Prepare for Climate Change and Reduce Energy Consumption

Indicator #2—Per capita non-renewable energy use

Why is this indicator important?

A goal of the Regional Growth Strategy (RGS) is to reduce the consumption of non-renewable energy within the region. Energy is generated through the depletion of non-renewable fossil fuels. Non-renewable energy consumption also emits greenhouse gas emissions that change the earth's climate. Local governments can help create communities that are more energy-efficient to reduce the depletion of natural resources and the emission of greenhouse gases. The RDN and member municipalities may reduce household energy consumption through efficient land use patterns, site design, building design

What does this indicator tell us?

This indicator tells us the average amount of energy from non-renewable sources being used by each person in the region (and amounts for municipalities and electoral areas). Non renewable energy is consumed as natural gas to heat homes and buildings, or as gasoline for personal transportation. Wasteful energy consumption depletes non-renewable resources and generates greenhouse gas emissions that cause climate change. The RDN and member municipalities may influence the amount of energy consumed through more efficient transportation options and building forms. Electricity consumption is not included within this indicator, as it is primarily produced in the form of renewable hydro electricity. Wood heat is also not included as it is a renewable form of energy.

Target: Reduce per capita energy use

Where do we want to go?

The RGS aspires to create communities and environments that are conducive to behaviors that conserve energy, such as improved transportation options or more energy efficient forms of housing. The RGS explains that "reducing energy consumption means building compact, complete communities that are not auto-dependent, increasing the number of multi-family dwellings, supporting (near) net-zero building design and construction, and supporting the use of renewable energy and district energy systems."

What is included in this indicator?

This indicator relies on information from the Province of BC's Community Energy and Emissions Inventory (CEEI) for the amount of non-renewable energy consumed by the on-road transportation, buildings, and solid waste sectors. The 2011 census of population is used to report energy consumption per person in the RDN for 2010-2012 and the 2016 census population is used for 2014-2016.

Where are we right now?

In 2010, each person in the RDN consumed approximately 80 gigajoules (GJ) of non-renewable energy, based on estimates from the CEEI and the 2011 census population data. The estimate includes energy consumption for on-road transportation and buildings. The CEEI discontinued the release of energy consumption for the transportation sector after 2010 and only released information for the building sector. In 2012, each person in the RDN consumed 21.8 GJ of non-renewable energy in the building sector based on the 2011 census population data compared to 35.5 GJ in 2016 based on the 2016 census population data, an increase of 61 percent.

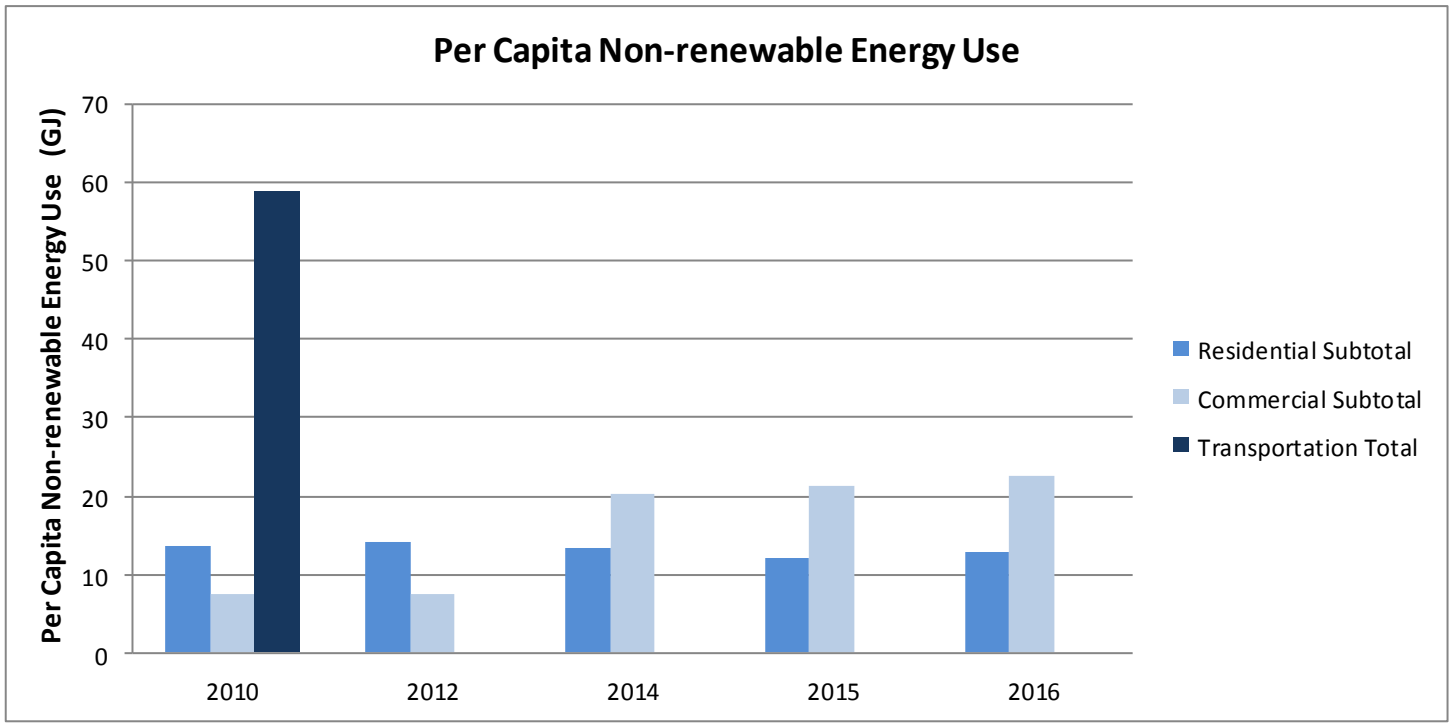
Goal 1

Prepare for Climate Change and Reduce Energy Consumption

Target: Reduce per capita energy use

2010 Energy Consumed Per Capita		2012 Energy Consumed Per Capita*	
Total Energy Consumed	80 GJ	Total Energy Consumed	21.8 GJ
Building Totals	21.2 GJ	Building Totals	21.8 GJ
Residential Subtotal	13.7 GJ	Residential Subtotal	14.2 GJ
Commercial Subtotal	7.5 GJ	Commercial Subtotal	7.6 GJ
Transportation Totals	58.8 GJ		

2014 Energy Consumed Per Capita		2015 Energy Consumed Per Capita		2016 Energy Consumed Per Capita	
Total Energy Used	33.6 GJ	Total Energy Used	33.2 GJ	Total Energy Used	35.5 GJ
Residential	13.4 GJ	Residential	12.0 GJ	Residential	12.8 GJ
Commercial	20.2 GJ	Commercial	21.2 GJ	Commercial	22.7 GJ



On-Road Transportation

Residential Buildings

Commercial Buildings

* The CEEI transportation data not available after 2010

Updated August 2018

Every reasonable effort has been made to use comparable data with consistent geographies and methodology. Where data limitations exist, these are noted within the document content, chart or table. For further details of the results, please refer to the RGS Annual Reports for information: https://www.rdn.bc.ca/rgs-progress-reports