Sustainable Energy Group Sam Arnold, Coordinator Samarnold3@gmail.com 110 College Street Woodstock, N.B. E7M 1K6 506-328-9420



Re: Invitation at the end of the CCAP consultation meeting held August 21, 2013 to submit our points to the Climate Change Action Plan, I'm restating and adding the following six points for consideration.

- 1. We believe that among the most effective approaches to climate change action is the promotion of renewable energy and energy efficiency with a complete switch to renewable energy. A policy and program to increase the energy efficiency performance of all homes, public and commercial buildings while moving to renewable energy sources, instead of planning on shale gas development, will put New Brunswick on a solid footing that will produce lasting jobs while mitigating climate change. Additionally:
 - a) Research shows that investment in energy efficiency and renewable energy will create far more good quality and long lasting jobs than continued investment in and reliance on non-renewable greenhouse gas emitting energy.
 - b) All new public buildings must be constructed to the Silver LEED certification standard as required by the Province's Green Building Policy for New Construction and Major Renovation Projects. As well, high R-value insulation and Energy Star rated windows and doors in all new home construction must be required, as well as similar incentives for upgrading older homes such as the Efficiency NB program that recently was cut back.
 - c) Another medium term goal is to adopt the International Passive House standards as the model to aim for and to notch up the standards each year. http://www.passivehouse-international.org/index.php?page_id=65
 - d) All hydrocarbon fuels contribute to climate change and must be eliminated from the energy pool as soon as possible. This includes shale gas, which must, therefore, be rejected by New Brunswick. Research has now concluded that 80% of the remaining hydrocarbon deposits must be left in the ground in order to prevent a level of climate change that would be catastrophic for human civilization worldwide.
- 2. The newly formed Energy Institute needs to be connected to the Climate Change Action Plan. The Energy Institute, to be credible, must look beyond hydrocarbons. From both a business and climate change perspective, the Energy Institute should see its role as providing guidance for the future on how to use as little hydrocarbon fuel as possible in the quick transition to renewable energy technology. Consider the following:

- A timeline for achieving majority renewable energy sources and phasing out reliance on all fossil fuels must be set. Shale gas development will only delay this.
- The role of government in regulation and enforcement must include the monitoring of the existing shale gas wells on a regular basis and the release of data collected to the public.
- We oppose Dr. LaPierre's recommendation that the Environmental Trust Fund provide funding to the Energy Institute. This is contrary to the fund's stated intent. It may be possible for the ETF to fund work that the EI is carrying out if it meets ETF criteria.
- 3. Forest harvesting practices on crown (and private) lands needs to be carefully managed to become a mature mixed Acadian Forest with naturally growing softwoods, rather than plantations. Select cutting and thinning of trees will make forests permanent and a much better habitat for the full biodiversity of animal and plant life while still providing good income for the owner or contractor. Silviculture practices optimize CO2 sequestering, protect the ecosystem, reduce erosion, and improve groundwater retention. It will also make the province more attractive to investors and immigrants, and will improve the value of forestland over time as older wood is better for lumber, furniture making and other value added products.
- 4. Public transportation development, and incentives for using public transportation are needed to reduce GHG emissions. Lowering the highway speed limit will also help reduce GHG. Certain highways should be tolled and the revenue used to achieve climate change action goals. In addition to voluntary reduction of automobile use made possible by more accessible public transport, car-pooling, more energy efficient vehicles, reducing unnecessary trips, and using other modes for short distances such as walking, bicycling, scooting, should be encouraged and supported by government. A carbon levy should be introduced at a modest level and gradually increased. Experience in British Columbia shows this can be done without hurting the economy. Front license plates could be eliminated thus reducing government and owner expense while improving vehicle mileage. Other provinces have made this change.
- 5. In addition to net metering and the smart grid, a program is needed with incentives from NB Power to increase local renewable energy sources that allow residential, commercial, and community co-ops to opt for two-way metering with decentralized distributed generation. A feed-in tariff system should be introduced, as Ontario has done.
- 6. Establish Energy Financing Districts. Energy Financing Districts enable governments (either local or provincial) to raise money through the issuance of bonds (or other methods) to fund on-site renewable energy installations. The financing is repaid over a set number of years through an extra "assessment" on the property tax bill of only those

property owners who choose to participate in the program by installing energy efficiency improvements and/or renewable electricity generation to their facilities. The financing is secured by the property, and, like taxes, is paid before other claims against the property in the case of foreclosure. There is little or no up-front cost to the property owner. If the property is sold before the end of the repayment period, the new owner inherits both the repayment obligation and the financed improvements.

An Energy Financing District program in New Brunswick would promote environmentally friendly efficiency improvement and on-site generation projects with little or no upfront costs to home or business owners. The Province would only bear the cost of administering the program and not be responsible for any of the capital or operating cost for the on-site generation of power. As well, the payback obligations would transfer with the property when the property is sold, encouraging the implementation of projects where the payback period is longer than the anticipated ownership of the property.

The EFD program for energy efficiency retrofitting and renewable energy installations would help to reduce CO2 levels, thereby contributing to the mitigation of climate change.

Thank you,

Sam Arnold

P.S. To add urgency please read again this quote from *Evolution of the Superspieces* by Dr. David Suzuki, already twenty years ago:

Our great crisis of climate change demands a radically new approach. We must act as a single species to deal with global problems that transcend borders and acknowledge the rules and limits that nature defines. We must also act in the best tradition of our species, which has been to use foresight based on our knowledge and experience. And today we have the amplified ability to look ahead with scientists armed with super computers and global telecommunications.

In 1992, 1,700 senior scientists from twenty-one countries, including 104 Nobel Prize winners, signed a document called "World Scientists' Warning to humanity."

Their opening words were an urgent call to action: "Human beings and the natural world are on a collision course. Human activities inflict harsh and often irreversible damage on the environment and on critical resources. If not checked, many of our current practices put at risk the future that we wish for the human society...and may so alter the living world that it will be unable to sustain life in the manner that we know. Fundamental changes are urgent if we are to avoid the collision our present course will bring about."

They went on to list the areas of collision, from the atmosphere to water resources, oceans, soils, forests, species, and population; then their words grew even more dire: "No more than one or a few decades remain before the chance to avert the threats we now confront will be lost and the prospects for humanity immeasurably diminished. We, the undersigned, senior members of the world's scientific community, hereby warn all humanity of what lies ahead. A great change in our stewardship of the earth and life on it, is required, if vast human misery is to be avoided and our global home on this planet is not to be irretrievable mutilated." The document concluded with a list of the most urgent actions to be started immediately.