Residents and businesses use energy to heat buildings and water, fuel vehicles, and power industrial processes. Using fossil fuel energy such as gasoline, diesel, propane, and natural gas results in greenhouse gas emissions. In this region, there are many opportunities to generate renewable and low carbon energy, and switch away from fossil fuels.

Switching from fossil fuel-based energy sources to low carbon electricity and fuels is essential to decarbonize our region’s energy system. Investing in local low carbon energy systems such as renewable natural gas, waste heat recovery, solar, and heat pumps can support business development, job creation and energy self-sufficiency while reducing greenhouse emissions. Eliminating sources of energy waste (e.g., heated/cooled air leakage from buildings) and improving energy efficiency (e.g., through equipment upgrades and process improvements) should be an integral part of reducing energy-related emissions.

Grid electricity in British Columbia is primarily generated by hydroelectric dams.

Recovering energy from waste streams produces a renewable and clean energy that can replace fossil fuel use or electricity. Metro Vancouver currently produces renewable natural gas at several of its wastewater treatment plants, which displaces the use of fossil fuels for operation of these facilities. There is potential to produce additional renewable natural gas or other biofuels at Metro Vancouver facilities. There are also opportunities to capture more waste heat from its utility processes, solid waste management facilities, and liquid waste collection system. Recovered heat can be used to generate electricity, or in district energy systems that provide energy to buildings for space heating and water heating. Through its policies and programs, Metro Vancouver can also support other projects in the region that generate renewable, low carbon energy.