



Atlantic Vision for Clean Electricity

AN AFFORDABLE, RELIABLE, SUSTAINABLE ENERGY FUTURE

KNOW THE FACTS:

We all want **RELIABLE** electricity.

We rarely think about our electricity until the power goes off. We want the power on when we need it and when it goes out we want the electricity back on quickly. To feel safe, we need to know that electricity is available when we need it – regardless of the time of day or time of the year, or the power source.

We also need reliable electricity to solve climate change. To eliminate the pollution making weather more extreme, we must shift the way we use energy, away from fossil fuels (oil, coal, natural gas) and toward cleaner electricity. Our vehicles, our businesses, and our home-heating systems will rely more on electricity than on gasoline, coal, oil and natural gas.

The risk of the power going out is increasing because hurricanes, snowstorms, icestorms, floods and other extreme weather events are becoming more frequent and extreme. By acting on climate change, we lower the risk to our health and safety.



Having reliable electricity takes collaboration among utilities, governments and customers. Our electricity grid is an interconnected system with many connections within our region and beyond.

Paired with highly advanced wind and solar, we can use proven technologies like energy storage (batteries and hydro power), new transmission connections with our

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It's better **together**, with **renewables**.

Combining wind, solar and energy storage using batteries and accessing existing hydro power increases reliability and keeps us safer because we have a wider range of energy sources supplying our needs.





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neighbours, and Internet-based applications (called the Smart Grid) to make our electricity system more reliable.

We can learn from other provinces and states that are ahead of us in the transition to clean electricity, and use best practices from our region and around the world.

By focusing on energy efficiency and local renewables, we ensure that more of our electricity needs come from within our region. This means we no longer spend money on imported fossil fuels with volatile pricing. Instead, we invest in local, reliable ways to meet our electricity needs.

By investing in our homes and buildings so they use as little energy as possible (to a standard called Passive House), we create an added layer of security and comfort that keeps us warm in winter, and cool in summer.

In fact, a home that is retrofitted to a Passive House can stay warm in the winter for days if the power goes out in a storm. With energy efficiency we also decrease the amount of time our utilities burn coal, oil or natural gas to generate electricity today and we spend less on new electricity sources in the future. We all win with lower pollution and lower energy bills.



Save energy and money.

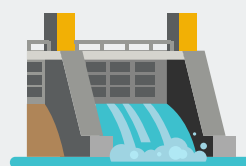
Building retrofits and best-in-class building standards save energy and money, and make buildings safer and more reliable. When the power goes out during a storm or emergency, the increased insulation of a very energy-efficient house (a **Passive House**) keeps a home warm for days.

We can phase out **COAL** by 2030.

A [2019 study](#) found that to phase out coal in Nova Scotia, the 'firming capacity' from hydroelectric imports would only require:

LESS THAN:

3% Quebec's TOTAL HYDROELECTRIC EXPORTS



LESS THAN:

.5% Quebec's TOTAL HYDROELECTRIC CAPACITY



Adjusting our energy use during the day or by season using smart technologies helps manage electricity rush hours or high-demand seasons (called peak demand) and that helps our electricity system add renewables.



You can adjust your usage during peak times to save money.

With a smart grid, smart meter technologies, and incentive programs, we can time our electricity demand with peak production from wind and solar.

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Energy Futures Group Report:

Clean portfolios, based on renewable energy, demonstrate significant greenhouse gas reductions. In both the electricity sector and economy wide, the combination of decarbonized electric supply, efficiency, strategic electrification, and flexible load management can be used to create plans that result in 50% medium term, and **80% to 90% long-term reductions in greenhouse gas emissions.**



Read our report here:

[*Comparative Analysis of Long-Term Resource Plans and Energy Scenarios*](#)

Published by:



Established in 1969, the Conservation Council serves as the province's leading voice for conservation and environmental protection. A strong public policy advocate, CCNB works to find practical solutions to help families and educators, citizens, governments and businesses protect the air we breathe, the water we drink, the precious marine ecosystem and the land, including the forests, that support us.

About the Atlantic Electricity Vision

The Conservation Council of New Brunswick and the Ecology Action Centre are excited to launch the **Atlantic Electricity Vision** series of reports, webinars and research to show that **affordable, reliable, sustainable** electricity is possible in our region, right now. Cleaner electricity can help make us **safer, more secure and healthier**. We can use it to help make electricity affordable for everyone, reliable for when we need it, and cleaner for our health and for our planet.

Our definition of cleaner electricity has two components. First, cleaner electricity relies primarily on non-polluting sources like wind, solar and existing hydro technologies and it is used efficiently. These renewable technologies have lower environmental impact than electricity generated from coal, oil and natural gas that generate greenhouse gases when burned causing the global heating that is supercharging our weather. Second, our sustainable electricity portfolio needs to be affordable and reliable.

The Atlantic Electricity Vision series is focused on the transition to electricity that phases out coal and ensures our regional electricity system is 90 per cent emissions free before 2030 as required by federal policy and climate change regulations. As a key part of the Just and Green Recovery from the COVID-19 pandemic, clean electricity can build green careers, bring health and economic benefits to communities and help us emerge from the pandemic better off than when we began.

Two studies, *A Comparative Analysis of Select Legislated Electricity Regimes in Eastern Canada and the New England Region* and *A Comparative Analysis of the Legislated Electricity Regimes in New Brunswick and Nova Scotia* by East Coast Environmental Law (ECEL) for CCNB and EAC show that government rules stand in the way of spending more to help low-income households spend less on energy; prevent utilities from considering the social and environmental costs of our electricity choices, and fail to send long-term signals to plan now for a zero-emitting electricity system over the next 20 to 30 years.

In other words, the public interest is narrowly defined by New Brunswick and Nova Scotia legislation and regulations to focus only on financial costs to utilities and ratepayers. Government rules fail to consider environmental and social dimensions. This narrow understanding of the public interest poses barriers to securing the best outcomes for low-income households and our health through clean electricity portfolios.

A third report, *Comparative Analysis of Long-Term Resource Plans and Energy Scenarios* by the Energy Futures Group shows that electricity plans that favour cleaner electricity are cost competitive. In fact, of the 24 electricity plans reviewed, 80 per cent of the scenarios favouring efficiency and renewable energy were cheaper or within just a few per cent of the scenarios favouring conventional, polluting technologies.

We know that cleaner electricity is affordable, reliable and sustainable - and it's ready to be deployed right now. The major barriers keeping us from achieving the clean electricity system we deserve are the **outdated laws, rules and targets** in our region. We need to update the laws and processes that control how we plan for future electricity systems, in order to ensure a **safer, more secure and healthier future** with clean electricity. Not doing so is a political choice.

We need to avoid the financial and environmental **risks, mistakes and delays** that come with continued coal burning, new nuclear and large hydro power, and dependence on fossil fuels like natural gas.

We need to build electricity connections connecting Atlantic provinces and Quebec to allow renewable energy like wind and solar to be reliable at all times of year, by backing it up with existing hydroelectric capacity through two-way electricity trade with our neighbours.

