



MAKE YOUR FAIRFIELD GONZALES HOME MORE ENERGY EFFICIENT, COMFORTABLE AND CLIMATE-FRIENDLY

Introduction

The Fairfield Gonzales Community Association Climate Action Group is bringing you a series of Fact Sheets (like this one) in 2021 to help you learn more about lowering your home's greenhouse gas (GHG) emissions.

Retrofitting Existing Housing

Older Can be Better! Working with what you have...

The 4 R's of household recycling (reduce, reuse, repurpose, reclaim) can be applied to buildings, but on a larger scale. Renewing, adapting and retrofitting existing and historic buildings is environmentally-friendly because it reduces landfill waste, conserves energy, and promotes sustainable communities. Upgrading and adapting existing buildings and materials means significant quantities of construction/demolition waste are diverted from landfills. If retaining an existing building is not possible, then de-construction or "unbuilding" allows still serviceable materials to be re-used.

Another important consideration is that embodied energy - the energy required to extract, process, manufacture, transport and assemble materials - is lost when buildings are demolished. Retaining and updating existing buildings preserves embodied energy by reducing the need for new materials, and has often been proven to be more energy efficient than demolishing and building new.

Finally, consideration of natural airflow, and heat retention & cooling were typically incorporated into traditional house design and construction. Where energy performance is lacking or deficient in many homes, recent examples of green rehabilitations of existing and historic buildings have proven to improve energy performance and increase occupant comfort while preserving community character.

Balancing Energy Efficiency and Community Character

Many Fairfield Gonzales residents live in older homes that were not built to today's standards or expectations for energy efficiency. While converting to alternative (non-fossil fuel) heating sources is an important step in improving environmental and energy outcomes for our homes, your dollars will be optimized by undertaking additional improvements (outlined below and on page 2).

Most existing housing can be made more energy efficient easily and cost effectively. Some simple and time-honoured repair/maintenance tasks for home owners include:

- closing fireplace dampers when not in use,
- insulating attics, basements and crawlspaces,
- repairing/weather-stripping/caulking windows and doors,
- repainting regularly (paint acts as a natural vapour barrier) and,
- increasing thermal performance of existing wood frame windows with storm windows or replacement of thermal pane windows in newer homes

Upcoming Fact Sheets:

Heat Pumps/Solar - August/September

Unbuilding - October/November



A NEIGHBOUR'S RETROFIT/RENOVATION STORY

Introduction

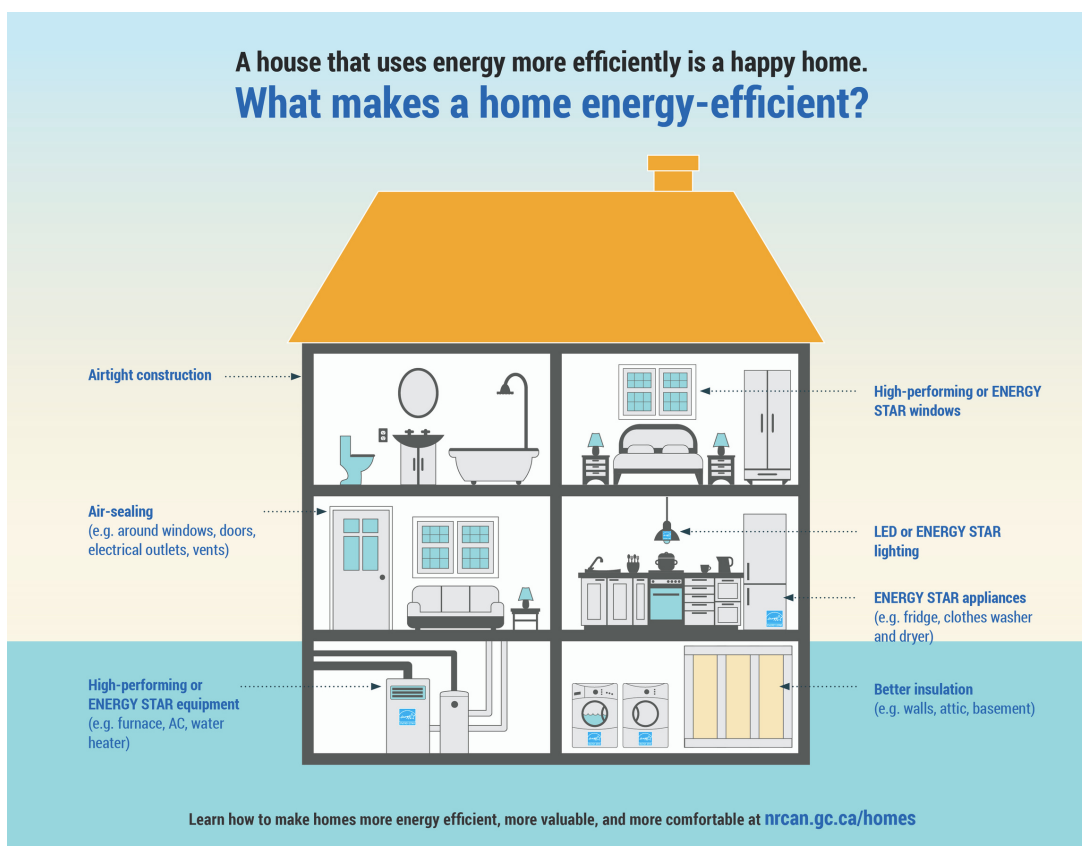
Dave and his family live in a 70-year old home in Gonzales. With kids entering their teens, Dave and his partner needed more space, but didn't want to leave their neighbourhood. They also didn't want to tear down their home and build a new one because of the GHG emissions that would cause (see page 1). They decided to renovate their basement and expand their living space including making it so that the kids could each have their own bedroom.

Components of the renovations and rationale

Obvious first steps were to improve energy efficiency by making the exterior walls thicker than the building code requires so that they could accommodate extra insulation, and the family opted for clean electric heat to lower GHG emissions. The family had a contractor do the major structural work, mechanicals like windows, plumbing and electricity and drywall. The family did the finishing work such as flooring, trim and paint.

The Results

All renovations come with frustrations, but those are temporary, and the family is now enjoying their new space - bedrooms, a second bathroom, and an activity / rec-room. When the kids go off to University, Dave and his partner plan to convert this renovated space to a suite, to help provide more affordable housing in their neighbourhood (and pay for the renovations!).



Where to get help and advice:

- To learn which upgrades are most appropriate for preserving the heritage and character elements of a home and achieving energy savings go to <https://betterhomesbc.ca/faqs/which-upgrades-are-most-appropriate-for-preserving-the-heritage-and-character-elements-of-a-home-and-achieving-energy-savings/>
- To see what rebates are available for everything from heating and cooling to windows and insulation see: <https://betterhomesbc.ca/rebate-search-tool/>
- To find a registered contractor for jobs that are too big for you to tackle on your own go to <https://betterhomesbc.ca/prc/>

Find this fact sheet online on the [FGCA Climate Action Group page](#)