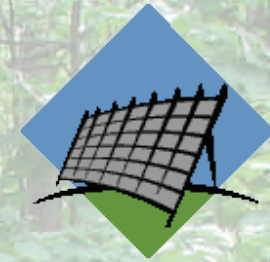


HUMBER ARBORETUM ECO CENTRE

RENEWABLE ENERGY



INTERESTING FACTS

- ✧ The largest wind turbine in the world, located in Hawaii, stands 20 stories tall and has blades the length of a football field!
- ✧ One wind turbine can produce enough electricity to power up to 300 homes.
- ✧ Canada has the potential to source more than 20 per cent of its energy from wind power.
- ✧ Worldwide, water is the most commonly used renewable energy resource, providing enough power to meet the needs of 28.3 million consumers.
- ✧ There are 450 hydropower plants in Canada.
- ✧ Canada is the number one producer of hydro power in the world.
- ✧ The top six miles of the Earth's crust contains 50,000 times more thermal energy than all the oil and natural gas resources in the world.
- ✧ The Mojave Desert in North America houses the world's largest solar power plant. It covers 1000 acres (4 km²) of solar reflectors. An astonishing ninety percent of the world's currently commercially produced solar power is produced by it.

COOL ACTIVITIES

GONE WITH THE WIND

- ✧ This is a fun activity to have kids use their imagination and show the power of wind. They will be building a wind powered vehicle... what it looks like is up to them!
- ✧ Split the class up into groups and provide them with 4 wheels, a balloon, 3 wooden sticks, and a piece of bristol board (fairly large and stiff as this will be what they cut the body out of) glue, and some tape.) For younger grades you can print design templates off the internet but for the older grades let them create what they want.
- ✧ Before you have the race make sure that all of the vehicles work by testing them inside so they can make improvements.



REVIEW QUESTIONS

1. What are the 6 main forms of Renewable Energy? (ANS: Solar, Hydro, Biomass, Geo-thermal, Wind, Tidal are the six main types of renewable energy)
2. What is the most commonly used form of renewable energy in Canada? (ANS: Hydro-electric power from hydro dams is the most commonly used renewable energy in Canada.)



3. What form of renewable energy is the most harmful to the environment? (ANS: Hydro electric dams are the most harmful when talking about destroying terrestrial and aquatic ecosystems. Whereas biomass burning is harmful in respect to air pollution.)
4. What is a fossil fuel? (ANS: Coal, oil and natural gas are called fossil fuels, they were formed deep under the earth millions of years ago from the decomposition of plant and animal matter.