

TRJ'S ENERGY USE DILEMMA



One of the greatest sources of greenhouse gas emissions from human activity is the combustion or burning of fossil fuels. Due to their chemical make-up, fossil fuels contain a great deal of potential energy. Because of this potential energy, and because for a long time fossil fuels seemed to be an inexhaustible resource, power plants have used fossil fuels, such as coal, to produce electricity for many years.

Although we all need to use energy, there are sources besides fossil fuels that can be used to produce energy, and there are ways we can reduce our energy consumption. Imagine that you are working as a researcher for the Tough Ride Jeans company (TRJ). TRJ has asked you and your Energy Technology team to study the electricity used by TRJ's conference center and to look into the possible benefits of using new energy technologies in the conference center to reduce the facility's energy consumption. TRJ has identified several energy technologies that could yield energy savings for the company, and wants your help in comparing them.

Read **Developing TRJ's New Energy Strategy** to see the details of your Energy Technology team's assignment. Look at the **TRJ Energy Technology Data Assessment** to see how your team's work will be assessed.

In this investigation, you have an opportunity to isolate and study the effects of one type of energy technology. In the real world, an investigation of energy-saving approaches would also consider the installation cost of each technology. By leaving out installation costs, you can focus on the energy-saving effects of your team's technology.

HOMEWORK 3.2

Read **TRJ Conference Center Information** and the **Energy Technology** reading for your team and be prepared to complete the necessary calculations.