

# It's in Our Power



Ecology  
Action  
Centre

## NOVA SCOTIA RENEWABLE ENERGY DEMYSTIFIER

RENEWABLE ENERGY



# It's in Our Power

Together, we can build a future where the use of renewable and low-carbon energy sources becomes standard practice.

## Let's bring Nova Scotia into the clean energy future with 90% renewable electricity by 2030.

Nova Scotia's electricity system isn't working for rate-payers or the planet. A cleaner electricity system is in our power. Learn how it's in our power to make energy fair, reliable, and affordable by rolling-out clean, renewable electricity across Nova Scotia.

- We can supply 90% of Nova Scotia's electricity needs with renewables by 2030.
- Nova Scotia has immense untapped solar and wind energy potential.
- We need to pressure our elected officials to build a better energy future for our province.

## The 21st century is an era of energy transition.

Much of Canada already runs on a majority mix of renewable electricity. But Nova Scotia is lagging. Most of our electricity comes from burning coal—an innovative energy source back in 1823.

Thankfully, technology has advanced.

Nova Scotia needs to accelerate the energy transition already underway across our province. Generating our power means Nova Scotians would become insulated from shocks to volatile global fossil fuel prices, and decentralized power generation from multiple sources like wind, solar and hydro means we can manage supply and demand better. Shutting coal plants means we'll breathe cleaner air, reducing illnesses linked to fossil fuel pollution like asthma and cancer. Transitioning the workforce to support a growing renewable industry will create good-paying local jobs. New industries will spring up to upgrade homes and commercial buildings, as well as build and maintain Renewable energy sources, creating shared prosperity while improving life and the economy for all Nova Scotians.

Most importantly, we'll do it all while saving money on energy. Renewable energy ensures a fairer, healthier, resilient and prosperous province, and we'll be doing our part to ensure a livable planet for future generations.

For more information

[Achieving a Net-Zero Canadian Electricity Grid by 2035](#) - Pembina Institute

[The Big Switch](#) - Canadian Climate Institute



# Why should Nova Scotians care about clean, renewable-powered energy?

## Wind and solar-generated energy are the fastest and most cost-effective pathways to a net-zero future.

Solar is now the cheapest form of new electrical capacity in history, while electricity generated from wind turbines is cheaper than oil, coal, gas, or nuclear.

Deploying renewables on a larger scale will enable us to provide electricity to the rising demand on our energy systems as we adopt new technologies like heat pumps and electric vehicles.

### Imagine a near-future Nova Scotia with...

- Greater energy independence
- Lower energy poverty
- Healthier air
- More good-paying local jobs
- Lower overall energy costs



### Did you know that people in Nova Scotia are the most supportive of increasing renewable energy in their communities compared to other provinces in Canada?

While British Columbia has slightly higher support for more rooftop solar with 80% of people in that province supporting it, Nova Scotia still leads in overall support for renewable energy.



Source: Abacus Data Survey Results November 2022

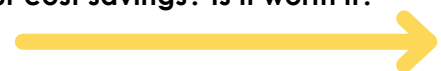
- 79%** support more rooftop solar.
- 75%** support having more onshore wind.
- 74%** support more solar farms.
- 74%** support more offshore wind and large-scale solar.

#### For more information

- [Shifting Power: Zero-Emissions Electricity Across Canada by 2035](#) - David Suzuki Foundation
- [Social Acceptance of Renewable Energy and Transmission Projects](#) - Conservation Council of New Brunswick
- [Solar Is Now 'Cheapest Electricity in History', Confirms IEA](#) - Carbon Brief

#### UP NEXT

What will renewable energy do for our cost savings? Is it worth it?





# Your Electricity Rates Could Go Up, but With Good Efficiency Practices Your Bills Will Go Down



## QUESTION

How can we save money on our energy bills if our electricity rates keep going up?

## ANSWER

**Put simply, you use much less energy!**

This can be done with a better building envelope (sealing and caulking), more and better insulation (especially in the attic and basement), and more efficient heating technologies, especially heat pumps, which in many cases can replace the need for heating oil completely.

All of these come with rebates from Efficiency Nova Scotia and the Government of Canada. You may also qualify for a free home audit to find out how you can save the most money on your energy bills.

It is important that as citizens we encourage our governments to better fund a just energy transition, which means one that gives everyone access to affordable, clean, efficient energy. That means government programs that support these efficiency measures for all kinds of housing and income levels.

For more information

[Residential Services & Rebates – Home Energy Assessment](#) - Efficiency Nova Scotia



# Did You Know...

We have growing wind and solar industries in Nova Scotia?

## 300+

### Commercial Wind Turbines

generating electricity in Nova Scotia, plus dozens more approved on the way, making our province a national leader in wind energy.



## 350–400

### Nova Scotian Homes

can be powered by a single megawatt of wind power, which could also reduce greenhouse gas emissions by 2,500 tonnes per year.



## 15,000

### Green Jobs per Year

could be created through energy reform and a transition to clean energy. The Nova Scotia Community College even offers a free Solar Photovoltaic (PV) Panel Installation Training course to facilitate the transition.



## 838

### Kilowatt Hours

The capacity of IKEA's powerful rooftop solar array in Dartmouth. It's the largest solar power system in Nova Scotia!

#### For more information

[Wind Power](#) - Nova Scotia Power

[Wind Energy in Nova Scotia](#) - Department of Natural Resources and Renewables

[Climate Jobs Report](#) - Ecology Action Centre

[Solar Photovoltaic \(PV\) Panel Installation Training](#) - Nova Scotia Community College

[Ikea's Solar Installation on the Roof of the Store Is The Largest in Nova Scotia](#) - SaltWire Network



# How do wind farms get built?

## Who's responsible?

In Canada, the provinces and territories are responsible for deciding to coordinate and integrate renewables into their electricity systems. The Federal government can incentivize greater cooperation, but the province decides what, where, when and how much.

## The process

For its most recent RFP process—which will procure 10 percent grid capacity from wind—the Nova Scotia government hired an independent procurement administrator Coho. These projects are also supported by the federal government through its Smart Renewables and Electrification Pathways Program (SREPs).

## Why don't we put wind farms offshore?

The government of Nova Scotia has ambitious plans for offshore wind. In 2022, the premier announced the province's goal of offering leases to produce five gigawatts of electricity from offshore wind turbines by 2030. Offshore wind will be an important part of Nova Scotia's clean energy future. But as we develop this new industry, we have to ensure offshore wind projects generate real benefits to First Nations, ocean goers and nearby communities, and that damage to marine ecosystems is minimal or nil.

## How can wind benefit communities?

Wind farms across Nova Scotia are owned by Independent Power Producers with contracts to sell their electricity back to provincial utilities like Nova Scotia Power. Wind energy projects provide many economic benefits to neighbouring communities. They provide jobs and can increase the local tax base. Some wind energy developers also contribute wind revenue back to the communities where they build—and wind projects even attract tourists who want to see them in person!

Engaging and consulting local communities is the cornerstone of successful wind energy project siting. Nova Scotian's and Indigenous communities' voices and concerns should be heard well before the start of a project to ensure fairness. Obtaining prior and informed consent is imperative to act in accordance with the UN Declaration on the Rights of Indigenous Peoples (UNDRIP).



For more information

[Smart Renewables and Electrification Pathways Program](#) - Natural Resources Canada

[Bigger, Cleaner, Smarter](#) - Canadian Climate Institute

UP NEXT

Read some false widespread rumours about wind and solar



# Myth-busting solar and wind misinformation

Renewable energy poses a major threat to the fossil fuel industry's profits, so it's not surprising that there are a lot of misconceptions about wind and solar being pushed within bad-faith media circles.

**FALSE**

Wind turbines harm an outsized number of birds

## TRUTH

The truth is, sometimes birds collide with wind turbines. But fossil fuels are far more deadly for birds, killing 35x more birds per gigawatt generated than wind due to the immense pollution created by extracting and burning coal, oil and gas.

**FALSE**

Solar panels don't work in the cold

## TRUTH

This is an odd myth considering solar panels were designed to work in space, where it can be pretty darn cold.

But winter is a reality in Canada, meaning we receive less sunlight in the months around the winter solstice. But 'less' is not none! Effective plans make up for the decreased energy supply and increased energy demand in winter with other energy sources. Upgrading transmission is a highly cost-effective way of ensuring that renewable energy from other provinces like New Brunswick, Quebec and Newfoundland & Labrador is available when needed. We also propose energy storage techniques to deliver reliable electricity, including energy-system-sized battery storage and electricity support for electric vehicles.

**FALSE**

Wind and solar decrease property values

## TRUTH

Multiple studies conclude that wind turbines have no significant impact on property values. One example from the University of Guelph showed that, despite a vocal "not in my backyard" mobilization over 133 wind turbines installed in 10 Ontario townships, an analysis of 7,000 home sales in the area showed, "These [wind] turbines have not impacted the value of surrounding properties."

Solar, on the other hand, is decidedly beneficial, with a recent analysis by the real estate listing firm Zillow showing rooftop solar on homes increase sale prices by 4%, as buyers prefer having lower electricity bills for years to come. Luckily, Nova Scotia has attractive incentives for homeowners to install solar, like Property Assessed Clean Energy (PACE) programs that allow you to finance the upfront cost and unlock ongoing energy savings that more than pay off the investment over time.

For more information

[FACTSHEET: Wind Energy & Birdlife](#) - RE-Alliance

[Achieving a Net-Zero Canadian Electricity Grid by 2035](#) - Pembina Institute

[Wind Farms Do Not Affect Property Values, Study Finds](#) - University of Guelph

[Homes With Solar Panels Sell for 4.1% More](#) - Zillow

[Property Assessed Clean Energy \(PACE\) Programs](#) - Nova Scotia PACE



# What can everyday Nova Scotians do to support renewable energy?

## Improve your home's insulation

Investing in good insulation and windows keeps you more comfortable year-round, lowers demand on the grid, and saves you money in the long run.

## Install a heat pump system

Heat pumps are the most efficient way to move heat with electricity. They not only provide heat and domestic hot water, they also double as an air conditioner during summer months.

## Invest in rooftop solar

Installing solar panels on your rooftop will pay for itself over time, lowering your electricity bills significantly—not to mention helping our province reduce its overall greenhouse gas emissions. Ten towns and municipalities in Nova Scotia currently have Property Assessed Clean Energy (PACE) programs to help finance solar installations, and more communities are adding similar programs. Check if it's available in yours!

**Tip:** Be sure to check with the federal and provincial governments to find out whether you're eligible for any loans or rebates!

## Keep the conversation going

Climate change and the energy transition affect everyone. We are advocating for systemic changes that can have enormous positive impacts. But right now, not enough people are talking about it. You can help by starting the conversation with friends, family, neighbours, and anyone else in your community to push the democratic process toward decarbonization. Connecting with or even volunteering for a local or provincial environmental organization (large or small!) can help them demonstrate a groundswell of support for renewable energy policy.

## Support solar gardens

The province and the federal government have funded the installation of community solar gardens in Antigonish, Berwick, and Mahone Bay. Would you like one in your Community?

## Write to your representative

MLAs and MPs listen to their constituents. Tell them to support the Ecology Action Centre's "It's In Our Power" Campaign to accelerate the transition to clean, reliable and affordable energy for Nova Scotia. We CAN get to 90% renewables by 2030 in Nova Scotia.

For more information

[Nova Scotia PACE Municipalities](#) - Nova Scotia PACE

[Solar Gardens Coming to Antigonish, Berwick and Mahone Bay](#) - Province of Nova Scotia



UP NEXT

Here's how to reach our 2030 goal  
of a renewable-powered future





# Getting Nova Scotia to 90% renewable-powered clean energy by 2030 is possible!

## Currently, Nova Scotia's goal is to supply 90% of our electricity needs with renewables by 2035.

Other studies have shown we can get there by 2030, five years earlier, while decreasing carbon emissions from other sources such as transportation, building heating and domestic hot water. This plan requires significant investments and hard work, but it's possible!

## Here is what we can support putting in place to achieve this goal:

- 1. Increase our wind capacity:** In collaboration with Indigenous and local communities, let's be mindful by choosing locations with minimal ecological impact.
- 2. Build on our solar capacity:** Larger, utility-sized solar farms will help achieve this goal, saving us more money over time.
- 3. Share resources between the Maritime provinces:** Another link to New Brunswick will allow Nova Scotia to import more renewable generated electricity, in turn leading to cost savings, increased efficiency and economic benefits for everyone.
- 4. Increase hydroelectricity imports from Quebec:** Hydro-Quebec has substantial renewable-generated electricity exports, more than enough to share.
- 5. Retrofits:** Retrofitting single-family dwellings and apartment buildings will reduce their energy demand, allowing them to run much more efficiently—and cheaply!
- 6. Heat pumps:** Unlike traditional heating systems, heat pumps are highly energy efficient because they move heat from one place to another rather than generate heat.
- 7. Utility-sized batteries:** Innovations in battery storage will help supply energy needs after sunset, or when the wind doesn't blow.
- 8. Electric vehicles:** In addition to saving you gas money, EVs are a unique energy storage solution—these could replace the need for large-scale batteries, creating a decentralized energy system with the right infrastructure.

Putting this plan into action to integrate renewables and low-carbon energy sources at a quicker pace means Nova Scotia can completely end its coal dependence. We'll meet 90% of our electricity needs with renewables while dramatically lowering carbon emissions—an important step to tackling climate change and toward a more livable future for us and future generations.



UP NEXT

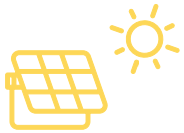
Read on for more actionable ways to tackle climate change

For more information

[Achieving a Net-Zero Canadian Electricity Grid by 2035](#) - Pembina Institute



# Help us take action on climate change



## You have more power than you think.

Climate change is a collective problem, and it will take collective action to address it. Whether you install solar or help us promote renewable energy, utilities don't have the final word on where your energy comes from. You can help advocate for cleaner energy and more efficient use across the province's electrical system. How? More solar systems, wind farms, battery storage, and home retrofits. Deploying heat pumps to warm our homes and water would also make a world of difference. Together, we can help bring about a better, fairer energy system for everyone in Nova Scotia with continued financial support from the provincial and federal governments.



## And bring Nova Scotia into the clean energy future.

Nova Scotia has a responsibility to do its part to ensure a sustainable future. According to the world's leading climate scientists, "deep, rapid and sustained greenhouse gas emissions reductions in all sectors." A transition to clean, renewable energy is the first step to avoiding the worst outcomes of global warming. At stake is a habitable Nova Scotia—a habitable planet—for those of us alive today and for generations to come.

For more information

[Energy Poverty](#) - The Homeless Hub

[Urgent Climate Action Can Secure a Liveable Future For All](#)  
- Intergovernmental Panel on Climate Change



## We can tackle energy poverty.

Imagine choosing between groceries and heating your home. This kind of grim decision is a sad reality for many in our province. Energy poverty can exacerbate other challenges, like health, addiction and mental health. In a healthy, fair, renewable-powered community, we'd all share the peace of mind that comes with energy security.

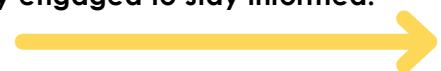


## But we need your help to make sure our government leads the charge.

The seated provincial government writes policies that can support—or hinder—Nova Scotia's progress toward generating more clean, renewable electricity. And it can provide funding to help accelerate the transition. Our provincial leadership has to take a bold stand to build a better energy future. Letters and emails to your MLA on renewable energy issues can help, as they make energy decisions that affect us all.

UP NEXT

**But the biggest thing you can do?  
Stay engaged to stay informed.**



# Let us support you in advocating for cleaner, renewable-powered energy

At the Ecology Action Centre, we're advocating loudly for energy policies that ensure that Nova Scotia is powered by 90% renewables in 2030.

Stay connected and learn about other ways to engage.

[ecologyaction.ca](https://ecologyaction.ca)

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