

PARKER MOUNTAIN TURBINE

838
Homes

Every year this turbine produces enough electricity to power about 838 average Nova Scotia homes.

This is a Vestas V100 wind turbine generator. Vestas, a Danish company, is a long time pioneer in wind energy and the world's largest turbine manufacturer.

Generator Max Capacity:	1.99MW
Nacelle Height:	100 m (328 ft)
Blade Length:	50 m (164 ft)
Max Height:	150 m (492 ft)
Swept Area:	7850m² (2 acres)

Revolution Speed:	8.8-14.9 rpm
Cut-in Wind Speed:	11km/h (6 knots)
Cut-out Wind Speed:	72km/h (39knots)
Maximum Output at:	45km/h (24knots)
Operating Temp. Range:	-20°C to 40°C

- 1** Wind flows over the blades, turning the rotor
- 2** The rotor turns a gearbox, which turns an electric generator
- 3** On board computer systems monitor the turbine
- 4** Electricity is fed directly to the distribution grid
- 5** Homes and businesses draw electricity from the distribution grid
- 6** All distribution lines connect to the substation
- 7** High-voltage lines connect the substation to the rest of the province

WIND POWER

Wind is a variable energy source, and produces electricity when the wind is blowing. When you see this wind turbine spinning, electricity is being generated and there is that much less electricity being drawn from fossil fuel power plants in other parts of Nova Scotia.

TRANSMISSION & DISTRIBUTION

High-voltage transmission lines transmit electricity from central power plants to substations across Nova Scotia. The substation lowers the voltages to a usable level. All of the power lines we see on streets are part of the distribution system that originates at a local substation.

The electricity from the Parker Mountain Turbine feeds directly into the distribution lines. This means that 100% of the electricity from this wind project is consumed by homes and businesses in the Annapolis Royal area.

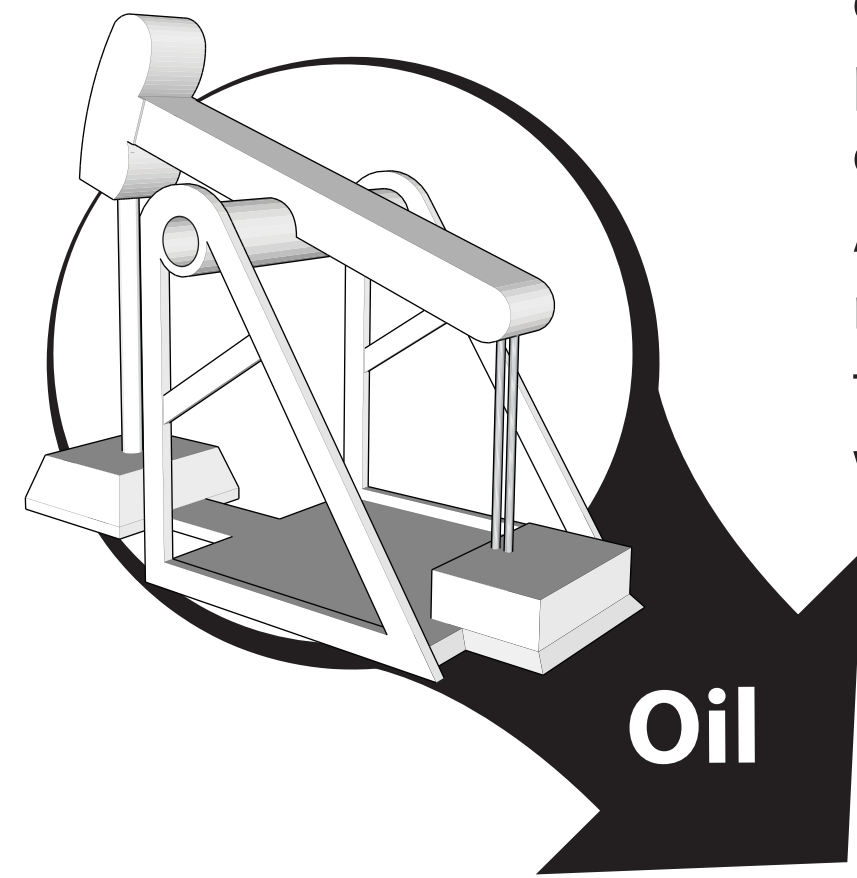
ELECTRICITY IN NOVA SCOTIA



Nova Scotia has a long history of generating electricity from fossil fuels, such as coal, petroleum, and natural gas.

Now we send money elsewhere to import fuel for electricity that is generated with large, centralized power plants. Burning fossil fuels releases CO₂ and other greenhouse gases.

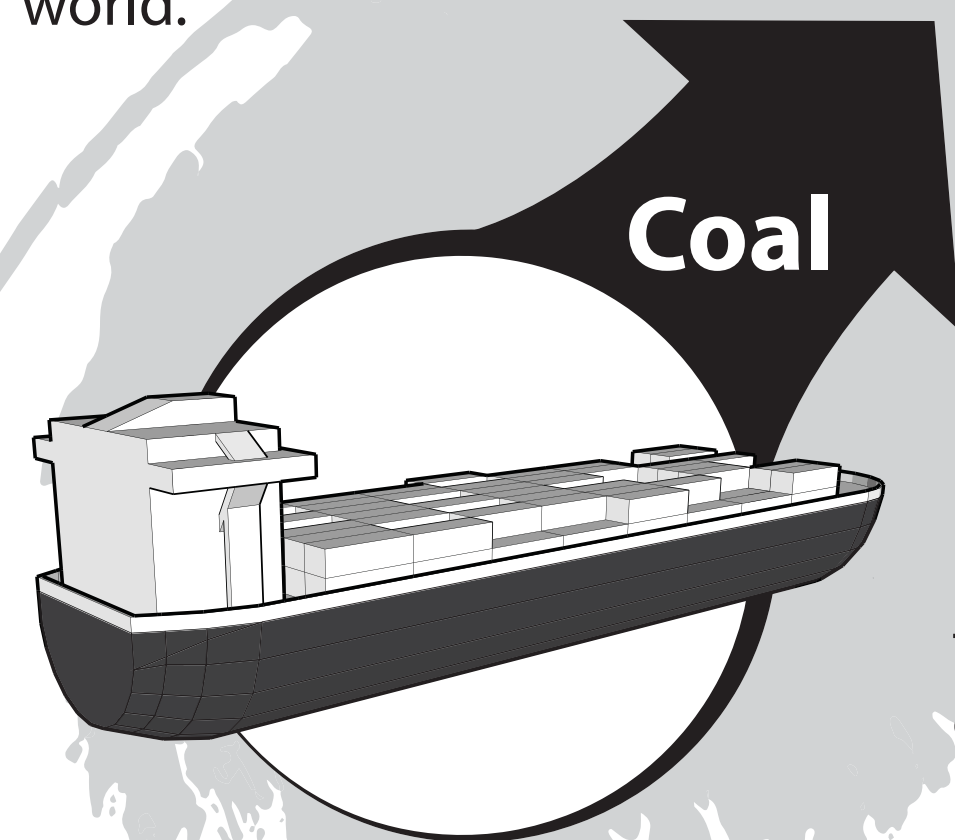
As we transition away from fossil fuels and toward renewable energy sources, we will reduce the negative impacts that our electricity system has on the world around us.



IMPORTED FUEL EXPORTED \$\$\$

To meet Nova Scotia's electricity demands, \$545 million was budgeted for fuel in 2009 alone. The vast majority of that went to imported coal. Every dollar spent on these fuels is money that leaves this province.

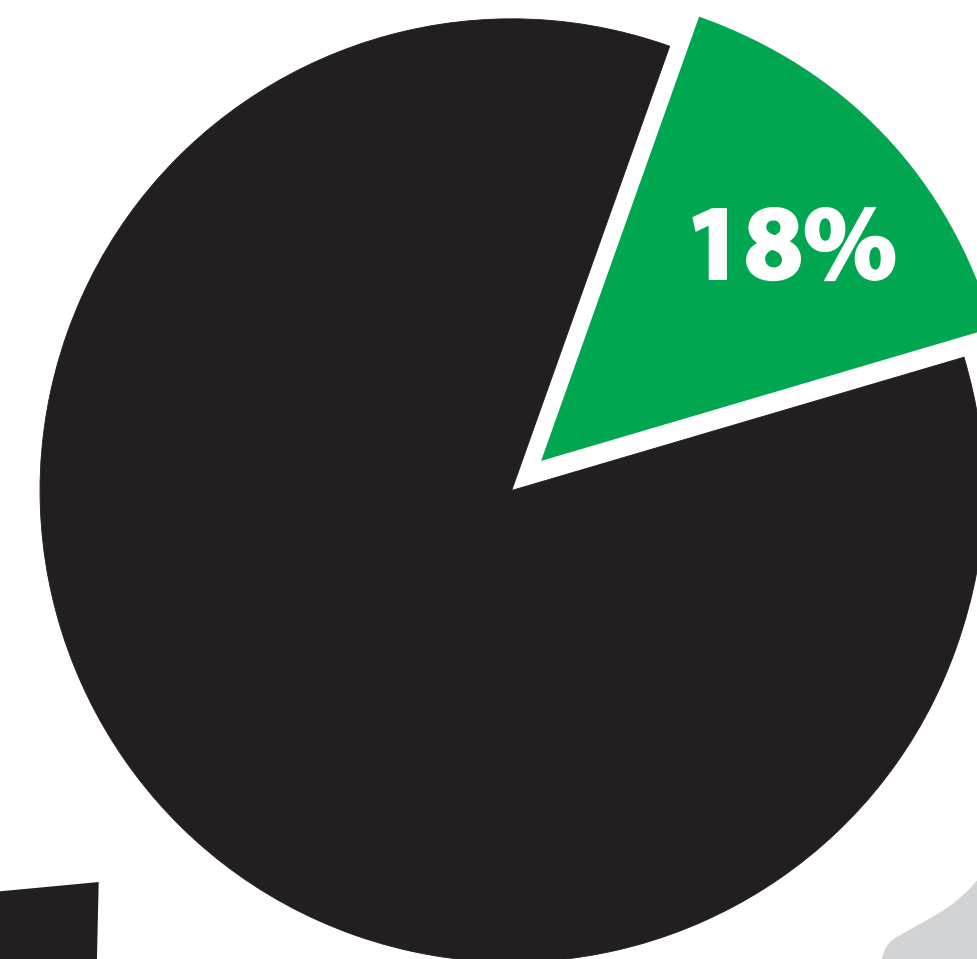
Sourcing our electricity from fossil fuels, especially imported ones, puts Nova Scotians at the mercy of volatile markets and natural disasters around the world.



LOCAL, RENEWABLE FUEL

Nova Scotia has tremendous potential to harness the power of the sun, wind and tides. Renewable energy sources strengthen our energy security, making our fuel supply less dependent on volatile markets.

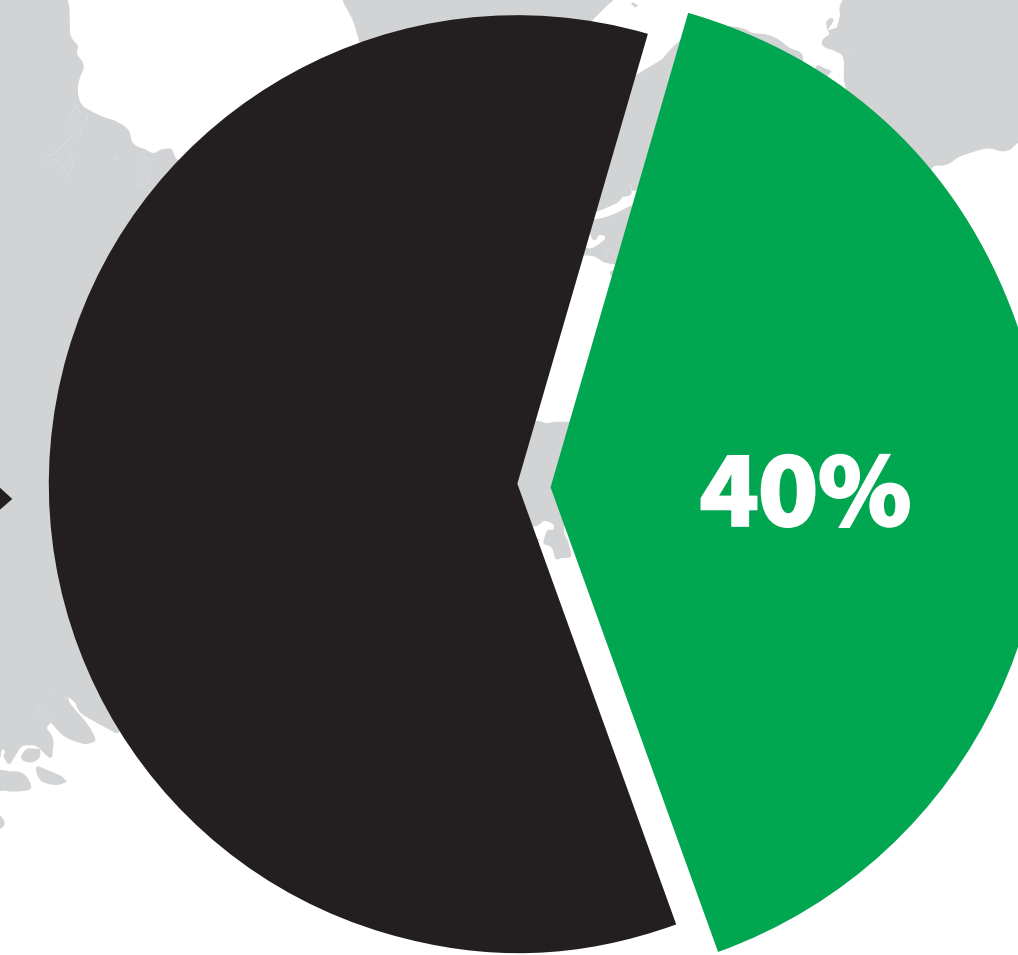
The money that we spend when we choose to purchase electricity from renewable sources has the ability to stay in Nova Scotia and contribute to our local economy.



2013

ENERGY MIX

In 2012, the vast majority of the electricity in Nova Scotia was generated from fossil fuels. 18% of the electricity consumed was generated from renewable sources such as small hydro plants, wind and other sources.



2020



2035

WHAT'S NEXT?

Nova Scotia will continue to develop our wind, solar, biomass and tidal resources.

Scotian WindFields believes that Nova Scotia has the ability to transition to a 100% renewable electricity system. We look forward to living in a province that is powered by the renewable resources around us and owned by the people utilizing that power.

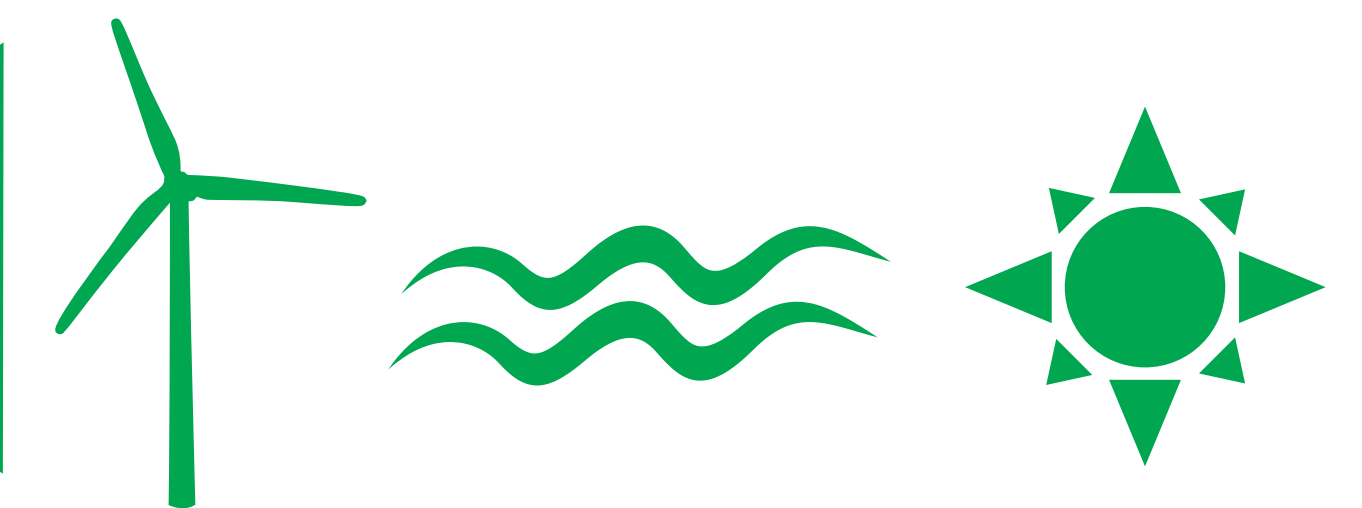
ENERGY GOALS

As a part of Nova Scotia's Renewable Electricity Regulations, the province has mandated a gradual transition from fossil fuels to renewable electricity resources. As of 2020, the province will generate at least 40% of its electricity from renewable sources within the Atlantic Region.

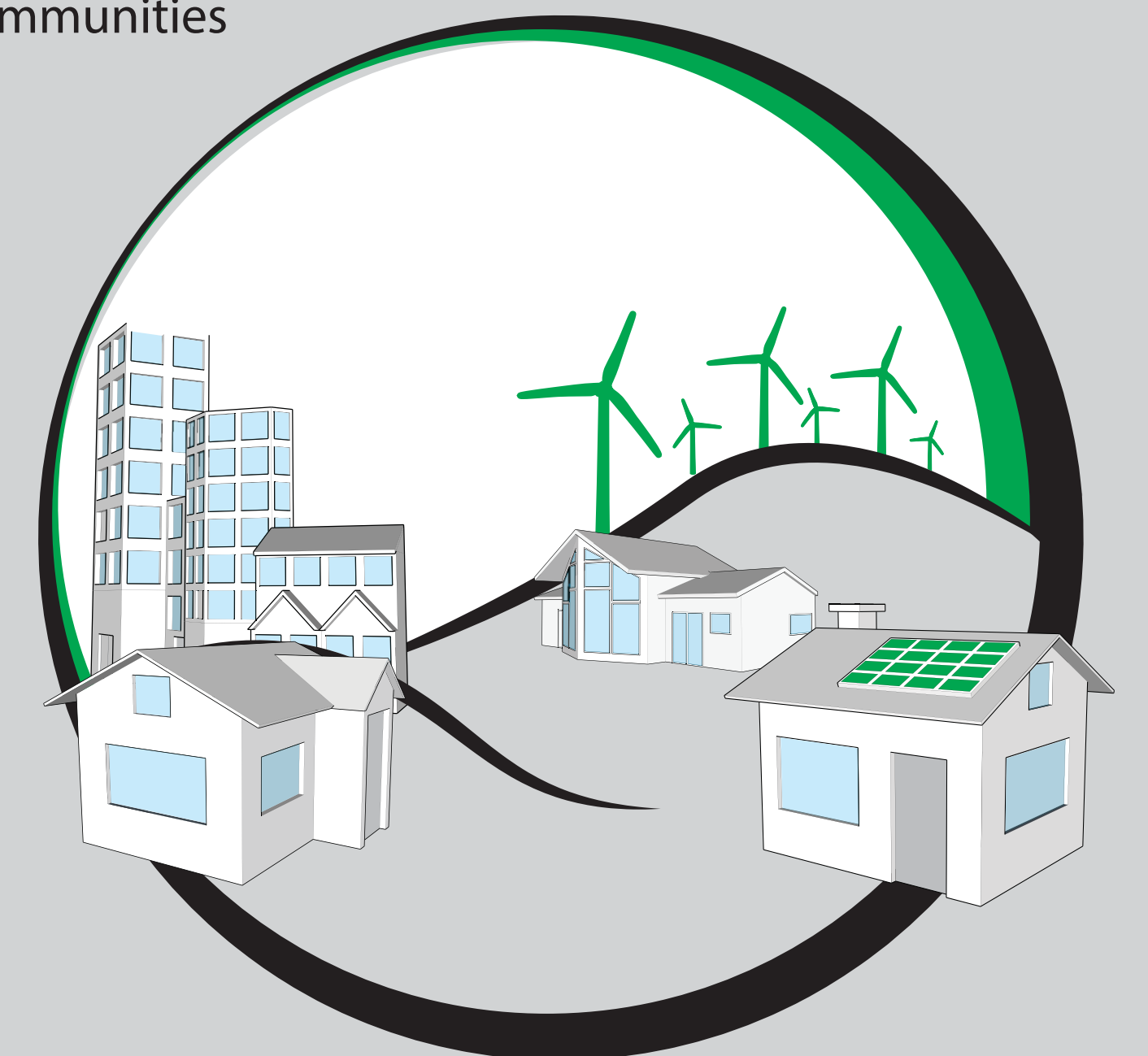
RENEWABLE ELECTRICITY

Renewable electricity is electricity that has been sourced by harnessing the power of the wind, ocean and sun. Renewable electricity does not need fuel from foreign or fossil fuel sources and releases no harmful emissions.

By utilizing renewable resources available locally and improving energy efficiencies, communities can reduce greenhouse gas emissions and make a difference in climate change impacts, both locally and globally.



Energy systems are most resilient when they are distributed, diversified and controlled by the community. Nova Scotia is adding more local, renewable sources of energy to its electrical generation mix. Investment in decentralized, local sources of clean energy mean healthy, stable communities



Scotian Wind Inc is a community-owned corporation formed under the Community Economic Development Investment Fund program of the Provincial government. Scotian Wind is wholly owned by Nova Scotian investors and donates 1% of revenue back to the communities in which its turbines are located.