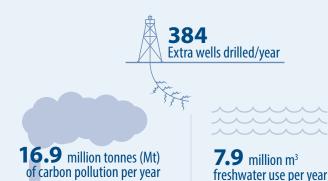
## **Fracking comes with environmental impacts.** If built, Sarita LNG and Malahat LNG could result in:



This is equivalent to:



3.5 million cars



annual residential freshwater use of **86,160 Canadians** 

pembina.org/pub/BCShaleTool

PEMBINA institute

## Malahat and Sarita LNG

## Numbers behind the infographic

- Based on two LNG plants proposed by Steelhead LNG for Vancouver Island and their associated upstream development:
  - Malahat LNG with a capacity of 6 million tonnes of LNG per year (mtpa),
  - and Sarita LNG, with a capacity of 24 mtpa.
- Steelhead LNG technology choices and the resulting emissions intensity of the
  terminals is unknown as this point. We assume an average of two LNG plants
  proposed for B.C.'s northern coast: LNG Canada with an emissions intensity
  of 0.15 t-CO2e/t-LNG, and PNW LNG with a proposed emissions intensity of
  0.255 t-CO2e/t-LNG. This gives an intensity of 0.2025 t-CO2e/t-LNG.
- Environmental impacts calculated for 2030 as the difference between a scenario with the two plants (30 million tonnes of LNG) and constant non-LNG demand, compared to a scenario with no LNG and constant non-LNG demand
- · Environmental impacts displayed are for 2030
- Assumes current technologies and practices for the purposes of determining carbon, water and wastewater environmental impacts (i.e. no new policies).
- The number of cars equivalent is based on annual emissions for a standard personal vehicle of 4.75 tonnes of CO2e.<sup>1</sup>
- The water use comparator is based on annual per capita residential water consumption of 91.615  $\rm m^3/yr.^2$
- The global warming potential for methane is set at 34, to reflect the most recent findings by the International Panel on Climate Change (IPCC AR5).
- Environmental Protection Agency, "Calculations and References: Passenger vehicles per year," June 18, 2015. http://www.epa.gov/cleanenergy/energy-resources/refs.html#vehicles
- Environment Canada, "Residential Water Use in Canada Indicator Data," June 18, 2015: http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=553CC57B-1



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