

GLOBAL WARMING

The evidence that humans are causing global warming is strong, but the question of what to do about it remains controversial. Economics, sociology, and politics are all important factors in planning for the future.

Even if **we** stopped emitting greenhouse gases (GHGs) today, the Earth would still warm by another degree Fahrenheit or so. But what we do from today forward makes a big difference. Depending on our choices, scientists predict that the Earth could eventually warm by as little as 2.5 degrees or as much as 10 degrees Fahrenheit.

A commonly cited goal is to stabilize GHG concentrations around 450-550 parts per million (ppm), or about twice pre-industrial levels. This is the point at which many believe the most damaging impacts of climate change can be avoided. Current concentrations are about 380 ppm, **which** means there isn't much time to lose. According to the IPCC, we'd have to reduce GHG emissions by 50% to 80% of what they're on track to be in the next century to reach this level.

Is this possible?

Many people and governments are already working hard to cut greenhouse gases, and everyone can help.

Researchers Stephen Pacala and Robert Socolow at Princeton University have suggested one approach that they call "stabilization wedges." This means reducing GHG emissions from a variety of sources with technologies available in the next few decades, rather than relying on an enormous change in a single area. They suggest 7 wedges that could each reduce emissions, and all of **them** together could hold emissions at approximately current levels for the next 50 years, putting us on a potential path to stabilize around 500 ppm.

There are many possible wedges, including improvements to energy efficiency and vehicle fuel economy (so less energy has to be produced), and increases in wind and solar power, hydrogen produced from renewable sources, biofuels (produced from crops), natural gas, and nuclear power. There is also the potential to capture the carbon dioxide emitted from fossil fuels and store it underground—a process called "carbon sequestration."

In addition to reducing the gases we emit to the atmosphere, we can also increase the amount of gases we take out of the atmosphere. Plants and trees absorb CO₂ as they grow, "**sequestering**" carbon naturally. Increasing forestlands and making changes to the way we farm could increase the amount of carbon we're storing.

Some of these technologies have **drawbacks**, and different communities will make different decisions about how to power their lives, but the good news is that there are a variety of options to put us on a path toward a stable climate.

Question 11 The word "we" in paragraph 2 refers to _____.

- A. humans
- B. economists, sociologists, and politicians
- C. animals
- D. scientists

Question 12 According to paragraph 2, how many degrees could the Earth warm up?

- A. 2.5
- B. 2.5 or 10
- C. 10
- D. from 2.5 to 10

Question 13 According to paragraph 3, why should we stabilize GHG concentrations around 450-550 parts per million?

- A. to avoid the most serious effects of climate change
- B. to avoid all damaging impacts of climate change
- C. to mend the most damaging impacts of climate change
- D. to stop climate change

Question 14 What does "which" in paragraph 3 refer to?

- A. current concentrations
- B. that current concentrations are about 380 ppm
- C. 380 ppm
- D. ppm

Question 15 Why does the author mention Stephen Pacala and Robert Socolow?

- A. To introduce two researchers in the field
- B. To prove that researchers are working to reduce GHG emission
- C. To introduce one way to reduce GHG emission
- D. To introduce Princeton University

Question 16 What does the bold word "them" in the passage refer to?

- A. researchers
- B. humans
- C. renewable resources
- D. wedges

Question 17 What stabilization wedges are NOT mentioned in the passage?

- A. create environment-friendly materials
- B. capture and store carbon dioxide underground
- C. increase the use of renewable energy

D. grow more trees

Question 18 "Sequestering" in the passage has the closest meaning to ____.

- A. absorb
- B. isolate
- C. release
- D. emit

Question 19 Why does the writer mention "drawbacks" in the last paragraph?

- A. To introduce the disadvantages of solutions in the following paragraph
- B. To emphasize the disadvantages of the solutions in the previous paragraph
- C. To recommend readers not to use the solutions
- D. To emphasize the advantages of the solutions in different contexts

Question 20 What is the best title for this passage?

- A. Arguments over Global Warming
- B. Global Warming and its Causes
- C. Global Warming Solutions
- D. Global Warming's Effect on Earth