

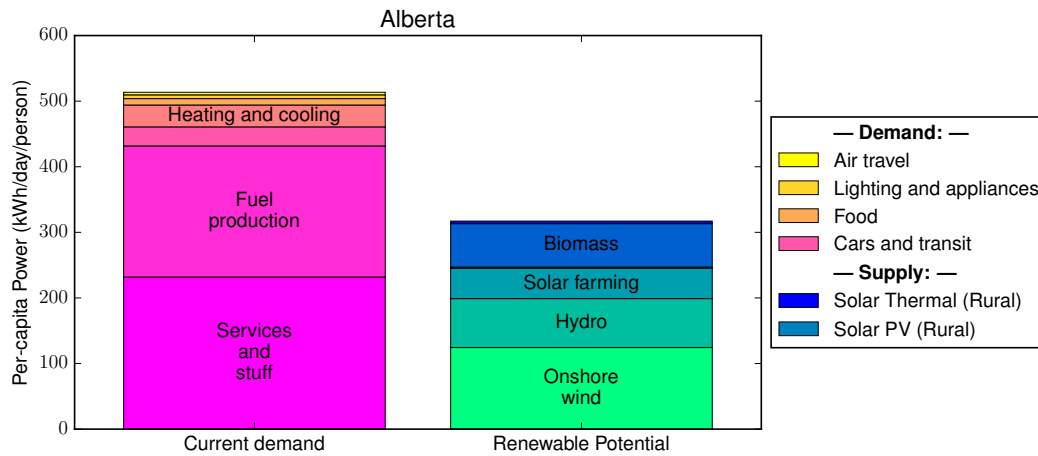
# Renewable energy scenario for Alberta

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](#)

Alberta stands out from other provinces in its current per capita energy requirements, which amount to over 500 kWh/day per person; see below. Unsurprisingly, a large component of this is due to the production of fuel, and a significant proportion of what we list as “Services and stuff” for Alberta is likely also related to the oil industry.

Unlike the other large provinces, Alberta has no offshore wind potential. Its potential renewable resources include wind, hydro, biomass, and solar farming. As has been mentioned, with appropriate distribution systems and a more aggressive embrace of solar, Alberta could exploit considerably more than we have included in the present assessment.

It is worth noting that on a per capita basis, Alberta has more than twice as much renewable power potential as does Ontario, the other province without sufficient renewable resources to cover its demand.



The stack on the left shows the sum of all energy currently consumed, as both electricity and combustion, in Alberta. 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.

