Unit 3, Topic 2: Problem Situation

You and your partner will be using the 8-Step Design Process to construct an "*alternate energy model*". This first step is called "Problem Situation", however, all problems in the world of energy and power can be considered to be "opportunities".

For instance, as of 2014, Newfoundland is still burning some fossil fuel (bunker C oil at the thermal electric station in Holyrood) to generate electricity. We know that burning fossil fuel is a factor in global warming. In some parts of Canada, electricity is generated from nuclear plants. These can be safe until something happens and then, the hazardous radiation cannot be contained (consider Fukushima in Japan). The opportunity is to create safe energy for a sustainable planet.

In this very exploratory and open step, you and your partner will compile a list of alternate energies that could be used for our homes, businesses or transportation.

PROBLEMS	SOLUTIONS
(Example) 1. We are running out of oil to burn	We can switch to solar power or wind power
2. The cost of burning oil is too much for some families to heat their home	Families can tap into geothermal sources of heat right on their own property, but deep down inside the earth

You and your partner can consider alternate energies (sources that are not traditional or commonly used) for your prototype. This can be a list of jot notes as you and your partner brain-storm various ideas.

Finally, you could develop a bulleted list of possible features that your prototype will display.

These THREE(3) items should be added to the Microsoft PowerPoint that you started in Topic 1.

Checklist:

- ✓ Table of problems and solutions
- ✓ Alternative energies
- ✓ Agreed upon features that your prototype will display