



An integrated, multi-level climate plan

Despite a decrease between 2014 and 2016, the city of Calgary's emissions are 16.5% higher than in 2005, with 18.5 MtCO₂eq/ year in 2017. However, Calgary's 2018-2022 strategy, which includes 23 programmes and nearly 250 mitigation and adaptation actions, will lead the city towards a 20% reduction in emissions by 2020. It is also linked to the [Climate Leadership Plan 2015](#) of the Alberta province, and to the [City Charter](#), a legislative framework negotiated between the cities of Calgary and Edmonton and the Government of Alberta, which requires the formulation of a climate plan, but also gives them greater flexibility of action.

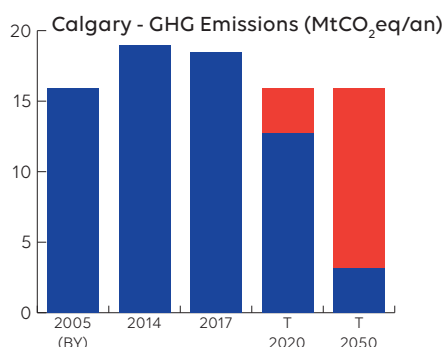
• ELECTRICITY GENERATION, A MAJOR SOURCE OF EMISSIONS

Electricity accounts for 42% of Calgary's emissions, far ahead of natural gas (24%), gas oil (20%) and diesel (13%). This is because 47% of Alberta's electricity is generated from coal, 40% from natural gas, and only 13% from renewable sources. However, the province's plan includes shutting down coal plants by 2030, which is expected to contribute significantly to Calgary's mitigation efforts. The latter has also been able to take advantage of the climate benefits of its region, by fully supplying its own buildings with renewable energy. Wind energy has the lowest regional tariff in Canada at 3.7 cents/kWh in 2018, and with regard to solar energy, Calgary is the second-sunniest city in the country (CED 2018). Given Calgary's energy mix, the energy efficiency of buildings - accounting for 65% of emissions - is thus a double lever for its mitigation strategy: surface areas of +500 m² must meet the requirements of the national energy system of LEED ratification of the Canadian Green Building Council. For the rest, the city has formulated its own [good practices](#).

• A MODAL SHIFT THAT IS RUNNING OUT OF STEAM

Calgary was the first city on the sub-continent to introduce a Light Rail Transit (LRT), which operates entirely on wind energy, saving 56,000 tonnes of CO₂ a year, according to the public company Calgary Transit. The city also holds the record in Canada as the city with the most rapid transit infrastructure available per capita with 53 km/ million inhabitants ([Pembinga 2014](#)) and one of the lowest congestion times in Canada behind Edmonton ([Tom Tom index](#)). However, an annual census of modes of transport used to access the business district in the morning during rush hour shows that their distribution has remained relatively stable for 10 years, with just under 50% of inhabitants using the metro and public buses, 40-45% using cars, and the rest cycling or walking ([Calgary 2018](#)). **The number of annual trips by metro and bus has also declined, from 109 million in 2015 the company reported 102 million in 2017 ([CalgaryHerald](#)).** It is seeking to reverse this downward trend in the modal shift by opening a third metro line in 2026, priority lanes for buses and the development of the city adapted to existing lines ("transit-oriented development").

Calgary's 2018 road transport energy emissions strategy aims to reduce its emissions, including the development of electric vehicles and the creation of a network of charging terminals in the south of the province, in addition to the 70 terminals currently in place in the city. Finally, Calgary Transit is determined to modernise its bus network, encouraged in particular by the carbon tax put in place by the province of Alberta, reaching CAD 30/ tonne in 2018, which could cost more than CAD 2 million ([RouteAhead Update](#)).



MAIN SOURCE:
[CALGARY CLIMATE RESILIENCE PLAN 2018](#)