

HOMES

are a significant source of **carbon pollution** in Edmonton



single family/
duplexes

217,500 units

2 million
tonnes CO₂e/year¹



low-rise MURB*
(<4 storeys)

138,000 units

1.1 million
tonnes CO₂e/year¹



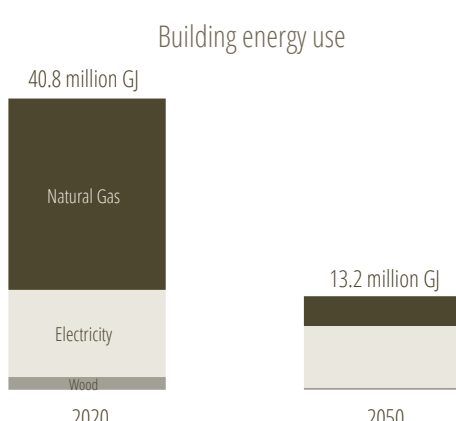
mid-/high-rise
MURB*

23,500 units

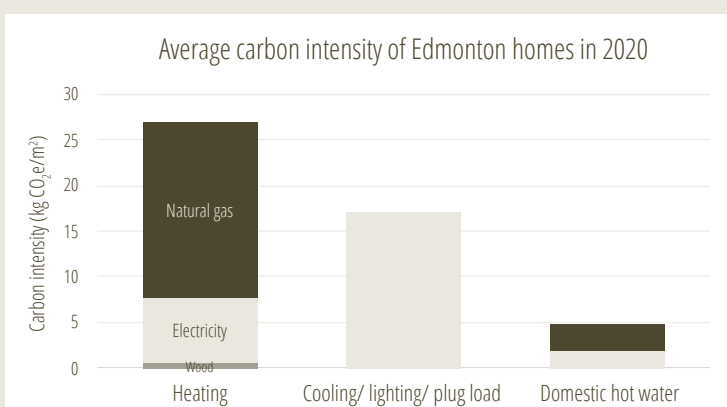
200,000
tonnes CO₂e/year¹

*multi-unit residential buildings

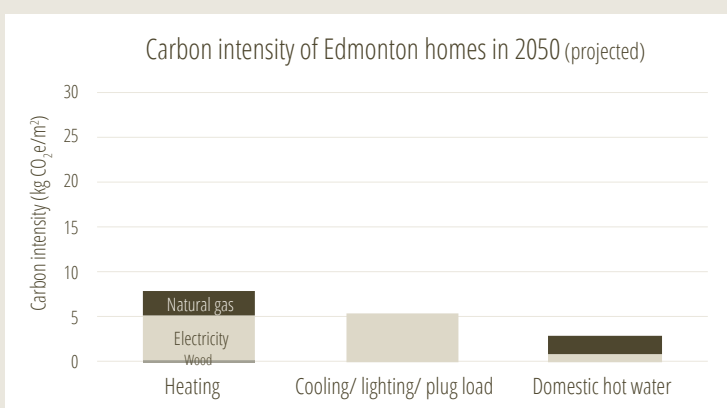
Edmonton aims to cut residential energy use in half and be carbon neutral by 2050.² We need to retrofit our homes to be better insulated and more air-tight, and use more efficient heating systems, like electric heat pumps.



When we use electricity — which mostly comes from coal and gas plants in Alberta — and burn natural gas in furnaces and boilers for heating, our homes emit carbon pollution:



Retrofitting our homes now will help reduce emissions in 2050³



To be carbon neutral by 2050, we need to increase grid and on-site renewables and **retrofit more than 3% of existing homes** every year from now through 2050



7,000 units/year



4,500 units/year



760 units/year

These energy upgrades will require an annual investment of about **\$320 million**⁴



and result in
over **3,000**
jobs/year⁵



1. Based on a grid intensity factor of 0.704 g/kWh. City of Edmonton, *Greenhouse Gas Management Plan*, 74. www.edmonton.ca/city_government/documents/PDF/GHGManagementPlan-CityOperations.PDF. Housing data provided by Sustainability Solutions Group. www.ssg.coop/

2. Getting to City of Edmonton, *Getting to 1.5°C: A Discussion Paper* (2019). www.edmonton.ca/city_government/documents/PDF/GettingTo1-5DiscussionPaper.PDF

3. Grid intensity factor projected to decrease to 0.343 g/kWh under current AESO policies and programs.

4. 2020 dollars, assuming an average incremental cost of \$30,000 for single-family and mobile homes and \$16,000 for multi-family residential units. Ralph Torrie and Céline Bak, "Building Back Better with a green renovation wave," Corporate Knights, April 22, 2020. www.corporateknights.com/channels/built-environment/recovering-stronger-building-low-carbon-future-green-renovation-wave-15875463/

5. An estimated 9.5 direct, indirect and induced full time job years are generated for every million dollars spent. Based on Duns (2018). *The Economic Impact of Improved Energy Efficiency in Canada*. (Efficiency Canada) Efficiency Canada (2020). Written Submission for the Pre-Budget Consultations in Advance of the Upcoming Federal Budget.

Reducing carbon pollution starts at home