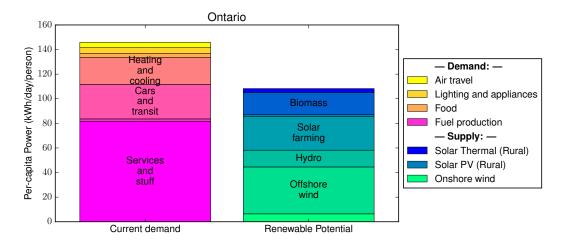
Renewable energy scenario for Ontario

This snapshot is based on "The renewable energy landscape in Canada: a spatial analysis," Renewable & Sustainable Energy Reviews (2016), doi:10.1016/j.rser.2016.11.061. Our project assembles all sources of energy use into familiar household categories, and it identifies feasible sites for renewable energy generation across Canada. CONTACT: C. BARRINGTON-LEIGH, MCGILL UNIVERSITY

Ontario's dense population and lower fraction of primary extraction industries gives it a relatively low per capita energy usage at present (see below). Nevertheless, in absolute terms it is the second largest consumer of power in Canada, after Alberta. We find a diversified portfolio of available renewable energy for Ontario which amounts to the third largest among the provinces, but it is insufficient to meet Ontario's demand. The largest component of renewable energy potential in our assessment comes from offshore wind, largely on Lake Erie and Georgian Bay, but the portfolio includes also significant bioenergy, solar farming, hydroelectricity, and some onshore wind.



The stack on the left shows the sum of all energy currently consumed, as both electricity and combustion, in Ontario. On the right is a breakdown of available renewable energy resources.

For maps, methods, sources, and more detailed discussion, see our full paper. We do not carry out an economic analysis, but our criteria for generation siting relate also to economic feasibility. Overall, our analysis shows that all but two provinces in Canada have sufficient renewable energy potential to meet the entire current energy demand.

