

## Dalhousie University's Eco-Efficiency Centre Newsletter

## Nova Scotia Renewable Energy Consultations Summary

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The province of Nova Scotia has committed to providing 25 percent of the province's electricity with renewable energy by the year 2015. At the request of the Nova Scotia Department of Energy, then Dean of the Faculty of Management, Dr. David Wheeler and Eco-Efficiency Centre Director Dr. Michelle Adams, initiated a stakeholder consultation process aimed at developing a consensus within the public as to the options for increasing renewable energy investments in the Province.

Workshop and development sessions along with three stakeholder consultations were held with interested stakeholders from across the province, between September and late December. Direct feedback and suggestions were solicited in relation to environmental, economic, social, and policy considerations related to a number of renewable energy strategies options. This information was incorporated into three scenario papers, a synthesis report, an interim report to stakeholders, and a final report submitted to the Nova Scotia Department of Energy at the end of December.

A series of four smaller cross-province community meetings were also included, held in Yarmouth (Dec. 17), Digby (Dec. 18), Sydney (Dec. 21) and Port Hawkesbury (Dec. 22). These additional community meetings were proposed in order to gauge the level of interest and enthusiasm within communities for the possibility of specific support for community-based renewable energy development projects. Feedback from these sessions was also incorporated into the report which was submitted in final form on December 28<sup>th</sup>, 2009 to the Department of Energy.

For further information on the renewable energy consultation process, including a summary of events, submitted documents, participant survey feedback, and reports referenced in the final Renewable Energy Stakeholder Consultation Report, please visit:

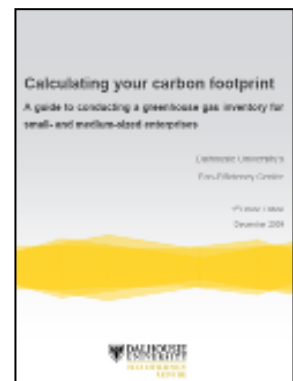
[www.eco-efficiency.management.dal.ca/Events/Special\\_Events](http://www.eco-efficiency.management.dal.ca/Events/Special_Events)

The final report, A New Renewable Energy Strategy for Nova Scotia, prepared by Dr. Michelle Adams and Dr. David Wheeler, has recently been released. To download a copy of the report, please visit: [www.gov.ns.ca/energy/renewableplan/](http://www.gov.ns.ca/energy/renewableplan/)

## Carbon Footprinting for Small and Medium-Sized Enterprises

We are pleased to announce that the Centre's **Carbon Footprint Calculator** for Canadian Small and Medium Enterprises is now available as an online tool. This easily accessible version, hosted on our website, has all the functionality of the previous standalone calculator. The calculator can be accessed through our website under 'Services' at: [www.dal.ca/eco-efficiency](http://www.dal.ca/eco-efficiency)

Along with the calculator you will also find a corresponding User Guide, which will provide you with insight on the basics of carbon footprint accounting as well as further information on the calculator itself.



## Upcoming Events

### Dollars to \$ense Energy Management Workshops

Natural Resources Canada will be offering **Dollars to \$ense Workshops: Spot the Energy Savings Opportunities** on Wednesday, January 27 and **Energy Monitoring** on Thursday, January 28. Both events will take place at the Citadel Halifax Hotel.

The *Spot the Energy Savings Opportunities* workshop will explain how your organization can reduce energy consumption by identifying low-cost opportunities in a simple 7-step process. Plant and process engineers and managers, electrical and mechanical trades' people as well as "shop-floor" personnel are among those especially encouraged to attend.

At the *Energy Monitoring* workshop you will learn how systematic monitoring and analysis can lead to unexpected energy savings. You will also learn how energy data can be used to improve your energy management plan and motivate employees. Energy champions, financial operations managers and production supervisors will benefit greatly from this opportunity. More information about these and other Dollars to \$ense Workshops are available here:

<http://oee.nrcan.gc.ca/industrial/training-awareness/index.cfm?CFID=66564702&CFTOKEN=40113543>



Natural Resources  
Canada

Ressources naturelles  
Canada

## Event Recap: Resource Management and Synergy Workshop

Can one person's trash really be another person's treasure? The people at the National Industrial Symbiosis Programme (NISP) seem to think so and are quickly convincing people worldwide that this is the case. NISP is a UK based programme that aims to facilitate the creation of commercial opportunities through the exchange of all resources, including materials, energy and water and by also sharing assets, logistics and expertise. NISP has had many great successes and boasts over 131 million in savings for its members, over 2216 jobs created or safeguarded as well as the elimination of 357,000 tonnes of hazardous waste. Michelle Adams, the Eco-Efficiency Centre (EEC) director, travelled to the UK to find out firsthand how NISP was turning not only trash into treasure but wasted resources into cost-savings, environmental gain and socially responsible actions. She returned with an in-depth knowledge of the program and the desire to share that knowledge with Nova Scotia business owners.

The EEC is initiating small scale synergy workshops with small to medium sized enterprises (SMEs). Workshops have been designed to meet the goals of developing waste exchange networks and promoting resource sharing. In order to achieve these goals the EEC identifies key businesses and arranges a 2 to 3 hour workshop with presentations on waste management best-practices, the EEC carbon footprint calculator and on industrial symbiosis. A semi-structured networking session follows where participants are provided with material to record their excess resources and waste material as well as wanted resources with space to record connections and potential exchanges.

On December 3rd 2009 the Colchester Regional Development Authority (CoRDA) co-hosted a resource management and synergy workshop with the Eco-Efficiency Centre and the Colchester waste/resource management team. The event took place at the Colchester Material Recovery Facility and was attended by 15 SME owners and members. This event was a great success with over 31 resources for exchange identified such as, wood pallets, warehouse space, waste oils and office supplies. Participants were enthusiastic about the event and were happy not only with the information presented but with the connections made with other like-minded, environmentally conscious yet business savvy individuals. Ken Smith, Winery Manager from Andrew Peller Limited commented "without this forum I would never have met the individuals who can help us change our business. In less than an hour you can let 20 others to know what you need, or what you want to dispose. The rewards can be huge!"



Resource Management and Synergy Workshop  
December 3, 2009



**Please check the Eco-Efficiency Centre website for upcoming synergy workshops to be announced shortly**  
[www.dal.ca/eco-efficiency](http://www.dal.ca/eco-efficiency)

## 2009 Eco-Efficiency Centre Success Story

### Clearwater Seafoods Limited Partnership: A Green School of Thought Bedford NS

With growing evidence that competitive global fisheries are pushing many fish stocks to their limits, Clearwater has taken a different position by focusing on the long-term sustainability of the industry. Founded by John Risley and Colin MacDonald in 1976, the company started with a pickup truck and an optimistic vision. As a testament to how far an optimistic vision (and a good pickup truck) can take you, the company now boasts several seafood processing facilities, a fleet of ships, and fishing operations ranging from Nova Scotia's lobster industry to the Patagonian scallop fishery in Argentina.



Clearwater's environmental initiatives are founded in a commitment to sustainable fishing practices, as demonstrated by the certification of its fishing operations by the Marine Stewardship Council and partnerships with other offshore operators to conduct ocean bottom mapping. With respect to the latter, advancements in mapping technologies have helped Clearwater reduce the fuel needed to harvest its offshore scallop quotas by 37 percent, quotas that are set by regulation and voluntary sustainability targets. As part

of the commitment to efficiency practices throughout the company, the Clearwater Sustainability Challenge was developed in 2008. The initiative challenges employees to develop innovative ways to reduce energy or material waste, and uses an internal website to promote sustainability-related events and company success stories.



In a marketplace where producers are increasingly competing on the basis of their green initiatives, Clearwater cuts through the green wash to demonstrate its dedication to sustainable practices. Pierce Fisheries, a division of Clearwater located in Lockeport reduced its annual green house gas emissions by 370 tonnes by updating its lighting and motors to more efficient models, shutting off equipment when not in use and removing heaters from non-essential areas. In addition, by fixing leaks in chilled water lines, reducing the use of the auxiliary water chiller, and installing more energy efficient motors, Clearwater's live lobster handling facility in Clark's Harbour has substantially improved energy efficiency, reduced operating costs, and cut greenhouse gas emissions by 15.4 tonnes annually.



In addition to these process improvements, the company's corporate headquarters in Bedford has implemented education programs that have led to switching printers, computers and fax machines in to power-save mode when not in use. Furthermore, the fleet operations office in Lunenburg created a waste reduction, recycling and composting program that dropped its garbage production from five bags per day to one. Over the past five years as part of its fleet renewal strategy, Clearwater has also been retiring old vessels and replacing them with more efficient newer vessels.

In all its endeavours, Clearwater shows that if you teach a man to fish, you will feed him for a lifetime, but if you teach a man to fish sustainably you will feed the generations of the future.

To view more Eco-Efficiency Success Stories, please visit:

[http://eco-efficiency.management.dal.ca/Publications\\_%26\\_Resources/Success\\_Stories.php](http://eco-efficiency.management.dal.ca/Publications_%26_Resources/Success_Stories.php)

## Engaging Employees in Energy Efficiency

A new report by the Pew Center for Global Climate Change which investigated policies and practices of leading energy efficient companies has found that "a robust energy efficiency strategy can reduce costs, manage risks, ease environmental compliance, boost employee morale, and open doors to greater innovation and productivity." (deFontaine, 2009, GreenBiz.com)

The report is part of a major initiative launched by the Pew Center which includes a web portal and a comprehensive searchable database of measures taken by these leading companies. The latter includes companies such as ABB, Alcoa, Baxter, Boeing and BP. Look for [www.pewclimate.org/energy-efficiency](http://www.pewclimate.org/energy-efficiency) on the web.

One of the interesting findings of the study is that employee engagement can play an important part in improving energy efficiency but it is often an underutilized strategy. After all what do employees know? They just come in and earn their paycheques and leave at the end of the day, don't they? Presumably most managers want committed employees who will grow with the company. Once you spend a reasonable amount of money that you would want to retain them. And some finding and training employees, one would expect that you would want to retain them. And some studies have found that environmental commitment and social responsibility make employees feel better about the companies with which they are employed. Wasting energy is one of those things that demonstrates a lack of environmental commitment and social responsibility.



The leading companies studied by the Pew Center actively involving employees. Some of the methods used, are inclusion of energy efficiency messaging in newsletters and general communications to employees, training sessions, "greening the workplace" programs, establishing green or energy conserving teams, workplace intranet, suggestion boxes, targeted energy efficiency campaigns, signage, reward or incentive schemes, "lunch and learn" sessions.

on Global Climate Change found that 89% are used to engage employees, from most to least newsletters and general communications to programs, establishing green or energy conserving

For many leading companies, changing the culture of the company and its workforce and raising awareness of ways of enhancing efficiency and continuous improvement of practices has resulted in measurable benefits. The reasons behind their efforts range from a commitment to reduce their carbon footprint, cost control related to energy costs, social responsibility, enhancing innovation and productivity, risk management, offering new products or services, and finally anticipating regulations. Strangely, employee engagement programs tend to receive the least financial and staff resources when compared to other efficiency initiatives. Get your employees engaged. It will return dividends you had not anticipated.

By: Ray Côté, Senior Research Fellow with the Eco-Efficiency Centre, and a retired professor with the School for Resource and Environmental Studies at Dalhousie University. Reprinted from the November 2009 issue of the Burnside News, [www.burnsidenews.com](http://www.burnsidenews.com)

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Dalhousie University's Eco-Efficiency Centre is a non-profit environmental management centre supporting small- and medium-sized enterprises in Nova Scotia. Since 1998, the Centre has worked with several hundred businesses throughout Atlantic Canada, identifying opportunities to enhance productivity and optimize both environmental performance and operational efficiency.

Through personalized and cost-effective services designed for SMEs, the Centre is an award-winning resource for businesses responding to the increasing focus on enterprise sustainability. Now that carbon footprints have become an indicator of corporate competitiveness, the Centre also provides businesses with tools and guidance on measuring and managing their energy use and greenhouse gas emissions.

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