

Sustainability Literacy Assessment - 2022

What are the three pillars of sustainability?

- a. Environmental, Political, and Social
- b. Education, Economic, and Political
- c. Environmental, Social, and Economic
- d. Social, Political, and Economic
- e. I do not know

Since the beginning of the industrial revolution, average global temperatures have increased about

- a. 1°C (1.8°F)
- b. 3°C (5.4°F)
- c. 5°C (9.0°F)
- d. They have not increased at all
- e. I do not know

Anthropogenic (human-induced) activities utilizing fossil fuels (oil, natural gas, and coal) significantly contribute to rising global temperatures.

- a. True
- b. False
- c. I do not know

According to the IPCC, scientific evidence suggests that anthropogenic (human-induced) climate change:

- a. Is unlikely as human beings don't have the capacity to change such a large and complex system
- b. Might or might not happen; it's too early to tell.
- c. Is already happening on a global scale.
- d. Is likely to begin in about 20 to 40 years
- e. I do not know

Which of the following represents greatest contributors to greenhouse gas emission, from greatest to least in the United States:

- a. Transportation, electricity generation, agriculture, heating of homes and buildings
- b. Agriculture, electricity generation, transportation, heating of homes and buildings
- c. Electricity, agriculture, heating of homes and buildings, transportation
- d. eating of homes and buildings, agriculture, transportation, electricity
- e. I do not know

The International Panel on Climate Change (IPCC) recommends we, as a global community, achieve carbon neutrality.

- a. True
- b. False
- c. I do not know

Which of the following statements about climate change is false?

- a. It is likely to adversely and disproportionately affect low-income and minority populations across the U.S., as well as globally.
- b. In the last 150 years, carbon dioxide levels rose from 280 parts per million to 414 parts per million.
- c. Climate change is global and therefore affects all people equally.
- d. If temperatures continue to rise, it is projected that impacts will increase and persist throughout this century and beyond.
- e. Carbon dioxide, nitrous oxide, methane, and water vapor are examples of greenhouse gases contributing to the greenhouse effect.
- f. I do not know

Each person has a carbon footprint, or their contribution to climate change. What does not contribute to a person's carbon footprint at Miami University?

- a. Driving to campus
- b. Recycling plastic waste
- c. Using single-use items
- d. Walking to campus
- c. Generating food waste
- d. Printing a course assignment
- e. Leaving the lights on and windows open
- f. Flying to study abroad
- g. Charging electronics
- h. All of the above
- i. None of the above
- j. I do not know

Every academic discipline can have a role to play in addressing climate change

- a. True
- b. False
- c. I do not know

Which of the following statements is false?

- a. Scope 1 and 2 greenhouse gas emissions are BOTH controlled by an institution.
- b. Scope 1 and 2 greenhouse gas emissions BOTH emit onsite
- c. Scope 3 greenhouse gas emissions are NOT owned, nor directly controlled by an institution.
- d. Scope 3 greenhouse gas emissions emit both onsite and offsite an institution.
- e. I do not know

Which of the following has the lowest carbon footprint at Miami University?

- a. Burning natural gas to heat buildings
- b. Purchased electricity
- c. Commuting by faculty, staff, and students
- d. All directly financed air travel by Miami University
- e. Fuel used by Miami's vehicles and grounds equipment
- f. I do not know

Which of the following has the largest carbon footprint at Miami University?

- a. Burning natural gas to heat buildings
- b. Purchased electricity
- c. Commuting from Faculty, Staff, and Students
- e. All directly financed air travel by Miami University
- f. Fuel used by Miami's owned vehicles and grounds equipment
- g. I do not know

Over the past decade, Miami University's Utility Master Plan prioritized energy efficiency and reduction of energy consumption over renewable energy first to maximize carbon reductions per dollar spent.

- a. True
- b. False
- c. I do not know

If an institution has achieved carbon neutrality, it means:

- a. It generates all electricity onsite
- b. Its contributions to carbon emissions are balanced by its contributions to carbon reductions.
- c. It strictly uses electricity to heat and cool buildings.
- d. It is using more natural gas than coal and oil.
- e. I do not know

Climate action efforts involve:

- a. Only mitigation measures to reduce and eliminate emissions to reduce warming
- b. Only resilience measures to adapt to current and future impacts of climate change
- c. Both mitigation and resilience measures
- d. Neither mitigation and adaptation measures
- e. I do not know

According to the EPA's Waste Management Hierarchy, what is the preferred order of waste management?

- a. Recycling/Composting, Treatment and Disposal, Energy Recovery, Source Reduction/Reuse
- b. Source Reduction/Reuse, Energy Recovery, Recycling/Composting, Treatment and Disposal
- c. Source Reduction/Reuse, Recycling/Composting, Energy Recovery, Treatment and Disposal
- d. Recycling/Composting, Energy Recovery, Source Reduction/Reuse, Treatment and Disposal
- e. I do not know

Which of the following is an example of a zero waste initiative?

- a. Recycling properly
- b. Avoiding single-use items (bottles, utensils, bags etc.)
- c. Buying products from a carbon-neutral company
- d. Purchasing carbon offsets
- e. I do not know

Carbon offsetting refers to purchasing or producing credits that reduce emissions elsewhere (such as planting trees) while emissions continue to emit onsite. In doing so, an institution can become carbon neutral even if they still have a carbon impact on-site.

- a. True
- b. False
- c. I do not know

Which activity does not result in greenhouse gas emissions?

- a. Burying waste in a landfill
- b. Recycling products
- c. Incinerating waste
- d. Re-using products
- e. I do not know

In 2019, Miami University had reduced its energy-based carbon emissions on per gross foot by what percent compared to 2008?

- a. 20%
- b. 12%
- c. 34%
- d. 52%
- e. I do not know