A few weeks ago I discovered that my mother believed that putting solar panels on the house would cost almost a hundred thousand dollars. I could not believe this was true, and so decided to do some research. My parent’s house uses an average of 1.875 kW throughout the day. Canadian Tire sells 80W solar panels for $699.99 (Canadian Tire, 2010). This means that in order to meet their energy needs, my parents would need to buy about 25 solar panels, costing just less than twenty thousand dollars. Unless the person installing the panels tries to charge eighty thousand dollars, a hundred thousand dollars is a completely unrealistic estimate. This is one of many significant misconceptions I have come across while trying to learn more about alternative energies. Like my mother, many people seem to think that alternative energies are much more expensive than they really are, or that they are impractical for some other reason that doesn’t really exist. This kind of misconception can make it not only difficult to carry on a discussion about alternative energies, but also make people less willing to make changes. One of the most important steps that people can take to encourage alternative energies over their unsustainable and polluting counterparts is to spread the facts and fight misinformation.
One of the largest misconceptions that seems to exist around alternative energies is that they are outrageously expensive. The Ontario Power Authority classifies homes, farms and small businesses as using under 10kW (Ontario Power Authority, 2010). However, most homes use much less energy than this. On average, houses in Canada used 29444kWh in 2007 (Natural Resources Canada, 2007). Over a period of a year, this is equal to using an average of 3.36kW. Now, admittedly this is still very expensive, but when people believe something costs twice as much as it actually does, it means that many fewer people will bother to look into it in the first place, resulting in significantly fewer people actually buying solar panels. I have heard similar misconceptions relating to geothermal energy, which can save up to 70% of energy use on heating and 50% of energy use on cooling (Energy Development Initiative, 2010). The average cost is similar to the cost of solar (Manitoba Hydro).

Also, the federal and provincial governments often provide grants and rebates to help offset the cost of the installation. For example, as part of the federal government’s economic action plan, the ecoENERGY Retrofit program provided up to $5000 in rebates to homeowners making their homes more energy efficient, and in some cases the provincial government would match that amount (Ontario Geothermal Association).

Alternative energies in the context of the home may also be perceived as expensive, large-scale projects, while there are many smaller scale technologies that can also be useful in a home environment. One really interesting new area of technology is so-called “human power” technologies. For example, stationary bikes can be used to generate enough electricity to power small electronics or laptops. There are flashlights that can be powered by a hand crank. These technologies are important for people to know about, as they not only cut down on electricity use and batteries, but may also help encourage people to get more exercise.

There also seems to be a common misconception that energies like wind and solar are unattractive at the least, and not something you want sitting on your roof or in the yard. However, people are constantly designing these technologies to either appear more appealing, or to blend in to the surrounding.

Source: http://www.sassweb.ca/3bb3/volume1-0/how-you-can-help/the-importance-of-understanding-alternative-energies