

The primary sources of greenhouse gas emissions in the United States are:

**Electricity production:** Electricity production generates the largest share of greenhouse gas emissions in the United States. More than 70 percent of our electricity comes from burning fossil fuels, mostly coal and natural gas.

**Transportation:** Greenhouse gas emissions from transportation primarily come from burning fossil fuels for cars, trucks, ships, trains, and airplanes.

**Industry:** Greenhouse gas emissions from industry primarily come from burning fossil fuels for energy as well as greenhouse gas emissions from certain chemical reactions necessary to produce goods from raw materials.

**Commercial and residential:** Greenhouse gas emissions from businesses and homes arise primarily from fossil fuels burned for heat, the use of certain products that contain greenhouse gases, and the handling of waste.

**Agriculture:** Greenhouse gas emissions from agriculture come from livestock such as cows, agricultural soils, and rice production.

**Land use and forestry:** Plants and soil can act as an overall “sink” (absorbing CO<sub>2</sub> from the atmosphere) or as a source of greenhouse gas emissions. In some countries, large amounts of forest are being burned or cut down, which ends up adding CO<sub>2</sub> emissions to the atmosphere. In the United States, however, forests are growing overall. As forests grow, they help to remove CO<sub>2</sub> from the atmosphere.

Read the following sections:

[Greenhouse gases](#)

Click the Carbon Dioxide link near the top of the page and read about specific feature of CO<sub>2</sub>.

Directions:

- 1) Go to the following website: <https://ghgdata.epa.gov/ghgp/main.do>
- 2) In the first window that appears, “Explore Greenhouse Gas (GHG) Emissions from Large Facilities,” choose your state. Choose all the greenhouse gases listed in the box on the top left and click the “APPLY” button. Choose “List” from the buttons at the top.
- 3) A list of facilities will appear. It will list all emitters in the state alphabetically. You can also click the headings at the top of the table to re-order the table.
- 4) Scroll through the facilities listed and find the top emitters in the state. Write down the top five facilities, what sector each facility is listed under, and the amount of total greenhouse gases each is emitting on the “Top Five List” worksheet.
- 5) Conduct another search for your state by selecting only “CO<sub>2</sub>” in the Greenhouse Gas” category on the tool. Again, you may use the headings to organize the chart. List the top five CO<sub>2</sub>-emitting facilities on the worksheet.

- 6) Choose all the greenhouse gases listed in the box. Now, choose the bar chart icon under the "View" tool, and select "Sector." You will be able to see a bar chart that shows how much greenhouse gases each "sector" or kind of facility emits. Under the bar chart, there is a listing of the number of facilities that are categorized under each sector.
- 7) Use the following website to explore the things that you can do to help with climate change at home.

<https://www.epa.gov/climate-indicators/weather-climate>

Chose 3 of the topics from the indicators and describe what you understand them to mean.  
Summarize the indicator and what it shows

- A) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- B) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- C) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_