West Kootenay
100% Renewable Energy Plan

Nelson
October 2020

Creating a pathway for local communities to use 100% Renewable Energy for transportation, buildings, electricity and local infrastructure no later than 2050.

Why renewable energy?

Renewable energy is cleaner and more affordable than fossil fuels in the long run. Transitioning to 100% renewable energy will take some time, and it can pay off for everyone.

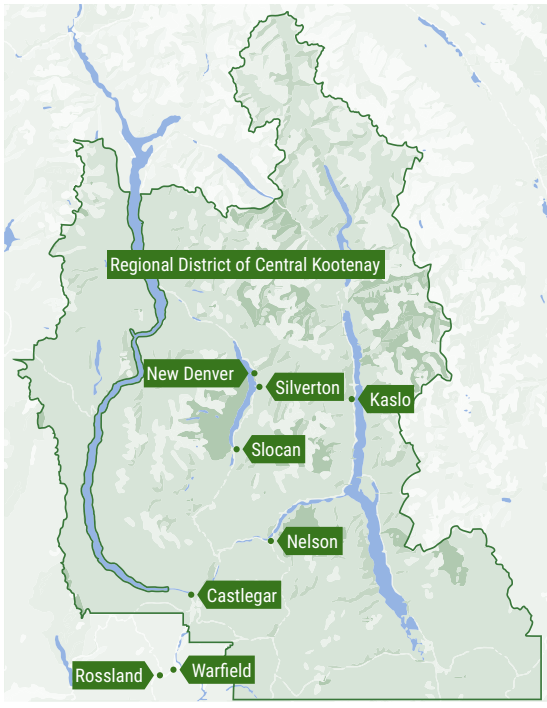
Health – Renewable energy means cleaner air, with less asthma, heart and lung disease, and mental and emotional stress.

Economic strength – The transition to renewable energy creates local employment and increases energy self-reliance. Our communities have more control over energy prices when we generate it locally. Conserving energy also saves a lot of money.

Safety – Renewable energy helps reduce carbon pollution and climate impacts, making communities safer from wildfires, flooding, and slides, and droughts.

A regional approach

Nine Kootenay Governments have pledged to reach 100% renewable energy by 2050 in community energy uses. They have worked together to reflect the connections among West Kootenay communities, share resources, and promote future collaboration.



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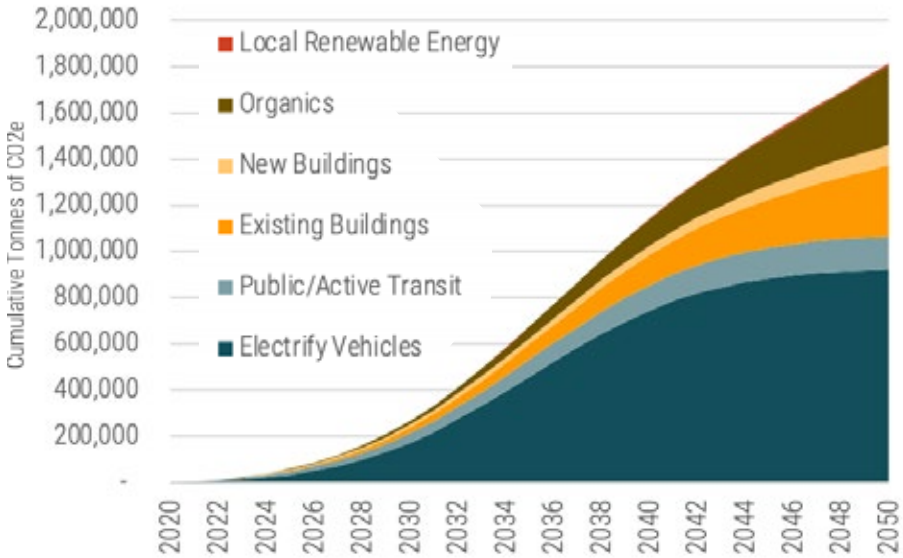
Big Moves

To achieve 100% renewable energy by 2050, some big moves are going to be necessary. The West Kootenay 100% Renewable Energy Plan includes five Big Moves that local governments can take, and each local government has chosen specific actions.

Big Moves	Transportation	Buildings	Zero Waste	Renewable Energy	Supporting Actions
Strategies	• Electrify passenger vehicles • Public Transportation • Active Transportation • Commercial Vehicles	• Raise efficiency standards for new buildings • Improve efficiency of existing buildings	• Avoid creating waste • Divert waste from landfills • Capture landfill gas	• Generate local renewable energy	• Carbon Storage • Local Government Actions • Asset Management
Potential Next Steps	• Add electric vehicle charging stations • Add or improve walking routes	• Subsidize and support home improvements for energy efficiency	• Create regional compost program and bylaws	• Advocate for better energy policy • Improve the electrical grid	• Choose electric vehicles when replacing existing fleets



By working together, we can prevent 1,800,000 tonnes of carbon emissions – as much as taking 13,000 cars off the road for 30 years!

Why now?

The sooner we transition to renewable energy, the sooner we reap the benefits. Many communities have already taken important steps, but more action is needed to accelerate the transition. To keep our communities healthy, strong, and safe, we need to make it easier, faster and cheaper for people to choose renewable energy.

Now is a good time for local governments to access coronavirus stimulus funding to kick-start renewable energy projects that will benefit our communities for years to come.

Photo: Kyle Peace

Nelson

Most of Nelson's non-renewable energy use is passenger vehicles followed by residential buildings then commercial buildings.

City of NELSON

Nelson's Actions

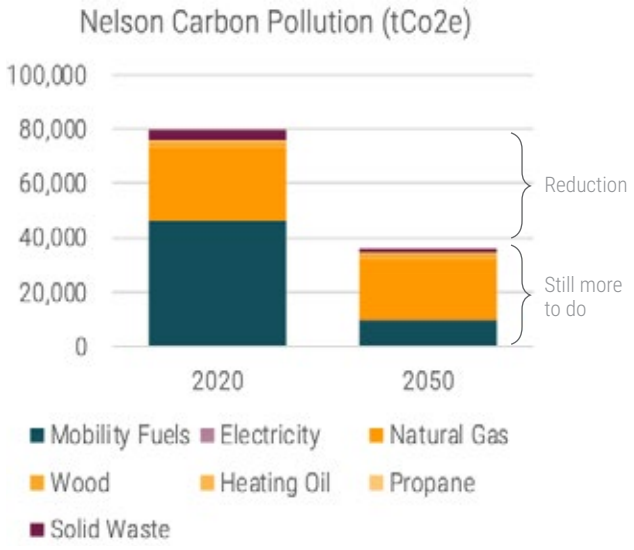
Nelson has identified proposed actions for each strategy, including:

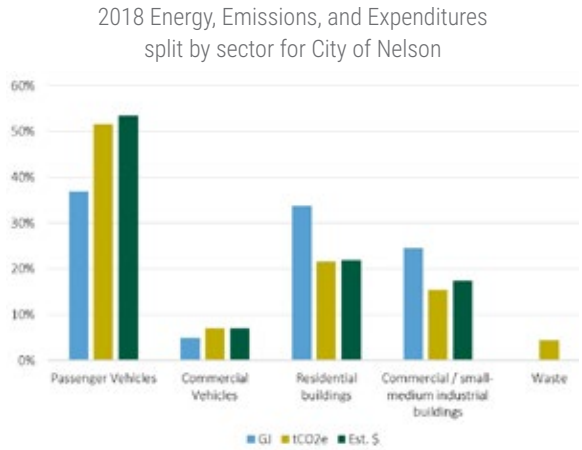
- Develop an electric vehicle charging strategy
- Increase efficiency requirements for new buildings (Step Code)
- Adopt a voluntary standard for retrofitting older buildings
- Participate in regional organics composting

Nelson is developing a Climate Change Action Plan. To learn more about Nelson's actions, go to nelson.ca/804/Climate-Change-Action

The strategies with the greatest impact on carbon pollution will be:

- Electrifying Passenger Vehicles
- Improving Existing Buildings
- Public and Active Transportation
- Composting organics & capturing landfill gas





Nelson's Next Steps

Although the Big Moves can make a lot of progress toward 100% renewable energy, new kinds of technology or policy at the federal or provincial level will be needed to fill the gaps. In Nelson, the main gaps are:

- Natural gas emissions in existing buildings
- Commercial vehicle emissions

Nelson Quick Facts

Area & population (density)*	11.95 km², 10,572 (884.3/ km²)
Average Age (portion of population 65 or older)*	42.5 (18.7%)
Total Private Dwellings (permanently occupied)	5,061 (4,822)
Median Household Income*	$56,714
Utility infrastructure	Natural Gas (Fortis BC), Nelson Hydro, BC Transit
Mean solar insolation per day**	ND
Heating Degree Days 2018 (2050 projection)	4,342 (3,753)
Cooling Degree Days 2018 (2050 projection)	54 (132)
Walk/Bike Score***	77/64

* Statistics Canada 2016 Census Data
**Natural Resources Canada, Photovoltaic Potential and Insolation Dataset

West Kootenay
100% Renewable Energy Plan

What you can do...

- **Review a copy of the full plan**.
- **Complete a survey** to share your priorities for renewable energy by **November 20, 2020**.
- **Register** for a public meeting.
- **Send in your comments**: info@westkootenayrenewableenergy.ca or call (778) 760-3772
  Long distance charges may apply

westkootenay**renewableenergy**.ca