



Classroom Activity

10 Big Question: How can we reduce our reliance on fossil fuels?

Food versus fuel

The use of biofuels is a hot topic around the world, particularly the debate over growing crops for fuel versus food. In this activity you will investigate the position of an interested party and participate in a group role play to debate its pros and cons.

Take up the role of one of the following groups:

- > Owner of an international fuel company
- > Consumer
- > Environmental activist
- > Member of Parliament linked to transport
- > Member of Parliament linked to energy and climate change
- > Biofuels scientist
- > Farmer growing crops needed for food
- > Villager in a developing country

Research and establish your position. The 'Useful Websites' resource in 'Liquid Biofuels: An Essential Component of Renewable Energy' (e-Science issue 12, February 2015) is a good place to start for research sources.

You may like to brainstorm some questions particular to your position before beginning your research. Here are some to get you started:

- > Will food prices go up when crops being used for food are also needed for biofuels?
- > What rules will be in place for biofuel production?
- > Will more jobs be made available when new biofuel production plants are opened or production expands in already established plants?
- > What are the advantages of biofuels over fossil fuels? And what disadvantages?
- > Will big business and the general public adopt biofuels as an alternative to fossil fuels?
- > What is the future market for biofuels?
- > Do I have to increase the number of plants I grow for biofuel production?
- > How can biofuels be produced and transported in a more environmentally-friendly way?
- > Which biofuel and type of biofuel production is the most efficient?
- > How much biofuel can be produced with minimum waste products and energy use?
- > How will the expansion of biofuels production affect the environment?

Present your position on biofuels to the group and/or write a 'submission' lobbying for it.