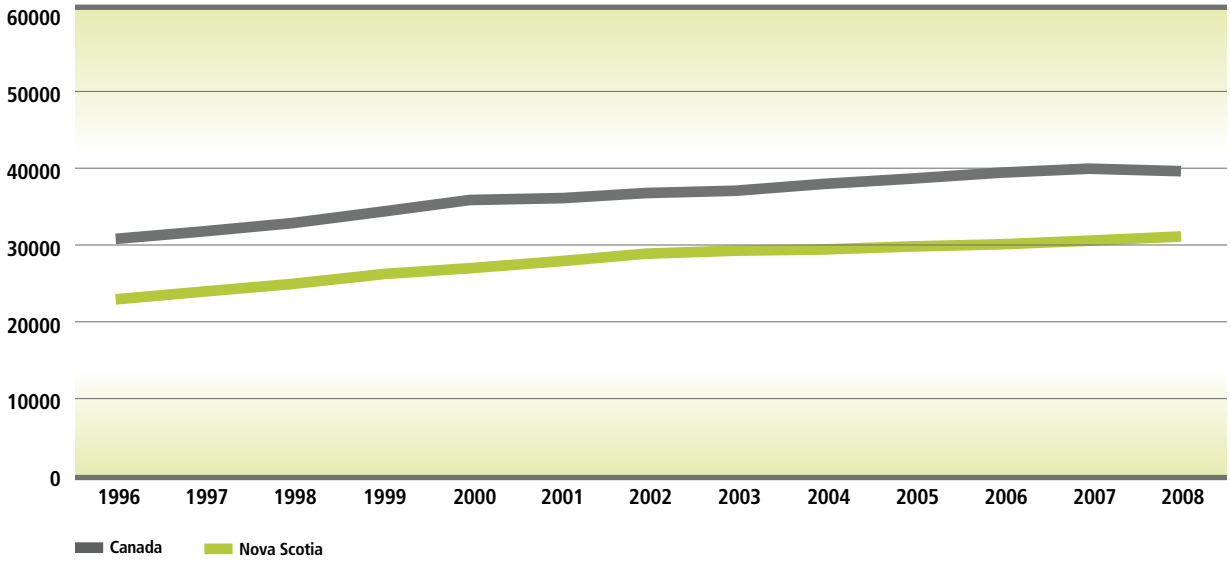
The act tasks the external Round Table on Environment and Sustainable Prosperity to conduct a review of the legislation and its goals every five years. The first review is due in 2012. The commitment to review the act on a regular basis provides an opportunity to re-assess priorities, consider emerging trends and continue to show leadership in achieving sustainable prosperity.

The act emphasizes the importance of integrating environmental sustainability and economic prosperity. This calls for a broad approach to tracking how we are doing as a province. The following section, "Measuring Up – Tracking Economic Progress", outlines this approach. The high-level indicator set presented here will track trends over time within Nova Scotia and across the country. This indicator set is not perfect, and work will continue to refine it and strengthen the environmental component as meaningful measures for Nova Scotia are selected.

The strength of the economy and the health of the environment depend on one another. This is a basic principle in EGSPA. The act challenges Nova Scotia to achieve specific environmental goals while growing the economy. It sets the objective for the economy to perform at or above the Canadian average by 2020 (subsection 4(1)(b)). This is no small feat, as the province falls below the national average on a number of traditional economic indicators.

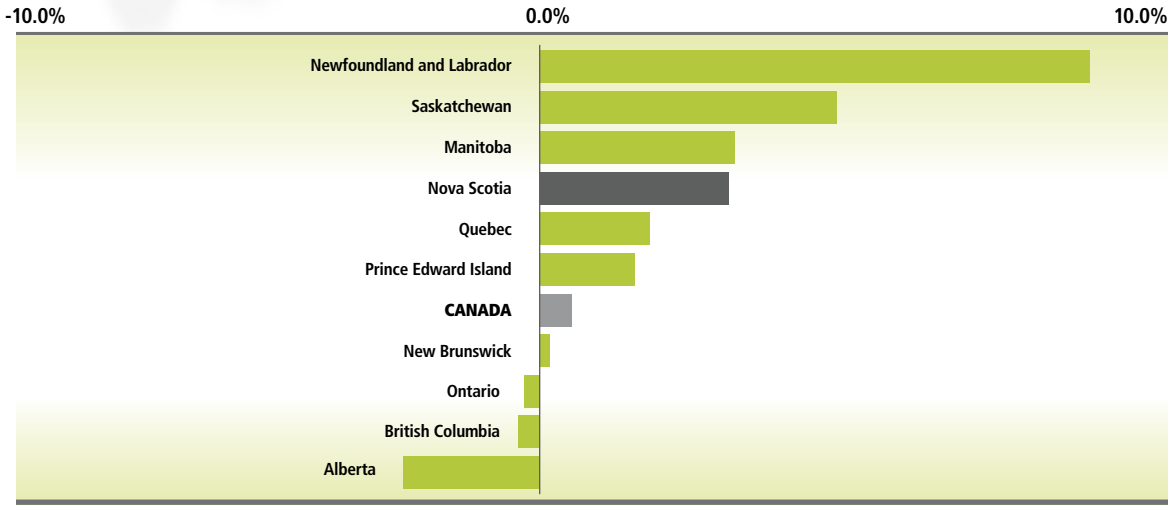
In terms of GDP per capita alone, Nova Scotia's economic performance remains well below the Canadian average (Figure 1). Between 2001 and 2006, this gap widened as provincial GDP growth slowed, and rapid economic growth in resource-rich Newfoundland and Labrador, Saskatchewan and Alberta boosted the Canadian average.

FIGURE 1. GDP PER CAPITA – 1996 TO 2008



In recent years, talk of the economy tends to dwell on the impact of the world-wide recession. So far Nova Scotia has fared relatively well compared to other provinces (see Figure 2). Between 2006 and 2008, Nova Scotia performed better than the Canadian average in terms of growth of Gross Domestic Product (GDP), ranking fourth among Canadian provinces, with a growth rate that was only slightly less than Manitoba's. In 2010, however, as the national economy rebounds, the GDP for Canada is expected to once again grow at a faster rate when compared to Nova Scotia.

FIGURE 2. REAL GDP PER CAPITA GROWTH – 2006 TO 2008



Economic indicators such as GDP are very important to track. When GDP is increasing, employment, profits, incomes and government revenues usually improve as well. This only tells part of the story. A prosperous economy must provide citizens with economic security, a healthy environment, and social well-being. The challenge is to achieve these objectives without risking quality of life in the future.

To get the whole picture, the things that build economic prosperity must be counted – human, social, built, financial, and natural capitals (See Appendix 2 for definitions). This concept was introduced in the 2009 EGSPA Progress Report. The health of each of these capitals is essential. One cannot be compromised for the benefit of another. This is the essence of sustainability.

A preliminary set of indicators is presented here to provide a broader view of the economy, including environmental and social measures (Table 1). They represent a slice of the economy from the perspective of all five capitals referenced above. Monitoring indicators over time in Nova Scotia, and across Canada, will identify where further analysis is required to understand emerging challenges and opportunities. The selection of indicators that capture a big picture of the economy was no easy task. For more details on the process and the indicators, a copy of the technical report is available on-line at www.gov.ns.ca/nse.

Most of the indicators selected can be compared across the country. Some indicators affect more than one capital and cannot be slotted into a single category. A continuum is presented in Table 1 representing social, economic and environmental measures of economic prosperity. It might be useful to think of how various factors (lifestyle, environment, relationships) interact to support a person over their life-time. In a similar way, economic, environmental and social elements work together to support a healthy economy. In the table, weather symbols are used to represent the status of each indicator - sunshine means things are going well, while the thunder storm represents cause for concern.

TABLE 1. INDICATOR SET

PEOPLE	sense of belonging to community	income equality	persistence in low income
PEOPLE	post secondary education	life expectancy	employment ratio-visible minority groups
ECONOMY	labour productivity	net investment in capital stock	personal savings
ECONOMY	Gross Domestic Product (GDP)	government debt	
ENVIRONMENT	value of natural resources (unharvested stock)	electricity generated from fossil fuels	
ENVIRONMENT	water quality (planned - 2011)	forest sustainability (planned - 2011)	air quality (planned - 2011)

Key: Note: Data sources are found in Appendix 1.

- Favorable level, high to middle Canadian ranking, overall positive trend
- Favorable to neutral level, middle to low Canadian ranking, flat or positive trend
- Neutral to unfavorable level, middle to low Canadian ranking, flat or negative trend
- Unfavorable level, low Canadian ranking, flat or negative trend

Our People

HUMAN AND SOCIAL CAPITALS

Viewed as a whole, our human and social capital is steadily improving and is in good health compared to other provinces. Social networks make possible a wide range of activities that support people, the economy and the environment. Nova Scotians are seen as supportive and community-focused. Reflecting this, in 2007, 71.7 per cent of Nova Scotians reported a strong sense of belonging to local community.

Inadequate social supports can lead to poor health, and limited employment and life skills. These factors create barriers to participation even when the economy is doing well. Over the last decade, the percentage of Nova Scotians experiencing three or more years of low income declined from 11.3 per cent to 7.0 per cent by 2007. Higher levels of income equality have been correlated with better quality of life for everyone, regardless of their income. Income equality declined slightly in Nova Scotia in the early years of this decade, but still remains higher than the Canadian average.

Poor health affects quality of life and the ability to work. Employees in Nova Scotia miss more work due to illness or disability than the Canadian average.[1] Diagnosis of chronic diseases, such as asthma[2] and cancer[3] is higher than any other Canadian province. This is reflected in a lower life expectancy for Nova Scotians compared to the Canadian average.

Completion of post-secondary education is related to better health and employment outcomes. One of Nova Scotia's major assets is a well educated workforce. Historically, Nova Scotia has also had a low rate of grade nine completion compared to other provinces. This difference has vanished in recent years. Between 1997 and 2009, the percentage of 25 to 44 year-olds with less than grade nine education fell by over 60 per cent.[4]

Almost two-thirds (65.2 per cent) of 25 to 44 year-olds living in the province have completed either a university, college, or trades apprenticeship program. Despite this achievement, in recent years the province has fallen below the Canadian average. Other provinces are also moving ahead of Nova Scotia in terms of developing and attracting a highly skilled younger working age population. Lower than average employment rates remain an issue for 25 to 44 year-olds who are members of a visible minority group. Although significant progress has been made, in 2006, this group was 87.6 per cent as likely to be employed as 25 to 44 year-old Nova Scotians as a whole.

Our Economy

ECONOMIC OUTPUT, FINANCIAL AND BUILT CAPITALS

A highly skilled workforce and the adoption of innovative practices improve labour productivity. Our employment rates[5] have continued to increase in recent years, meaning more Nova Scotians are joining the labour market and finding work. As our population ages and more people retire, the size of the workforce is expected to decline. To meet this challenge, employers will need to learn to achieve more with fewer workers. Employees often benefit from increases in labour productivity, with higher average wages, and the stability of competitive, profitable employers. In recent years, Nova Scotia's labour productivity growth has fluctuated, with little overall improvement.

Nova Scotia faces significant challenges in the coming years in terms of building and maintaining healthy financial and built capital. Both government and private investors are a source of financial capital or investment funds. High levels of debt, both public and private, reduce the funds available for future investments. Although there has been a small decline in government debt over the past few years, government debt to GDP was 37.1 per cent in 2008. This is more than twice the Canadian average. Personal savings rates have been negative since 2002, meaning that, as a whole, Nova Scotians are now spending more than they earn. An increasing proportion of retirees, who are now spending their savings, combined with higher levels of household debt, have significantly changed the rate of personal saving over the past decade.

In recent years, the offshore gas industry has generated healthy levels of private investment. Expected declines in natural gas production in the future may reduce levels of investment to below the Canadian average[6]. Net investment in non-residential capital stock (investment less depreciation) has steadily declined since 1997, and fell below zero in 2008. A recent increase in investment brought the ratio above zero in 2009.

Our Environment

NATURAL CAPITAL

The indicators near the bottom of Table 1 represent the environment slice of the economy. They are intended to track the big picture view of natural capital. In comparison, the goals and targets in EGSPA are more specific, and supplement this view.

The value of certain key natural resource stocks (timber, oil, gas and minerals) has increased slightly in recent years to $11,079 per person in 2008. Although important, Nova Scotia's natural resources are modest compared to the Canadian average ($41,712 per person). Sustainable management of our resources is essential to maintain our natural resource industries and the health of the environment. Development of a forest sustainability indicator is planned for inclusion in the 2011 report.

Nova Scotia's production of greenhouse gases, as measured per capita, is about equal to the Canadian average[7], and electricity is a major contributor. In 2008, electricity generated from fossil fuel per capita was still very high in Nova Scotia, although investment in renewable sources of energy and energy efficiency was beginning to have an effect. Decreasing fossil fuel usage will improve the quality of the air, lower greenhouse gas production and reduce economic risk due to increasing fossil fuel prices.

Clean water and air is essential for the health of individuals, communities, and the economy. It has been estimated by the Canadian Medical Association that the economic cost of air pollution in the province is approximately $205 million dollars each year and this cost continues to rise.[8] Adequate indicators for the overall air and water quality have yet to be identified. Once available, they will be included in future reports.

THE GOALS

4(2) To achieve the long-term objectives set forth in subsection (1), the Province's environmental and economic goals are to ensure:

ecosystem protection

PROTECTING OUR MOST VALUABLE ASSETS - OUR NATURAL RESOURCES

4(2)(u)	the Province will adopt strategies to ensure the sustainability of the Province's natural capital in the areas of forestry, mining, parks and biodiversity by the year 2010
Measure:	status of natural resource strategy development for forestry, minerals, parks and biodiversity
Target:	a provincial natural resource strategy in place by 2010

Where are we now?

The Natural Resources Strategy is being developed in three phases. Phase 2 is now complete.

In Phase 1, Voluntary Planning's Natural Resources Project Committee engaged citizens in discussions focusing on what is most valued about the four components of the provinces natural resources (forests, minerals, parks and biodiversity). Two thousand people across the province participated in workshops and 600 written submissions were received. Voluntary Planning submitted its final report to the Minister of Natural Resources in April 2009, completing Phase 1.

In Phase 2, a Steering Panel led the strategy development process. This Panel was chaired by retired Chief Justice Constance Glube, and members included Mr Allan Shaw and Mr Joe B. Marshall. The Steering Panel oversaw the work of four technical Panels of Expertise (PoEs), one for each of the four strategy areas. Each panel included three members appointed in the summer of 2009, after an extensive recruitment and screening process. The PoEs conducted technical stakeholder consultations and prepared a report for the review of the Steering Panel.

The Steering Panel prepared an overarching report with recommendations for the Minister of Natural Resources in Phase 2. Phase 3, strategy development, will begin once the report and recommendations have been reviewed by Executive Council. The strategy is expected to be completed by the end of 2010.

How will we reach our target?

- implement the project management framework (Phases 1, 2, 3)
- promote the development of the Natural Resource Strategy and opportunities for citizen and stakeholder engagement
- use the Phase 1 report prepared by Voluntary Planning to inform Phase 2. This report synthesizes public values identified in the citizen engagement process.
- establish independent panels: an overarching Steering Panel, supported by four Panels of Expertise, one for each subject area: forests, minerals, parks and biodiversity
- require the Steering Panel to prepare a report and recommendations based on the individual reports from the Panels of Expertise and the Phase 1 findings.
- prepare the Natural Resources Strategy using information gathered in Phases 1 and 2 (Phase 3)

ecosystem protection

continued...

4(2)(a)	twelve per cent of the total land mass of the Province will be legally protected by the year 2015
Measure:	per cent of the total land mass of the province that is legally protected
Target:	12 per cent land legally protected or 663,360 hectares by 2015

Where are we now?

At the end of 2009, approximately 8.6 per cent of the province had been legally protected. In 2009, the province designated three new wilderness areas (Shelburne River, Blue Mountain-Birch Cove Lakes, and Ship Harbour Long Lake Wilderness Areas) totalling 18,300 hectares. In addition, designation is pending for over 6,600 hectares of land purchased in 2007 from Bowater Mersey.

Over the last three years considerable progress has been made to conserve privately owned land. As of January 2010, 7,040 hectares of privately owned land has been protected and is being exempted from taxation under the 2008 Conservation Property Tax Exemption Act. In addition, $3.8 million from the Nova Scotia Crown Share Land Legacy Trust was used to secure over 2,100 hectares of ecologically significant private land, valued at nearly $7.1 million.

In 2009-10, NS Environment received a $1.5 million Tangible Capital Asset (TCA) allocation to acquire critical conservation lands. In September 2009, government increased the provincial TCA allocation for land purchase and improvements. As a result, more than 57,000 hectares of land was purchased for about $75 million to help meet a number of environmental, economic, and social objectives, including the goal of protecting 12 per cent of the province's land mass by 2015.

In November 2009 the Colin Stewart Forest Forum submitted its report and recommendations to government on ways to protect lands while recognizing the need for an economically sustainable forestry sector. This will help to inform a conceptual protected areas plan that will be used for stakeholder consultation in 2010-11. Broad public consultation will follow.

How will we reach our target?

- research candidate areas
- conduct socio-economic evaluations
- develop outreach and educational materials
- conduct internal reviews and stakeholder and public consultations
- develop and implement protected areas plan
- partner with land trusts and landowners
- acquire and designate land

table continues on next page...

ecosystem protection

continued...

Where are we now? (continued...)

While there is much work to be done, progress towards the 12 per cent goal is on track. Recent land acquisitions and private land conservation initiatives are expected to add about 1 per cent to the current protection. High conservation value Crown lands have been identified through a multi-year science-based approach. The process for evaluating, consulting on, and moving some of these lands towards legal protection is underway, with a goal of completing a protected areas plan by 2013 that will lead to the achievement of the 12 per cent goal.

Total hectares of land protected:

2007	**451,016 hectares**	**~8.2 %**
2008	**456,160 hectares**	**~8.3 %**
2009	**474,800 hectares**	**~8.6 %**

water quality

PROTECTING, RESTORING AND MANAGING OUR VALUABLE WATER RESOURCES

4(2)(k)	a comprehensive water-resource management strategy will be developed by the year 2010
Measure:	status of water-resource management strategy development
Target:	water-resource management strategy developed by 2010

Where are we now?

The development of a water-resource management strategy for the province follows the successful implementation of the Drinking Water Strategy (2002). An interdepartmental steering committee lead by Nova Scotia Environment is overseeing the development of this strategy.

A public discussion paper, *Towards a water resource management strategy for Nova Scotia* was released in January 2008. It outlined a number of water issues in Nova Scotia and posed key questions about how we can best manage water resources.

Public input collected from workshops and written comments were summarized in a document entitled *What we heard: A public feedback report* (September 2008). Sessions were also conducted with staff from 14 government departments and agencies involved in or affected by water resource issues.

A draft set of policy options was prepared in 2010 for consultation with key stakeholders. This document will form the basis of the water resource management strategy planned for release later in the year.

How will we reach our target?

- conduct formal public consultation on water issues and water resource management
- review water resource programs and policies across government
- work with all levels of government on a path forward
- develop a draft strategy based on research and public input
- consult with key stakeholders on the draft policy options and prepare the final strategy

water quality

continued...

4(2)(j)	municipal public drinking-water supplies will meet the Province's treatment standards by the year 2008
Measure:	per cent of municipalities that are in compliance with the Province's water treatment standards, as outlined in their operational approvals
Target:	at least 95 per cent of municipal public drinking water supplies meet the provincial treatment standards by 2008

Where are we now?

There are 84 municipal drinking water facilities that are required to meet the drinking water treatment standards. In addition to water quality, these standards include such things as operator training, monitoring and reporting requirements.

At the end of March 2010, approximately 65 per cent of facilities are in compliance with the provincial standard. These facilities serve approximately 90 per cent of the population in Nova Scotia. The municipalities with facilities not in compliance with the standard have submitted detailed plans and timelines to Nova Scotia Environment describing how they will meet the standard. As the numbers show, some municipalities are struggling to meet the standard. They are faced with challenges such as land acquisition delays, groundwater study requirements, construction delays and cost over-runs. Nova Scotia Environment together with Service Nova Scotia and Municipal Relations are working to help them overcome these challenges and achieve compliance.

2007-08:	**50 %**
2008-09:	**59 %**
2009-10:	**65 %**

How will we reach our target?

- assist municipalities to obtain the necessary funding for infrastructure upgrades
- work with municipalities to develop drinking water treatment compliance strategies
- conduct regular inspections of municipal public drinking water supplies to assess compliance with standards
- take enforcement action when necessary

water quality

continued...

4(2)(n)	a policy of preventing net loss of wetlands will be established by the year 2009
Measure:	status of policy preventing net loss of wetlands
Target:	policy preventing the net loss of wetlands in place by 2009

Where are we now?

The Department of Environment increased capacity to manage wetlands by hiring a wetlands specialist and conducting staff training. Wetland information sessions were also delivered to key stakeholders across the province.

Because of the broad nature of wetland issues, an inter-departmental Wetland Policy Working Group lead by Environment, guided the development of the *Wetland Conservation Policy* for Nova Scotia.

Public input on wetlands was gathered during the consultations on natural resources and water resource strategies (2007 to 2009). In addition, thirty-eight meetings were held with key stakeholders on the draft wetlands policy (more than 650 participants). Meetings with wetland experts from the government of New Brunswick were also held.

Public consultation on a draft *Wetland Conservation Policy* and a draft *Proponent's Guide to Wetland Conservation* took place from October to December of 2009. More than 150 stakeholders and interested Nova Scotians provided input that helped to shape the policy documents.

The approval and release of the wetlands policy and accompanying guide are planned for the spring/summer of 2010.

How will we reach our target?

- research other jurisdictions respecting "no-net loss" of wetlands
- consult with the public and key stakeholders on wetlands
- work across departments to identify and manage wetland issues
- develop a draft wetlands policy and proponents guide
- consult with public on draft policy and guide and make appropriate amendments
- release policy and begin implementation

water quality

continued...

4(2)(p)	septage treatment facilities will be operated in accordance with the Guidelines for the Handling, Treatment and Disposal of Septage by the year 2011
Measure:	per cent of septage treatment facilities that are operating in compliance with the guidelines
Target:	at least 95 per cent of septage treatment facilities are operating in compliance with the guidelines by 2011

Where are we now?

Under the *Guidelines for the Handling, Treatment and Disposal of Septage* (2005), each septage treatment facility in the province is required to prepare and implement a plan to meet the new requirements outlined in the guidelines.

All operating septage treatment facilities in the province currently have updated approvals that include targets and timelines to meet the guidelines referenced above. On December 31, 2010, these approvals will expire . New 10-year approvals will only be issued to sites that are in compliance with these guidelines.

At the end of 2009, 15 septage treatment facilities (56 per cent) have either completed the majority of the required upgrades and/or closed out in accordance with the guidelines. Six sites (22 per cent) are actively working toward upgrades and are expected to meet the December 31, 2010 deadline. Another six (22 per cent) have made limited progress and may not be in a position to obtain a new approval to operate.

How will we reach our target?

- research and encourage alternative technologies
- require implementation of facility action plans for achieving compliance with the guidelines
- monitor sites on an on-going basis to ensure upgrades are being completed in accordance with engineering site assessments
- commence investigations and compliance activities for sites that are behind schedule

water quality

continued...

4(2)(l)	wastewater treatment facility discharges will be provided at least primary treatment by the year 2017
Measure:	per cent of wastewater treatment facilities that provide at least primary treatment
Target:	100 per cent of wastewater treatment facilities provide at least primary treatment by 2017

Where are we now?

Currently 90 per cent of municipal wastewater facilities meet the EGSPA target of at least primary treatment.

Nova Scotia has begun implementing the national *Municipal Wastewater Effluent strategy* (MWWE) which goes beyond the goal in EGSPA. This strategy, developed through the Canadian Council of Ministers of the Environment (CCME), sets out a framework to manage discharges from more than 3,500 wastewater facilities in Canada. The long term target (30 years) is to achieve secondary level treatment standards for municipal wastewater facility discharges.

The CCME has established a national coordinating committee to oversee the implementation of the strategy. Nova Scotia has also established a committee to help facilitate strategy implementation.

All municipal wastewater facilities in Nova Scotia will be issued new approvals requiring them to meet the secondary treatment levels within 10, 20 and 30 years, based on the level of risk that the facility poses.

This stricter national standard will require a significant investment of funding, resources and education. This will be difficult for those municipalities currently facing declining tax revenues. Close coordination with the federal government and Service Nova Scotia and Municipal Relations is essential for the achievement of this challenging goal.

How will we reach our target?

- consult with municipalities on policy issues
- develop and implement the Canada-wide MWWE Strategy
- assist municipalities to obtain the necessary infrastructure upgrades

air quality

DOING OUR PART TO FIGHT CLIMATE CHANGE AND IMPROVE THE AIR WE BREATHE

4(2)(e)	greenhouse gas emissions will be at least ten per cent below the levels that were emitted in the year 1990 by the year 2020, as outlined in the New England Governors and Eastern Canadian Premiers Climate Change Action Plan of 2001
Measure:	annual provincial greenhouse gas emissions (GHG), as measured by the National GHG Inventory (revised annually by Environment Canada), compared with 1990 emission levels
Target:	17.1 M tonnes or less greenhouse gas emissions by 2020

Where are we now?

In 2004, Nova Scotia's greenhouse gas emissions peaked at approximately 19.5 per cent above 1990 levels. Change is required by all sectors of society to reach GHG emission target of 10 per cent below 1990. This includes such things as energy conservation, fuel switching and diversification of non-GHG emitting sources of power.

To help meet this target, in August 2009, Nova Scotia became the first jurisdiction in North America to impose hard caps on GHG emissions from the electricity sector. In 2010, government anticipates emissions from the electricity sector to be approximately 9.7 M tonnes. This is expected to decrease to approximately 8.8 M tonnes by 2015 and to approximately 7.5 M tonnes by 2020.

More stringent limits on air pollutants were also put in place through amendments to the Air Quality Regulations.

Nova Scotia greenhouse gas emissions:

1990:	**19.0 M tonnes**	**base year**
2004:	**22.7 M tonnes**	**19.5 % above base**
2005:	**21.6 M tonnes**	**13.6 % above**
2006:*	**20.0 M tonnes**	**5.3 % above**
2007:	**20.6 M tonnes**	**8.4 % above**
2008:	**20.8 M tonnes**	**9.5 % above**
2009:		**available in 2011**

*** In 2006 the province's largest electricity consumer was closed for most of the year. Therefore, emissions for this year were lower than average.**

How will we reach our target?

- implement the energy strategy and the climate change action plan
- regulate emissions (e.g., NSPI emissions cap)
- invest in energy conservation (new demand side management entity, Building Code amendments)
- require or encourage investment in renewable and cleaner energy sources (Renewable Energy Standard for electricity; conversions to natural gas)
- develop and implement a sustainable transportation strategy
- encourage projects with industry and municipalities that will reduce emissions with incentives through the ecoNova Scotia Program

air quality

continued...

4(2)(b)	the Province will adopt emissions standards for greenhouse gases and air pollutants from new motor vehicles, such as the standards adopted by the State of California by the year 2010
Measure:	status of new motor vehicle emission standards for greenhouse gases (GHGs)
Target:	GHG emission standards for new motor vehicles adopted by 2010
Measure:	status of new motor vehicle emission standards for air pollutants
Target:	air pollutant emission standards for new motor vehicles adopted by 2010

Where are we now?

Because of its limited automotive market share, Nova Scotia is working closely with other jurisdictions on new vehicle emissions standards. This includes federal, provincial, and territorial counterparts and the northeastern United States.

By 2012, the United States will have its GHG emission standards aligned with those of California. Implementation is planned for vehicle model years 2012 to 2016.

In Canada, the federal government released a consultation draft on December 7, 2009 for comments regarding GHG emission standards from passenger automobiles and light trucks. The proposed standards and test procedures align with those of the United States. These standards would fall under the Canadian Environmental Protection Act (CEPA). They plan to have the regulations finalized by the summer of 2010, to become effective for the 2011 model year.

The federal government's *Sustainable Development Strategy* released in March 2010 says it will continue the development and implementation of air pollutant emission regulations for various classes of on-road vehicles and large and small engines used in off-road applications and fuels. The Province will continue to encourage the federal government to upgrade the national standards.

How will we reach our target?

- consult with stakeholders
- work with federal/provincial/territorial counterparts on a national standard or standards
- encourage projects with industry and municipalities that will reduce emissions with incentives through the ecoNova Scotia Program

air quality

continued...

4(2)(c)	emissions of nitrogen oxides will be reduced by twenty per cent by the year 2009 relative to emissions in the year 2000
Measure:	annual total nitrogen oxide (NO_x) air emissions (tonnes) emitted by Nova Scotia Power Inc. in the province
Target Achieved and Exceeded:	in 2009 NO_x emissions from NSPI decreased by about 36 per cent, compared with emissions in 2000

Where are we now?

The NO_x emission cap of 21,365 tonnes per year for Nova Scotia Power Inc. took effect January 2009, achieving the target. This cap is legislated by the Air Quality Regulations under the Environment Act.

Further NO_x reductions beyond this EGSPA target have been added to the Air Quality Regulations for 2015 and 2020.

NSPI NO_x air emissions per year:

2000:	**26,706 tonnes**	**base year**
2001:	**26,513 tonnes**	**0.7 % reduction**
2002:	**30,168 tonnes**	**13.0 % increase**
2003:	**31,882 tonnes**	**19.4 % increase**
2004:	**33,442 tonnes**	**25.2 % increase**
2005:	**32,300 tonnes**	**20.9 % increase**
2006:	**28,037 tonnes**	**5.0 % increase**
2007:	**25,862 tonnes**	**3.2 % reduction**
2008:	**21,398 tonnes**	**19.8 % reduction**
2009:	**17,075 tonnes**	**36.1 % reduction**

How will we reach our target?

- target has been exceeded
- further NO_x reductions beyond this EGSPA target have been added to the Air Quality Regulations for 2015 and 2020

air quality

continued...

4(2)(d)	sulphur dioxide emissions will be reduced by fifty per cent by the year 2010 from sources existing in 2001
Measure:	annual total sulphur dioxide (SO_2) air emissions* (tonnes) in the province
Target:	a 50 per cent reduction in SO_2 air emissions (total) by 2010

* by emitters with greater than 90 tonnes SO_2 per year, including NSPI

Where are we now?

Total sulphur dioxide emissions have been dropping over the last eight years. In 2005, the Air Quality Regulations under the Environment Act were amended to establish specific SO_2 emission caps for Nova Scotia Power Inc., including 108,750 tonnes in 2005 and 72,500 tonnes in 2010. The SO_2 target will be achieved with the 2010 emissions cap.

Further SO_2 reductions beyond this EGSPA target have been added to the Air Quality Regulations for 2015 and 2020.

Through these regulations, other facilities that emit more than 90 tonnes of SO_2 are also required to submit plans for how they will reduce their emissions by at least 25 per cent by 2010.

Nova Scotia SO_2 air emissions (total) per year:

2001:	**164,000 tonnes**	**base year**
2002:	**154,000 tonnes**	**6 % reduction**
2003:	**161,000 tonnes**	**2 % reduction**
2004:	**161,000 tonnes**	**2 % reduction**
2005:	**126,431 tonnes**	**23 % reduction**
2006:	**126,281 tonnes**	**23 % reduction**
2007:	**123,645 tonnes**	**25 % reduction**
2008:	**124,300 tonnes**	**24 % reduction**

How will we reach our target?

- established SO_2 air emission caps for Nova Scotia Power Inc.
- require all facilities that emit more than 90 tonnes of SO_2 to develop and implement a SO_2 air emission reduction plan
- work with industry to reduce SO_2 air emissions

air quality

continued...

4(2)(f)	mercury emissions will be reduced by seventy per cent by the year 2010 relative to pre-2001 levels
Measure:	annual total mercury (Hg) air emissions (kg) from electrical power generation (NSPI) in the province
Target:	65 kg mercury air emissions from electrical power generation (NSPI) by 2010

Where are we now?

The Air Quality Regulations under the Environment Act were amended in 2007 to lower the Nova Scotia Power Inc. mercury emissions cap to 65 kg by 2010. The mercury target will be achieved with the 2010 emissions cap.

This mercury emissions cap is consistent with the Canada-Wide Standard established by the Canadian Council of Ministers of the Environment.

Nova Scotia Power Inc. has installed mercury abatement equipment on three of their four coal-fired facilities. This equipment will significantly reduce mercury emissions and the 2010 target is on track.

Hg air emissions from electrical power generation (NSPI) in Nova Scotia*:

pre-2001	**~226 kg**	**base year**
2006:	**161 kg**	**29 % reduction**
2007:	**157 kg**	**30 % reduction**
2008:	**162 kg**	**28 % reduction**
2009:	**140 kg**	**38 % reduction**

* numbers revised based on most recent data

How will we reach our target?

- a regulated mercury air emission cap for Nova Scotia Power Inc.
- on-going work with NSPI to reduce Hg air emissions

air quality

continued...

4(2)(h)	the Province will meet the Canada Wide Standard established by the Canadian Council of Ministers of the Environment for airborne fine-particulate matter by the year 2010
Measure:	98th percentile ambient fine particulate matter ($PM_{2.5}$ = less than 2.5 microns), measured annually and averaged over three consecutive years
Target:	30 µg/m^3 $PM_{2.5}$ or less with a 24 hour averaging time by 2010

Where are we now?

Significant improvements have been made to the provincial air monitoring network. New ambient fine particulate matter ($PM_{2.5}$) measurement instrumentation has been installed at various stations across the province.

An implementation plan for $PM_{2.5}$ is currently in place that demonstrates how the Canada Wide Standard (CWS) will be achieved.

The CWS for $PM_{2.5}$ is currently being met within the Halifax Regional Municipality, one of two Census Metropolitan Areas (greater than 100,000 people), for which reporting is required. The CWS for the Cape Breton Regional Municipality cannot be calculated at present because of insufficient data.

98TH percentile ambient fine particulate matter

	HRM
2003-2005:	**14 µg/m^3**
2004-2006:	**14 µg/m^3**
2005-2007:	**16 µg/m^3**
2006-2008:	**15 µg/m^3**

How will we reach our target?

- upgrade provincial air monitoring network to include $PM_{2.5}$ instrumentation
- implement a $PM_{2.5}$ reduction plan
- continue to work with national committees to improve $PM_{2.5}$ monitoring methodologies

air quality

continued...

4(2)(i)	the Province will meet the Canada Wide Standard established by the Canadian Council of Ministers of the Environment for ground-level ozone by the year 2010
Measure:	4th highest measurement annually of ambient levels of ground-level ozone, averaged over 3 consecutive years
Target Achieved:	the Canada Wide Standard for ground-level ozone of 65 ppb or less, with 8 hour averaging time, is consistently being met in the two Census Metropolitan Areas in Nova Scotia

Where are we now?

Significant improvements have been made to the provincial air monitoring network. New ground-level ozone monitoring instrumentation has been installed at various stations across the province.

An implementation plan for ground-level ozone is currently in place that demonstrates how the Canada Wide Standard (CWS) will be achieved.

The CWS for ground-level ozone is consistently being met in the two Census Metropolitan Areas in Nova Scotia as reported below.

ambient ground-level ozone:

	HRM	CBRM
2000-2002:	57 ppb	49 ppb
2001-2003:	53 ppb	49 ppb
2002-2004:	51 ppb	46 ppb
2003-2005:	46 ppb	46 ppb
2004-2006:	48 ppb	48 ppb
2005-2007:	47 ppb	50 ppb
2006-2008:	51 ppb	55 ppb

How will we reach our target?

- target has been achieved
- on-going implementation of the ground-level ozone reduction plan will continue

renewable energy

TAPPING INTO NATURE'S SOURCE OF ENERGY

4(2)(g)	eighteen and one-half per cent of the total electricity needs of the Province will be obtained from renewable energy sources by the year 2013
Measure:	annual electrical generation from renewable energy sources as a per cent of all electricity sales in the province*
Target:	18.5 per cent renewable energy sources by 2013

* This target is calculated based on the amount of renewable energy relative to the total electric energy used in the province. Total energy use declines and the percentage of renewable energy increases when major industrial customers are shut down for extended periods of time. An increase in conservation and energy efficiency will also have a positive effect on the renewable energy target.

Where are we now?

In 2007, the Renewable Energy Standard Regulations under the Electricity Act were enacted, establishing the requirement by 2013 for 10 per cent of the electricity supply to come from renewable sources built after 2001. Combined with pre-2001 renewable sources, this will result in at least 18.5 per cent of our electricity supplied by renewable sources, including hydro, wind, solar, tidal, and biomass.

Recent amendments to the Renewable Energy Standard Regulations under the Electricity Act provide for a one year extension (to 2011) for the NSPI interim target of 5 per cent post-2001 renewable energy. This will not affect the EGSPA target for 2013.

NSPI is currently being supplied with electricity from 60 Megawatts (MW) of post-2001 renewable energy and has signed long term power purchase deals with wind energy developers for an additional 245 MW.

On December 31, 2009, RMS Energy's Dalhousie Mountain wind farm project began generation (51 MW).

Government recently committed to increase the renewable electricity supply in the province to 25 per cent by 2015. A plan will be released in April 2010 to show how this new and aggressive target will be met.

Nova Scotia's renewable energy sources:

2001:	**8.5 %**
2006:	**9.7 %**
2007:	**8.4 %***
2008:	**11.0 %***
2009:	**11.3 %***

*revised based on load and generation

How will we reach our target?

- enforce Renewable Energy Standard Regulations under the Electricity Act with specific renewable energy targets
- continue efforts by NSPI to acquire renewable energy supplies
- conduct a tidal energy demonstration project on the Bay of Fundy
- continue to research and encourage investment in electricity from renewable energy sources

contaminated sites

BUILDING OUR ECONOMY BY RENEWING OUR LAND

4(2)(m)	regulatory tools that use the framework within the Environment Act to stimulate redevelopment of contaminated land and contribute to economic development while protecting the environment will be developed by the year 2010
Measure:	status of regulatory approach and tools to stimulate redevelopment of contaminated lands
Target:	regulatory approach and tools to stimulate redevelopment of contaminated lands developed by 2010

Where are we now?

Contaminated sites in the province are currently dealt with using the Environment Act and Nova Scotia Environment policies and guidelines. A more formal process has been requested by the public, site owners, lenders, insurers and municipalities, among others.

Amendments to the Environment Act in 2006 included the authority to develop a new regulatory approach to deal with contaminated sites. New regulatory tools required in EGSPA will help to clarify liability, improve consistency, and formalize the current system.

Significant technical, legal and financial complexities as well as consideration of the implications for specific groups affected by potential changes in the current system have lead to delays in the timeline for this target. A Stakeholder Advisory Committee was established and extensive internal and external consultations are on-going.

The Law Reform Commission of Nova Scotia released a discussion paper in April 2009 to gather public input on contaminated site processes and liabilities in Nova Scotia. Their final report, released in December 2009, presents recommendations for improving the current legislative regime.

The Department of Environment plans to release a discussion paper in the spring of 2010 to get public feed-back on policy options and regulatory tools under consideration. Consultation on the resultant draft regulation is planned for the fall of 2010.

How will we reach our target?

- research options and alternatives
- consult with stakeholders as changes are considered
- develop draft regulations and supporting tools and procedures
- consult with public on draft regulations

energy efficient buildings

SAVING MONEY AND ENERGY IN OUR BUILDINGS AT WORK, HOME AND PLAY

4(2)(r)	all new residential dwelling units constructed in the Province that are within the scope of Part 9 of the National Building Code of Canada will be required to display an EnerGuide rating by the year 2008
4(2)(s)	all new residential dwelling units constructed in the Province will be required to achieve an EnerGuide rating of 80, or meet energy conservation measures adopted in the Nova Scotia Building Code Regulations made under the Building Code Act after January 1, 2011
Measure:	status of requirement for all new residential dwelling units to achieve an EnerGuide rating of 80, or meet energy conservation measures adopted in the Provincial Building Code
Target Achieved and Exceeded:	a requirement is in place for all new residential dwelling units, as well as home additions or major renovations and commercial buildings under 600 square metres to achieve an EnerGuide rating of 80, through performance or prescriptive options

Where are we now?

Actions have been taken to ensure that EGSPA's goals for energy efficiency of buildings (4(2) (r) and (s)) will be exceeded, significantly boosting benefits to the environment.

As part of the implementation plan, EnerGuide labelling continues to be encouraged as a voluntary tool to educate homeowners. In addition, energy efficiency amendments were made to the Building Code Act in December 2009, one year earlier than required by the act. These amendments, developed in consultation with the Nova Scotia Building Advisory Committee, establish new energy efficiency standards beyond the scope of the EGSPA target. The new standards apply not only to new home construction, but also to home additions and major renovations, and commercial buildings under 600 square metres.

To meet the new energy efficiency requirements, builders have a choice of either "performance" or "prescriptive" options. Under the performance-based option, the construction projects listed above must achieve a minimum EnerGuide rating of 80, the equivalent energy efficiency of an R-2000 home. Under the prescriptive

How will we reach our target?

- On-going implementation including:
  - building capacity to conduct energy audits/ assessments
  - training builders
  - working with the Nova Scotia Building Advisory Council, municipalities, builders and subdivision developers
  - consulting with stakeholders
  - enforcing the Building Code Act

table continues on next page...

energy efficient buildings

continued...

Where are we now? (continued...)

option, builders are required to use materials and techniques specified in the Code that are intended to achieve energy conservation requirements in building performance. Each of these options will be enforced by municipal building inspectors. By adopting the prescriptive solutions, Nova Scotia can enforce energy conservation upgrades to existing built stock as owners choose to renovate their buildings.

More than twenty seminars introducing the energy conservation requirements of the Code have been conducted across all regions of Nova Scotia, serving more than 1,700 individual architects, engineers, designers, contractors, sub trades, materials suppliers, and manufacturers.

In 2012, Nova Scotia plans to adopt new national energy codes for Buildings and Houses that will achieve uniform energy conservation measures for all new buildings and the renovation of, or addition to all existing buildings. These requirements will apply to all buildings and significantly broaden requirements established in 2009.

energy efficient buildings

continued...

4(2)(t)	a government facility will be constructed as a demonstration facility in accordance with a leading standard for building energy efficiency and sustainability, such as the Leadership in Energy and Environmental Design standard by the year 2015
Measure:	phase of construction of a demonstration facility for energy efficiency and sustainability
Target:	a new government facility that showcases leading edge energy efficiency and sustainable design principles by 2015

Where are we now?

Government has partnered with the Nova Scotia Community College (NSCC) to construct Phase II of their waterfront campus in Dartmouth - the Centre for the Built Environment (CBE). Construction of the CBE is in the final phase and plans are to open in August 2010.

The CBE is striving to achieve Leadership in Energy and Environmental Design (LEED) Gold status. It incorporates such things as solar panels, a solar hot water system, wind turbines, geothermal heating and cooling, and a green roof to reduce heating and cooling demands. In addition to leading edge energy efficient and sustainable design and construction, this facility is unique in its ability to demonstrate and teach these principles to a wider audience.

Government has also been making steady progress on other green building initiatives. For example, a Green Building policy requires new buildings constructed by the province and those buildings that the province contributes financially towards are designed and constructed to meet specific energy efficiency and water conservation standards.

How will we reach our target?

- partnership with the Nova Scotia Community College
- Centre for the Built Environment scheduled to open in August 2010, certification to follow

solid waste

CONTINUING TO BE AN INTERNATIONAL LEADER IN SOLID WASTE MANAGEMENT

4(2)(o)	the solid-waste disposal rate will be no greater than three hundred kilograms per person per year by the year 2015 through measures that include the development of new programs and product stewardship regulations
Measure:	annual solid-waste disposal rate (kg) per person per year
Target:	300 kg or less solid waste disposed per person per year by 2015

Where are we now?

Amendments to the Environment Act in 2006 established a new solid waste disposal target of 300 kg per person per year by 2015. According to the most recent data from Statistics Canada, the Canadian average waste disposal rate in 2006 was almost twice that of Nova Scotia.

Currently there are 17 materials banned from disposal in Nova Scotia and eight product stewardship agreements.

In 2008, a report assessing the original solid waste-resource strategy (1995) was released in preparation for the development of a new strategy to map out a path to reaching the ambitious 300 kg disposal target.

Over the next two to three years efforts will focus on a renewed solid waste resource management strategy, expansion of the household hazardous waste programs, a construction and demolition waste action plan and a sustainable funding mechanism.

Annual solid waste disposal rates (from Statistics Canada - four year time lag)

	NS	Canada
2002	**416 kg/person**	**760 kg/person**
2004	**427 kg/person**	**772 kg/person**
2006	**430 kg/person**	**835 kg/person**
2008	**data available summer of 2010**	

How will we reach our target?

- research options and alternatives to minimize waste disposal and increase product stewardship
- consult with key stakeholders including municipalities and the Resource Recovery Fund Board
- consult with public
- develop and implement a work plan to reduce disposal to 300 kg/person/year
- develop and implement a renewed Solid Waste-Resource Management Strategy

sustainable purchasing

LEADING THE WAY IN THE PURCHASE OF ENVIRONMENTALLY AND SOCIALLY RESPONSIBLE GOODS AND SERVICES

4(2)(q) a sustainable procurement policy for the Province will be developed and adopted by the year 2009

Measure: status of development of a sustainable procurement policy

Target Achieved:
a provincial sustainable procurement policy was approved and in place on August 20, 2009

Where are we now?

Nova Scotia's Sustainable Procurement Policy was developed through extensive research and targeted internal and external consultations held throughout 2008 and 2009. This corporate policy was released on August 20, 2009, marking the achievement of this goal.

This policy takes a holistic approach to obtain the best value for government dollars. It integrates environmental, economic and social considerations into government purchasing decisions. This represents a substantial shift from the Lowest Competent Bid approach that was used in the past.

In-house education and awareness about sustainable procurement is proceeding through Talk SP newsletters and presentations. Both on-line and in-class training programs are in place, targeting employees with purchasing responsibilities. Communication about the policy and the implications for government suppliers is also on-going.

A Sustainable Procurement area has been established for the government Tenders website. Resources and tools are being developed and added to the site as they become available.

Work is also underway to include sustainability criteria in Standing Offer Tenders and Requests for Proposals.

How will we reach our target?

- target has been reached and policy implementation is on-going

LETTER FROM THE ROUND TABLE

May 12, 2010

Honourable Sterling Belliveau
Minister

Department of Environment
5151 Terminal Road
Halifax, Nova Scotia

DEAR MR. BELLIVEAU

This letter from the Round Table provides you and your colleagues with our annual assessment of the Province's progress in satisfying the intent and goals in the Environmental Goals and Sustainable Prosperity Act. Overall, the Province continues to make progress in satisfying most of the goals set for the years 2007 to 2009.

In particular, we note that the Provincial Government adopted a sustainable procurement policy in 2009. Although the operational details are still being worked out, the signal sent by the government to its suppliers is indeed noteworthy. We also note that the Government has announced changes to the renewable energy goals which go far beyond those in the Act. Changes to the building code regulations have come into effect one year early and were expanded to include major renovations and small commercial buildings. Significant progress has been made in establishing an energy efficient and environmentally sustainable demonstration building on the site of the NSCC Waterfront Campus in Dartmouth well in advance of the 2015 target date. Nova Scotia Power has met and exceeded the government's requirements for nitrogen oxide emissions.

However some goals have been missed or remain elusive. The wetland policy scheduled for release in 2009 has been delayed. The Round Table believes that thorough consultation is important and necessary to gain support for new policies. However we caution that the Departments tasked with the responsibilities associated with EGSPA must put the necessary resources into the process. This will be particularly important in the case of the water strategy, a resource that involves every Nova Scotian. We noted last year our concern that mandatory labeling was not pursued as we believed such labeling would benefit buyers. Further we convey our continuing distress about delays in a number of municipalities which have not met the 2008 municipal drinking water standards.

Beyond tracking progress toward specific goals, it is with the intent of the Act wherein the Round Table has greater concerns. We believe that it is quite important to explain to Nova Scotians not only what the targets are, but also how the targets will be reached and who will be involved in reaching them. We would like to see more detail in the sections answering the question "how will we reach our target?" For example, information on the nature of consultations and dates would be helpful. This is necessary to further engage Nova Scotians in discussing the intent of the Act, its goals and targets.

As we move toward a public review of the Act in 2012 as required in the legislation, much more effort must be devoted to informing Nova Scotians about the Act and educating them about its objectives and

intent. We collectively have an opportunity to involve Nova Scotians in creating "one of the cleanest and most sustainable environments in the world" but it must involve each and everyone of us! This can only be achieved by creating more ways to engage people, communities, businesses, organizations and schools in urban as well as rural areas of the Province. One Round Table member put this eloquently: "What we need to do in Nova Scotia is create an environment that will encourage industry to not only accept the EGSPA goals but will take measures to incorporate changes in their business environment that will enable them to achieve the goals." The various strategies which have been or are being developed are interconnected and how the government is planning to manage interrelationships and leverage synergies among strategies must be explained to stakeholders. For example the wetland policy, the coastal management strategy, and the climate change strategy will all implicate municipalities particularly with regard to adaptation policy and planning.

In Nova Scotia, sustainable prosperity is based on strengthening five capitals, namely natural, economic, social, human and built. The Provincial Government has made a commendable start at identifying indicators that will give Nova Scotians a means of measuring whether this is actually occurring. Unfortunately it is not possible at this time to easily link the proposed indicators with the five capitals. We encourage the responsible agencies to continue this work and to provide indicators that not only give the status of the measure but also its trend. While the Provincial Government works on a comprehensive and more appropriate approach to reporting on sustainable prosperity, it would also be helpful to include different ways of reporting GDP for comparative purposes including GDP per capita. The Government must continue its effort to demonstrate the integration of economic prosperity and environmental sustainability into sustainable prosperity. This is at the heart of the Act.

Finally, we have noted in the past that as the Act was designed to foster the integration of environment and economy, more effort must be devoted to exploring the costs and benefits associated with the goals and targets. There are at least three aspects that must be considered. These are the costs associated with implementing the target, the costs that may be involved if the issue is not addressed and the benefits to the economy and the environment that will be derived from implementing the goal with special emphasis on jobs. The Round Table recognizes that some of these will be more challenging than others. Therefore, we recommend that the Government proceed with a pilot project in 2010-2011 that will involve calculating costs and benefits of 2 or 3 goals and targets. It would be very helpful to have this analysis done before consultations begin in 2012. Paraphrasing a comment from one Round Table member "our challenge is about how to reconcile the divergent circumstances, opportunities and interests and find ways to collaboratively advance a society that finds value in both."

The Round Table looks forward to continuing progress in implementing the intent, goals and targets in the Environmental Goals and Sustainable Prosperity Act. This is a unique and important piece of legislation that places Nova Scotia at the forefront of jurisdictions around the world concerned with sustainability.

Yours sincerely
Raymond P. Côté,
Chair

LETTER FROM THE MINISTER

Raymond Côté

Kenneth C. Rowe
Management Building
Dalhousie University
Suite 5010
6100 University Avenue
Halifax NS B3H 3J5

Dear Prof. Côté:

I would like to thank the Round Table on Environment and Sustainable Prosperity for providing feedback on the third annual progress report for the Environmental Goals and Sustainable Prosperity Act (EGSPA). Your feedback will be considered as we work towards achieving the goals and targets set out in the Act.

I agree that significant progress has been made. As we work toward achieving the goals we have been able to protect new land, improve air quality, and reduce government's impact on the environment, however, there are ongoing challenges as we move forward. In some instances, such as release of a wetlands policy, we have been delayed in meeting the goals. This is because we are committed to ensuring that we choose approaches that are the most effective and have support of stakeholders. I would like to assure you that the EGSPA goals will continue to be met within reasonable time frames and that we will continue to work with stakeholders to achieve our goals.

The Round Table has identified the importance of educating and engaging all Nova Scotians in EGSPA. Clearly our success depends on this. It is partly for this reason that the department created a new division, Environment and Sustainable Prosperity Partnerships. This division plays a role in promoting the province's goal of sustainability and building relationships with partners throughout the community.

Through the work of this division the department was able to promote EGSPA either directly or indirectly through a number of activities. The department participated in numerous public events where EGSPA was explicitly promoted with written materials and aided by buttons and t-shirts worn by staff inviting visitors to "Ask Me About EGSPA." The department was a key partner with the Nova Scotia Environmental Network and the Department of Education in presenting Green Roots. This event brought together communities and environmental groups to discuss education for sustainable development, municipal sustainability programs, citizen-based environmental science, community-university partnerships, government priorities and working with government. In addition, the department continues to work with Sustainability Education in Nova Scotia for Everyone (SENSE), the Environmental Education Caucus of the Nova Scotia Environmental Network and the Department of Education. The division's Environmental Technology and Innovation section continues to work with businesses, municipalities and universities on a variety of projects that move us toward the green economy envisioned by EGSPA.

The department will continue its work of building new relationships over the next year. It will work on improving the Second Nature web portal to reflect current trends in internet communication. The Round Table made a recommendation to provide more detail about the way the targets will be reached and who will be involved in reaching them. This will help engage the public in discussions on the intent of the act, its goals and its targets. We will incorporate this into our next report.

In your letter, the Round Table has made mention of the five capitals and the proposed indicators. The act is built on the principle that the environment and the economy go hand in hand. For this reason, it is important to measure economic prosperity in the context of environmental sustainability. Last year, a framework was established to measure this. This year a set of high level indicators will help track how Nova Scotia is doing over time, and also how the province compares with the rest of Canada. I agree with the Round Table that Gross Domestic Product (GDP) is an important component of our economy. That is why GDP is integrated throughout the proposed indicator set. The selection of meaningful indicators is a difficult task, and I encourage the Round Table to provide advice and recommendations on how we can improve our approach in next year's report.

I think your recommendation about a pilot project to investigate the costs associated with the goals and their benefits to the economy and the environment is interesting. It may help us to better define the linkage between these key elements of EGSPA. I have asked staff to consider this recommendation to determine how it could be accommodated within our current business plan.

I appreciate the Round Table's continued commitment, support, and advice. I look forward to further discussions on your recommendations.

Sincerely,
Sterling Belliveau
Minister

APPENDIX 1

Indicator Data Sources

Figure 1, 2
Gross Domestic Product (GDP) (2008) Statistics Canada, Cansim Table 384-0002.

Indicator Table

Sense of belonging to the community:
Canadian Community Health Survey (CCHS) (2007) Statistics Canada.

Income inequality:
Gini coefficient of after-tax income (2007) Statistics Canada Cansim Table 202-0705.

Persistence in low income:
Persistence of low income (2007) Statistics Canada Cansim Table 202-0807.

Post-secondary education:
Labour force survey estimates (age 24-44) (2009) Statistics Canada Cansim Table 282-0004.

Life expectancy:
Life Expectancy at 65 (2006) Statistics Canada Cansim Table 102-0511.

Employment ratio - diversity groups:
Employment rates (ages 24-44) (2006) Statistics Canada Census of Canada.

Labour productivity:
Real labour productivity in the business sector (2008) Statistics Canada Cansim Table 383-0011.

Net investment in capital stock:
Flows and stocks of fixed non-residential capital (2009) Statistics Canada Cansim Table 031-0002

Personal savings:
Selected economic indicators, provincial economic accounts (2007) Statistics Canada Cansim Table 384-0013.

Government debt:
Public debt as a percentage of GDP (2008) Statistics Canada Cansim Table 032-0002.

Value of natural resources (unharvested stock of timber, oil, gas and minerals):
Value of Natural Resources per Capita (2008) Statistics Canada, compiled by Canadian Centre for the Study of Living Standards, Canadian Index of Economic Well-being, 2009.

Electricity generated from fossil fuels:
Electricity generated from fossil fuel per capita (2007) Statistics Canada Cansim Table 128-0014.

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7. GHG emissions per capita (2008): Environment Canada - Greenhouse Gas Inventory. Canada's 2008 Greenhouse Gas Inventory.
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APPENDIX 2

The Five Capitals Defined

Social Capital
the relationships and networks that support individual and societal well-being and healthy, prosperous communities. This includes a broad range of formal and informal support systems such as families, friends, communities, governments, institutions, organizations and associations.

Human Capital
the capacity of individuals to participate actively and productively in society and the economy. Individual capacity includes health, skills, knowledge, creativity, education, training and experience.

Financial Capital
the funds available for public and private sector investment in business activity, research and development, and social programs and services.

Built Capital
manufactured physical assets - equipment, technology, and infrastructure - that support productive economic and social activities. This includes a broad range of public assets (e.g., transportation networks, educational facilities) and private assets (e.g., factories, housing, and infrastructures for energy and communications).

Natural Capital
the natural environment, made up of dynamic, interacting systems of organisms and the habitats (air, water, land, minerals) on which they depend. Renewable and non-renewable natural resources are components of natural capital that contribute to economic activity and our quality of life.