

BEGINNER QUIZ

True or False Questions

1. In the United States, the transportation sector produces nearly one-third of annual greenhouse gas emissions.

- True False

2. Alternative fuels can be made from soybeans, corn, and even vegetable oil.

- True False

3. Scientists agree that humans are responsible for increasing temperatures that add to the effect of global warming.

- True False

4. Alternative fuel technologies are the only way to reduce greenhouse gas emission from transportation.

- True False

5. Public transportation is less popular than ever before.

- True False

6. My personal transportation choices do not have an impact on global climate change.

- True False

True or False Answers

1. True:

Only electricity generation produces more greenhouse gases on an annual basis. What does this tell us about our transportation habits? It is clear that our personal transportation choices **do** have an impact on global climate change. Most of the transportation emissions come from personal vehicles. We should look for ways to reduce personal vehicle use. We can take public transit, bike, walk, or even carpool!

2. True:

Scientists are investigating natural materials as possible alternative to fossil fuel sources. Ethanol is made from corn and biodiesel can be made from soybeans or vegetable oil. When these plants are growing, they remove carbon dioxide from the air. They also release less carbon dioxide (as compared to conventional fuels) when burned. What is the downside for these fuels? For ethanol especially, the fuel production is an energy intensive process. The farmers use fossil fuels to produce the fertilizer/pesticides that they apply to the crops and to run the farm machinery. More efficient production methods are decreasing the fuel use. Also chemical free farming methods, combined with farm machinery powered by alternative fuels, reduce the greenhouse gas emission associated with ethanol production.

3. True:

For many years, the idea of global warming was hotly debated. Only recently has the scientific community come to a consensus about global warming—thanks to the work of the United Nation’s *Intergovernmental Panel on Climate Change* (IPCC), the world’s leading scientific committee that investigates global warming. The panel concluded in their 2001 report that average surface temperatures are increasing and that humans are causing the warming trends.

Evidence for global warming trends is rapidly piling up. The 1990’s were the warmest decade in the last 1,000 years. Atmospheric carbon dioxide levels are rising. Melting snow cover and shrinking arctic ice shelves provide further evidence of global climate change. Are you convinced?

4. False:

Reducing greenhouse gas emissions from transportation requires a two-step approach:

1. Improving technology and fuel efficiency
2. Increasing the use of public transportation

Alternative fuel technologies and fuels provide a lot of possibilities for reducing greenhouse gases (GHGs). They are aimed at improving fuel efficiency in personal automobiles and in public transportation vehicles such as buses and trolleys.

These technologies can become even more effective when used in public transit fleets. Public transit is already more efficient than personal vehicles and release fewer GHG per mile traveled by each passenger. By getting more people to take transit and to drive less, greater GHG reductions can be achieved.

Making smart decisions in the way we develop our landscape can help make using alternative modes of transportation easier. One method for doing this is for municipalities to invest in “Transit-Oriented Development” (TOD). TOD helps to create communities that provide easy access to a wide variety of transportation alternatives. This type of planned development ensures that homes, shops, schools, and businesses are located near each other. This type of development makes it easier for people to walk or bike to work, school, or the store—methods of transportation that are both good for your health and the health of the environment!

5. False:

Between 1995 and 2000, transit ridership increased 21%. What is responsible for this? City planners are recognizing that planning and transportation go hand-in-hand. Through Transit-Oriented Development, city officials are creating neighborhoods that encourage people to take transit. More and more people in cities are also turning to public transit because it is cheaper and more convenient than owning a car.

What does this mean? This is great news for the environment. The more people who take transit, the less people driving on the road! Fewer cars on the road means reduced congestion and greenhouse gas emissions.

To continue to encourage the use of public transportation, policy makers should make sure to design transit systems that are usable and convenient. Limiting parking spaces in downtown areas, creating car free zones, and providing incentives to carpool also encourage the use of more efficient transportation systems.

6. False:

Even small changes in transportation habits can have a large impact on climate change. If we use transit for 5% of our daily trips, we can prevent 35 million tons of carbon dioxide(www.eesi.org) from being released. Can you replace one car trip with a transit trip, or by walking, biking, or carpooling this week? It's that easy.