Renewable Sources of Energy:

A Research and Building Project



You will be producing an in-depth Power Point (or Prezi) presentation on a renewable source of energy. This will be presented to the class along with a model of your type of energy. The model does not have to actually work but it should accurately represent the technology.

Sources of renewable energy could include:

Solar heat

Solar electricity

Wind energy

Water power (hydroelectricity)

Biomass energy

Geothermal Energy

Hydrogen Fuel Cells

1. Choose a topic from the above list to research, you may choose a different type of energy source with permission from the teacher.
2. Research the topic using at least three reliable sources of information. The re-energy.ca site is a good place to start and will also give you some ideas for building your model!
3. Draw a flow chart showing the energy conversions from the energy source to useable energy. This should be done separately from your power point on paper but should be discussed during your presentation.
4. Produce a power point using the rubric below to ensure you answer all the pertinent questions. Your power point should be at least 10-15 slides long and contain key ideas only (in your own words) which you can expand on using cue cards etc. The question do not have to be answered in order.
5. Construct a model of your power source. A lot of the construction will be done at home although if you finish your power point early and bring in the materials you can certainly work in class also.
6. Present your knowledge to the class! Presentation dates will be chosen ahead of time but everyone is responsible for having their presentation completed on the first day of presentations.

Evaluation

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| Topic | Value |
| Describe how what the energy source is and how it works. | /10 |
| Describe how the energy source derives its original energy from the sun or Earth’s core | /5 |
| Provide an historical overview of the energy source. How was it developed? How has its use changed from how it was used in the past? | /10 |
| Where in Canada (and/or around the world) is it used?  | /5 |
| How much energy is produced at a specific site and also worldwide by this type of energy? | /5 |
| What are the costs involved in setting up the technology needed for this type of energy? | /5 |
| What are the benefits of using this technology? | /5 |
| What are the drawbacks of using this technology? | /5 |
| How does the cost of this energy compare to other energy sources? | /5 |
| Some fun facts about your energy! | /5 |
| What is your opinion? Make sure you support your ideas well. | /5 |
| Reference list | /5 |
| Model | /25 |
| Energy conversion chart includes all changes in energy type. | /5 |
| Reference list | /5 |
| Presentation – prepared, does not read off slides, good visuals, understands topic, key points only, spelling and grammar. | /15 |
| TOTAL | /120 |