

## Atlantic Vision for Clean Electricity AN AFFORDABLE, RELIABLE, SUSTAINABLE ENERGY FUTURE

#### **KNOW THE FACTS:**

# What does a SUSTAINABLE electricity system look like?

The **Atlantic Vision** series is focused on the transition to electricity portfolios that phase out coal-fired electricity and ensures our regional electricity system is **90 per cent emissions free before 2030** as required by federal regulation and climate change policy.

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. That's what a sustainable electricity system looks like to us.



Burning coal, oil and natural gas (fossil fuels) unbalances our climate, and hurts human health.

Belledune coal burning power plant

# ATLANTIC CLEAN VISION FOR ELECTRICITY

An Affordable, Reliable, Sustainable Energy Future



#### Burning coal, oil and natural gas (fossil fuels) unbalances our climate, and hurts human health.

If Nova Scotia and New Brunswick phase out coal electricity by 2030, we can <u>avoid more than</u> 125 premature deaths, 12,100 asthma episodes and 81,000 days of breathing difficulty. The <u>cumulative</u> <u>benefit</u> in Canada to phasing out coal by 2030 is valued at \$4.7 billion, of which \$1.2 billion would be from avoided healthcare costs alone.



Nova Scotia and New Brunswick have among the dirtiest electricity grids in all of the country, and could be the last coal-burning region in Canada. In both Nova Scotia and New Brunswick, emissions from the electricity sector remain a significant source of overall emissions.

### If we phase out coal by 2030:



Did you **know?**  That the energy and emissions it takes to build a wind turbine are **offset in just 6 months**- and they typically last more than **20 years**!

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#### We need to do our fair share.

Our region can succeed in doing our fair share to keep global temperature rise to below catastrophic levels of 1.5 degrees Celsius, and avoid a dangerous climate crisis - the worst of the floods, fires, storms and other impacts yet to come. To do so, our region must transition all of our energy needs (not just electricity) to clean, renewable sources. Nova Scotia and New Brunswick have to work together to reduce emissions because they are currently among the **most emissions-intensive provinces on a per-capita basis**. We can work together to reduce emissions.



#### Read our reports - we have law and science to prove our points:

**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.



Comparative Analysis of Long-Term Resource Plans and Energy Scenarios Currently, our laws and regulations in Atlantic Canada are getting in the way [of protecting the public interest], with no requirement to take sustainability principles into account when making important decisions about our electricity future. We can learn from our neighbours, like Quebec and Vermont who both include sustainability and equity more directly in the way they make electricity decisions.



A Comparative Analysis of Select Legislated Electricity Regimes in Eastern Canada and the New England Region

Published by:



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

www.conservationcouncil.ca



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:

Atlantic

Vision

Sustainable

Electricity

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.

Reliable

Electricity

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.

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