



2009

Annual Report



◇ ECO-PEI Energy Project

Strategic and Organizational Accomplishments

The Environmental Coalition of Prince Edward Island (ECO-PEI) and its energy campaign are transforming the Island towards a sustainable future. In 2008, the Government of PEI undertook a public consultation process. Through discussions and stakeholder input, the provincial government then synthesized information in order to develop a policy series. As part of this process, ECO-PEI submitted the *Prince Edward Island Energy Strategy: Creating a Sustainable Future for Prince Edward Island* report to the PEI Department of Environment, Energy and Forestry in May 2008. The provincial government then released the *Securing Our Future; PEI Environment and Energy Policy Series* in October 2008. ECO-PEI witnessed many of its core strategic policy recommendations translated into government actions. These foundational policy documents are available on the ECO-PEI and the Government of PEI websites respectively.

ECO-PEI made a submission to the Island Regulatory and Appeals Commission (IRAC) regarding Maritime Electric's application for electricity rate increases in November 2008. The submission sought to encourage more realistic price signals and comprehensive energy efficiency. At this time, ECO-PEI also led a public awareness campaign to introduce smart grid and automated demand response concepts to Prince Edward Islanders. This broadened the space for policy discussions towards establishing sustainable regulatory and development frameworks for electric utilities. In January 2009, ECO-PEI testified at the rate case hearing and offered a broad energy context to frame regulatory discussions.

One year after ECO-PEI's initial calls for smart-grid investments, the Government of Canada announced more than \$10 million in funding for a smart grid trial involving 750 buildings in four Maritime communities. Complimentary to this, the Wind Energy Institute of Canada received \$12 million in funding for a green energy research project directed at enhancing storage capacity for wind production. These initiatives are promising however PEI is far from realizing the vision of a smarter grid.

In March 2009, ECO-PEI delivered the Island Energy 2009 workshop. The workshop was delivered to an audience of 75 attendees from across the Maritimes. The theme of the workshop was *Sustainable Energy: A Community Matter*. Provisions such as regionally-based speakers, local and organic food choices, as well as 20 people that used the Charlottetown to Summerside transit line (County Line Express), helped reduce the carbon footprint of the event. The event was principally funded by the Government of Canada's Rural Secretariat. A partnership with Eastlink Television allowed the presentations to be broadcast on cable TV in rotation for a period of six months following the event. Workshop proceedings are available online.

From April to June 2009, ECO-PEI continued outreach efforts by discussing policies to encourage investment into cost-effective electrical energy efficiency resources. The Government of PEI Energy Policy Series committed to implement a least-cost procurement mechanism to require electric utilities to purchase energy efficiency resources that are competitive with conventional supply-side resources. The CBC's Laura Chapin conducted a radio series to explore these issues on Prince Edward Island and elsewhere. ECO-PEI continues to encourage these commitments to be enacted upon in a timely manner.

ECO-PEI has helped facilitate growth of PEI's green technology cluster over the past year. Our in-kind research and collaboration efforts into solar air heating systems led to an Island-based company's expansion. The company, Gorman Controls Ltd., now supplies proven, innovative, cost-effective solar air heating systems for commercial, institutional, agricultural and industrial facilities on Prince Edward Island. Initial projects are being secured and these demonstrations will help the Province to develop more effective policies and sector-based programming. Federal funding is already available making many potential projects on PEI look attractive.

The City of Summerside commissioned a 12 MW, community-owned wind farm in December 2009. Eight percent of the output from the wind farm will be off-peak wind electricity. ECO-PEI identified technology options such as smart grid investments, electric thermal storage (ETS) devices and electric vehicles, which would allow Summerside to use this off-peak wind electricity to meet its energy needs in innovative ways. The City of Summerside is hoping to install smart meters soon and is actively exploring opportunities for plug-in vehicles. ECO-PEI recommends that Summerside install advanced metering infrastructure (AMI) by 2012, and that PEI install AMI by 2017. This infrastructure is clearly needed before wind-ETS systems and plug-in vehicles can emerge as fully-scalable solutions.

The nearest residential dwelling to the abovementioned wind farm is expected to experience noise levels up to 44.99 decibels (similar to the hum of a refrigerator). ECO-PEI was vocal encouraging the province to increase future setback distances, from three times the turbine height to four times the turbine height. This should reduce noise levels to more acceptable levels while still allowing Prince Edward Island to develop its wind energy resources.

The training, skills and programs needed to transform PEI's energy system are becoming more available – thanks in large part to the leadership of Holland College and the University of Prince Edward Island (UPEI). ECO-PEI continues to work with these institutions on a regular basis to cover a full range of topics related to changes in PEI's energy system. Local institutions are helping the province to quickly understand energy issues and prepare the workforce to create the sustainable energy future. Modern, innovative education facilities and programs along with increased research funding are being made available to position the province for effective actions. ECO-PEI is glad to see these institutional efforts.

ECO-PEI continues to foster institutional relationships. In April 2009, UPEI and ECO-PEI released a feasibility study of small-scale biogas systems. Currently, ECO-PEI is in contact with an engineering firm, which has a collaborative agreement with Holland Collage and UPEI in a project that will see students from both institutions working to develop a sustainable cottage community concept. Integrated sustainable design will be used, creating student teams with diverse backgrounds from several programs. Each team will have access to assistance by an advisory group. Upon completion of these concepts, the successful team will see their concept actually constructed by the students. This sustainable cottage community can be a showcase for tourists and Islanders on how homes can have a low impact on the environment while maintaining exceptional comfort.

The province is undergoing considerable change. Most notable in relation to energy, is that the municipalities are required to complete integrated community sustainability plans and PEI engaged in a rural strategy process. Furthermore, a provincial land use and local governance report has just been released. These other current province-wide efforts can create opportunities for more sustainable energy outcomes to emerge, however the number of shaping elements at play become complex, especially whenever these elements are considered into energy and climate situations. Nonetheless, ECO-PEI and other energy stakeholders are engaged in each of these processes – enhancing collaborations beyond previous boundaries.

Our work towards a rural energy strategy, including research, the delivery of a rural-focused workshop, and continued education and outreach, may have contributed to a recent \$9.9 million, four year funding program for on-farm renewable energy resource development and equipment, and the creation of a farm energy centre. ECO-PEI is working to encourage policy-makers to implement effective energy programs for these funds. Farmer's should be aware that currently, energy efficiency may not be covered or linked into this funding initiative. While this may seem like a good thing to some farmers, there are many cases on PEI where efficiency on farms provides fast, meaningful savings. Efficiency also ensures that any combustion requirements are minimized, which stretch the farm's supply-side energy resources much farther. ECO-PEI will encourage that life-cycle impact assessments are carried out. Currently, the farm sector has a surprisingly large impact on climate change, so the sector must use funding opportunities to transition to a low-carbon future.

The energy project website is being expanded and updated on a regular basis. The *PEI Smart Energy Guide* now provides a gateway to energy research, programs, products and services relevant for Prince Edward Island. The *Interactive Grid*, in collaboration with the University of Illinois, allows Islanders to discover how the electrical grid operates. *Stratford in Action*, a resource book of residents sharing best practices to reduce their carbon footprint, is an excellent guide for anyone looking for simple ways to save money and improve the environment.

In the fall, ECO-PEI launched stage one of a public awareness campaign to introduce Islanders to the concept of wind-powered, plug-in transportation. Around this same period, ECO-PEI also released two policy papers: *Toward a Sustainable Built Environment on Prince Edward Island* and *The Emergence of Electric Vehicles on Prince Edward Island*. These outreach documents and topics have allowed ECO-PEI to expand working relationships in key areas with a number of stakeholders across the province.

ECO-PEI has provided research and coordination efforts among stakeholders on policy issues such as net-billing and advanced renewable tariffs. Given the leadership in Ontario and the potential for regional cooperation between provincial governments such as Nova Scotia, and given the list of PEI's government actions, ECO-PEI thinks its province can develop advanced renewable tariffs that add benefits for Islanders.

In the upcoming year, ECO-PEI seeks to expand research, collaboration and action among dedicated stakeholder. The ECO-PEI Energy Project will actively monitor the progress of federal, provincial and municipal governments in order to help kick-start government actions. Critically, ECO-PEI will focus on fast-tracking comprehensive electrical energy efficiency regulations, new building codes and energy standards, enhancing existing efficiency programming and improving renewable energy policies. Working together, with support from our members and funders, regional counterparts and provincially-based alliances, ECO-PEI looks forward to helping Islanders achieve sustainable energy solutions well into the future. Together, with simple actions, we see climate change solutions which could be the dawning of a new modern era of sustainability for Prince Edward Island.

For information on the ECO-PEI Energy Project, visit: <http://www.ecopei.ca/energyproject.htm>

In the summer of 2009, Kate McDonald left her position as the energy policy coordinator at ECO-PEI to return to her home province of Nova Scotia, where she continues working on energy policy and programming. ECO-PEI thanks Ms. McDonald for her dedication and important contributions which have positively benefited Islanders. Since Kate's departure, Matthew McCarville has shifted from his previous role, as community energy project coordinator, to become the new energy policy coordinator.