

Skills and Strategies

- Questioning and Predicting
- Planning and Conducting
- Processing Information
- Evaluating
- Communicating

What You Need

- access to information resources (for example: online, in-print, interviews)

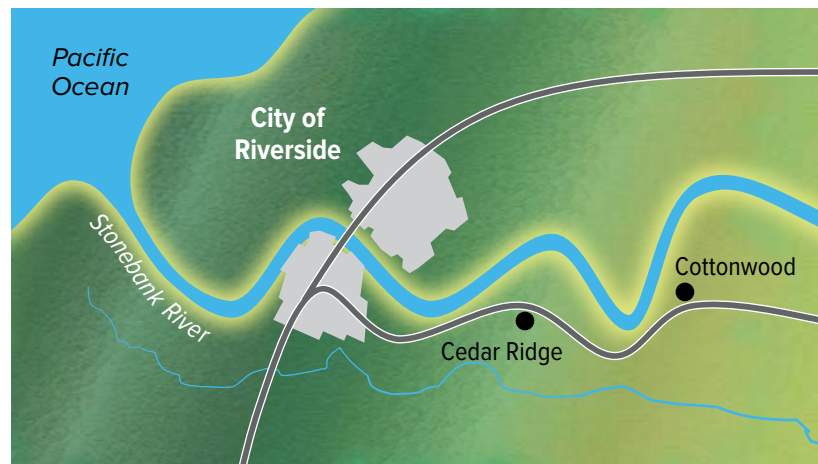
A Source of Electrical Energy for Riverside

The city of Riverside and its surrounding area (population: 10 000) is interested in establishing its own electrical energy generating station that utilizes a renewable energy source. The source must be able to supply 3 kW to every resident. Anything above this can be sold to neighbouring communities as surplus. Interested companies have been invited to present their proposals to the city council.

Question

What is the best renewable energy source to supply the city with reliable electrical energy year round?

This map shows the layout of the city, the shape of the valley, and two of the closest suburbs: Cedar Ridge and Cottonwood. The city is 20 km from an undeveloped coastline.



The Stonebank River winds through the valley and supplies water to the area. The city has a system of floodgates to cope with the spring floods that can affect the valley. The valley floor consists mainly of agricultural areas and neighbourhoods. The mountains around the valley are logged and used for recreation. A ski resort is located on a mountain just outside of the city. The mountain is a potential site of geothermal sources. The valley has an average wind speed of 14.3 km per hour. It has 288 sunny days per year on average.

Procedure

1. Your teacher will assign your group the role of one of the following stakeholders or energy companies that will be attending the council meeting.

- Sunny Skies Solar Energy
- Eagle Mountain Wind Energy
- From the Ground Down Geothermal
- River Run Hydroelectric
- Tsunami Wave and Tidal Energy
- Woodland Biomass
- Riverside Nature and Wildlife Association
- local residents association
- Riverside Valley Agricultural Cooperative
- city council
- local First Peoples

If your group is an energy company, you will be preparing a proposal for the new electrical energy generating station. If your group is representing a local stakeholder, you will be preparing a presentation of your concerns regarding the generating station.

2. Use the information on this page, including the map, as well as Internet and library resources to conduct research as needed to learn more about your group's proposal, stance, or role.
3. Organize the results of your research to prepare your presentation for a mock town council meeting.
4. Your teacher will briefly explain each group's proposal, stance, or role. As you listen to each group's presentation, take notes to help yourself prepare questions to ask.
5. Make your presentation before the council. If you represent the city council, you will present your concerns to the other presenters last.

Evaluate and Communicate

1. What was the final decision of the council? What was their reasoning?
2. Do you agree with the decision? Why or why not?
3. Summarize the presentation you made in the form of a report. Consider including statistics, illustrations, or diagrams as needed.

