

Saving the World One Farmer at a Time

As population rises, energy demands increase, and oil reserves are depleted, it is becoming increasingly clear that renewable energy sources such as biofuels are going to have to take a central role in meeting our liquid fuel requirements. Cellulosic biofuels, however, will never become a significant source of liquid fuels if farmers do not start growing biofuel crops. That's why we need you. **YOU** must take up the task of convincing farmers that using their fields to plant biofuel crops is a viable and responsible option. Help save the world from disaster; persuade a farmer to do his part to help make cellulosic biofuels a reality!!

Your task:

1. **Teams** You will be divided into teams based on your biofuel crop of choice to present the the panel of farmers at the end of the unit.
2. **Investigation** You will use the resources at your disposal (teacher, farmers, internet research, etc) to answer the following question: Under what conditions (environmental and economical) should a farmer use his farm to produce a fuel crop?
3. **Assignment** Each team will have to develop a mathematical argument based on economic, environmental, or other factors to present to a panel of farmers. Your task is to accumulate evidence in order to convince the panel of farmers to dedicate at least part of their land to growing cellulosic biofuel crops.
4. **Presentation** After compiling your information, making your mathematical model, and solidifying your arguments, your team will be required to make a 10-15 minute presentation to a panel of farmers. This presentation will be graded on content accuracy, visual appeal, and soundness of arguments. The group will have to choose what presentation tool to use.

