



Thursday, August 18, 2016

New Brunswick Select Committee on Climate Change
Office of the Clerk
Legislative Assembly of New Brunswick
P.O. Box 6000, Fredericton, N.B., E3B 5H1

Dear New Brunswick Select Committee on Climate Change,

RE: New Brunswick's Climate Action Plan

EOS Eco-Energy is a small not-for-profit environmental organization based in Sackville, NB that focuses on community-based solutions to climate change. We are writing to you with some of our suggestions for New Brunswick's climate change action plan.

Renewable Energy Adoption

- According to the discussion guide *Building a Stronger New Brunswick Response to Climate Change*, electricity generation is the number one emitter of GHGs in the province. New Brunswick needs to generate more renewable energy to decrease emissions from electricity.
- Renewable energy is good for the environment and for the economy. It is a win-win and does not pit one against the other as some of NB's industries do. Renewables also offer good paying jobs, and long-term jobs, which NB so desperately needs. Jobs may include solar installers, technicians, microgrid engineers, monitoring, maintenance, battery engineers, electricians, solar sales consultants, project coordinators, additional solar electrical inspectors, wind technicians, facility managers, construction, etc. (There are now more jobs in renewables than in oil world wide!)
- NB Power could create a financing program for solar panels where NB Power customers could purchase solar panels by monthly payment on their power bills (if their homes are already energy efficient and suitable for solar). This reduces the upfront costs, and provides a new source of income for NB Power. Spin-off installer jobs would also be created around the province.
- Also create a provincial certification system for solar installers. There are many up and coming companies but not all do things to code and the average homeowner does not know who to trust.
- Promote NB to the world as the sunniest province in Canada in the winter and that we have more solar potential than Germany. We should be using this to our advantage. New Brunswick could become the solar capital of Canada! Work in partnership with non-profits such as EOS to promote this.
- Allow more community-owned renewable energy generating stations. The LORESS program is good, but just a start. Support NB Power to continue to upgrade its grid system to allow for the

EOSECOENERGY.COM
506 536 4478

Eos Eco - Energy Inc. | Eos Éco-énergie Inc.
P.O. Box 6001, Sackville | B.P. 6001, Sackville,
New Brunswick, E4L 1G6 | Nouveau-Brunswick, E4L 1G6



fluctuations that solar, wind and other renewables present and to develop battery storage. Incentives for electric vehicles, such as rebates off the purchase price, will also increase the amount of portable battery storage units across the province.

- Incorporate local improvement charges (LIC's) into the new NB Municipalities Act. This legislation exists in many other Canadian jurisdictions, including Nova Scotia. LIC's allow homeowners to finance solar panels (or other property improvements) through their municipal property tax payments.

Industry

- Industry is the second largest emitter of GHGs in the province. Industry needs stronger regulations and there needs to be a way from oil, coal natural gas, etc. to renewable energy industries.
- Tax GHG-emitting industries, use this income to fund rebates and incentives to promote efficiency and renewable energy adoption.
- We urge the province not to support the proposed east-west pipeline project. It would have serious negative repercussions regionally, provincially, and nationally, and represents a further development of non-renewable resources. The proposed pipeline appears to be in conflict with the goals set forth by the federal government at the climate change talks in Paris, and detract from being able to achieve those laudable and mandatory goals. Instead invest in solar, wind and other renewable and emission free energy generation that will create long-term, sustainable jobs.
- Workers in the oil, gas and coal industries, etc should be re-trained to work in the renewables industry (solar, wind, etc). Jobs could include energy auditors, retrofit jobs to increase efficiency of residential/commercial/industrial buildings stock, solar installers, technicians, microgrid engineers, monitoring, maintenance, battery engineers/developers, electricians, sales consultants, project coordinators, wind technicians, facility managers, construction, etc.
- Legislate that all new commercial buildings be built to accommodate solar and/or wind energy and efficient designs (correct orientation and angle of roof, strength of roof to hold panels, etc.).
- Support the renewable energy industry (solar, wind, etc) by offering tax breaks to manufacturers and installers in order to attract business in NB.

Transportation

- Transportation is the third largest source of emissions in New Brunswick. Support the transition to electrified transportation with a provincial rebate for electric vehicle purchases. Fund this with increased tax on higher emitting luxury vehicles (large trucks, vans, SUVs, etc).
- Support the installation of additional EV charging stations across the province. Offer partial funding (perhaps from carbon or gas taxes) for their installation. Work in partnership with municipalities and non-profits such as EOS Eco-Energy for local installations.
- Help to subsidize more public transit, including in smaller and rural areas, which could make use of teledrive services where population numbers would now allow shuttles or buses to be

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feasible. Teledrives allow volunteer drivers to take small groups of local residents to medical appointments, grocery shopping etc. just for the price of mileage.

Energy Efficiency and Conservation

- The 4th largest proportion of emissions in New Brunswick comes from buildings, at 6%. The province needs to enable an increase in the energy efficiency of homes and businesses across the province.
- Reinstating Efficiency NB for rebate programs and education. Include rebates for home solar energy systems (for homes that qualify, are energy efficient, etc.) Efficiency is more than electricity and those with oil and gas should also be increasing their efficiency.
- Focusing on efficiency also creates many jobs including energy auditors and retrofit jobs to increase efficiency of our residential/commercial/industrial building stock. Many houses in NB are older and require a lot of work to achieve adequate efficiency ratings. There could be lots of work in this field, especially if more government incentives for retrofits are created.
NB Power should offer time of day rates to enable people to see the benefits of reducing and shifting demand and to incentivize them to change their behavior and enable the culture change that is desperately needed. Education alone is likely not enough to “beat the peak” especially when people are not aware of the exact peak times.
- You can’t just “encourage” renewable energy uptake, efficiency, or reducing and shifting demand. Financial incentives and rebates are needed until these actions are more common place, affordable, and second nature to more people.

Funding the Transition to a Low Carbon Economy

- Put a price or tax on carbon for industry and certain consumer goods such as higher emitting luxury vehicles. This can then fund green initiatives and incentivize sustainable behaviours. Do not put added taxes on those with lowest incomes but tax higher luxury items (such as large SUVs, pick up trucks, oil furnaces, power boats, non-energy star appliances, etc.).

Adaptation

- The Tantramar area is among the most vulnerable regions to the impacts of climate change in the province. It constitutes the only land bridge to Nova Scotia and serves as a critical movement corridor for wildlife as well as the flow of trade and transportation of people. We have already witnessed impacts such as freshwater flooding, closed roads, coastal storm surges, overtopping of the dykes by 1-2cm, longer dry spells, coastal erosion, more intense and more frequent storms.
- Limit/ban new developments in known high risk flood plains. Research conducted in our region has identified a need for strengthening province-wide planning policy and improved implementation of that policy in order to reduce community vulnerability to flooding (Lieske et al. 2015, Journal of New Brunswick Studies 6(1): 32-54).



- Examine with experts and planners how to begin retreat from the coast at a provincial scale (how the NB government can support the long-term process). One example could be to offer capacity building for municipal leaders (staff, councils, etc.) at Union of Municipalities of New Brunswick (UMNB) events. And work in partnership with NGOs to offer public awareness campaigns locally.
- Develop a guide to help municipalities at risk from flooding (both salt and freshwater) to figure out how to begin the long-term project of relocation/retreat. Include information on funding options, eligibility of houses/buildings, how to determine priority, how to begin community discussions, ways to discourage/ban new developments in flood zones, etc.
- Offer funding opportunities to communities most at risk. Finance this fund with portion of gas tax or carbon tax money.
- Restore/protect/build wetlands, salt marshes, forests and other ecosystem services and green infrastructure. Work in partnership with nature organizations across the province. Develop regulations to limit clear cutting (which also leads to flooding).
- Pass legislation to ensure all new developments (subdivisions, etc.) have a certain percentage of absorbent green space such as rain gardens on each property. Work in partnership with non-profits to educate and train the public about rain gardens and other adaptations.
- New commercial and industrial buildings should be built to accommodate green roofs. Could update the building code to mandate this feature.
- All houses could have rain barrels to conserve energy and water especially during longer and longer dry spells and intense rainstorms. Perhaps offer a government rebate or incentive to help more people set one up.
- Provide more funding to protect the dykes around Sackville and natural erosion control in Port Elgin.
- Ensure emergency measures organizations around the province are preparing for large scale floods with mock exercises and other training. Provide more public awareness about the importance of 72 hour emergency kits, go kits and shelter-in-place kits.

Education

- The importance of climate action needs to be at the forefront of every NBER's mind all the time. It needs to become part of every personal, business and government decision.
- Invest in a public education campaign about actions you can take, why it's important, and the impacts of climate change.
- Include climate and outdoor education in every grade in NB (impacts, adaptation, problem solving, etc). The next generation will face even larger challenges than we have right now. They need to be creative problem solvers with a keen understanding of science and climate, as well as an appreciation and love for nature. Schools could partner with non-profits such as EOS to help deliver these lessons and outdoor experiences.



Think Outside the Box and Share Successes

- EOS's projects such as rain gardens, efficiency installs, draft proofing work parties, Tantramar Climate Change Week, solar panel bulk installations, 72 hour emergency kit bulk purchases, DIY rain garden workshops, etc. are all innovative projects that raise awareness and save local residents money while adapting to and fighting climate change. These could be duplicated across the province.
- There needs to be a public, searchable database of NB Environmental Trust Fund final reports. There is so much good information and great ideas around the province. We should not wait to share them. There's no need to reinvent the wheel in such a small province.
- Poverty and environmental issues are connected. Find ways to help people with upfront costs and with education. Partner with non-profits like EOS to offer more programs locally.
- The government doesn't have the capacity, time, knowledge, etc. to do everything that is needed to fight climate change. EOS feels climate action needs to be a continuing collaborative effort between federal and provincial governments, municipalities, planners, researchers, EMOs, non-profits and non-governmental organizations like EOS, and local residents, farmers, First Nations, and businesses, etc. to be successful.

Thank you for considering our suggestions to fight climate change in New Brunswick and create a green and sustainable future.

Respectfully submitted by EOS Eco-Energy.

A handwritten signature in black ink that reads 'Amanda Marlin'. The signature is fluid and cursive, with a large initial 'A'.

Amanda Marlin
Executive Director
EOS Eco-Energy
eos@nb.aibn.com