Conservation Council *of* New Brunswick
Conseil de conservation *du* Nouveau-Brunswick
www.conservationcouncil.ca

Submission to the Energy Transition Group regarding GNB Energy Strategy

For more than 50 years, the Conservation Council has worked to create awareness of environmental problems and advocate solutions through research, education, and interventions. The Conservation Council consistently promotes environmentally, socially, and economically sound solutions. We thank the Energy Transition Group for inviting the Conservation Council to respond to the Government of New Brunswick's (GNB) Energy Strategy as a stakeholder.

The Conservation Council was informed that the Energy Transition Group's role is to gather feedback exclusively on Section 3. Therefore, this submission will primarily address Section 3. However, we would first offer a few general comments on Sections 1 and 2 of the strategy.

General comment on Sections 1 and 2

Greenwashing of Fracked gas/LNG

The GNB Energy Strategy, titled "Powering our Economy and the World with Clean Energy – Our Path Forward to 2035," fails to clearly define what constitutes "clean energy." This ambiguity is concerning as it allows for the potential mislabeling of energy sources that may not be clean or sustainable. A critical issue within the strategy is the significant emphasis on promoting Liquefied Natural Gas (LNG), which in New Brunswick's case is fracked gas, as a climate solution, which is greenwashing. Fracked gas/LNG, while touted as a cleaner alternative to coal, still results in considerable greenhouse gas emissions throughout its lifecycle, from extraction and processing to transportation and combustion. Promoting Fracked gas/LNG as a component of a clean energy strategy is misleading and counterproductive. The strategy's portrayal of Fracked gas/LNG as a sustainable solution undermines genuine efforts to transition to genuinely renewable and zero-carbon energy sources, such as wind, solar, and advanced battery storage technologies.

Push for renewables and transmission is encouraged

We are pleased to see the GNB's commitment to increasing renewable energy sources such as wind, solar, and battery storage. However, there is potential for even greater expansion in this area. New Brunswick has significant opportunities to profit from further renewable energy development coupled with enhanced transmission infrastructure. Our neighbouring regions, particularly New England, are experiencing substantial growth in both population and energy demand. By capitalizing on this demand, New Brunswick can position itself as a key player in the clean electricity trade, which could generate substantial revenue. This approach would not only help to pay off NB Power's debt but also prevent the financial burden from falling on the ratepayers, fostering a more sustainable and economically beneficial energy strategy for the province.

Biomass is costly and hurts New Brunswick’s forests

Including biomass as a key component in GNB’s energy strategy raises significant sustainability and economic concerns. Biomass, while often promoted as a renewable energy source, is not sustainable in the context of New Brunswick's energy needs. Converting forests into biomass fuel can lead to further unsustainable logging practices, threatening the province's cherished forests. Also, biomass has a lower energy density than coal, meaning that more biomass fuel is required to produce the same energy. This not only jeopardizes forest ecosystems but also incurs high costs associated with harvesting, processing, and transporting biomass fuel. New Brunswickers, who value their forests for both their environmental and recreational benefits, are rightly concerned that a shift towards biomass energy could lead to the degradation of these vital natural resources.

Lack of due diligence on SMRs

The GNB claims to prioritize affordability in its energy strategy, yet it is promoting the development of Small Modular Reactors (SMRs) despite the lack of concrete cost estimates associated with these projects. Committing to significant and expensive projects without comprehensive due diligence on the risks and costs involved is concerning. Additionally, the province has already suggested changes to the Electricity Act to allow NB Power to utilize more expensive electricity options over cheaper ones. This indicates that the GNB knows the potentially high costs of SMRs and is already creating mechanisms to pass these costs onto New Brunswick ratepayers and exacerbate the affordability crisis. This approach contradicts the stated goal of maintaining affordable energy for residents, as the uncertainties and high costs of SMRs could lead to increased energy rates and financial strain on households and businesses across the province.

Prioritizing exports over cheap electricity for New Brunswickers is short-sighted

The GNB's energy strategy places a disproportionate emphasis on exporting energy, such as hydrogen, rather than prioritizing affordable electricity for its residents. This approach is short-sighted, as hydrogen production is currently unsustainable and uneconomical. Exporting hydrogen may generate revenue for corporations, but it overlooks the immediate and pressing need to reduce energy costs for New Brunswickers. Utilizing locally produced energy to lower electricity rates within the province would provide more substantial and direct economic benefits. By focusing on exports, the government risks missing out on opportunities to enhance local energy affordability, which would support households and businesses and foster broader economic growth within New Brunswick.

Response to Section 3

Here are our comments, concerns, and recommendations to Section 3 of the GNB Energy Strategy. The numbered paragraphs are directly from the strategy and below is the Conservation Council's response.

Affordability

1) Advanced metering will be installed across the province by 2025 to allow customers to better manage their energy costs. In parallel, an energy app will be developed to allow customers to make informed real-time decisions on energy usage.

We are pleased to see the implementation of smart meters across the province by 2025. Providing more information to ratepayers is always beneficial, especially if it helps them better understand the breakdown of their energy bills and find effective strategies to reduce costs. Additionally, offering a more accessible and transparent breakdown of current energy costs and the resource mix would be highly advantageous for New Brunswick. This level of detail, akin to the information provided by New England's ISO, would empower residents with the knowledge needed to make informed decisions about their energy usage, which would ultimately push for a more cost-effective and sustainable energy landscape.
New England's transparent data as an example: ISO New England (iso-ne.com)

2) NB Power will introduce a new off-peak energy rate for residential customers.

We support the introduction of a new off-peak energy rate for residential customers, provided that the rates and designated hours are clearly identified and communicated. It is crucial that each resident receives a detailed breakdown of their energy usage, specifying how much energy they consumed during each rate period. This transparency will enable residents to understand precisely where the costs on their bills are coming from. Clear and consistent communication is essential to ensure that all residents can effectively manage their energy consumption and take full advantage of the cost savings offered by the off-peak rates.

3) The province will leverage the federal Low Carbon Economy Leadership Fund to establish a number of new energy efficiency programs that are currently under development. This will include an enhanced solar program targeting behindthe-meter solar, that will improve customer access and make solar energy more affordable.

While the establishment of new energy efficiency programs through the federal Low Carbon Economy Leadership Fund is a positive step, clarification on these programs is needed. To maximize household efficiency, it is essential that these programs consider whole-house retrofits. Furthermore, the application process for these programs should be streamlined and simplified to ensure accessibility for all residents.

We strongly support making solar energy more accessible and affordable for all New Brunswickers. Programs that enable homeowners to generate and store their own renewable electricity are highly encouraged, as a significant increase in residential solar would greatly benefit the entire province. Additionally, incorporating a battery storage program would significantly enhance grid reliability, providing further stability and efficiency to our energy system.

Moreover, expanding existing programs is crucial to addressing the diverse and complex energy affordability needs of residents. Programs like the Enhanced Energy Savings Program (EESP) currently have an income threshold ($70,000 for the EESP), but many people have far more complex financial situations. Certain groups are far more vulnerable than others, such as renters, fixed-income families, rural households, single parents, or a household of five with a family income over that threshold. The government needs to expand the eligibility criteria so that people with more complex financial situations can access these programs.

4) We will undertake a full review of the conservation programs and delivery model to determine if there are opportunities for enhancement.

We welcome the initiative to undertake a full review of the conservation programs and their delivery model. It is essential that the findings of this review be made available to the public. Transparency in this process will help foster a broader understanding and engagement with the programs. Our goal is to see increased energy efficiency across the province, and a thorough review will help identify solutions and improvements. The review should clearly specify any gaps in the current programming that need to be addressed, ensuring that we can enhance the effectiveness and reach of these crucial energy efficiency initiatives.

5) The province will continue work with the federal government to access funding to help lower the cost of new generation in the province through the Canadian Infrastructure Bank, the Smart Renewables Electricity Pathways program, and the Clean Technology and Clean Electricity Investment Tax Credits.

New Brunswick should actively seek additional support from the federal government by any means necessary. The foremost priority should be securing funding for transmission infrastructure between New Brunswick, surrounding provinces, and New England. Cross-jurisdictional lines are a federal responsibility, and enhancing this infrastructure would significantly improve New Brunswick's capacity to buy and trade clean electricity. Additionally, we encourage seeking further federal support for renewable energy projects within the province, including those that are community-owned and Indigenous-owned. Such investments would not only strengthen our clean energy capabilities but also promote inclusive and sustainable economic growth.

6) We will review and modernize the Energy and Utilities Board (EUB) mandate to strengthen its regulatory and governance framework as needed, in light of the significant changes occurring in the energy market.

The review and modernization of the Energy and Utilities Board (EUB) mandate present a critical opportunity to incorporate a net-zero or sustainability mandate. The EUB must evolve beyond its current role as an economic regulator to include social and environmental factors in its decision-making process. This holistic approach will ensure that the most informed and balanced decisions are made on energy-related matters within the province. Presently, the EUB's decisions often appear to favour industry interests; however, the focus should shift towards prioritizing the interests of ratepayers. By integrating these broader considerations, the EUB can better serve the public and support New Brunswick's transition to a sustainable energy future.

The Conservation Council is currently working with East Coast Environmental Law to assess the feasibililty of such a mandate that is already implemented in Quebec and Nova Scotia.

Energy Security and Reliability

1) We will support ongoing development and deployment of SMRs at Point Lepreau as means to grow our clean nonintermittent baseload electricity supply.

While we acknowledge the potential of Small Modular Reactors (SMRs) to provide non-intermittent baseload electricity, we remain concerned about the lack of concrete cost estimates, thorough risk assessments, and we do not consider this technology clean. SMRs are still going to generate radioactive waste that requires long-term storage, and therefore is not a renewable resource.

The government's commitment to developing SMRs at Point Lepreau without a clear understanding of the financial implications raises significant concerns. Furthermore, recent suggestions to amend the Electricity Act to allow NB Power to utilize more expensive electricity options indicate an awareness of the high costs of SMRs, which will ultimately be borne by New Brunswick ratepayers.

Although we disagree with investing in SMRs, as it diverts funds from more effective projects, we understand the province's rationale. However, what we do not understand is the commitment to more than one SMR project before even determining the success of the first. It is irresponsible to invest heavily in multiple projects without knowing if the initial project will work. This approach places too many resources into an uncertain endeavor, potentially at the expense of more reliable and proven renewable energy solutions.

We urge the government to prioritize transparency and due diligence in evaluating the costs and risks of SMRs. Additionally, a greater focus on expanding renewable energy sources, such as wind, solar, and battery storage, coupled with enhanced transmission infrastructure, would not only provide a more cost-effective and sustainable solution for meeting the province's energy

needs but also have the potential to lower electricity rates. This approach would not only support clean energy goals but also protect ratepayers from potential financial burdens associated with costly and uncertain SMR projects.

2) Point Lepreau will improve its operating profile and we will work with NB Power to enable the establishment of a partnership with another nuclear operator to improve performance, lower operational risk and lower cost for New Brunswickers.

Improving the operating profile of Point Lepreau and establishing a partnership with another nuclear operator to enhance performance, lower operational risk, and reduce costs for New Brunswickers is the bare minimum. Point Lepreau has experienced consistent malfunctions, leading to significant rate increases, including the 3% variance rate increase currently being discussed at the EUB. Given the plant's history of operational issues and its consistently dropping capacity factor, the province should seriously consider retiring Point Lepreau in 2040. This would allow for a strategic shift towards more reliable and sustainable energy sources, ultimately benefiting New Brunswick ratepayers and supporting a more resilient energy future.

3) Wind power procurement targets will be established with the utility to deliver up to 1400MW of new generation by 2035 in the following tranches: • 200 MW by 2027 • 400 MW by 2029 • 400 MW by 2031 • 400 MW by 2033

We are very happy to see the establishment of wind power procurement targets aimed at delivering up to 1400 MW of new generation by 2035. New Brunswick has enormous wind potential, a significant step in the right direction. However, the province should scale up its ambitions further and aim to develop 2000 MW of wind power by 2035. Additional renewable energy capacity, coupled with enhanced transmission infrastructure, can help NB Power generate substantial revenue through clean electricity trade. This, in turn, would help relieve the burden of debt on ratepayers, fostering a more sustainable and economically resilient energy future for New Brunswick.

4) Solar power will continue to become more cost effective and help diversify our energy supply. A grid scale solar target of 200 MW by 2035 will be set with annual procurements of 25 MW per year starting in 2028 through 2035.

We are very happy to see the commitment to additional solar power with a grid-scale solar target of 200 MW by 2035. However, the province should enhance policies and programs to further support solar energy. This can be achieved by offering additional resources such as an improved buy-back system for surplus solar energy generated by residences, increased funding for residential solar projects, and enabling community solar projects. Shediac is currently leading the way with community solar initiatives that are coupled with batteries and smart meters, providing substantial benefits. These holistic opportunities should be expanded to the rest of New Brunswick to maximize the advantages of solar energy for all residents.

5) We will support regional transmission upgrades with Prince Edward Island and Nova Scotia to enhance the interconnectivity and flow of electricity between our provinces.

We are very excited to see the support for regional transmission upgrades with Prince Edward Island and Nova Scotia to enhance interconnectivity and electricity flow between our provinces. This is a step in the right direction, but this is just the start. New Brunswick should expand its collaboration to include other jurisdictions such as Newfoundland and Labrador, Quebec, and New England to further enhance transmission capabilities. Governments need to work together to find a viable alternative to the Atlantic Loop. Strengthening these regional connections will not only improve energy security and reliability but also create more opportunities for clean electricity trade and economic growth across the region.

6) To support the province's 2030 electric vehicle target, we will establish and deploy a plan to increase the public charging network.

We are pleased to see a commitment to expanding the public charging network to support the province's 2030 electric vehicle target. Additional chargers are indeed necessary, and the deployment plan should prioritize Level 3 chargers wherever possible to ensure faster and more efficient charging. Significant infrastructure improvements are needed at the grid level to support consistent and affordable charging options. It is also essential to make the process of charging an electric vehicle as easy and seamless as possible for consumers. Simplifying payment systems, ensuring reliable charger availability, and providing clear information on charging locations and status will encourage more residents to transition to electric vehicles and support the province's clean energy goals.
In addition to focusing on personal electric vehicles, it is crucial to consider the broader scope of transportation needs. Affordable and reliable public transportation options, such as electric buses, commercial vehicles, and freight transportation, should also be prioritized. Expanding the use of electric vehicles in public transportation and commercial sectors will not only reduce emissions but also support a more comprehensive and sustainable transportation network across the province.

7) We will complete the established review process for the Mactaquac Life Achievement Project.

A thorough review of the Mactaquac Life Achievement Project is essential. Stakeholders, rightsholders, and the public must be engaged transparently and meaningfully *before* making any decisions. Asking these groups to comment after making a decision is inappropriate and does not constitute meaningful engagement. To ensure the most informed decision for the future of Mactaquac, the review process should involve comprehensive consultation and input from all relevant parties at the outset. This approach will foster trust, incorporate diverse perspectives, and ultimately lead to better project and community outcomes.

Economic Growth

1) Release a hydrogen roadmap to incubate and develop the hydrogen industry.

We have several concerns about the emphasis on hydrogen for export. A hydrogen roadmap should prioritize green hydrogen for local industrial use, such as green steel or fertilizer production. Focusing on hydrogen for exports is unsustainable and diverts valuable energy resources that could be better utilized to lower energy rates for New Brunswick residents. Additionally, decarbonizing current hydrogen production should be a primary focus to ensure the environmental benefits of this technology. By prioritizing local industrial applications and reducing reliance on carbon-intensive hydrogen, New Brunswick can achieve more significant and immediate economic and environmental benefits.

Hydrogen for energy is not as efficient or effective as direct electricity use. The process of producing, storing, and converting hydrogen back into electricity results in significant energy losses. Therefore, hydrogen should remain primarily a chemical used for industrial applications, such as in the production of green steel and fertilizers, rather than being used as an energy carrier. This approach maximizes its utility and ensures that energy resources are used more efficiently.

2) Establish an economic development plan that outlines the opportunities and actions required to accelerate growth of New Brunswick's industrial base with a focus on: • Critical minerals • Energy resource development • Development of SMR technology • Clean manufacturing • Natural gas and LNG

Critical Minerals
Developing an economic plan for critical minerals is needed for New Brunswick's industrial growth. However, these minerals must be mined sustainably, adhering to circular economy principles. To minimize the environmental footprint, mining operations should implement advanced technologies for waste reduction and ensure the rehabilitation of mining sites post-extraction. Water recycling, reducing emissions through cleaner mining practices, and maintaining strict biodiversity conservation measures are critical. Ensuring that new mining projects do not add to the province's extensive list of over 1000 contaminated sites is paramount for maintaining environmental integrity and public health.

Energy Resource Development
Expanding energy resource development can drive economic growth, but it must be done sustainably. Implementing stringent environmental standards and community engagement processes will ensure that energy projects contribute positively to New Brunswick's economic and environmental landscape.
The Conservation Council has written a guide that the GNB should follow for community engagement:
Best-Practices-Guide-for-Community-Engagement-in-Energy-Projects.pdf (conservationcouncil.ca)

Development of SMR Technology

The Conservation Council does not support SMR development, but this must be approached cautiously, ensuring thorough risk and environmental assessments. Prioritizing transparency and public engagement in the development process is essential to address concerns and build trust among New Brunswick residents.

Clean Manufacturing
Promoting clean manufacturing is a crucial step towards a sustainable industrial base. This involves adopting energy-efficient technologies, utilizing renewable energy sources, and minimizing waste through innovative production processes. Incentives for businesses to reduce their carbon footprints and support for research and development in green technologies will drive the transition to cleaner manufacturing practices. Ensuring clean manufacturing initiatives align with environmental regulations and sustainability goals will enhance their effectiveness and public acceptance.

Natural Gas and LNG = Fracked gas
We do not support fracked gas development in New Brunswick, as there is no social license for this practice in the province. Fracked gas is not a climate solution; promoting it as such is a form of greenwashing. Instead, the focus should be on developing genuinely sustainable energy resources.

3) Encourage the establishment of a provincial energy cluster to drive collaboration, investment and growth across the entire energy ecosystem.

We agree that establishing a provincial energy cluster to drive collaboration, investment, and growth across the entire energy ecosystem is a commendable initiative. The more stakeholder and rightsholder collaboration and discussion, the better the outcomes for New Brunswick's energy future. Additionally, the GNB should consider opening an Office of Renewable Energy to focus on and facilitate the energy transition specifically. This office could be a central hub for coordinating renewable energy projects, providing resources and support for clean energy initiatives, and ensuring that the province's energy policies align with sustainability goals. New Brunswick can effectively advance its energy transition and achieve long-term environmental and economic benefits by fostering a collaborative environment and dedicating resources to renewable energy.

Regulatory Reform

1) Complete legislative changes that are needed to facilitate the energy transition and drive clean energy development: • Electricity Act • Pipeline Act, 2015 • Gas Distribution Act, 1999

We are concerned that most of the proposed updates to the Electricity Act, Pipeline Act, 2015, and Gas Distribution Act, 1999, appear to facilitate NB Power's ability to choose more expensive energy options, such as SMRs, and promote less effective solutions like hydrogen. We urge that these acts be updated not only to support large-scale projects but also to encourage and promote:

-Community-owned energy initiatives.
-Residential energy production.
-Enhanced incentives for energy efficiency improvements.
-Development of microgrids.
-Support for battery storage systems.
-Expansion of electric vehicle infrastructure.
-Initiatives for energy poverty reduction.

Additionally, it is crucial that the Energy and Utilities Board Acts be updated to include a net-zero mandate. This will ensure that all energy-related decisions are made with a clear focus on achieving net-zero emissions, thereby aligning with broader environmental and sustainability goals. By incorporating these changes, New Brunswick can foster a more inclusive, effective, and sustainable energy transition.

2) We know we have exceptional wind resources on land and offshore. To further encourage development, we will establish a regime for offshore wind projects, aiming for completion in 2024.

We agree with the initiative to establish a regime for offshore wind projects, aiming for completion in 2024. Offshore wind represents a tremendous opportunity to harness exceptional wind resources, providing cheap and sustainable electricity for New Brunswickers. To maximize the potential of offshore wind, the province should follow similar regulatory adjustments currently being implemented in Nova Scotia and Newfoundland and Labrador. These adjustments will ensure a streamlined and efficient process for developing offshore wind projects, promoting investment, and facilitating the transition to a cleaner energy future. By learning from the successes of our neighbouring provinces, New Brunswick can effectively capitalize on its offshore wind potential.

3) Streamline the environmental approval process for new clean energy projects, working in concert with the federal government when needed, to find ways to move projects more quickly without compromising the integrity of the existing regulations and processes.

We need more clarity on what "streamline" entails in the context of the environmental approval process for new clean energy projects. If streamlining means hiring more staff to expedite the approval process while maintaining the integrity of existing regulations and processes, then we fully support this initiative. However, if it implies cutting corners or reducing the rigor of environmental assessments, then we strongly oppose it. Ensuring that projects move quickly should not come at the expense of environmental protection and regulatory standards. It is essential to balance efficiency with thoroughness to safeguard the environment and public trust.

The Conservation Council thanks the Energy Transition Group for inviting us to participate as a stakeholder in this process. We hope our comments and suggestions are helpful. We expect this process to be transparent and made available to the public as soon as possible.