



FIRST REPORT
OF THE
STANDING COMMITTEE
ON
CLIMATE CHANGE AND ENVIRONMENTAL STEWARDSHIP

Third Session
Sixtieth Legislative Assembly
of the
Province of New Brunswick

December 8, 2023

MEMBERS OF THE COMMITTEE

Mr. Cullins, Chair
Mr. Dawson, Vice-Chair
Mr. Allain
Hon. Mr. Holland
Hon. Ms. Johnson
Hon. Mr. Crossman

Mr. Wetmore
Mr. LePage
Mr. Mallet
Mr. Losier
Ms. Mitton

December 8, 2023

To The Honourable
The Legislative Assembly of
The Province of New Brunswick

Mr. Speaker:

I have the pleasure to present herewith the First Report of the Standing Committee on Climate Change and Environmental Stewardship.

The report is the result of your Committee's deliberations on a clean energy strategy for New Brunswick.

On behalf of the Committee, I wish to thank those individuals and organizations who appeared before the Committee. In addition, I would like to express my appreciation to the members of the Committee for their contribution in carrying out our mandate.

Your Committee begs leave to make a further report.

Respectfully submitted,

Mr. Ryan Cullins, MLA
Chair

December 8, 2023

To The Honourable
The Legislative Assembly of
The Province of New Brunswick

Mr. Speaker:

Your Standing Committee on Climate Change and Environmental Stewardship begs leave to submit this, their First Report of the session.

On September 22, 2022, the Committee met and agreed to invite subject matter experts and stakeholders to present to the Committee regarding small modular nuclear reactors (SMRs), following which the Committee would invite presenters to appear regarding other energy sources before reporting to the House.

On February 14 and 15, 2023, the Committee met and heard from several subject matter experts and stakeholders, including Indigenous representatives, on the topic of SMRs.

On February 17, 2023, the Committee agreed to hold hearings on a clean energy strategy, attended by presenters with energy or environmental subject matter expertise, for the purpose of studying pathways to decarbonization.

Following an organizational meeting on June 13, 2023, the Committee met again on September 26, 27 and 28, and October 3 and 4, 2023, and heard presentations on the subject of a clean energy strategy for New Brunswick.

The Committee met again on December 7, 2023, to consider the input received and to formulate a report to the House.

A list of the presenters who appeared before the Committee is appended to this report. The Committee wishes to express its appreciation to them.

The following summarizes what the Committee heard, including the recommendations made to the Committee regarding a clean energy strategy for New Brunswick.

OVERVIEW

In its second report of the First Session, dated March 31, 2022, the Committee listed the actions that were recommended for inclusion in a renewed Climate Change Action Plan for the Province. During the consultations that informed that report, greenhouse gas (GHG) emission reduction was a central topic of discussion.

New Brunswick's target for GHG emission reduction by 2030 is 10.7 Mt, which is 47 per cent below 2005 levels. Its current 2050 target is 5 Mt. As of 2019, New Brunswick was emitting 12.4 Mt annually. Pathways to meet both targets were identified during the 2022 consultations. These

include transformative measures like clean electricity, coal phase out, and energy efficiency, as well as the introduction of new technologies such as low-emission fuels, renewables, and SMRs.

New Brunswick's Climate Change Action Plan 2022-2027 was issued by the government in September 2022. Among the new actions contained in the Plan, the government committed to

- developing a net-zero blueprint by 2025 that includes:
 - a. a suite of actions needed to achieve net-zero by 2050, focusing on all key sectors and including new low-carbon technologies and nature-based solutions, such as biofuels and clean hydrogen, clean electricity, and natural carbon sinks; and
 - b. establishing five-year interim emission reduction goals; and
- developing a clean electricity strategy by 2025 for achieving net-zero electricity emissions by 2035, based on guiding principles that support clean, reliable, efficient, and affordable electricity.

In 2023, the Committee invited subject matter experts and Indigenous representatives to gather further information about how transformative measures and new technologies in the energy sector can help the Province achieve its 2030 and 2050 emission reduction targets.

Part 1: New Technologies

A wide selection of clean energy technologies was discussed during the hearings, with the conversation focusing on the following four key areas:

1. renewable energy with battery storage
2. small modular nuclear reactors (SMRs)
3. low-emission fuels
4. distributed energy resources (DERs).

The first section of this report discusses presenters' views of the advantages and disadvantages of each of these technologies.

Part 2: Clean Energy Strategy

Discussion of a clean energy strategy for the Province centered around three key themes:

- 1) Collaboration
 - a. Indigenous communities
 - b. New Brunswick municipalities and the Atlantic region
- 2) Changes to legislation and regulatory systems
- 3) Coordinated action
 - a. portfolio approach
 - b. energy efficiency and demand response

- c. labour market needs and infrastructure development
- d. social acceptability.

The second section of this report summarizes what the Committee heard regarding what should be contained in a clean energy strategy for the Province. The actions that presenters recommended to the Committee are grouped under each theme.

Part 1: New Technologies

Presenters emphasized that we are at the start of one of the most profound transformations that has ever occurred to the global economy. Over the next several decades, jurisdictions around the world will be undertaking a significant overhaul of the energy systems that power their industries, businesses, homes, and vehicles. This transformation is driven by a sense of urgency. The shift needs to come quickly and affordably. This will create new challenges and opportunities, requiring jurisdictions to embrace both change and uncertainty.

To ensure grid reliability, fossil fuels will remain part of New Brunswick's energy mix in the near term. However, there are many new technologies that must be considered for adoption if New Brunswick is to prosper – from both an environmental and an economic perspective. Each technology presents advantages and disadvantages, and these must be evaluated carefully when developing a clean energy strategy.

The Committee heard that New Brunswick is already a leader among Canadian provinces in GHG emission reduction. The Province also has many advantages for advancing clean energy projects, including an abundance of natural resources, key connectivity to other regional power grids in Canada and the United States, strong supply chains, and research and development capacity through post-secondary institutions.

Due to these advantages, companies are looking to invest in New Brunswick. And while economic development should not be the primary goal of the Province's energy transition, it can be the by-product of good planning and execution. It was submitted that a clean energy strategy should address which technologies should be pursued, to what degree, and when.

Renewable Energy with Battery Storage

All models presented by energy experts prioritized investment in renewable energy sources such as wind and solar. New Brunswick has an abundance of wind for electrical generation and its solar potential is significant. Other provinces in Atlantic Canada also have a profusion of wind power potential to share and trade to balance the grid. In addition, mutually beneficial renewable energy projects are already underway between industry and Indigenous communities in the Province.

The Committee heard that as demand for wind and solar technologies has increased over the last decade, their cost has fallen dramatically. Globally, these technologies have become the most economic choices among all types of electricity sources, both clean and not. They also have the advantage of scale: solar panels can be installed on any building and there is potential for the future adoption of smaller-scale wind projects on private land.

Energy experts consider wind and solar “safe bets” for the energy transition with few disadvantages. However, wind and solar are both intermittent sources of energy which results in concerns about reliability during times of peak demand. Battery storage is crucial, and experts recommend that at least 20% of renewable energy be backed up with battery storage to ensure reliability. While batteries are a major focus of research and are becoming less expensive every year, they are still relatively expensive.

In addition to battery cost, another potential disadvantage of renewables is the expense of grid integration. Presenters emphasized that rather than looking only at project setup costs, the government should instead examine the cost of integrating renewables into the overall system to make the grid reliable and secure.

SMRs

As non-carbon-emitting technologies whose planned output capacity is large, SMRs are recognized globally for their potential to replace fossil fuels as a baseload power source. The Committee heard that New Brunswick has the potential to be a global leader in SMR development by building on its existing nuclear expertise at Point Lepreau and by pursuing SMR projects in the Province. Supporters argue that these projects will lead to global export opportunities and help create new local jobs, both of which will contribute to the economic prosperity of the Province.

Presenters listed several other advantages of SMR technology. These include: 1) their small ecological footprint compared to some renewable technologies, 2) deployment versatility: they can be set up as multiple reactors or function as single units, 3) designs that are able to recycle fuel, which leads to more energy and less waste produced, 4) having many avenues for partnership, including with First Nations and with communities within the Atlantic region, 5) the possibility of generating medical isotopes, which are in growing demand for cancer patients worldwide.

Presenters also discussed the potential disadvantages of this technology. A primary concern is their uncertain viability, as SMRs are considered a “wild card” by certain presenters. Several subject matter experts said that while SMRs are an intriguing technology that could possibly address the clean energy needs of the Province in the longer term, they have yet to be proven operational in a commercial setting and should not be considered as the central technology for an energy strategy in the near term.

Other disadvantages of SMRs outlined by presenters include: 1) the possibility that development timelines may not align with GHG emission reduction targets, 2) high cost that could increase electricity rates, 3) inconsistent support across Indigenous communities, 4) concerns about the safety of radioactive waste storage systems, 5) concerns about the risk of nuclear weapons proliferation, 6) global market competition, 7) inconsistent regulations worldwide, and 8) concerns about the process of decommissioning at the end of their life cycle.

Low-Emission Fuels

The economic and public reliance on refined petroleum products will not shift overnight. Atlantic Canada's oil and gas sector continues to innovate and reduce its carbon footprint, with the introduction of new gaseous fuels like low-emission hydrogen and renewable natural gas, as well as organic fuels like biomass. Supporters of these lower carbon energy options argue that they can bridge the Province's reliance on fossil fuels and the development of larger-scale innovations that are only now in the exploration stage.

The Committee heard that as a power source, natural gas is currently on par with the number of megawatts of electricity consumed through the NB Power system. The infrastructure is also well-developed. New Brunswick has one of the newest gas systems in North America, putting the Province at an advantage in pursuing new low-emission fuel distribution opportunities. Presenters also listed the relative safety, low cost, reliability, scalability, storage capacity and ease of transportation as advantages of low-emission fuels.

Potential disadvantages of these energy sources include: 1) the lack of renewable fuel regulations in Atlantic Canada, 2) the fact that they are more of a reserve energy source rather than one that can serve the baseload needs of the Province, and 3) the fact that biofuels are still in the development stage, and some are better than others in terms of carbon-intensity, reliability, and availability. Presenters also noted that while hydrogen is gaining in popularity for its potential to replace gasoline as a vehicle fuel, its role as an energy source is still being explored.

The Committee heard that modelling from NB Power shows that a conversion from coal to biomass at the Belledune generating station provides value in many scenarios. A full report with results is expected to be released in early 2024. Biomass is already being collected in New Brunswick and converted to wood pellets that are exported overseas. However, a power generating facility like Belledune would require a different type of wood pellet and it would require many times the amount that is currently being exported. Overall, the Committee heard that this conversion is potentially viable and could retain the existing workforce and use existing supply chains. However, in the opinion of some, the conversion would be costly and there are too many unknown factors for it to be considered the centerpiece of a clean energy strategy for the Province.

Distributed Energy Resources

At present, the Province has a single electricity system in which large generation facilities supply power to communities across the Province. When these facilities go offline, imports are necessary. The Committee heard that a modern electricity system could follow a distributed energy model, rather than rely on larger power sources. Distributed energy resources (DERs) supply their own power but are connected to the larger grid. When something goes wrong, it is a much smaller problem to fix because other sources are still online.

The Committee learned that DERs are becoming increasingly popular and can take many forms, ranging from rooftop solar panels to the battery capacity of electric vehicles. At present, these technologies are designed to benefit the homeowner and require deliberate thought and action as to time of use. However, in the future, with the use of smart meters and smart grid technologies,

these power sources could be managed by utilities to reduce the need to procure costly new generating assets. Power could come from a variety of sources, and New Brunswick could have DERs throughout the Province to supplement baseload power needs.

Presenters noted that a DER model is currently being tested in Shediac, and other models are being considered elsewhere in Canada. Preliminary results of the Shediac project are positive and a full report with outcomes is expected to be published in 2024. The Committee heard that DERs are relatively inexpensive to implement and one of the quickest and least costly ways to reduce emissions in the near term. They are considered a “safe bet” by the Canadian Climate Institute and are lauded for providing customers with transparency and control.

Currently, the use of DERs within the commercial power grid is limited under the *Electricity Act*. The Committee heard that amendments to this legislation will be required for the private sale of power. Another disadvantage is that while many DER technologies are ready to deploy, more complex projects such as micro grids with battery storage are still in the development phase.

Part 2: A Clean Energy Strategy

The Committee heard that all jurisdictions need to think about their energy needs for the future and plan accordingly. A provincial clean energy strategy can help guide the process of navigating the transition away from fossil fuels, while drawing connections between the government’s approach to energy policy and economic development.

The climate crisis requires immediate attention, and New Brunswick’s clean energy strategy needs to communicate this sense of urgency. The Committee heard that the strategy should set clear goals and directives and include accountability measures. However, it should not be considered a static document. Its goal should be to provide a framework that allows New Brunswick to evolve its approach as it moves away from fossil fuels. As technologies mature, and costs and demand change, there will be opportunities to adapt.

Recommendations made to the Committee:

A clean energy strategy for the Province should include:

1. A vision, objectives, and concrete action plans to identify the most pressing issues and ensure that the Province has a clear pathway forward.
2. Timelines for revision and re-evaluation as progress is made.
3. Accountability mechanisms that ensure tasks are assigned to relevant government departments and that they are held responsible for carrying out their assigned actions.

Beyond these overall goals, presenters outlined key areas that should be considered when developing a clean energy strategy for the Province. The following section outlines the main themes and recommendations that were discussed during the public hearings.

Theme 1: Collaboration

Indigenous Communities

Intentional trust-building with New Brunswick Indigenous communities is integral for a clean energy future in the Province. A foundational principle of Indigenous communities is the assurance that human activities do not pose harm to the health of plants, animals, water, soil, and air, as well as to the health of people and communities. For this reason, presenters said that First Nations must be involved in all energy project planning from the beginning of the process through proactive and ongoing meaningful engagement with all relevant departments.

The Committee heard from First Nations that the government needs to improve its relationship with them, not just for reconciliation but also for the economic prosperity of the Province. Businesses do not like uncertainty. They do not want to proceed with projects that are subject to the risk of litigation. New Brunswick can create mutually beneficial partnerships between government, businesses, and Indigenous communities, but presenters said that the onus is on the provincial government to communicate nation to nation.

Recommendations made to the Committee:

A clean energy strategy for New Brunswick should:

4. Ensure that Indigenous communities are engaged through meaningful consultation.
5. Ensure that First Nations are involved in all project planning processes from the earliest stages with relevant government departments.
6. Be created with respect for the holistic environment.
7. Provide a clear definition of “clean energy” with respect for the interconnectedness of the environment and Indigenous rights.
8. Provide support for a province-wide Indigenous knowledge study, which will document current plants and animal species and inform decision making.
9. Ensure that economic advantages are shared with First Nations communities.
10. Decentralize the current engagement process with the Department of Indigenous Affairs and create opportunities for dialogue between First Nations and all government departments.
11. Include First Nations in the impact assessment process in the ways that they have requested.

New Brunswick Municipalities and the Atlantic Region

The Committee heard that the local nature of energy generation requires clear, effective, transparent partnerships with communities. Presenters said that while municipalities should be central to a clean energy strategy, they have been unable to move certain projects forward because provincial legislation limits municipal utilities from distributing energy across the Province.

Presenters suggested that a unified approach to energy generation, in which provincial and municipal utilities collaborate and share resources, would better serve New Brunswick's energy needs in the future.

Likewise, New Brunswick can benefit from sharing knowledge and expertise with other jurisdictions in Atlantic Canada. Presenters suggested that this dialogue could lead to more creativity and the development of best practices. Regional partnerships for sharing energy resources could also benefit New Brunswick. Collaborations such as the revised Atlantic Loop could help ensure overall reliability and lower costs for all partners involved.

Recommendations made to the Committee:

A clean energy strategy for New Brunswick should:

12. Include amendments to any legislation that creates barriers for municipal energy projects.
13. Leverage opportunities to connect with other jurisdictions when building transmission infrastructure.
14. Optimize the integration of renewable energy resources in Atlantic Canada and enable relevant regulatory actions.

Theme 2: Changes to Legislation and Regulatory Systems

As discussed under the previous theme, legislation can be a barrier to the development of municipal energy projects. A key challenge for energy utilities and municipalities is the inability to develop new renewable energy projects due to caps on net-metering and embedded local generation in current legislation. Presenters suggested that amendments be made to the *Electricity Act* and related legislation to remove some of the perceived economic risk of having a single agreement with NB Power, allow for the development of cleaner energy sources, and ultimately lead to more economic growth in the Province.

The Committee also heard that the increasing pace of change in the energy sector is not currently reflected in New Brunswick's policy environment. Presenters said that the list of federal requirements is complex and growing. To address this, the provincial government must ensure that its energy regulations have more flexibility to allow newer and emerging technologies to be deployed as quickly as possible. This regulatory agility will ensure that decisions can be made more quickly because a frame of reference clearly outlines expectations.

Recommendations made to the Committee:

A clean energy strategy for New Brunswick should:

15. Address the need to implement changes to section 68 of the *Electricity Act* to allow new sources of capital, expertise, and innovation to support province-wide decarbonization.
16. Raise the energy efficiency target under the *Electricity Act* from 0.75 per cent of forecasted total in-province electricity sales by 2029 to 1.75 per cent.

17. Raise NB Power’s total in-province electricity sales from renewable resources from 40 per cent to 80-95 per cent by 2035 in the *Electricity from Renewable Resources Regulation* under the *Electricity Act*.
18. Consider a “sustainable net-zero mandate” amendment to the *Energy and Utilities Board Act*, which would allow the Energy and Utilities Board to address social, environmental and economic costs rather than act only as an economic regulator.
19. Redesign the utility tax to incentivize investment in grid modernization and decarbonization measures.
20. Include the development of policies to support and grow the clean technology sector through additional funding and grant programs.
21. Implement guiding principles that will facilitate efficient decision making and expeditious legislative processes with continuity that crosses political parties.
22. Modernize governance and regulatory frameworks to ensure that regulators are responsible for delivering on net-zero commitments, and that systems can properly integrate a greater share of renewables and distributed energy resources.
23. Implement an integrated energy policy to determine how existing systems such as natural gas can be used to support the electric infrastructure.

Theme 3: Coordinated Action

A Portfolio Approach

Presenters advised that other jurisdictions have found themselves consistently underestimating the amount of energy they will require in the future. Some said that New Brunswick would likely need to embrace all the different projects that are currently being discussed and that care should be taken to avoid relying on the maturity of a single technology.

Analysis and modeling have shown that a portfolio approach is the best way to proceed with a provincial energy strategy. This would include a steady increase in existing technologies such as renewables with battery storage, followed by other medium-term options such as low-emission fuels. As emerging technologies such as SMRs become better known and their costs are better established, these assets can be considered as additions to the generating mix. Introducing new technologies can increase power rates, so presenters argued that a portfolio approach would also help minimize ratepayer impacts.

Presenters noted that there are resources available to help model various energy scenarios. These modeling forecasts look at commonalities across energy options and enable jurisdictions to answer questions about cost impacts, projected GHG emission reductions, and potential economic growth. It is important that this scenario modeling is conducted by an independent body to ensure its reliability and protect it from interference.

Recommendations made to the Committee:

A clean energy strategy for New Brunswick should:

24. Take a portfolio approach to meet New Brunswick's energy needs with emphasis on lower-cost, deployment-ready technologies, and continued support for longer-term less-developed emerging technologies.
25. Prioritize an independent pathway assessment for GHG emission reduction and net-zero scenarios in New Brunswick to examine the trade-offs that different scenarios represent.

Energy Efficiency and Demand Response

The Committee heard that a challenge for New Brunswick's energy future will be balancing supply and demand, particularly during times of peak demand when the temperature is very low. This challenge can be addressed through behavioural changes, such as pre-heating rooms and using electricity to complete household tasks during non-peak hours. Presenters suggested that New Brunswickers need clear communication about these and other types of energy efficiency actions as well as incentives to initiate changes in behaviour.

Presenters also referenced the concept of "demand response", which is the practice of actively managing and modifying electricity consumption in response to supply conditions or grid reliability needs. It involves actively shifting or reducing electricity use during times of high demand, grid congestion, or when supply of electricity is limited. The Committee heard that demand response and energy efficiency are complementary strategies. Advanced technologies such as smart thermostats, automated systems, and real-time communication devices play a crucial role in enabling demand response as they allow for more precise control over energy use.

A key feature of energy efficiency and demand response actions are their ease: it is much easier to ask people to use less power at peak times or install energy efficient heat pumps than it is to build a large generating station. Another advantage is the reduced cost to consumers. If New Brunswickers use less power or retrofit their homes to make them more efficient, their energy bills will naturally go down.

While there are currently long-term financing and repayment mechanisms in place to make homes more energy efficient, there are still large up-front costs, which are unattractive to many households. The Committee heard that there is a need for bridge financing, particularly to incentivize low-income homeowners. The Committee also heard that a single entity should be responsible for facilitating efficiency programming in the Province, working with New Brunswickers to achieve their goals, and educating them so they can make informed choices.

Recommendations made to the Committee:

A clean energy strategy for New Brunswick should:

26. Include a plan for the public to learn about energy efficiency measures and explain concepts such as demand response using real-world examples.

27. Supplement the *Electricity Act*'s minimum energy efficiency targets for electricity with a requirement to thoroughly study and invest in all energy efficiency solutions that are lower cost than supply alternatives.
28. Maximize energy efficiency measures and programs for space heat and water heat.
29. Address the backlog of customers who applied for rebates under the Province's home retrofit program and include suggestions for better facilitation of the program.
30. Create an independent facilitator or agency for energy efficiency in the Province.

Labour Market Needs and Infrastructure Development

The Committee heard that the energy transition is the largest global change that has occurred since the industrial revolution, and it will impact all aspects of life and business. Presenters emphasized that to be prepared, jurisdictions need to anticipate labour market and infrastructure needs well in advance of GHG emission reduction and net-zero timelines. Good labour market and infrastructure planning will help prevent problems such as shortages of electric vehicle chargers and a lack of skilled workers in the energy sector.

New modelling shows that across the Atlantic region, achieving net-zero through existing industries and new clean energy technologies can create over 99,000 new jobs by 2050. The Committee heard that many new jobs will be similar to those currently performed by fossil fuel workers and that transition programs could help retain these employees as new sectors emerge. Presenters also suggested that the Province look for ways to bolster post-secondary programs in the energy sector to support and recruit the next generation of workers.

The Committee heard that the Province must also anticipate changes to building codes and transportation infrastructure as the energy transition progresses. For example, soon, electric vehicle charging stations located in homes could have the potential to add energy back into the grid. Similarly, commercial buildings could be designed with technology that tracks and monitors energy use, and results could identify energy savings opportunities. Finally, when thinking about infrastructure development, the Province must plan how it will strengthen supply chains through rail and highways. These will be crucial as new energy generating technologies are identified and pursued.

Recommendations made to the Committee:

A clean energy strategy for New Brunswick should:

31. Consider existing models for integrating anticipated workforce needs with the Province's economic strategy.
32. Include a section on bolstering post-secondary education and research in areas that align with new energy technologies.
33. Include building the required transmission infrastructure.

34. Include measures to adapt to new supply chains.

35. Require municipalities to use the permitting process to ensure, incentivize, and track building energy performance.

Social Acceptability

New Brunswickers are relying on the decision-makers in government to clearly communicate priorities and put the right resources in place to follow through on goals. Public support is necessary to achieve emission reduction targets, so there must be clear and ongoing public dialogue about the efforts and investments needed to achieve net-zero emissions by 2050. The Committee heard that people who do not have a strong understanding of a topic pay more attention to risks than to benefits, and for this reason they rely on cues or signals from leaders to assess costs and benefits.

Some presenters noted that early messaging around net-zero targets centered on the energy sector, specifically oil and gas and electricity generation. They said that it might be a common misperception that the energy sector is to blame for climate change. This has implications for the future prosperity of the region as a large portion of New Brunswick's economy and GDP is driven by the energy sector. Therefore, it will be important for communication with the public to highlight the advancements that are being made in the energy sector and how these innovations will help achieve climate change goals.

Many presenters discussed how the predicted increase in demand for electricity combined with the expense of new energy technologies will result in higher electricity rates. This presents a challenge for public acceptance, when the Atlantic region has been identified as having the highest levels of energy poverty in Canada. Those who are most vulnerable and who can least afford to invest in energy-saving technology or alternate fuels in their home may be affected most. Surveys have shown that most New Brunswickers agree that they need to make changes to combat the climate crisis. To ensure that they take the necessary steps, the government needs to communicate that the pathway to net-zero will come at a price but that there are steps that can be taken to offset higher power rates.

Recommendations made to the Committee:

A clean energy strategy for New Brunswick should:

36. Include a public engagement mechanism that starts with basic energy literacy and then discusses specific technologies.

37. Include a communications plan that encourages dialogue between homeowners and helps ensure that the public knows that small actions can make a difference for both the climate and their energy bill.

38. Improve the transparency of the electricity system by allowing real-time access to data for energy demand, emissions, and costs for each generation facility.

39. Re-define energy poverty to include social aspects as well as economic ones so that those who are most vulnerable qualify for energy efficiency and other rebate programs.
40. Identify ways to combat energy poverty in the Province with the help of energy efficiency organizations.
41. Consider the development of a stand-alone energy poverty strategy.

CONCLUSION

The Committee wishes again to express its thanks to all those who provided input and recommendations on a clean energy strategy for New Brunswick.

**APPENDIX:
PRESENTERS**

Advanced Biofuels Canada	Efficiency Canada
ARC Clean Technology Canada Inc.	EfficiencyOne
Atlantica Centre for Energy	EnviroEconomics
Belledune Port Authority	Liberty Utilities
Canadian Coalition for Nuclear Responsibility	Mi'gmawe'l Tplu'taqnn Inc.
Canadian Fuels Association	Millar, Heather
Canadian Nuclear Association	Moltex Energy Canada Inc.
Clean Energy Canada	Navius Research
Clean Foundation	New Brunswick Power Corporation
Coalition for Responsible Energy Development in New Brunswick	Pabineau First Nation
Conservation Council of New Brunswick	Peskotomuhkati Nation at Skutik
Cook, William	Ramana, M.V.
Crompton, John	Saint John Energy
David Suzuki Foundation	Sapinski, Jean Philippe
d'Entremont, Colleen	Torrie, Ralph
	Wolastoqey Nation in New Brunswick