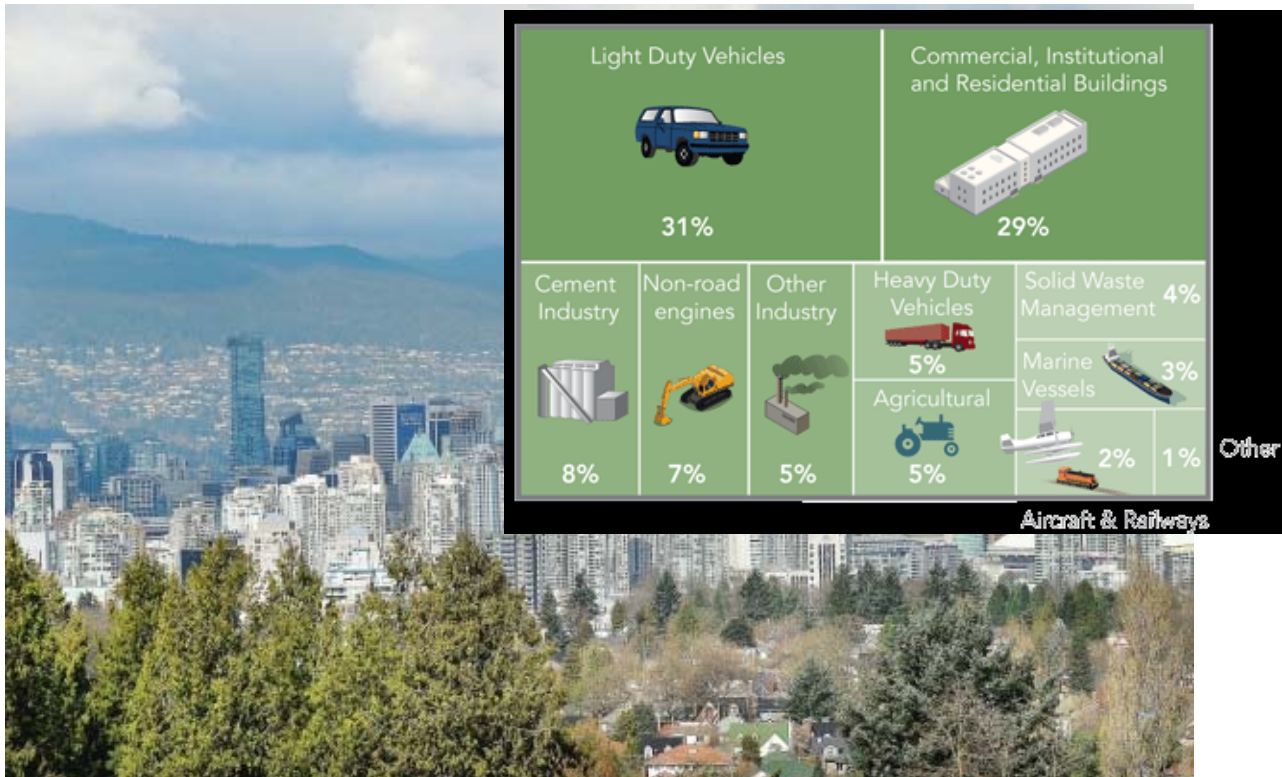


For correct information see graph below: Source: <http://www.metrovancouver.org/services/air/whatsMVdoing/Pages/EmissionInventoriesandForecasts.aspx> -cjk

Buildings are biggest source of greenhouse gases in Vancouver, staff report says

Detached houses are the worst culprits, followed by industrial buildings

BY BRUCE CONSTANTINEAU, VANCOUVER SUN JUNE 23, 2014



About 55 per cent of GHG emissions in Vancouver come from buildings and of those detached homes create 31 per cent of building emissions, a staff report said.

Photograph by: bill keay, Vancouver Sun

Buildings spew more than half of all Vancouver's total greenhouse gas (GHG) emissions every year and detached houses are the biggest culprit, according to a city staff report to be considered by council's planning committee on Wednesday.

That fact is key to a staff recommendation that council adopt an energy retrofit strategy for existing buildings to drastically cut GHG emissions.

About 40,000 of Vancouver's 77,000 detached homes were built before 1960. The report said most older homes could improve their energy efficiency with weather sealing, wall and attic insulation, furnace/boiler/hot water heater replacements and replacing old windows with new energy-efficient glazing.

About 55 per cent of GHG emissions in Vancouver come from buildings and of those detached homes create 31 per cent of building emissions, the report said.

That compares with industry's 20-per-cent share and 18 per cent from multi-unit residential buildings.

The city's Greenest City Action Plan has targeted a 20-per-cent reduction in GHG emissions from Vancouver buildings by 2020, which would eliminate 160,000 tonnes of emissions annually — the equivalent of taking 40,000 cars off the road.

The report recommends the city partner with BC Hydro and/or FortisBC to study the effectiveness of using thermal imaging to identify poorly insulated homes.

Vancouver contractor Nick Kerchum, president of Natural Balance Premium Home Builders, said every home is unique and suggested homeowners get an “energy audit” to determine the best way to increase the energy efficiency of their homes.

The price for such an audit starts at about \$300 at home energy assessment firm City Green Solutions.

“That lets you know the best upgrades to pursue,” Kerchum said. “Maybe you should go from double to triple glazing or maybe you should go from standard insulation to outulation (an exterior insulation system).”

He said common energy-efficient building practices today include using vinyl or wood window frames instead of aluminum, along with the use of heat pumps, solar panels and drainwater recovery systems.

But Kerchum noted it can cost nothing to improve a home's energy efficiency.

“Don't heat your home all day when you're not there,” he said. “If you can't be bothered to turn down the thermostat, get a programmable one to do it for you automatically.”

A recent Vancouver city initiative to improve energy efficiency in Vancouver homes — the Home Energy Loan Program — had a very low participation rate among homeowners.

The program called for homeowners to have an energy audit by a federally licensed auditor, who would recommend the best ways to reduce a home's carbon footprint.

Homeowners could then select from a list of pre-approved contractors and apply for up to \$10,000 in financing from Vancity Credit Union. The 10-year-loan, with a fixed interest rate of 4.5 per cent, would be collected through the city's annual property tax bill.

BC Hydro and FortisBC encourage homeowners to become more energy efficient through their Home Energy Rebate Offer (HERO), which offers rebates of up to \$1,200 for various home improvements — including insulation, draftproofing, space heating, water heating and ventilation.

The program was launched in April and is due to expire on March 31 next year but the city staff report recommends the city promote the program, especially to older homes, and get the utilities to extend it beyond next year.

Other report recommendations include:

- Encourage the five largest industrial emitters in Vancouver to undertake detailed energy audits to identify cost effective efficiency improvements.
- Support voluntary building energy benchmarking by large commercial buildings and large multi-unit residential buildings in the city.
- Expand the Green Landlord program, which undertakes energy and water audits of apartment buildings.
- Partner with BC Hydro and FortisBC to pilot programs that use new smart technologies such as learning thermostats to reduce home energy use.

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