

The New Brunswick Energy Blueprint

Final Progress Report

Department of Energy and Mines

August 2014



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Province of New Brunswick
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E3B 5H1

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Message from the Hon. Craig Leonard Minister of Energy and Mines

As Minister of Energy and Mines, it is my great pleasure to present the final progress report of *The New Brunswick Energy Blueprint*. With this release, our government marks the completion of all the Action Items of the three year action plan released in 2011.

When *The New Brunswick Energy Blueprint* was first released, our government established a 10 year vision for New Brunswick's energy sector that sought to lay out a strategic direction for our province's energy future based on extensive public and stakeholder input.

Today, I am proud to say that we fulfilled our commitment in completing all of the Action Items, despite the complexities and constant evolution of the energy sector. In the implementation of the 20 Action Items, our government was able to take full advantage of emerging energy opportunities, while proactively addressing key energy challenges and building on the policy objectives that are the foundation of the *Energy Blueprint*.

As we worked to shape New Brunswick's energy future, our government kept the public abreast of the progression of the Action Items with the release of progress reports in October 2012 and March 2014 and now with the release of this final report. Since our last update, we are pleased to announce the completion of the final eight Action Items:

- Renewable Portfolio Standard;
- Future Development of our Renewable Energy Resources;
- Wood Based Biomass Resources;
- Energy and Climate Change;
- Electricity Efficiency Plan;
- Energy Efficiency Building Code Standards;
- Petroleum Products Pricing;
- Energy Literacy, Education and Skills Development.

The New Brunswick Energy Blueprint and its Action Items will continue to guide an energy future based on low and stable energy prices, energy security, reliability of the electrical system, environmental responsibility and effective regulation.

Our government remains dedicated to following through with the objectives of the Action Items as we believe there is room for continual updates and improvements with implementing standards while the energy sector continues to innovate and modernize in our province. By working today to improve our province's energy policies, we can ensure low and stable energy prices for all New Brunswickers for generations to come.

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Energy Blueprint – Progress Report Card

Item	Energy Action Plan	Status	Completion Year
1	Reintegration of NB Power		2013
2	Electricity Market and New Brunswick System Operator		2013
3	NB Power – Debt Management Plan		2012
4	NB Power – Regulatory Oversight and Integrated Resource Plan		2013
5	Regional Electricity Partnerships		2012
6	Smart Grid Technology and Innovation		2012
7	Large Industrial Renewable Energy Purchase Program		2012
8	Renewable Portfolio Standard		2014
9	Future Development of our Renewable Energy Resources		2014
10	Wood Based Biomass Resources		2014
11	Energy and Climate Change		2014
12	Electricity Efficiency Plan		2014
13	Energy Efficiency Building Code Standards		2014
14	Energy Efficient Appliances and Equipment		2012
15	Natural Gas Distribution Rates		2012
16	Petroleum Products Pricing		2014
17	Energy and Utilities Board		2013
18	Office of the Public Energy Advocate		2013
19	Energy Literacy, Education and Skills Development		2014
20	Energy Research and Development		2013

Completed
 In progress
 Not started



Energy Action Plan Progress Report

1. Reintegration of NB Power

The Province of New Brunswick will amalgamate the NB Power group of companies into a single vertically integrated Crown utility.

Progress and Next Steps

The *Electricity Act* for reintegration of the NB Power group of companies into one main company and one subsidiary was proposed to the legislature on May 7, 2013.

Under the *Electricity Act*, the New Brunswick System Operator (NBSO) and the New Brunswick Electric Finance Corporation (NBEFC) were amalgamated into one vertically integrated Crown utility called New Brunswick Power Corporation.

The *Electricity Act* received Royal Assent on June 21, 2013 and allowed the reintegration to proceed on October 1, 2013, meeting the target reintegration utility date.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2013.

2. Electricity Market and New Brunswick System Operator

The Province of New Brunswick will review our electricity market polices and implement appropriate structural and operational changes, including the dissolution of the New Brunswick System Operator (NBSO) and migration of system operator functions back to NB Power.

Progress and Next Steps

Under the *Electricity Act*, which was proposed to the legislature on May 7, 2013, the NBSO and the NBEFC were amalgamated into one vertically integrated Crown utility called New Brunswick Power Corporation.

Supporting *Electricity Act* regulations for the reintegration process were posted for public review beginning the week of August 12–16, 2013. The reintegration commenced on the target utility date of October 1, 2013.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2013.

3. NB Power—Debt Management Plan

The Province of New Brunswick will direct NB Power to implement a debt management plan, allowing it to reduce its debt and create shareholders equity.

Progress and Next Steps

In 2012, NB Power released its strategic plan, accompanied with 10 year debt and equity targets, which supports the Province’s debt management objectives.

Under the *Electricity Act*, NB Power may take a rate increase of up to two Percent on October 1, 2013, and on October 1, 2014.

The October rate increase provisions allows NB power to meet its debt reduction target and provides the Energy and Utilities Board (EUB) and NB Power with the necessary time to prepare for a hearing on rates in the 2015-16 fiscal year.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2012.

4. NB Power—Regulatory Oversight and Integrated Resource Plan

The Province of New Brunswick will subject all NB Power operations to regulatory oversight and review, and require NB Power to present an Integrated Resource Plan every three years and a Financial Forecast annually to the New Brunswick Energy and Utilities Board, or as directed by the EUB.

Progress and Next Steps

The *Electricity Act* was proposed to the legislature on May 7, 2013. Supporting *Electricity Act* regulations for the reintegration process were posted for public review beginning the week of August 12–16, 2013.

Under the *Electricity Act*, NB Power may take a rate increase of up to two Percent on October 1, 2013 and October 1, 2014.

Since completion of this action item, NB Power has continued to make improvements with regulatory oversight and in July 2014, submitted to its Energy Utilities Board the Integrated Resource Plan, a strategic planning document that identifies how the utility will meet projected customer demand for electricity across the next 25 years.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2013.

5. Regional Electricity Partnerships

The Province of New Brunswick will pursue regional electricity agreements, joint ventures and partnerships where there are positive commercial outcomes for NB Power and defined benefits for New Brunswick ratepayers.

Progress and Next Steps

Phase 2 Atlantic Energy Gateway (AEG) work plan initiatives were reviewed during a meeting of Atlantic Energy Ministers and Deputy Ministers in July of 2013.

The phase 2 AEG work plan includes a regional natural gas supply study with an assessment of the aggregator concept. A draft of Terms of Reference has been prepared by the Atlantic Canada Opportunities Agency (ACOA). Since the preparation of the Terms of Reference, the study has been completed and submitted to Atlantic Energy officials.

The July 2013 meeting of Atlantic Energy Ministers and Deputy Ministers supports the continued priority intergovernmental energy cooperation initiatives as presented in the October 2012 *Energy Blueprint* progress report. In July 2014, the provincial government attended the 38th Conference of New England Governors and Eastern Canadian Premiers and committed to regional partnerships with New England states in the energy sector.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2012.

6. Smart Grid Technology and Innovation

The Province of New Brunswick will expand the network of smart grid stakeholders and partnerships and work with existing and new smart grid pilot projects.

Progress and Next Steps

In 2012, NB Power announced a smart grid partnership with Siemens to integrate Smart Grid technology into the province's electrical system and create a Centre of Competence based in Fredericton.

As a part of NB Power's Reduce and Shift Demand (RASD) strategy, implementing Siemens' Smart Grid programs will enable customers to control and manage their energy usage and will provide more choices about how and when they consume electricity in the future.

The NB Smart Grid roadmap will be updated on an annual basis to align fully with the NB Power/Siemens Reduce and Shift Demand (RASD) initiative.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2012.

7. Large Industrial Renewable Energy Purchase Program

The Province of New Brunswick will bring qualifying large industrial companies' electricity costs in line with their Canadian competitors by implementing a Large Industrial Renewable Energy Purchase Program (LIREPP).

Progress and Next Steps

The LIREPP program benefit is calculated annually based on comparable, published large industrial electricity rates and export data for forestry intense jurisdictions across Canada.

The target reduction percentage is approved and posted on an annual basis.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2012.

8. Renewable Portfolio Standard

The Province of New Brunswick will increase the provincial Renewable Portfolio Standard (RPS) to a minimum of 40 percent of NB Power's in-province sales by 2020.

Progress and Next Steps

A new RPS policy framework has been developed for inclusion as a new *Electricity Act* regulation.

The RPS and renewable energy policy framework and supporting regulations under the *Electricity Act* have been approved.

This action item as identified in *The New Brunswick Energy Blueprint* has been completed.

9. Future Development of Our Renewable Energy Resources

The Province of New Brunswick will (a) support local and First Nations small scale renewable projects; (b) integrate current and future wind generation in the most cost-effective and efficient manner; and (c) support promising solar, bio-energy and other emerging renewable energy technologies.

Progress and Next Steps

The Province of New Brunswick continues to work with First Nations on potential renewable energy projects.

NB Power, through their Reduce and Shift Demand programs, will improve wind integration from a technical standpoint and in a more cost-effective manner.

The new Renewable Portfolio Standard expands the definition of eligible renewable sources that qualify for NB Power’s renewable energy target and specifically states that electricity from renewable resources includes “electricity that is generated inside the Province in an innovative manner and provides a net environmental benefit to the Province.” This will help emerging renewable energy technologies to play a role in New Brunswick’s energy future.

This action item as identified in *The New Brunswick Energy Blueprint* has been completed.

10. Wood Based Biomass Resources

The Province of New Brunswick will develop and implement supporting policies to optimize the energy output from our province’s wood based biomass resources with a specific focus on pellets.

Progress and Next Steps

The Department of Economic Development published its *New Brunswick Value-added Wood Sector Strategy* in 2012, which includes a strategic objective to increase the use of wood biomass-based fuels in the province by: 1) developing a policy to support the installation of biomass heating systems (both in new construction and retrofits) in residential, commercial and public sector applications and 2) working with existing industry to develop a bulk delivery pellet-supply chain system in New Brunswick.

The Department of Energy and Mines has worked with New Brunswick pellet producers to identify opportunities to increase the use of pellets in the province.

This action item as identified in *The New Brunswick Energy Blueprint* has been completed.

11. Energy and Climate Change

The Province of New Brunswick will develop the key energy components for the 2012-2020 New Brunswick Climate Change Action Plan.

Progress and Next Steps

The Department of Environment and Local Government, through the Climate Change Secretariat, released the renewed Climate Change Action Plan on June 2, 2014.

The Department of Energy and Mines will continue to work with the Climate Change Secretariat to meet the goals of the new plan.

This action as identified in *The New Brunswick Energy Blueprint* has been completed.

12. Electricity Efficiency Plan

The Province of New Brunswick will require electric utilities, in conjunction with Efficiency NB, to prepare a three year electricity efficiency plan.

Progress and Next Steps

The three year Electricity Efficiency plan has been completed by NB Power, in cooperation with the municipal electric utilities (in Edmundston, Perth-Andover and Saint John), Efficiency NB and the Department of Energy and Mines.

The three year plan will be reviewed continuously to ensure it is meeting the needs of the utilities and their customers.

This action item as identified in *The New Brunswick Energy Blueprint* has been completed.

13. Energy Efficiency Building Code Standards

The Province of New Brunswick will require minimum energy efficiency standards for new building construction in New Brunswick by adopting national standards and will amend the *New Brunswick Building Code Act* to create the authority to do so.

Progress and Next Steps

The Department of Energy and Mines is working with the Department of Public Safety and the Department of Environment and Local Government to adopt the National Building Code of Canada 2010, which includes Energy Efficiency provisions for Housing and Small Buildings.

Amendments were proposed in the legislature in the spring of 2014 to adopt the National Building Code of Canada 2010, which would ensure new constructions and major renovations are harmonized with established national standards. These changes will come into effect on January 1, 2015.

This action item as identified in *The New Brunswick Energy Blueprint* has been completed.

14. Energy Efficient Appliances and Equipment

The Province of New Brunswick will upgrade the list of regulated appliances and equipment under the *Energy Efficiency Act*.

Progress and Next Steps

The Province updated its appliance and equipment regulations in 2012 and work is scheduled to proceed with respect to future product and equipment efficiency standard upgrades or enhancements.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2012.

15. Natural Gas Distribution Rates

The Province of New Brunswick will review the natural gas rate structure and distribution network with the objective of achieving a cost-based rate structure and improve access to natural gas across the province.

Progress and Next Steps

In December 2011, Government introduced key amendments to the Gas Distribution Act, mandating the EUB to authorize a new rate structure based on cost of service rates. The amendments also facilitate the delivery of natural gas by means other than pipeline, including point-to-point delivery using compressed natural gas. Regulations which specified details of rate-setting methods were passed in April 2012.

In accordance with the act and its regulations, the EUB authorized new rates, effective October 1, 2012. Most customer classes experienced significant reductions in gas distribution rates as a result.

Government will continue to work with key natural gas stakeholders to address issues relating to the long-term sustainability of the natural gas distribution system in New Brunswick.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2012.

16. Petroleum Products Pricing

The Province of New Brunswick will perform a comprehensive review of the *Petroleum Products Pricing Act* (PPPA) and Regulations for the purpose of ensuring its continued effectiveness in achieving the objectives of petroleum price stability, while ensuring the lowest possible price to the consumer without jeopardizing the continuity of supply.

Progress and Next Steps

A comprehensive review of the PPPA was completed between January and July of 2014. Stakeholder groups were directly engaged to gather feedback and experiences. The public was also invited to consult a discussion paper pertaining to the review and submit their comments to government electronically.

This action item as identified in *The New Brunswick Energy Blueprint* has been completed.

17. Energy and Utilities Board

The Province of New Brunswick will restructure the Energy and Utilities Board to consist of exclusively full-time members.

Progress and Next Steps

The *Act to Amend the Energy and Utilities Board Act* received Royal Assent on June 21, 2013.

The legislation was proclaimed in November 2013, and three new full-time EUB members were appointed shortly thereafter.

The EUB is now comprised of five full-time members under its new structure as opposed to two full-time members and eight part-time members under its former structure.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2013.

18. Office of the Public Energy Advocate

The Province of New Brunswick will establish and appoint a full time public energy advocate to replace the system of ad hoc appointment of public interveners.

Progress and Next Steps

The *Act Respecting a Public Intervener for the Energy Sector* received Royal Assent on June 21, 2013.

Legislation is now in place to appoint a permanent Public Intervener for the Energy Sector. This will replace the previous ad hoc system. The Office of the Attorney General is in the process of completing the recruitment process for the position.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2013.

19. Energy Literacy, Education and Skills Development

The Province of New Brunswick will: (a) develop an energy sector workforce strategy; (b) pilot an energy certificate program; and (c) implement an energy literacy, education and awareness program.

Progress and Next Steps

The energy certificate program, Energy Fundamentals for Leaders, designed to develop individuals’ knowledge of the energy sector to make informed decisions on energy issues, was launched in 2013. The program, which is offered at University of New Brunswick’s Saint John campus, combines in-class instruction with interactive exercises, expert panels and applied case studies to offer exposure to all major forms of energy and energy production through site visits and hands-on learning experiences. The second class graduated from the program in June of 2014, and a third class is scheduled to begin in September 2014.

Under Action 15 of New Brunswick’s Labour Force and Skills Development Strategy 2013-2016, the Department of Post-Secondary Education, Training and Labour is conducting labour market research on each of the six strategic sectors, as well as the energy, mining and oil and natural gas sectors to assist in identifying which occupations are experiencing labour market imbalances today and forecast the positions required for the future.

Through the Council of the Federation’s National Energy Strategy and the Energy and Mines Ministers’ Conference frameworks, New Brunswick is participating in two national energy literacy planning initiatives.

This action item as identified in *The New Brunswick Energy Blueprint* has been completed, yet remains an important and ongoing commitment.

20. Energy Research and Development

The Province of New Brunswick will develop and implement a New Brunswick energy sector research and development strategy supporting the adoption of emerging clean energy technologies.

Progress and Next Steps

Multiple energy research and development initiatives are underway as per *The New Brunswick Energy Blueprint*.

Current Action Items related to Energy Research and Development include:

- Action Item 5 — Regional Electricity Partnerships
- Action Item 6 — Smart grid Technology and Innovation
- Action Item 9 — Future Development of our Renewable Energy Resources
- Action Item 10 — Wood Based Biomass Resources
- Action Item 12 — Electricity Efficiency Plan

An important element in support of New Brunswick’s capacity in energy sector research and development was realized through the launch of the New Brunswick Energy Institute in the spring of 2013. With \$1 million in seed government funding, the institute’s mandate is to serve as an advisory body to the provincial government and to the people of New Brunswick and to review and assess the environmental, social, economic and health issues relating to energy extraction, development or production within New Brunswick by ensuring credible, evidence-based research.

This action item as identified in *The New Brunswick Energy Blueprint* was completed in 2013.