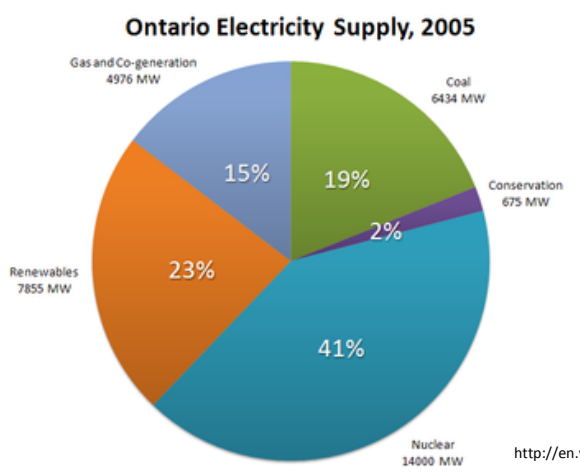
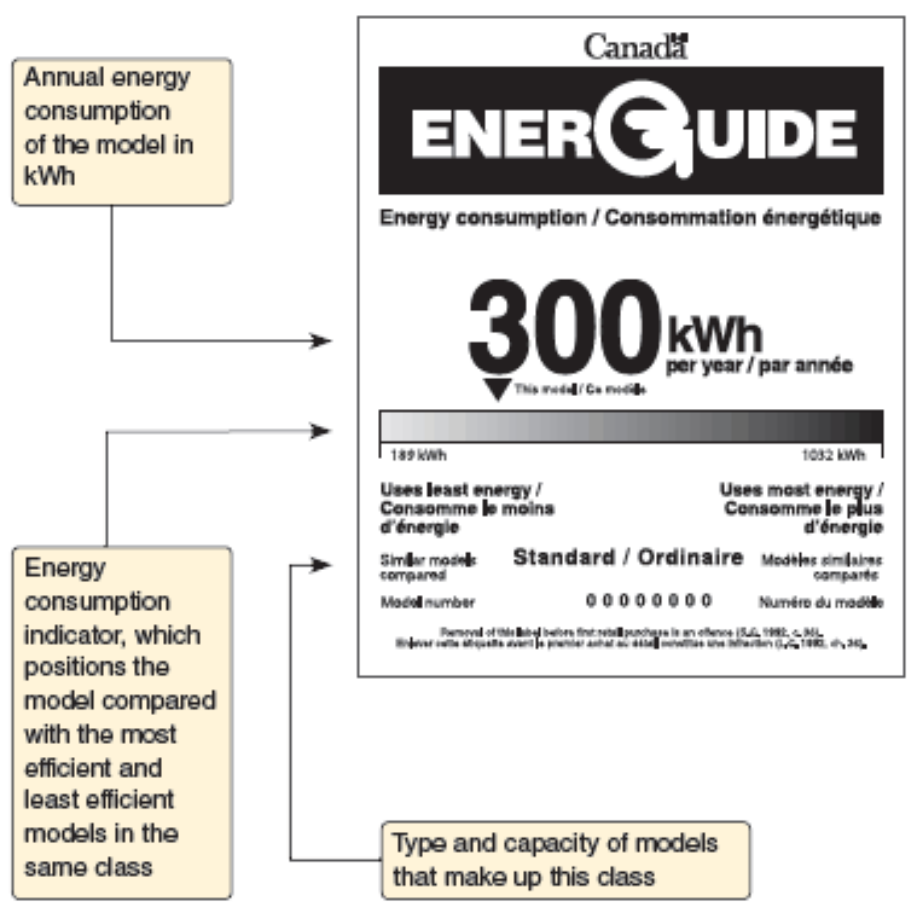


Does Buying Energy Efficient Appliances save you money?

Federal law in Canada, under Canada's Energy Efficiency Regulations, requires that the EnerGuide label be placed on all new electrical appliances manufactured in or imported into Canada and that the label indicate the amount of electricity used by that appliance.



<http://www.mytorontohomeimprovement.com/four-tips-to-save-home-energy.htm>



The use of energy efficient products can also help save the environment. In Ontario, 34% of our electricity is generated by burning fossil fuels (coal, natural gas and oil). The burning of fossil fuels is a major source of greenhouse gas (GHG) emissions and contributes to smog and acid rain. By choosing energy efficient or Energy Star® products, less electricity needs to be produced, therefore reducing our impact on the environment.

http://en.wikipedia.org/wiki/Ontario_electricity_policy

The Energuide label to the left is for an average size refrigerator. Use it to answer the questions below.

1. What is the range of energy consumption for this type of refrigerator?

2. Is the refrigerator that this label represents energy efficient? Why do you think it is or is not efficient?

3. Complete the following table
(Yearly cost = energy consumption x cost per kW·h)

Type of Refrigerator	Energy Consumption	Cost per kW·h	Total year cost to run the refrigerator.
Most efficient Refrigerator		\$0.065/ kW·h	
The refrigerator for the label	416 kW·h	\$0.065/ kW·h	\$27.04/year
Least efficient refrigerator		\$0.065/ kW·h	

4. How much money would you save per year if you bought the most efficient refrigerator (396 kW·h) compared to buying the least efficient refrigerator (701 kW·h)?

5. You have seen the commercials on TV for the program “The Great Refrigerator Roundup” by *Every Kilowatt Counts*. The local program encourages people to get rid of their old refrigerators and up-grade to a more energy efficient one. Use the following table to determine how much money you would save by upgrading to the refrigerator in the above Energuide label from one built in 1984.

Type of Refrigerator	Energy Consumption	Cost per kW·h	Total year cost to run the refrigerator.
1984 Refrigerator	1457 kW·h	\$0.065/ kW·h	
The refrigerator for the label	416 kW·h	\$0.065/ kW·h	\$27.04/year

TOTAL YEARLY SAVINGS? _____

