



The Environmental Economy: Seizing Opportunities

Highlights and Recommendations

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1. EXECUTIVE SUMMARY

After the release of NovaKnowledge's 2005 Knowledge Economy Report Card "*The Environmental Economy - seizing opportunities*," government and private sector partners were approached by NovaKnowledge to support a series of Environmental Economy Workshops across the province.

The project's purpose was to raise awareness of the opportunities that sustainable development provides Nova Scotia businesses and to communicate the global market trends towards environmentally sustainable economies. The feedback from small and medium size business (SME) is that management have to come to regard sustainable practices as core to the operation of their business before they effect change. The disconnect between "why" and "how" is where the challenge lies.

Partners in the project were: NS Office of Economic Development, NS Department of Energy, Nova Scotia Department of Environment and Labour; the Eco-Efficiency Centre was a key strategic partner. Over 160 people representing more than 50 organizations were reached in six sessions held in Sydney, Port Hawkesbury, Stellarton, Wolfville, Bridgewater and Yarmouth. Media coverage was obtained in all but one location. Participants from a variety of sectors brought a broad range of perspectives to the dialogue.

There were several components of each Environmental Economy Workshop. The agenda included a time for networking; an environmental quiz to get participants thinking about environmental issues; and NovaKnowledge's presentation, which focused on the three business drivers identified in the 2005-06 Report Card. They are resource stewardship, market demand and competitiveness, and public policy. After a short break, a local environmentally friendly business adopting sustainability practices was profiled. Finally, participants were given a Case Study to review and asked to present recommendations to the group. The Case Study featured a NS business and participants were interested to learn what the company actually did to solve the issues outlined.

What we heard

NovaKnowledge staff noted recommendations and observations made by participants in each of the six Environmental Economy Workshops. Detailed outcomes from each workshop are included in Section Four of this report.

Chanterelle Country Inn and Cottages is a very successful environmentally sustainable bed and breakfast operation, and claims revenues 25% higher than local tourism counterparts. There is an opportunity for Cape Breton Island tourism operators to embrace environmental sustainability and build it into an economic driver for the sector.

However, better education is required in the construction sector if new methods that embrace environmental sustainability are to be put in practice. As the public demand for environmental sustainability strengthens, it changes the way corporations do business and business is more motivated to respond, or to be perceived to be responding.

Ocean Nutrition (ONC) has successfully entered the nutraceuticals market and, after 10 years in business, is experiencing exponential growth. Through innovation and research ONC has developed new waste stream remediation techniques resulting in new products, such as bio-diesel, developed in partnership with a local company, Wilson Fuels. They further reduce waste, and save money, in their waste stream by removing and recycling extraction chemicals and capturing heat.

Neenah Paper has reduced their purchase of power from 27 megawatts, to 2 megawatts per year by burning waste. Crossley Carpets is saving \$475,000 a year by recovering heat from skein dye steam condensate and dye house effluent.

Construction of the Stadacona Officers' Mess was a challenge as the architects were asked to incorporate an existing building into the project, develop a waste separation system and meet LEED¹ certification guidelines. Clients, architects and contractors need to take into consideration "whole building" concepts in order to make the business case for environmentally sustainable buildings. Municipal policy for construction waste separation and diversion is overdue, and represents the single largest remaining component of waste stream management.

The Eco-Efficiency Centre, one of Nova Scotia's best-kept secrets, helps SMEs across the province review current practice against environmental sustainability principles and leads companies through assessment to implementation. One example of a successful partnership, between the EEC and a joint NS-NB tourism initiative, saw 60 tourism operators located around the Bay of Fundy implement environmental sustainability practices into their business processes to advantage. However, the EEC would benefit from an increased awareness of the programs it offers SMEs across the province.

Louisiana Pacific found the key to becoming environmentally sustainable was to bring about a change in mindset of management so environmental sustainability practices are seen as core to the organization's operation. In most SMEs managers know it is the "right" thing to do, but are not undertaking the initiatives required to put it in place. The EEC is effectively bridging this disconnect, but reaching more SMEs is dependant on the resources available. Representatives of government departments working in

¹ LEED - Leadership in Energy and Environmental Design certification measures the sustainability of a building using a variety of indicators including water efficiency, design excellence, materials and energy performance. 2005-2006 Knowledge Economy Report Card.

regions outside metro should be more aware of EEC programs and assist by referring businesses to their services.

2. RECOMMENDATIONS

Participants and presenters voiced recommendations and observations about the opportunities and challenges presented to them by the environmental economy and they have been summarized in Section Five of this Report. Based on our observations, NovaKnowledge makes the following recommendations:

- **Raise Eco-Efficiency Centre's profile with NS business leaders**
The EEC is one of Nova Scotia's best-kept secrets. It has developed an effective model and understands how to work with SMEs to improve environmental efficiencies and save money. A marketing campaign targeted at the SME should be undertaken to build awareness. One outcome should be to build stronger linkages with provincial and federal government representatives and Regional Development Authority (RDA) staff located across the province. As awareness heightens and more businesses seek environmental and energy reviews, additional resources will also be required to meet demand. Finally, the EEC would be wise to build a self-sustaining model. The programs offered are valuable to business and there is potential for further private-sector revenue generation.

- **Incorporate environmental sustainability questions in BREI**
Nova Scotia's RDAs are taking the Business Retention and Expansion Initiative (BREI) model used by the Greater Halifax Partnership, doing some pilot studies, and then plan to roll it out across the province. One immediate action should be to ensure inclusion of questions about environmental sustainability practices so this information can be gathered and acted upon.

- **There is money to be made and money to be saved**
The work of raising awareness about the opportunities presented by the environmental economy must continue. Awareness is growing slowly, but as business leaders come to recognize there is money to be made and money to be saved they'll naturally take the lead. However, more work is needed to help SMEs make the move toward sustainability.

Where do we go from here?

In the year since this project began public demand has impacted political agendas and the media is engaged, now that it has become "the number one issue in Canada". Political pundits believe the issue will only remain in first place until the economy dips. But do they realize how closely associated these two issues have become?

We can lead by building an economy around environmental products and solutions, or lag and lose export market share, deplete natural resources and suffer the economic consequences, while becoming a purchaser of solutions after its far too late. Early in 2005 the European Union enacted new legislation banning 14 categories of household products from the continent's landfills, sending retailers and manufacturers scrambling to develop eco-friendly products and packaging. In Denmark seeking renewable energy sources has fostered a wind power industry and now it is the world's leading exporter of wind turbines. North America lags the EU, but market demand, global warming, and rising energy costs dictate the way forward. Nova Scotia has a choice to make, we can become a leader and find ourselves in the engine of the train with hand on throttle, follow and seat ourselves in the caboose, or ignore these issues and find ourselves on the track.

In order for government to advance this agenda and meet the challenges set out in "Opportunities for Sustainable Prosperity" (the provincial economic development strategy) time and energy must be invested in determining the way forward. The three business drivers outlined in the 2005 Report Card clearly set out the role for government as setting the policy agenda to facilitate the transition to enhanced sustainability.

Through this project we have learned that the key challenge is to bring SME management to regard sustainable practices as core to the operation of their business. The disconnect between "why" and "how" is where the challenge lies. The EEC helps bridge this gap, but a business decision to embrace sustainability has to be made first.

Collaboration is key to developing next steps that will ensure Nova Scotia's business community focus goes beyond climate change, to protecting the environment and eliminating waste.

The objective -- a business community that understands:

- it is important to focus on the environment;
- there is money to be made and money to be saved; and
- exports will be impacted by green compliance issues in many jurisdictions of the world.

3. PROJECT OVERVIEW

3.1 What is NovaKnowledge?

NovaKnowledge is a not-for-profit, non-partisan organization that has been promoting the knowledge economy in Nova Scotia since 1993. NovaKnowledge serves as a hub, bringing together members and stakeholders with the common objective of charting a course for Nova Scotia's future.

Our unique combination of neutrality, broad membership, diverse stakeholders, province-wide mandate, and focus on innovation and ingenuity has made NovaKnowledge the only organization of its kind in Atlantic Canada.

3.2 Report Card overview

In November 2005, NovaKnowledge published its 2005-06 Knowledge Economy Report Card – *"The environmental economy - seizing opportunities"*. While maintaining emphasis on the core issue of innovation, the 2005-06 Report Card tackled a new and challenging area, examining the opportunities offered by the environmental economy and global market trends towards environmental sustainability.

The Report Card clearly identifies three business drivers which represent opportunities for Nova Scotia's companies. They are:

Resource stewardship

Fluctuating oil, gas and coal prices, threat of climate change and growing concern over sustainability of our natural resources is revealing new opportunities for growth and advancement in the knowledge economy. As Nova Scotia's Solid Waste-Resource Management Strategy has shown, protecting the environment can result in exciting new opportunities for value-added manufacturing, innovation, and enhanced competitiveness.

Market demand and competitiveness

Businesses have a lot to gain from the environmental economy. Sustainable companies report increased efficiency and reduced operating costs, greater productivity and reduced liability. Also, with an increasingly environmentally aware purchasing public, eco-friendliness is fast becoming an essential marketing tool.

Public policy

Governments play a key role in facilitating the transition to an enhanced environmental economy. As countries such as Denmark and Germany have shown, leading edge regulations, and appropriate incentives and procurement policies set the stage for environmental innovation and enhanced global competitiveness.

3.3 Report Card Feedback

Feedback on the 2005 Report Card received from stakeholders and Knowledge Economy Summit participants was positive. They said addressing the topic of environmental sustainability from the standpoint of the economic opportunities open to Nova Scotia is extremely useful, and NovaKnowledge should continue work on the topic.

There is an increasing emphasis on achieving environmentally sustainable economic growth at municipal, provincial and federal levels of government. In addition, the Premier's Advisory Council on Innovation identified sustainable development as a high-priority area of opportunity for Nova Scotia.

3.4 Project Overview

NovaKnowledge combined a series of M.I.K.E. Debates with Environmental Economy Workshops which became the 2006 Road Show. Over 160 people representing more than 50 organizations were reached in six sessions held in Sydney, Port Hawkesbury, Stellarton, Wolfville, Bridgewater and Yarmouth. Media coverage was obtained in all but one location. Participants from a variety of sectors brought a broad range of perspectives to the dialogue.

3.5 Locations and dates

The six 2006 Road Show stops and the dates are as follows:

Sydney, NS	Tuesday, June 27, 2006
Port Hawkesbury, NS	Wednesday, June 28, 2006
Stellarton, NS	Thursday, June 29, 2006
Wolfville, NS	Thursday, October 19, 2006
Bridgewater, NS	Friday, November 3, 2006
Yarmouth, NS	Wednesday, November 8, 2006

3.6 Project Rationale

Environmental sustainability, and the three business drivers identified by the 2005-06 Report Card, offers Nova Scotians new business opportunities that will emerge

as demand grows for more efficient or different ways to use ecosystem services, mitigate impacts, or to track or trade ecosystem services. Innovation and new technologies can play a key role in the creation of these new business opportunities. Many leading companies are already capitalizing on these needs and trends.

Project purpose

The purpose of the project was to communicate broadly based opportunities that can be realized by embracing environmental sustainability, and to communicate the key business drivers to Nova Scotia's business and community leaders.

Project goal

It was proposed to build upon the work done for the 2005-06 Report Card to raise awareness of the issues and opportunities in the environmental economy in communities around the province, and stimulate discussion of regional opportunities and potential goals. This would be done by running a series of workshops based on a presentation of the Report Card material, profiling of one or more local businesses that are seizing opportunities in the environmental economy, and discussion of local strengths, opportunities and actions.

Project objectives

The objectives of the debate and workshops were:

- To raise awareness of the opportunities in the environmental economy in communities across the province;
- To stimulate dialogue among the stakeholders about actions required to seize the opportunities; and
- To obtain province-wide input into the definition of targets that can be tracked annually in the Report Card.

Intended outcomes

- A better understanding among participants of the impact of the three drivers on business and economic trends and opportunities.
- Exploration of, and at least partial consensus about, opportunities and targets related to the environmental economy for Nova Scotia as a whole, and for regions within it.
- A “finger on the pulse” reading of the stakeholders’ level of understanding and views on opportunities, priorities and targets.

4. WHAT WE HEARD

During the course of the 2006 Road Show, NovaKnowledge staff recorded observations and recommendations as they were articulated by presenters and participants. Detailed notes were taken, and these insights, as wide-ranging and varied as the subject itself, follow.

RECOMMENDATIONS AND OBSERVATIONS

Sydney, Nova Scotia - June 27, 2006

- **Environmental sustainability could be an economic driver for tourism**
If the Cape Breton tourism sector embraced environmental sustainability it could offer increased revenue. Cape Breton is the second most-popular tourist destination in the world. Tourists are willing to pay more for this sustainable product, and it is a growing market. Naturally available food ingredients for environmentally sensitive travellers are close at hand. Canada has the highest-quality milk standards in the world, and Nova Scotia has more organic farms per capita than any other province, with organic produce accessible through an abundance of farmers' markets.
- **Engaging the construction sector to understand and support the environmental requirements**
Better education of contractors in the construction sector is required if they are going to embrace environmentally sustainable construction methods.
- **Public and corporate attitudes are changing**
Public attitudes are changing the way corporations do business. The public is more demanding and corporations are more motivated to respond, or to be perceived to be responding.

Port Hawkesbury, Nova Scotia - June 28, 2006

- **There are new opportunities for prosperity in the environmental economy as evidenced by:**
 - the exponential growth for Ocean Nutrition's natural health supplements, expanding by 50,000 litres each month.
- **There are opportunities to save money through innovation, and waste has been used to:**
 - produce bio-diesel in partnership with Wilson Fuels;

- heat the building where it is stored to keep it from solidifying;
 - reduce energy and operating costs through electricity generation from waste; and
 - develop a product to allow the addition of Omega-3 directly into other food products.
- **The Strait-Regional RDA is promoting sustainability**
The Strait-Regional RDA has developed an environmental sustainability initiative. In the summer of 2006 they hired a co-op student to go from business to business talking to business owners. The project was in early stages when we were there in June, but it would be interesting to see their results and consider actions to take this initiative province-wide.

Stellarton, Nova Scotia - June 29, 2006

- There are opportunities to save money through innovation:
- By recycling waste the Neenah Paper plant has reduced purchase of power from NSPC by 25 megawatts, leaving only 2 megawatts per year to be purchased.
 - By capturing skein dye steam condensate recover and dyehouse effluent heat recovery Crossley Carpets will save over \$475,000 a year.
- Local representatives of government departments should be more aware of the EEC programs as they work closely with regional businesses and could help identify potential clients for E EC.

Wolfville, Nova Scotia - October 19, 2006

- LEED Certification guidelines for new buildings and in residential home construction exists, but demand is still weak.
- There is a need to educate clients, architects, and building contractors about the "whole building" concept, where both "capital costs" and "operating costs" are taken into consideration to make the business case.
- Management of construction waste, through separation and diversion, is the largest remaining component of waste management. Both HRM and the province have yet to develop policy.

- In landlord tenant situations it takes more time, but identifying the win for both landlord and tenant leads to success.
- The Eco-Efficiency Centre is one of Nova Scotia's best kept secrets and offers Nova Scotia a leg up through their ability to engage SMEs in the environmental economy and help them implement sustainability practices.
- The EEC would benefit from an increased awareness of its programs for SMEs across the province. Most of the business people participating in the workshops had no prior knowledge of the EEC and many were genuinely interested in their programs.
- The joint NS-NB tourism initiative, where 60 tourism operators around the Bay of Fundy have been reviewed by the EEC, is another example of the tourism sector embracing environmental sustainability to advantage.

Bridgewater, Nova Scotia - November 3, 2006

- Many larger companies are beginning to realize environmental sustainability is important to the bottom line, whether it is driven by a desire to reduce tipping fees or improve resource stewardship.
- The key is to change the company mindset and bring management to regard environmental sustainability practices as core to the business operation.
- There is a disconnect because most managers know it is the right thing to do, they are just not undertaking the initiatives required.
- From an Eco-Efficiency Centre standpoint, reaching more SMEs depends on the resources available. They have three staff now, but with more resources could develop marketing campaigns or recruit more assessment officers who do recruitment and assessment.

Yarmouth, Nova Scotia - November 8, 2006

No recommendations or observations were recorded, although the presentation was very well received.