

Winds of Change: Why Wind Energy Should be a Focus as a Green Energy Source

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Problem Statement

- Nova Scotia should focus on increasing their percentage of green energy within the province. Nova Scotia Power has put forth that by the end of 2020, forty percent of energy in Nova Scotia will be green, and wind energy should be at the forefront of this commitment. This goal provides positivity both economically environmentally.



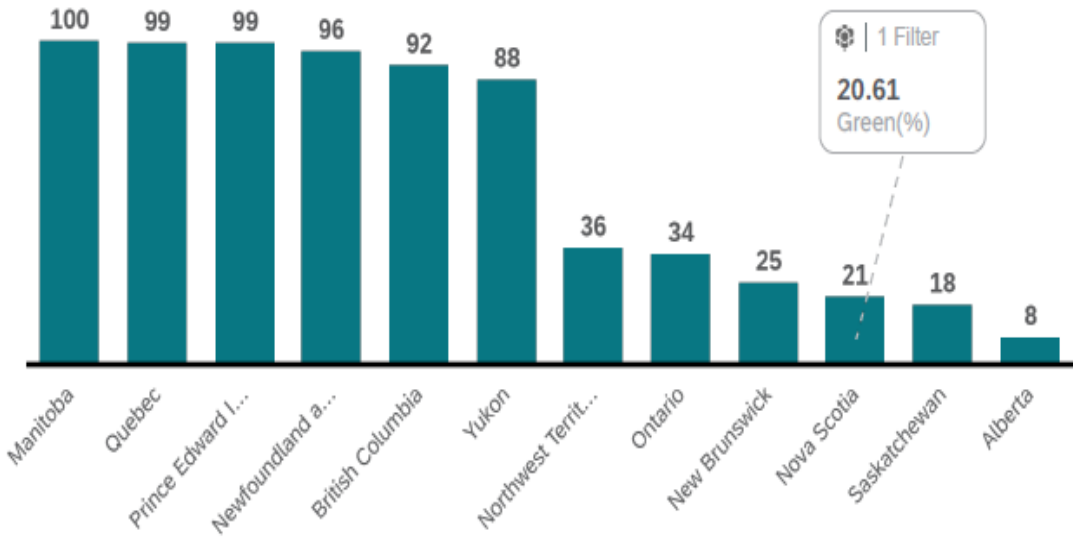
65% of total energy was generated by green energy in Canada in 2018.

Green energy includes hydro, tidal, wind, solar

In green energy

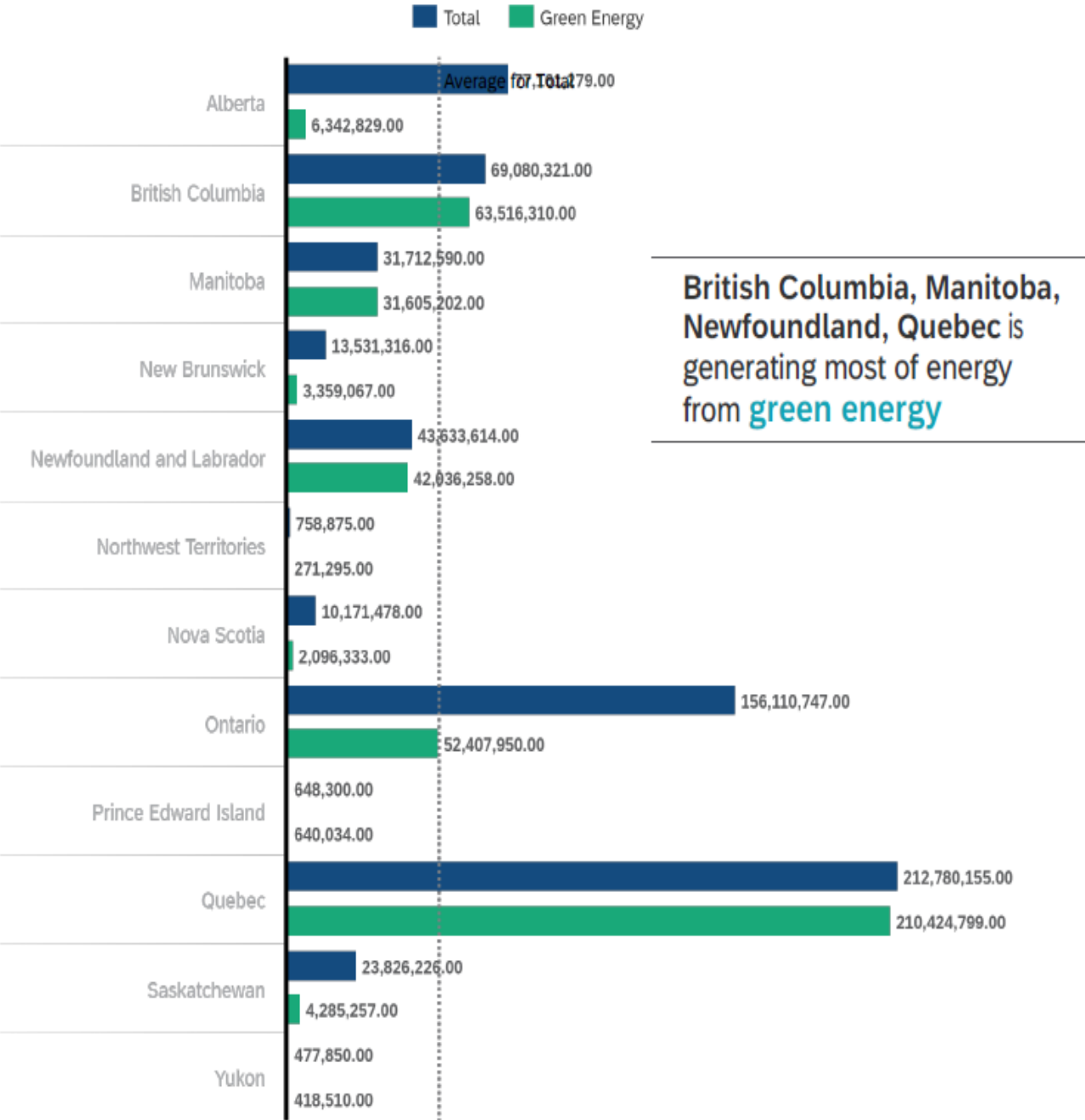
- 92% is hydraulic energy
- 8% is wind energy

Green Energy Percentage(%)



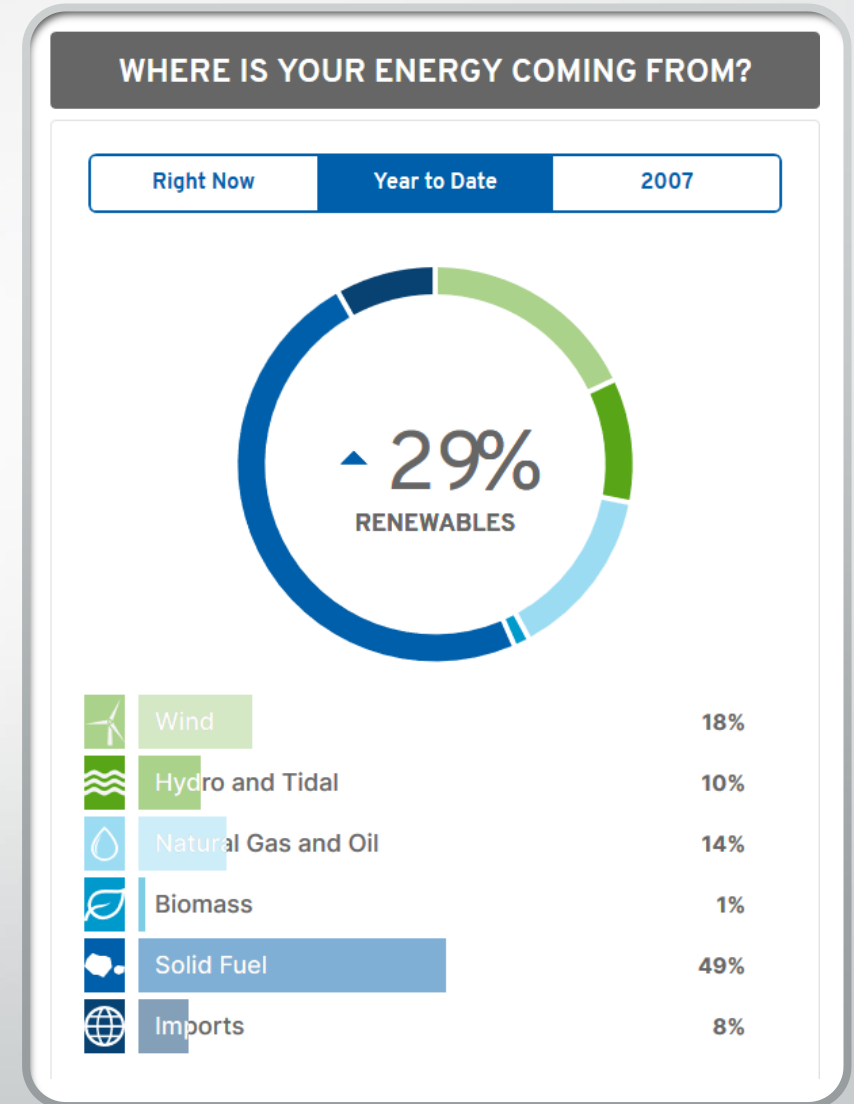
Total energy and Green energy per province(Mwatt)

1 Filter



Some Quick Facts about Wind Energy in Nova Scotia

- Wind energy accounts for 18 percent of energy in Nova Scotia
- No impact on Greenhouse Gasses
- No water use impacts (particularly important in Nova Scotia, with \$2 billion dollars in exports in seafood)
- Over 19 endangered species in Nova Scotia are aquatic



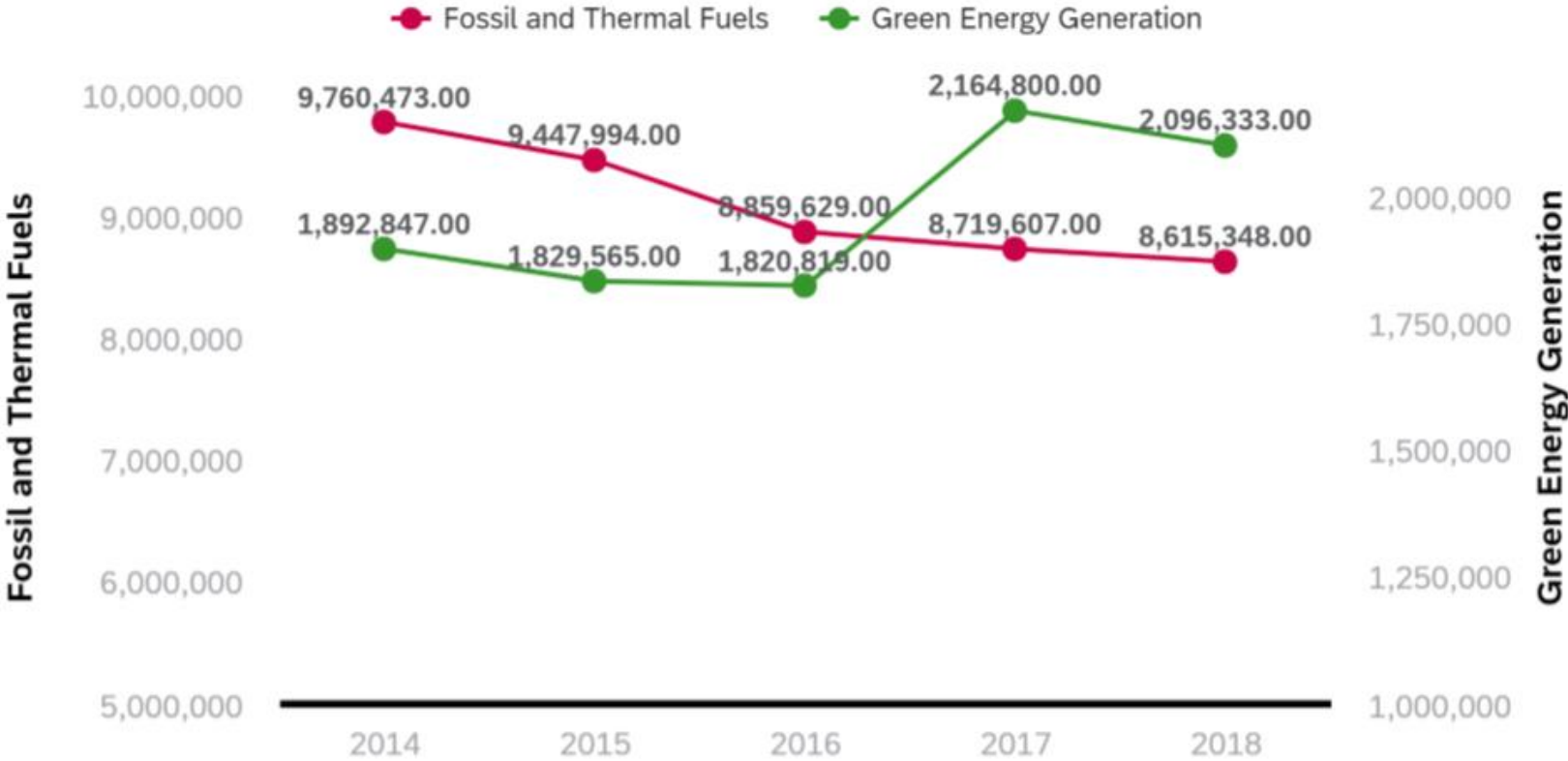
Datasets Used

- Price Index of Energy
- Energy Generation
- Greenhouse Gasses – Emissions
- Sea Ice Levels
- World Trade to United States

	Nova Scotia (map)				
	Electricity quantity				
Electric power, components	2014	2015	2016	2017	2018
	Megawatt hours				
Total generation of electricity ^{1 2}	10,640,910	10,220,036	9,820,029	10,087,962	10,171,478
Total imports of electricity from the United States	0	0	10,091	0	13,044
Total exports of electricity to the United States	0	0	73,080	78,991	39,169
Total electricity available for use within specific geographic border ³	10,987,050	11,266,513	10,105,289	10,448,024	10,583,348

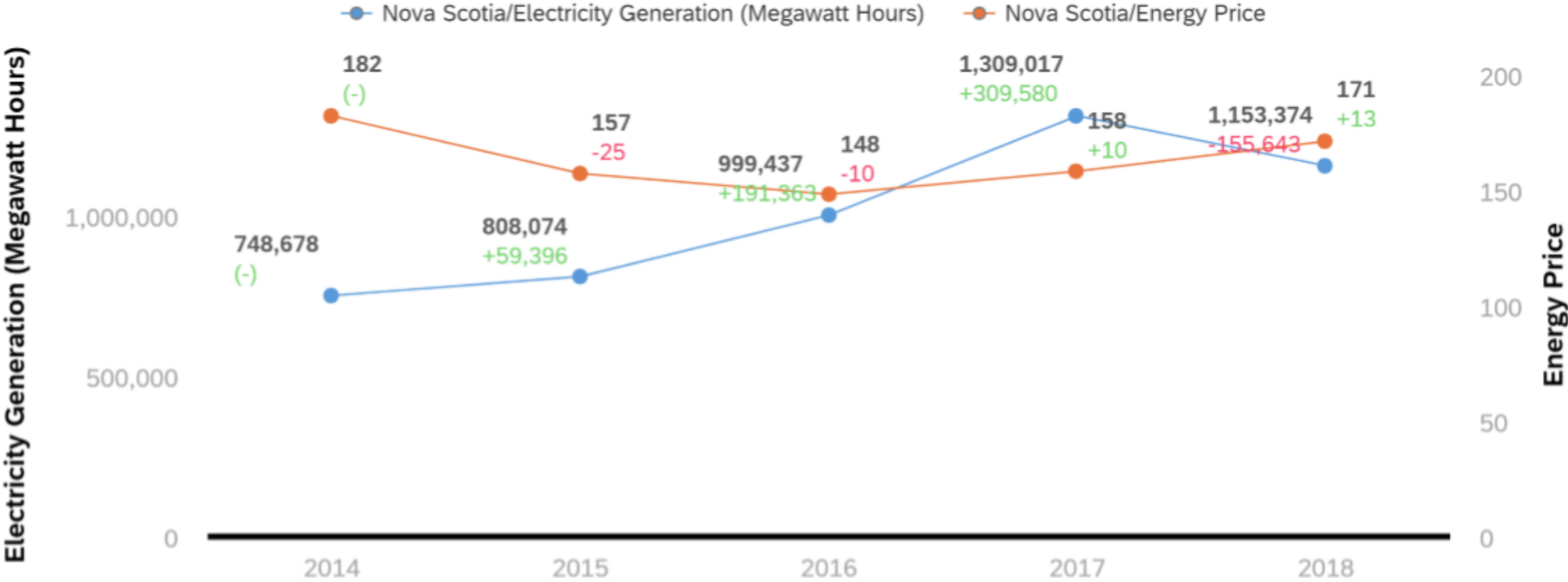
Green Energy V.S. Non-renewable Energy in Nova Scotia

in USD



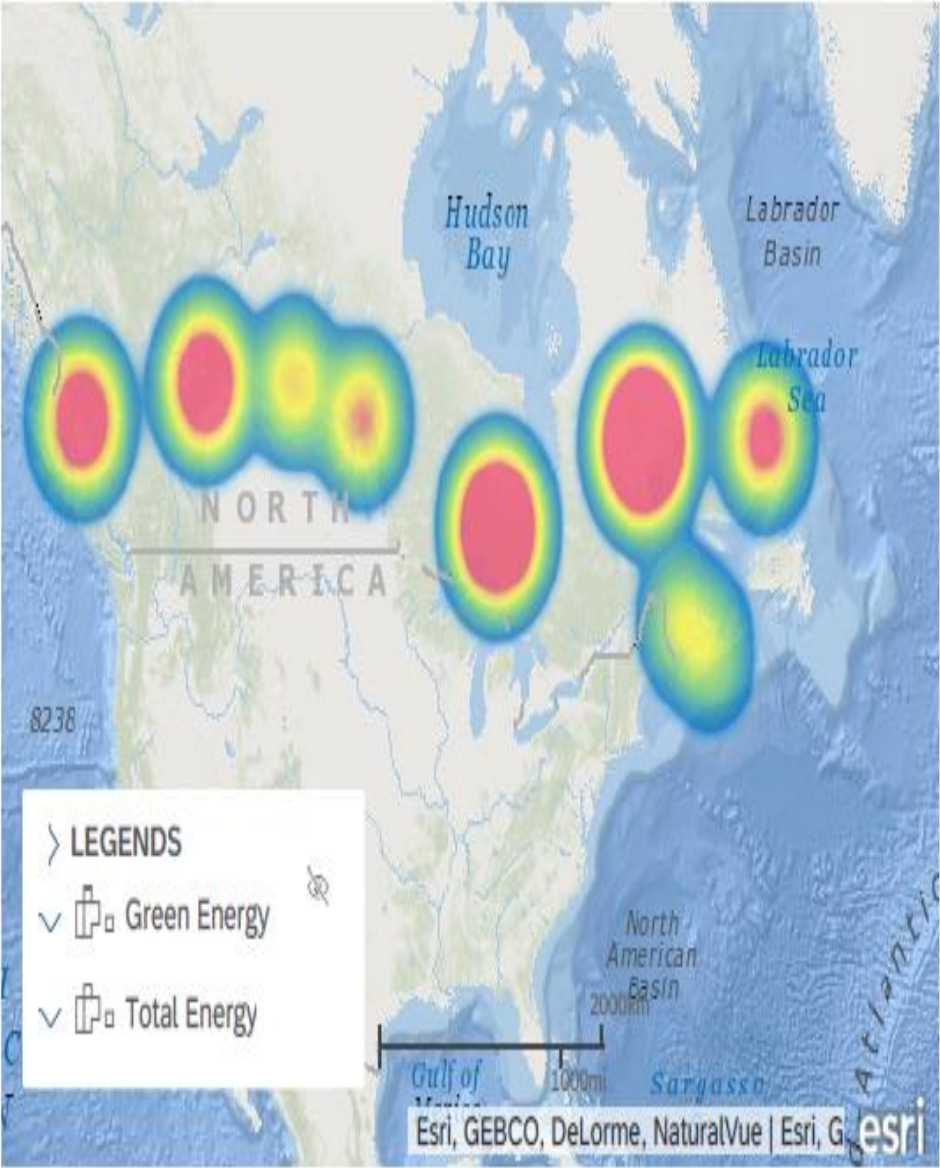
Electricity Generation and Energy Price per Geographical Location (Annual)

1 Filter | 1 Variance



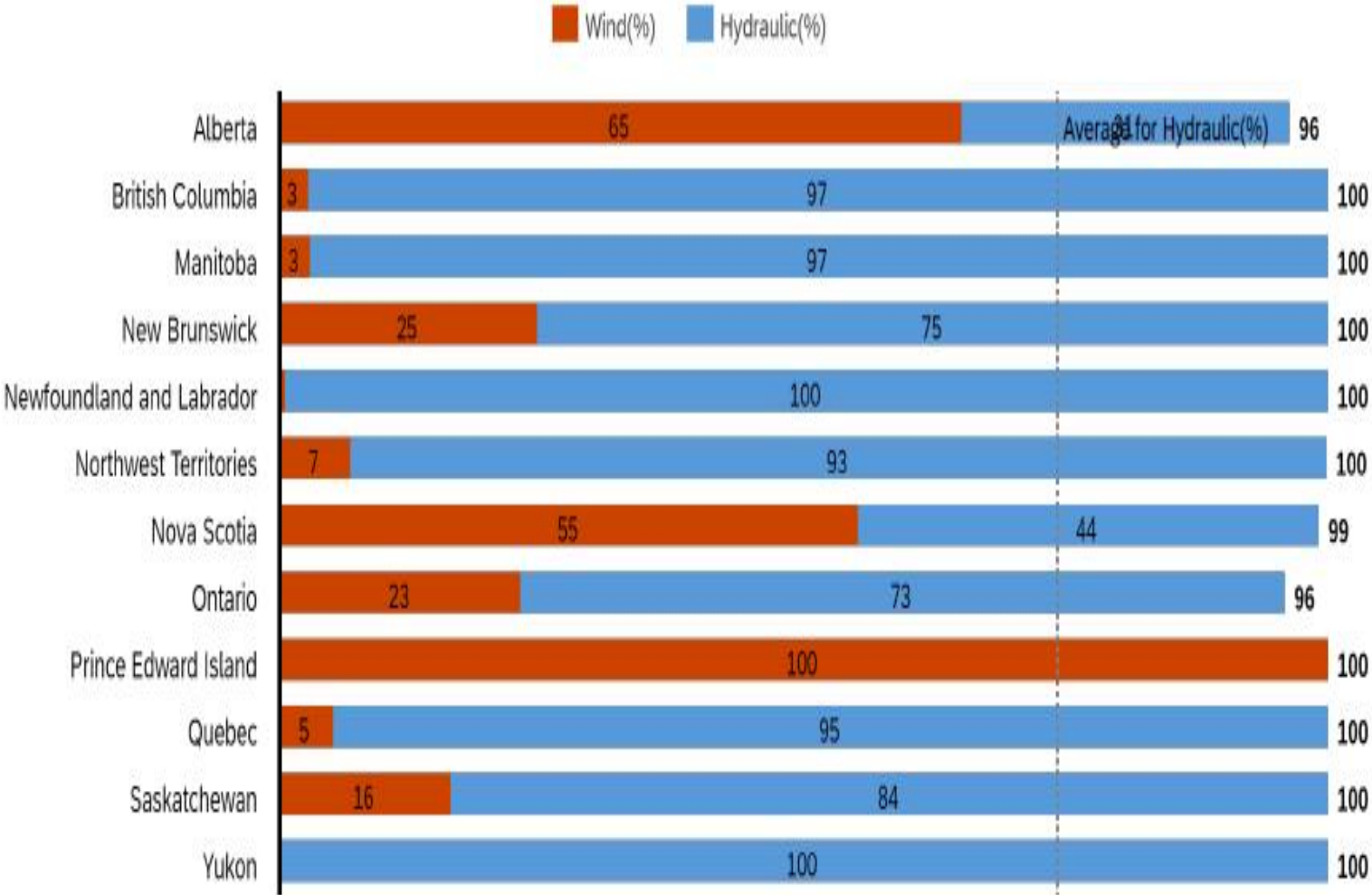
Total Energy and Green Energy

Subtitle |  * Choose layer

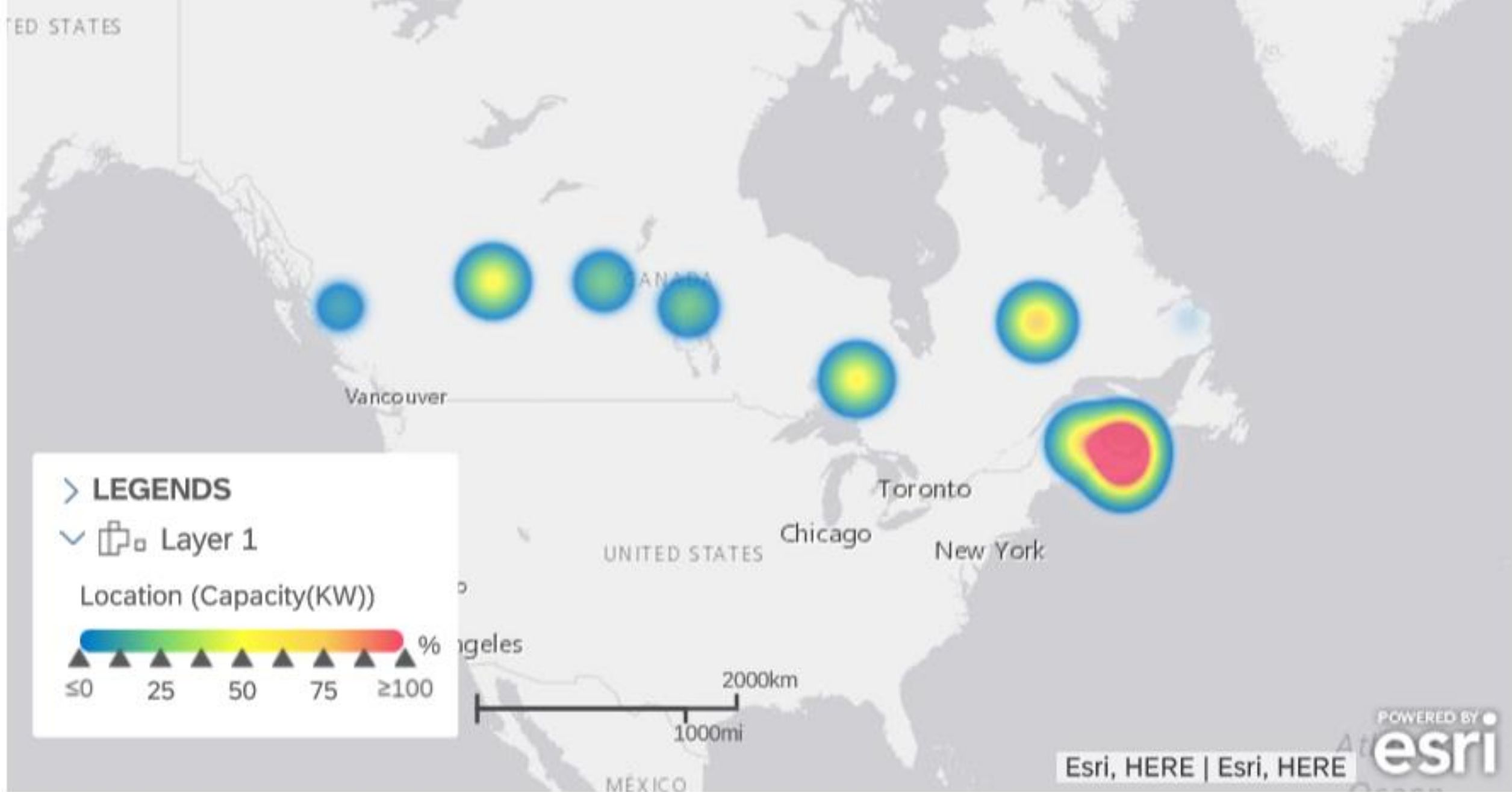


Hydraulic, Wind percentage in Green energy(%)

* Others are tidal, solar

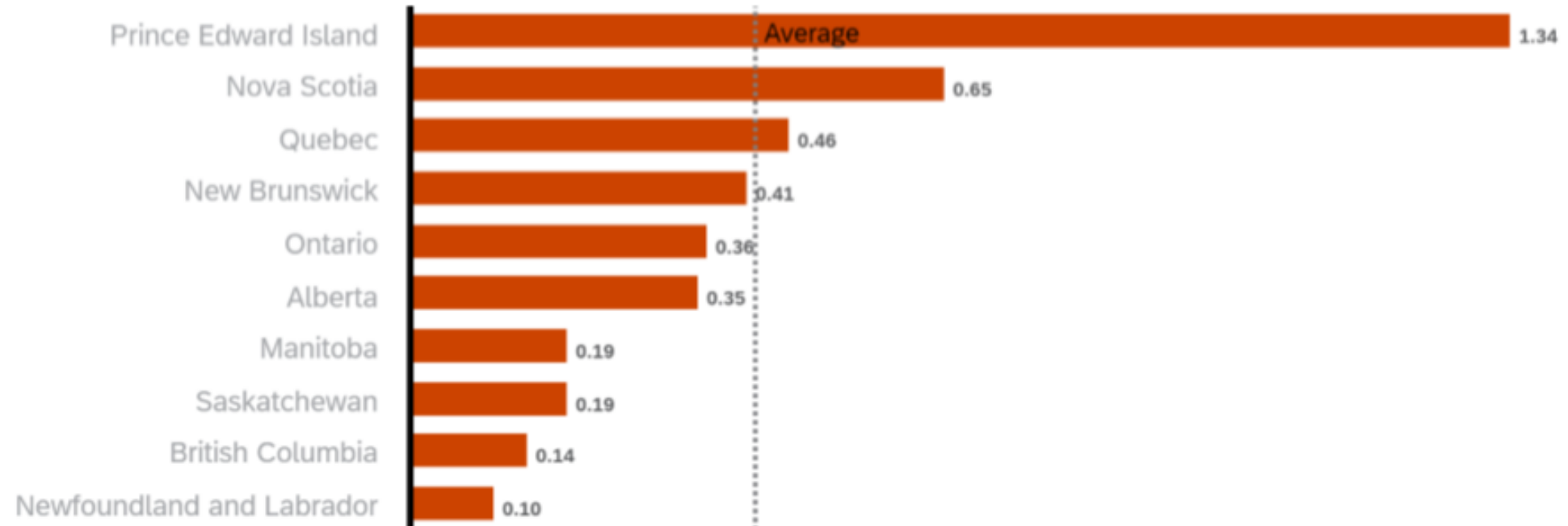


" Alberta, Nova Scotia, PEI is generating Wind energy more than Hydraulic energy "

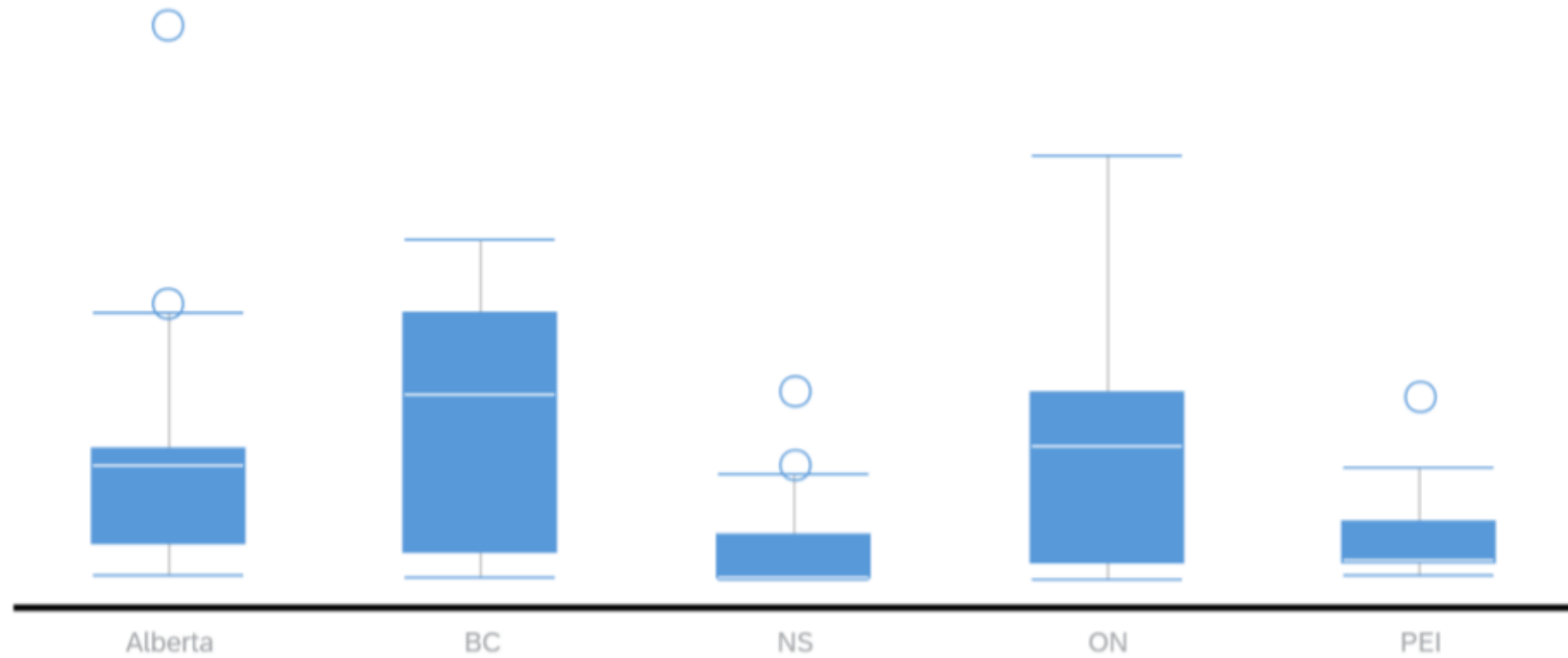


Capacity(KW) per Person

Capacity(KW) per Person



Capacity (MW) distribution per Wind Farm



Questions?



Thanks!

