

Scenario 1: Urban

Back Ground Situation: You live in Ontario in a community called Lakeview. The town is situated on the top of a bluff on a large lake. On the North Side of the town is a large deep river valley. The river itself is wide but shallow only a few meters deep at most. The community has about 10 000 residences. Currently, the majority of your electricity comes from nuclear power, The source of heating energy is a combination of electricity and fossil fuels.

Due to unforeseen mechanical/structural failure the Bruce Power plant either needs to be rebuilt or shut down. At the price tag of several billion dollars the Ontario government has decided not to further invest in nuclear power. Rather they have chosen to allocate money to communities individually. Each community therefore has the freedom to develop energy resources that are appropriate to them.

Task

Your group is a committee that represents the town and has the task of determining how the community will become self sufficient for electricity. You must develop a plan that is realistic and sustainable.

You should take the following into consideration.

Evaluate all the options of renewable resources as they relate to the town.

Is the use of the renewable resources viable? Present clearly why you did or didn't choose to incorporate certain sources,

Develop a plan and map to show what the developments will look like. How and where are the installations going to be made?

Consider the impacts on community members, local businesses and the environment in your plan.

Your group must develop a 10 minute presentation to deliver the class. You may use poster paper to help you create visuals for your presentation. All members of the group should play a part in the presentation.

Scenario 2 Rural

Back Ground: You live in Ontario in an agricultural community. The municipality consists of a town of 7000 people and a rural region containing 5000 people. The region contains several small streams and is relatively flat with rolling hills. Currently, the majority of your electricity comes from nuclear, coal and natural gas power plants. The source of heating energy is a combination of electricity and fossil fuels.

Due to dramatically increases costs of fossil fuels and concerns about atmospheric pollution the Ontario Government has decided to encourage a move away from our dependence on fossil fuels. The Government is willing to finance proposals made by communities that reach this goal.

Situation

Your group is a committee that represents the town and has the task of determining how the community will become self sufficient for energy. You must develop a plan that is realistic and sustainable.

You should take the following into consideration.

Evaluate all the options of renewable resources as they relate to the town and the Municipality.

Is the use of the renewable resources viable?

Present clearly why you did or didn't choose to incorporate certain sources.

Develop a plan and map to show what the developments will look like. How and where are the installations going to be made?

Consider the impacts on community members, stakeholders and the environment in your plan.

Your group must develop a 10 minute presentation to deliver the class. You may use poster paper to help you create visuals for your presentation. All members of the group should play a part in the presentation.

Scenario 3 Individual

Background

You own a 600 acres of farm land in Bluewater near Zurich. You have several farms in the area surrounding your homestead. You cash crop the land and have a small amount of bush. At your homestead you heat your house with an oil furnace and take your electricity off the grid. Heating with oil can cost you up to \$800 a month in the winter.

Scenario

You are considering investing in alternative energy for your home and participating in the corporate wind turbine developments in the area. You are need to develop a plan that for use of alternative energy on your farm.

You should take the following into consideration.

Evaluate all the options of renewable resources as they relate to the individual land owner.

Is the use of the renewable resources viable?

Present clearly why you did or didn't choose to incorporate certain sources.

Develop a plan and map to show what the developments will look like. How and where are the installations going to be made on your farm?

Consider the impacts on local community, stakeholders and the environment in your plan.

Your group must develop a 10 minute presentation to deliver the class. You may use poster paper to help you create visuals for your presentation. All members of the group should play a part in the presentation.