

Ethanol fuel, made from plants such as corn and sugar cane, has been advocated by some people as an alternative to gasoline in the United States. However, many critics argue that ethanol is not a good replacement for gasoline for several reasons. First, the increased use of ethanol fuel would not help to solve one of the biggest environmental problems caused by gasoline use: global warming. Like gasoline, ethanol releases carbon dioxide into the atmosphere when it is burned for fuel, and carbon dioxide is a greenhouse gas: it helps trap heat in the atmosphere. Thus, ethanol offers no environmental advantage over gasoline. Second, the production of significant amounts of ethanol would dramatically reduce the amount of plants available for uses other than fuel. For example, much of the corn now grown in the United States is used to feed farm animals such as cows and chickens. It is estimated that if ethanol were used to satisfy just 10 percent of the fuel needs in the United States, more than 60 percent of the corn currently grown in the United States would have to be used to produce ethanol. If most of the corn were used to produce ethanol, a substantial source of food for animals would disappear. Third, ethanol fuel will never be able to compete with gasoline on price. Although the prices of ethanol and gasoline for the consumer are currently about the same, this is only because of the help—in the form of tax subsidies—given to ethanol producers by the United States government. These tax subsidies have cost the United States government over \$11 billion in the past 30 years. If the United States government were to stop helping the producers in this way, the price of ethanol would increase greatly.

Now listen to part of a lecture on the topic you just read about. Ethanol actually is a good alternative to gasoline. Although you just read three reasons why it's not a good alternative, not one of these three reasons is convincing: First, the increased use of ethanol fuel will not add to global warming. It's true that when ethanol is burned, it releases carbon dioxide into the atmosphere. But as you read, ethanol's often made from plants such as corn. Well, the process of growing the plants counteracts this release of carbon dioxide. Let me explain. Every growing plant absorbs carbon dioxide from the air as part of its nutrition. So, growing plants for ethanol production actually removes carbon dioxide from the atmosphere. Second, large-scale production of ethanol doesn't have to reduce the sources of food for animals. That's because we can produce ethanol using cellulose. Cellulose is the main component of plant cell walls, and you'll find most cellulose in those parts of plants that are not eaten by animals. So, since we can produce ethanol from the plant parts that aren't eaten, the amount of animal feed that's available will not be reduced. Third, in the future, ethanol will be able to compete with gasoline in terms of price. It's true that government subsidies make ethanol cheaper than it would normally be, but this support won't always be needed. Once enough people start buying ethanol, ethanol producers will increase their production of ethanol. Generally, increased production of a product leads to a drop in its price. So the price of ethanol will go down as more of it becomes available. Studies show that if ethanol production could be three times greater than it is now, the cost of producing a unit of ethanol would drop by forty percent.

Summarize the points made in the lecture, being sure to explain how they oppose the specific points made in the reading passage.

Do you agree or disagree with the following statement? Teachers should not make their social or political views known to students in the classroom. Use specific reasons and examples to support your answer.