Establishing the Low-Carbon Economy in New Brunswick
December 2017

The government of Canada committed to the Paris Climate Accord in October 2016, and shortly thereafter the New Brunswick government released its plan to work towards a Low-Carbon Economy. Considering these commitments and the increasing public support for a transition to more sustainable industries, we believe 2018 will be the best time for the province of New Brunswick to establish a Low-Carbon Economy (LCE).

The LCE is an economic model that is based on much lower power consumption, clean energy and energy savings, less pollution and low greenhouse gas (GHG) emissions. The provinces of Quebec, Ontario, Alberta, and British Columbia have already implemented measures to reduce and measure carbon emissions.

The LCE is now an imperative – as we are being reminded regularly by the increasing number of extreme weather events, both locally and globally. Global warming has become an urgent race against time to manage this risk along with the inevitable rising cost of repairs by putting in place safeguards to mitigate these costs and losses in the years to come. We are calling on the New Brunswick government to catch up with other jurisdictions before it is too late.

Climate Change Mitigation Requirements, Actions, and Commitments

We are witnessing an increase in public opposition to the current hydrocarbon-based economy of New Brunswick, which achieved a moratorium on shale gas and more recently, the now-cancelled Energy East pipeline. However, the economy will improve little if the government continues to believe it can grow and benefit from this fading and increasingly costly sector.

First, any serious attempt to return to a balanced natural carbon cycle and halt human-induced global warming requires that the mining and burning of fossil fuels be phased out as soon as possible.

Second, carbon pricing must be implemented in 2018 as required by the federal government. By design, carbon pricing is intended to slow down and discourage the use of fossil fuels. It is meant to promote industrial transition to more sustainable and less carbon-intensive practices.

Third, the Climate Change Action Plan (CCAP) agreed to by the Conference of the New England Governors and Eastern Canadian Premiers commits to "Reduce GHG emissions by 75 to 85 percent below 2001 levels by 2050." It will be very difficult if not impossible to achieve this without significant reductions in fossil fuel emissions starting now.

The solution is to focus the LCE primarily to benefit the local economy that will bring economic returns. Well-paying jobs will be created initially by refitting older private homes to the Passive House EnerPHit standard, building new homes to Passive House standard, and transitioning public buildings and businesses to LEED efficiency

standard. This will save owners heating costs of over 40 per cent annually. Added to this, wealth created by increasing support for local farming and the growth of small businesses will be local and regional, allowing the flow of investment capital to remain within our communities and the province.

In December of 2016, the government released New Brunswick's Climate Change Action Plan (NBCCAP), *Transitioning to a Low-Carbon Economy*. It is a direct result of the Paris Agreement on Climate Change, in which Canada and 195 other countries agreed to keep the rise in global average temperature below two degrees Celsius in this century. Many of the actions in the plan came from recommendations made by groups and individuals appearing before the Select Committee on Climate Change in 2016.

Highlights of the NBCCAP include:

- Provide the government leadership needed through over 100 clear action items to support sustained and ambitious actions on climate change.

- Expand energy efficiency and clean energy programs across all sectors and all fuels with ambitious performance targets.

- Phase out coal as a source of electricity as quickly as possible.

- Plan for and investing in new technologies that reduce pollution.

- Establish a made-in-New Brunswick price on carbon and caps on GHG emissions that reflects the reality of New Brunswick's economy and provide opportunities to invest in emission reduction measures that create jobs for New Brunswickers, such as through energy efficiency.

- Lead by example by making government carbon-neutral by 2030 and increasing spending on energy efficiency in the capital budget by 50%.

- Measure and reporting progress with strong oversight by committees of cabinet and the legislative assembly.

These objectives clearly indicate that the best future lies with a resolute transition to the low carbon economy. In addition to the benefits noted in the government's plan, there are additional benefits to the LCE. Health care costs – the largest government expense – will be reduced substantially by eliminating the deleterious effects from both the production and burning of fossil fuels. The results will be that our air will be safer to breathe, our water safer to drink, and the land on which we grow our food will be less contaminated by petrochemicals.

Transitioning to the LCE will help New Brunswick meet and exceed the regional Climate Change Action Plan (CCAP) agreed to by the Conference of the New England Governors and Eastern Canadian Premiers. The benefits to ecosystem resilience resulting from climate change adaptation strategies – a direct result of LCE programs – will help lessen the impacts of severe weather events and rising sea levels. The LCE

will almost certainly be welcomed and supported by Indigenous people, and by most New Brunswick residents as they begin to realize the benefits. Critically, a LCE will help nature thrive, thereby helping everyone thrive.

Shale gas development, pipelines, and all other carbon-based industries are high-risk ventures in every sense. They must be phased out for the economic prosperity in New Brunswick to improve. Carbon-producing industries will be obstacles to the LCE if they are protected from paying the attributed carbon tax owing. The carbon-based economy does not contribute positively to a healthy environment or economy today, and will do so even less in the future.

According to NASA, Earth's average surface temperature has risen by 1.1 C since the late 19th century, with most warming occurring over the last 35 years and 16 of the 17 warmest years occurring since 2001. Eight months of 2016 were the warmest on record. Oceans have also been warming and acidifying quickly, Arctic ice has rapidly decreased in extent and thickness, glaciers are retreating worldwide, permafrost is melting, and sea levels have been rising at an accelerating pace. Record high temperature events have been increasing while low temperature events have decreased, and extreme weather events are becoming more common in many areas. 2017 promises to break yet more unwanted records.

The Economic Opportunity for the Low-Carbon Economy (LCE)

One logical funding source of revenue to establish the low-carbon economy beginning in 2018 is the revenue collected from carbon pricing. Not only will these funds create much-needed jobs while mitigating global warming, the funds will remain in the province and communities where they will help stabilize and strengthen the provincial economy. The funds will help preserve the vital natural ecosystem for all present and future inhabitants of New Brunswick.

The federal plan released in 2016 calls for a minimum $10 per tonne price on carbon starting in 2018, rising $10 a year to reach $50 per ton in 2022. However, an announcement made by the Federal Environment Minister on May 18, 2017, said that Ottawa will be copying an element in Alberta's carbon tax system called "output-based pricing." It is intended to shield companies from becoming uncompetitive by the Canadian tax on greenhouse gas (GHG) emissions. Under output-based pricing or "revenue neutrality" measures, manufacturers will be given carbon emission allowances and will only have to pay a carbon tax on greenhouse gas emissions above that threshold. If a manufacturer's emissions are kept below the allowance, it will be issued credits it can use later or sell to other polluters.

Making such a concession to the carbon industry will undermine the federal plan and the GHG emission reductions commitment that Canada made in the 2015 Paris Accord and the Conference of the New England Governors and Eastern Canadian Premiers. It will severely weaken any carbon pricing plans initiated in New Brunswick and other provinces, making the LCE a failure that the province simply cannot afford.

The government of New Brunswick is committed to an action plan still lacking the economic details of "Transitioning to a Low-Carbon Economy" that was released December 2016:

"This action plan signals New Brunswick's intention to play its part in achieving regional GHG emission reduction targets by adopting targets that reflect total outputs of 10.7 Mt by 2030 and 5 Mt by 2050, recognizing the unique challenges of New Brunswick's economy. The provincial government confirms its previous target of 14.8 Mt for 2020."

These targets match the CCAP agreements that the present and previous governments have signed. However, for future generations and administrations, it would be advantageous for government to do its utmost to exceed the targets, and to resist capitulating to corporate and political pressure for revenue neutrality measures before the adopted plan is established and shows any signs of success.

While we recognize that economists may be best qualified to do the analysis of the costs and revenue potentials for any aspect of moving to a low-carbon economy, it appears prudent to spend most of these public investments in NB Power in the process of converting the carbon generating stations such as Coleson Cove (oil) and Belledune (coal) and other CO2 emitting power plants nearing the end of their operating cycle to renewable energy plants where they are needed. Such power plants can include both macro- and micro-hydro, tidal, biomass, geothermal, wind, and solar energy installations. Implementing the smart grid might be included in such investments, although funds for this may already have been budgeted. Any new energy project proposal would require community consultation and approval, following what is outlined by the United Nations Declaration on the Rights of Indigenous Peoples, as well as Free, Prior and Informed Consent.

Investing carbon tax dollars to improve the efficiency of homes, businesses and public buildings will not only reduce electricity demand and lower the peak electricity demands for NB Power, it will provide consumers with cumulative savings over the years, an economic gain that will certainly be welcomed by customers.

A report conducted in 2011 by the United Nations Environment Program Sustainable Energy Finance Alliance (UNEP SEF) titled "Evaluating Clean Energy Public Finance Mechanisms" concluded the following in a study involving eight countries, including Canada:

Key findings

- *By identifying and analyzing the design, implementation, and market impacts of effective clean energy public finance mechanisms, the report found that many of the public finance programs leveraged as much as twenty times the amount in private-sector capital, and operated with approximately 5% in operation costs.*
- *The study also found that the most effective way to measure public finance impact is not only through private-sector leverage but also to account for more indirect outcomes such as job creation, net economic benefits, and reductions in health costs. This can illustrate the importance of the industry to the general economy beyond its support in achieving dedicated clean energy targets.*

Investing funds derived from carbon pricing into the LCE should significantly hasten the transition. However, the plan must recognize that carbon pricing revenue will decrease and may end within only a few years as clean energy replaces carbon-producing energy and the funding source is lost due to a successful transition. But making shrewd reinvestments that produce compound interest along with public and private investments may keep the LCE going indefinitely, once established.

Chris Rouse of New Clear Free Solutions has done a detailed Integrated Resource Plan New Clear Free Solutions 2017 Integrated Resource Plan. It is worthy of study and consideration for NB Power's conversion to low carbon energy by investing carbon tax funds in renewable energy, electric transportation and efficiency while reinvesting profits from clean energy installations to new clean projects to create compound interest.

A new study out of the Columbia Institute in British Columbia prompted the following statement by Charles Beresford, the executive director of the institute:

"If Canada is serious about meeting our climate commitments, we need to move faster in areas like renewable energy, green building construction, building retrofits, and transportation infrastructure."

The study found that 20 million jobs could be created across the country if Canada follows through on its national emissions targets for 2050. The study shows job creation through three streams: building new power grids with renewable energy sources, efficient building and energy system construction, and new transportation infrastructure.

Implementing the Low-Carbon Economy

The provincial government is expected to soon announce its choice between a straight carbon tax or the cap-and-trade option on carbon pricing. Whichever system is chosen, it must include safeguards with transparency that prevent the possibility to hide or misrepresent emissions and carbon credit numbers, as well as backsliding due to corporate and consumer pressure. There must be no grace period to fully implement the program, or to give away carbon credits rather than sell them to industries that pollute under the cap-and-trade regime like the government of Nova Scotia has announced.

If established and enforced properly, the province should be in better financial shape within a decade. However, within the same time-period, the revenue being produced from carbon pricing is likely to diminish as clean energy replaces carbon-producing energy and dirty energy ramps down. This may happen within only a few years, making it vital that all provincial carbon tax revenues are invested in clean energy, clean transportation and infrastructure, and energy efficiency.

Fortunately, there are excellent measures in the NB Climate Change Action Plan that will help reduce the costs from climate change caused disasters including storms, floods, forest fires, ice storms and sea level rise. This could save the province significant funds needed for future generations, and possibly begin to reduce the provincial debt.

Government policies must advocate, adhere to, and enforce LCE programs and legislation, while large enterprises need to adapt to the new norm by markedly reducing their carbon footprint, pollution and waste. All sectors of the society – government, business, citizens and civil society – must play a role in moving to the low carbon economy as it is both the best and only realistic way forward.

We the undersigned call on the government of New Brunswick to:

• adopt the establishment of the Low-Carbon Economy as the base for a stable and more resilient economy starting in 2018;

• include transparent safeguards preventing the possibility to hide or misrepresent emission and carbon credit figures;

• ensure success by not allowing "output-based pricing," revenue neutrality measures and other backsliding measures from corporate and consumer interest groups;

• allow no grace period in fully implementing the carbon pricing program, or give away carbon credits rather than sell them to industries that pollute under the cap-and-trade regime; and

• invest and reinvest all provincial carbon tax revenues in clean energy, clean transportation and infrastructure, and energy efficiency.

Signed,

Association for the protection of marshes and beaches at l'Aboiteau
Bathurst Sustainable Development
Citizens Coalition for Clean Air – Saint John, NB
Concerned Citizens of Saint John
Council of Canadians – Atlantic
Council of Canadians – Kent County Chapter
Department of Geography and Environment, Mount Allison University
East Brûlé Citizens for Protected Wetlands and Beaches
Esgenoopetitj Watershed Association
Friends of Rockwood Park, INC. – Saint John, NB
Green Light – Grand Falls, NB
NB Anti-Shale Gas Alliance
New Brunswickers Against Fracking – Doaktown, NB
OCIA Atlantic
PEACE-NB
Recherche Indépendante de Retraité en Écologie
Red Dot Association of Shediac Bay
Sierra Club Canada Foundation Atlantic Canada Chapter
Sustainable Energy Group – Woodstock, NB
Taymouth Environmental Action
University of New Brunswick Saint John Green Society
Voices for Sustainable Environments and Communities – Village of Gagetown, NB
West/Ouest Brûlé Ltd.