

## Our Solar Hot Water Heater

By Susan Grinstead

I received some wonderful news last month. The gas company called to see if I had trouble with my tank-less water heater, since I had not used any gas in the last 4 months (April-July). I explained that it was the back-up for my solar hot water system. In the spring, summer and fall, it easily reaches 72°C. It won't allow the temperature to go above scalding. In the winter, the tank temperature averages 30-35°C. It pre-heats for the tank-less gas system. He wasn't surprised by this and told me this was becoming a typical reply.

The unit (panels and tank) are manufactured in London, Ontario at the Enerworks factory. It was installed in February 2012, the month before the home retro-fit program was scrapped by the federal government. The program gave grants and rebates to homeowners to upgrade their house to become more energy efficient. Most people used the funds to add extra insulation or upgrade wiring. Some used the program to buy efficient windows or solar hot water systems.

Since I knew this valuable program was to end soon, I was very pleased when the engineer for the company called to talk. He was curious as to why I wanted an industrial anchoring bracket pre-set at 63° angle. I explained that it was going on top of a 1½ storey house; I was never going to climb up to the roof to clear the snow away and was not intending to ever change the angle. We had a technical discussion about the altitude of the sun during the winter; it is quite low at only 20° above the southern horizon in December. He agreed that this was the best angle for maximum winter efficiency. I also told him that we lived on top of the hill and we always had the wind blowing in all directions. I didn't want to worry about increasing weather events blowing it down and smashing windows in our solarium. What I ordered works perfectly! After 2½ years, it has almost paid for itself.

This is the good news. Before saying goodbye, the gas company rep informed me that my house was getting a designation change. They already had us listed as a "partial solar home" because we heat with the sunshine. Now we are listed as a "full solar home".