NEW BRUNSWICK'S 100% RENEWABLE ENERGY FUTURE

The science is conclusive: We must limit our carbon emissions below 350 ppm and global warming to under 2 degrees Celsius to avert the worst impacts of climate change.

The good news: switching out fossil fuels and making the transition to renewable energy comes with many benefits — cleaner air, jobs, healthier communities and more robust local economies.

How can our cities and towns in New Brunswick lead action on climate change?

Municipalities can have a meaningful impact on reducing greenhouse gas emissions and avoiding the impacts of global warming and climate change. Local governments throughout New Brunswick, Canada and the world are taking action against climate change through various initiatives including the transition to clean renewable energy. We believe our cities and towns can do more and set ambitious but realistic targets to go 100% renewable in the near future.

Municipalities are in a good position to take real action on climate change. Municipalities are accustomed to long-term development planning, which sometimes span decades and different administrations. Setting targets far into the future and then planning how to get there is what municipal planners do. Two of the three sectors that generate the largest amount of greenhouse gases — transportation and building heating and cooling — are directly influenced by municipal plans for public transport and building codes. Action taken in these areas not only can have a profound impact on the future sustainability of our planet but it also connected to creating more healthy, livable, innovative and diverse places to live. Switching to renewable energy sources for municipal heating and cooling, promoting zero-emission buildings and infrastructure for electric cars all contribute to driving the demand for new green technologies.

The transition to 100% renewables is happening

Living in a 100% renewable energy community is no longer a fantasy but a reality today.

Eight countries, 55 cities, 61 regions/states and counting are committed to shifting to 100% renewable energy in the next few decades. Germany, Denmark, Scotland and Costa Rica are countries planning to be 100 % renewable energy-powered by 2050. Denmark's Samso Island is already powered 100% with renewables and it produces more renewable energy than it uses. Reykjavik, Iceland gets 100% of its electricity and heat from renewable geothermal sources. Vancouver City Council voted unanimously in March 2015 to support transitioning the city to 100% renewable energy. The first city in Canada to make such a comprehensive commitment to renewable energy is joining cities such as San Francisco, Sydney and Copenhagen, which already have 100 % renewable energy goals. City staff was directed to create a timeline for reaching the goal by fall 2015. Hydropower, solar, geothermal, wind and biomass are all sources of renewable energy that could help the city meet its energy demands.

The City of Burlington in Vermont, with a population of 42,282, just a little smaller than Fredericton, went 100% renewable in 2014. Their renewable power mix comes from biomass, wind, hydro, landfill methane. The vast majority of its renewable power comes from a 25 MW biomass facility while 16 MW are generated from the Vermont Wind Project in Sheffield. Burlington's renewable energy portfolio is complimented with energy efficiency programs. Burlington boasts that its investment in energy efficiency has paid off in local jobs, local equipment sales and improved environmental quality.

The City of Aspen in Colorado with a population of 6,600, just a little larger than Woodstock, NB, has set a goal to achieve 100% renewable power by 2015. As of 2014, they achieved 86% renewable power, mostly generated by hydro but also by wind. The City of Aspen's 100% renewable energy by 2015 goal is one component of a broader strategy to reduce both operational and community-wide greenhouse gas emissions 30% below 2004 levels by 2020 and 80% below 2004 levels by 2050. Aspen has already reduced its operational emissions by over 30% and its community-wide emissions by 6% (from 2004 levels).

Beyond 100% Renewable

Municipalities can take action on to reducing greenhouse gas emissions in their community in other ways. The adoption of 100% renewable energy in our communities needs to be accompanied with a comprehensive approach that integrates energy efficiency and smart planning. Buildings account for a significant portion of a municipality's greenhouse gas emissions. By investing in energy-efficient equipment and building infrastructure, a municipality can significantly reduce its greenhouse gas emissions. Retrofits and green design can often be cost-neutral, making municipal buildings a target for action. Existing municipal buildings can also be retrofitted to reduce energy consumption and emissions. Retrofits can often have a significant impact on lowering the operating costs of a building and improving long-term financial performance. New buildings or facilities can be designed to maximize energy and emissions performance.

The future is bright: Renewables are good for the climate, our health, jobs and the local economy

Fossil fuels (coal, oil, gas) are not only major contributors to climate change but they also release pollutants linked to disease, devastate our oceans, threaten mass extinction of species and contribute to water and food shortages and conflict.

Recommended First Step! Get Your Municipality to Pass a Motion in Support of Renewable Energy

Citizens can bring forward motions to their municipal councils to support the transition to 100% renewable energy by 2050. Here is the one that was passed unanimously by the councillors of Oxford County, Ontario in June 2015. Their County Community Sustainability Plan outlines greenhouse gas reduction goals, efficient and green construction measures, and actions to decarbonize transportation.

Motion In Support of Oxford County Targeting 100% Renewable Energy by 2050

Whereas the environmental implications of continued fossil fuel use and the growing impacts of climate change are well documented and recently recognized by G7 Leaders;

And whereas significant reduction in fossil fuel dependency represents, as it does for much of the world, an enormous challenge to Oxford;

And whereas Oxford has begun to address the challenge of energy sustainability through critical first steps that include energy management and conservation strategies;

And whereas Oxford has a history of environmental courage and leadership

And whereas Oxford is poised to adopt by the Fall of 2015 its first Community Sustainability Plan which includes, among other goals, significant advancement in the role of renewable energy in Oxford with similarly significant reductions in fossil fuel reliance;

And whereas leading municipalities around the world are considering or have committed to achieving 100% Renewable Energy by 2050;

And whereas the continued advancements of renewable energy and energy storage technologies demonstrate strong potential for achieving 100% Renewable Energy by 2050;

And whereas Oxford residents and businesses already demonstrate significant leadership in the advancement of renewable energy technologies and their applications;

And whereas Oxford has the opportunity to be the first Ontario municipality to commit to achieving 100% Renewable Energy by 2050

And whereas being the first Ontario municipality to commit to achieving 100% Renewable Energy by 2050 is expected to catalyze environmental change in Oxford, create opportunity for renewable energy investment in Oxford, and position Oxford as a renewable energy centre of excellence and home for renewable energy education, research and development.

Therefore be it resolved that the County of Oxford hereby commits to the achievement of 100% Renewable Energy by 2050

Investments in renewable energy are creating more jobs than investments in fossil fuels. For every $1 million invested in Canada, two jobs are created in the fossil fuel sector compared to fifteen jobs in the clean energy sector, according to Blue Green Canada. The number of clean energy jobs in Canada has now surpassed tar sands jobs. The clean energy sector (hydro power, wind, solar and biomass) directly employs 23,700 people compared with 22,340 directly employed in the tar sands.

We all have a responsibility to change this destructive energy system to a sustainable one that meets the needs of everyone. Combined with increased energy efficiency and conservation, the transition to renewable energy means a brighter future for all.

What can you do?

1. Ask your Mayor and councilors to set ambitious targets for renewable energy and energy efficiency for the municipality. Organize the passing of a motion like Oxford County's.

2. Write the Premier and your MLA, asking for more resources to be given to municipalities to accomplish their clean energy targets.

3. Join the Conservation Council of New Brunswick. Your local environmental organization is working on supporting the transition to clean energy in New Brunswick. Join us and support our work at conservationcouncil.ca.

Conservation Council *of* New Brunswick
Conseil de conservation *du* Nouveau-Brunswick

For more information, contact info@conservationcouncil.ca
Conservation Council of New Brunswick
180 St. John Street
Fredericton NB E3B 4A9

T: (506)458-8747
http://www.conservationcouncil.ca/

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