

# The Pros and Cons of Powering Up

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As you read Renewable Energy vs. Fossil Fuels (<http://www.energyquest.ca.gov/story/chapter17.html>), write down the pros and cons of the different types of energy sources in the chart below.

Type of Energy	Pros	Cons

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**When you are finished reading, use your Power Up! student E-Sheet to go to the Power Up! interactive. You will discuss the following questions with your class so you may want to take some notes as you play.**

- When you choose a certain energy plant, what do you have to consider?
- What are the consequences of your choices?
- List some of the trade-offs in choosing certain power plants.
- With a game that you won, were you able to pick the kind of power that you think your city SHOULD have? Why or why not?
- Do you think that when people choose certain energy sources there are unexpected consequences?

**Below, keep track of what different power plants have to offer for later use.**

Type of Energy	Power	Cost	Impact

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## Understanding What You Learned

Now that you have tried powering a city with various types of power plants, you will need to decide on a combination that is best for the city. You will write a proposal intended to be read to the citizens of the city, which explains how their city will be powered. It's important that the proposal explains why you made the power plant choices you did. Use the following section to gather information for your proposal.

**Name of City:** \_\_\_\_\_

**I propose that we use the follow types of power plants:**

Plant #1 \_\_\_\_\_

Plant #2 \_\_\_\_\_

Plant #3 \_\_\_\_\_

For each type of energy plant, provide information in these areas:

- Cost
- Pollution
- Description of advantages and disadvantages

**Plant #1:** \_\_\_\_\_

**Cost:** \_\_\_\_\_

**Pollution:** \_\_\_\_\_

**Description of advantages and disadvantages:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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Name: \_\_\_\_\_

Plant #2: \_\_\_\_\_

Cost: \_\_\_\_\_

Pollution: \_\_\_\_\_

Description of advantages and disadvantages: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Plant #3: \_\_\_\_\_

Cost: \_\_\_\_\_

Pollution: \_\_\_\_\_

Description of advantages and disadvantages: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Using the above information, write a proposal letter to the people of your city. Be sure to include the following information in your letter.**

1. Address the letter to the Mayor and citizens of the city.
2. Describe each power plant to be used.
3. Describe the advantages of each power plant. Include any disadvantages, but be sure to make a case for why each power plant is a good choice, even with disadvantages.