



Submission to the Select Committee on Climate Change

Woodstock Sustainable Energy Group
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The Sustainable Energy Group (SEG) is grateful for the opportunity to meet with the Select Committee on Climate Change. SEG was established in 2004 as a nonprofit organization for the purpose of raising public awareness about renewable and environmentally sustainable options in energy production, distribution and use.

SEG was formed to address the concern that people – us included – were living in a manner that was unsustainable and threatened the wellbeing of future generations. The following statement from SEG’s first brochure in 2004 continues to be true: “Today’s dual realities of global warming and the rising costs of dwindling natural resources are challenging us to seriously harness alternative renewable energy resources that cause little or no damage to the environment.”

Members of SEG were well aware that the ‘good life’ people expect was coming with a high environmental price tag, and that this problem had been identified over 60 years ago. On June 20, 1957, the Sentinel Press (Woodstock) published an article that started with the question; “Are We Tampering With Our Climate?” That was an early admission that human activity may indeed be affecting the climate, and yet it has taken six decades for the world to start taking any meaningful action to curtail this problem. It is now clear that what we have been thinking of as progress and growth do not come without a price, and that climate change from uncontrolled resource development and use may be the heaviest price of all.

Today, in 2016, the world is facing the dangerous consequence of runaway climate change that humans cannot control. Global warming has reached the stage where polar ice is rapidly melting, oceans are warming and rising, droughts, floods and other severe weather events are increasing. The associated costs of these events are incalculable.

These negative impacts could have been averted had government and business leaders taken seriously the warnings of scientists decades ago that continuing business as usual would lead to environmental, economic, and social disaster. But, instead, the unrestricted mining and burning of coal and hydrocarbons has brought us to the precipice of climate catastrophe.

It now appears that some government and industry leaders are, at last, taking the reality of our situation seriously. It boggles the mind, however, that others seem determined to continue ramping up the oil and gas industry for as long as they can. Clearly, this cannot continue in order to have any possibility of moderating the high price that climate change is on track to extract from our economy and society.

Fortunately, the Select Committee on Climate Change is a positive sign that political leadership in New Brunswick is determined to focus on this crisis and do its part to reduce the risk of this high stakes situation. To have any chance of averting the worst consequences of climate change, a dramatic shift into a renewable energy future must be the highest priority of government, industry and society.

Virtually all the policy and action ideas we might offer have been well articulated in the submission being made by the Conservation Council of New Brunswick, and even, to a certain extent, appear in the government Discussion Guide on climate change action. Our contribution here will be to add extra emphasis to three areas of policy and action that SEG regards as of the highest priority, and on which we have made repeated submissions to government and NB Power.

Efficiency

The cheapest and most sustainable energy is the energy that we don't use. Efficiency is widely recognised as the 'low-hanging fruit' in any sustainable energy system. The Maritimes can leverage the federal government's offer of sustainable infrastructure and transportation funding to prioritise building insulation, electrical efficiency, and public transport for demand-reduction administered through provincial energy-efficiency agencies.

Charlottetown Initiative – Maritime Sustainable Energy Transition

Upgrading the energy efficiency of all building stock – residential, commercial, institutional, and civic – is the one of the best investments in the future we can make, both for GHG reductions and cost savings. This has been proven over and over again.

Energy Efficiency NB was, at one time, the flagship program of its kind in Canada. It should be made so again. Although this program has now been folded into the administration of NB Power, it should be again moved to the head of NB's climate action strategy.

Improving the efficiency of all buildings to the highest possible standard – starting with low-income housing – will substantially lower operational costs for years to come, reduce GHG emissions, and create good quality, much needed jobs.

The Charlottetown Initiative, meeting in PEI in February 2016 and composed of representatives from the business, academia, and civil society, established ambitious energy efficiency targets for all buildings: “Reduce the total primary energy consumption of buildings by 80% by 2050, with an intermediate target of 20% reduction in primary energy consumption levels by 2025.”

NB Power's *Integrated Resource Plan* (2014) states: “The potential energy savings available to New Brunswick homes, businesses and institutions as a result of actions to improve energy efficiency in our electricity system have been estimated by NB Power to be equivalent to about 609 MW, representing about 14 per cent of our current electricity generation capacity.”

SEG regards upgrading the Energy Efficiency Program at NB Power as the most important immediate step government can take to make a genuine commitment to a climate action plan. By “upgrading” we mean to *change the program from passive access to recruitment access*. Rather than a program that waits for people to come to it seeking information, it should be changed into a program that actively and systematically seeks out candidates for its services.

The Energy Efficiency Program should be revamped to include a major education and outreach component. The program's capacity for response should be much improved, and its funding increased to match a greatly expanded annual target of completed energy efficiency projects. At the moment the Low Income Energy Savings Program cautions that applicants can expect an 18-month wait time for response. This is not acceptable. This does not indicate a program that is being given a high priority.

SEG urges that in line with a high priority response by government to climate change action, NB Power's Energy Efficiency Program be mandated to a much higher priority. Carbon tax funds could provide energy efficiency funding incentives.

Distributed Generation

In 2011, SEG prepared and presented a sixteen-page submission for the then current Energy Policy Commission in which we made a strong case for the transition to a distributed generation electrical system. We argued that innovations in small and intermediate renewable energy technology will rapidly displace the large scale, central generation of electrical power, and that for both environmental and cost savings reasons NB should make every effort to get on the forefront of this transition.

The report of the Energy Policy Commission did not pick up on our argument and did not advance distributed generation as a significant component of NB's energy future. Yet, only five years later, renewable energy technology has developed to such an extent that NB Power now clearly recognizes the transition that is underway and is incorporating distributed generation into its planning.

For this submission to the Select Committee on Climate Change, we can only reiterate that taking maximum advantage of renewable energy's potential for building out a distributed generation system should be a major component of NB's climate action strategy.

This is true not only for reasons of reducing GHG emissions, but for reasons of security of service in the face of what is now forecast to be increasingly turbulent weather conditions as climate change effects become more pronounced.

In addition, it has also been well documented that building out a distributed generation system would bring a significant increase in good quality employment. Building out a distributed generation, renewable energy system is an economic development opportunity waiting to be realized.

SEG has been in conversation with NB Power on various occasions about managing the transition to a distributed generation system. We understand that the implications for NB Power's business model are challenging. But the renewable energy transition is moving even faster than SEG anticipated five years ago. We are encouraged that the leadership of NB Power clearly understands the potential of renewable energy technology and is progressive in its attitude toward distributed generation.

The Locally-Owned Renewable Energy Small Scale (LORESS) program is a step in this direction, but it is heavily constrained by NB Power's effort to manage the scale and speed of distributed generation development in relation to its business model and administrative costs. Unfortunately, NB Power is saddled with a number of hangover technologies and an administrative cost structure that creates a drag effect on its ability to optimize the opportunities of renewable energy and distributed generation technology. However, in its defense, the Power Commission is not resisting renewable energy and distributed generation, as are some utilities in other jurisdictions.

Nevertheless, we urge that the Select Committee on Climate Change work toward a government mandate for NB Power that moves the development of distributed generation into a high priority. This would measurably serve NB's climate change strategy, its energy security environment, and its job creation goals.

Financing Energy Efficiency and Distributed Generation Development

For the past six years, SEG has taken every opportunity to advocate with government for a specific, practical financing arrangement for energy efficiency upgrades and renewable energy installations. Known as Property Assessed Clean Energy (PACE), this financing program is key to a sustainable energy future and should be a central component in NB's climate action strategy.

PACE programs allow property owners to pay for energy efficiency upgrades and renewable energy installations through additional assessment on their property tax bill over an appropriate extended period. There is no upfront cost. Investment is immediately cash-flow positive due to energy cost savings. If the property is sold, the benefit and tax assessment pass with the property to the new owner.

The PACE concept and first programs originated in the Yukon. PACE programs are now functioning effectively in Toronto and Halifax, and many other jurisdictions. PACE programs now operate in the municipalities of 34 US states.

PACE programs overcome two barriers to making energy efficiency upgrades and installing renewable energy equipment – a) large upfront costs and b) investment recovery if property is sold.

NB might consider setting up PACE as a provincial program, or as municipal programs with a provincial program for areas where there is no municipal government. In any case, the steps in establishing a PACE program are generally the same:

1. government passes enabling legislation;
2. the jurisdiction designs programs and selects program administrator;
3. the jurisdiction raises funding through the issuances of bonds or through agreements with private lenders;
4. the jurisdiction markets the program through pre-qualified service providers;
5. property owners develop a retrofit and/or renewable energy installation plan and apply for special assessment;
6. work completed and assessment payments added to the property tax bill.

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PACE programs have been proven in use. They are relatively easy to set up and administer with minimal cost to government. They are job creators, and economic development stimulators. And, in the context of this submission, effectively advance the implementation of NB's climate action strategy.

We have been told in conversation with representatives of NB Power that the Commission is considering an in-house financing program that would function like a PACE program, but be attached to a property owner's electric bill. This is an interesting idea, but it seems unlikely that an in-house program administered by NB Power would reach the scale and scope of what could be achieved by fully developed provincial and municipal PACE programs.

A search of the NB Power website gives no indication they have launched an energy efficiency and renewable energy financing program.

SEG urges the Select Committee on Climate Change to put a fully developed PACE program on the table for government action.

Conclusion

Although many other policy frameworks and programs of action need to be included in NB's approach to climate change mitigation, SEG has limited this presentation to three that, in our view, should be given the highest priority:

- support for energy efficiency upgrading and renewable energy installations,
- support for building up a renewable energy based, distributed generation, provincial electricity system,
- support for the province-wide implementation of a Property Assessed Clean Energy (PACE) financing program.

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