

The Daily Gleaner

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By Sonya Hull

An Energy Efficient New Brunswick – one home at a time

Last week my parents got an energy audit of their home. In the next few weeks they are installing a heat pump. Last year my Dad installed solar in their completely off-grid cottage. They can rattle off the names of more than ten friends that have installed an air-source heat pump or a ground-source/geo-thermal heat pump system in their home in the past year; and most of them are retrofits, not new builds. Like my parents, these early adopters are of the pre or early Baby Boom generation.

The motivations of this 55+ generation provide us with both opportunity and inspiration as we search for ways to make our province more energy efficient. They're making long-term sustainable decisions that we should all consider as we look at our personal energy future: where we live; the size, the design, the efficiency of our home; energy sources; retrofits, etc.

What's driving these decisions? Factors such as the desire to sustain their incomes during retirement, reducing the stress of sourcing and bringing in wood to heat their homes, and real concern about the future volatility of energy prices. But perhaps the defining characteristic of this generation of New Brunswickers is that they wish to be to be self-sufficient and control their own energy destiny as much possible.

Our province's typical home is heated by a variety of sources ranging from: electric baseboard; to oil, wood or natural gas forced air or hot-water baseboard. Many new homes being built are raising the bar, however, by installing geo-thermal and air source heat pumps, solar and even a few small wind turbines. These new and renewable energy sources are maximized even further because the homes are now much more efficient in terms of design and materials.

So the great challenge lies not with ensuring that new housing stock is built more efficiently, but with figuring out how the existing house stock can be retrofitted to reduce energy requirements.

Heat pumps, especially ground-source (geothermal), are the new preferred choice for heating and cooling a home, and heating water. Heat pump technology extracts and moves heat energy from one environment/source (air, ground or water) to another, and in either direction. This allows the heat pump to bring heat into an occupied space, or to take it out.

The higher installation cost for heat pumps (particularly geo-thermal) can be quickly offset by the savings in energy costs, and in the case of retrofitting an existing home, combining a heat pump with an existing furnace can significantly reduce home energy expenses by reducing the draw on the more expensive energy source.

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Heat pumps, no matter the source (air, ground or water) provide a renewable and emission free source of heating and cooling. Remember the adage: “the cleanest and cheapest energy is the energy never used”? Well, heat pumps move us much further along this spectrum. Maybe it is worth a look for your home?

Sonya Hull is a consultant for the City of Fredericton’s environmental and sustainability portfolio. The Green Matters team can be reached at greenmatters@fredericton.ca. Go to www.energycnb.ca to find out the financial help that is available if you install an ENERGY STAR heat pump. And search ‘heat pump’ on this website to read some great New Brunswick homeowner case studies!