Elaborate:
Contextualizing Air Pollution

Investigate a town to determine air quality, sources, and impacts

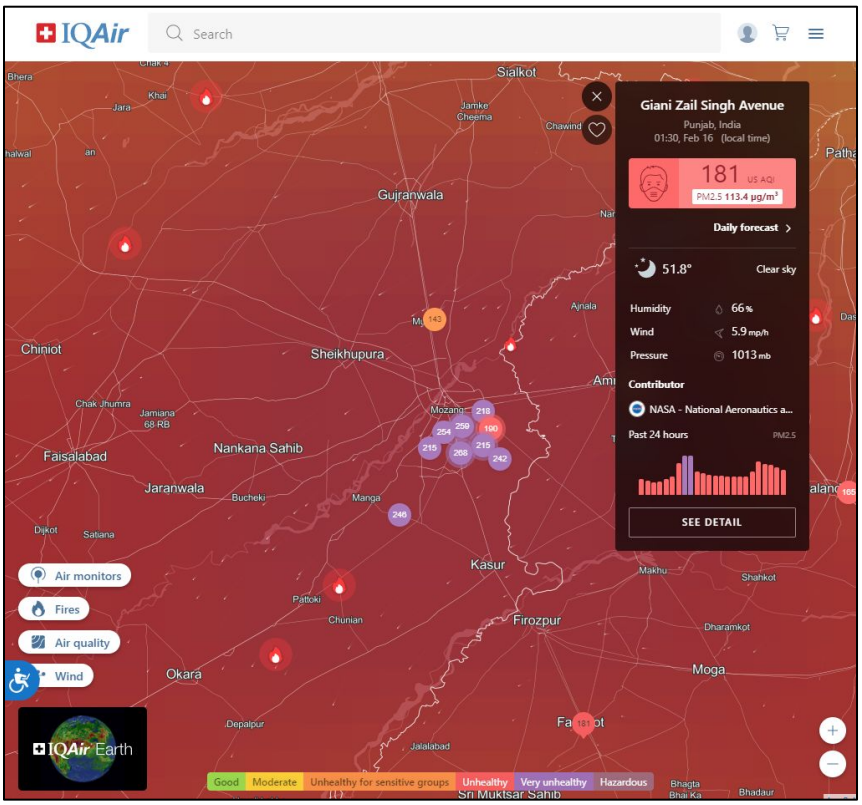
Students will work in small groups to complete the **Contextualizing Air Pollution** assignment. See the included document for a template assignment sheet.

1. Sort students into groups of 2–4 and assign each group a community from the following list:

Los Angeles, U.S.	Stockholm, Sweden	Kabul, Afghanistan
Sydney, Australia	Kanpur, India	Hotan, China
Houston, U.S.	Boise, U.S.	Honolulu, U.S.
Delhi, India	Beijing, China	Madrid, Spain
Paris, France	Lahore, Pakistan	Vancouver, Canada

2. Task each group with generating a brief report on their community's air quality. Information to research might include:
   - Air quality reports (average and that day)
   - Population and population density
   - Average weather
   - Geographic information
   - Environmental policies specifically regarding air quality and pollution
   - Other relevant information such as major industry and local environmental problems

3. Instruct students to start their investigation using https://www.iqair.com/us and then supplement with researching local news, environmental organizations, weather reports, and geographic maps to create a brief but thorough report on the air quality of their assigned community.



Names:

Contextualizing Air Pollution

Instructions: With your assigned group, prepare a brief report on the air quality of your assigned community. Your task is to identify the current and average air quality readings for your community. In addition, you will research information on the relevant factors that we have identified in class that contribute to decreased air quality. Record your research and findings below.

Our group's location is _____.

What is the air quality in this location? How does this compare to other locations?

What factors contribute to the air pollution in this community?

How has health been impacted by air quality? Search for news articles or other health data.

What policies or changes have been made to improve air quality? Search for news articles or local environmental agencies.

These are some questions and ideas we still need to learn about:

Names: **EXAMPLE report**

Contextualizing Air Pollution

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Our group's location is _____Boise, Idaho, U.S._____.

What is the air quality in this location? How does this compare to other locations?

The air quality for Boise, Idaho on 6/5/2022 is a US AQI score of 10 or Good. The PM2.5 currently is 2.4 microns. Currently, the worst air in the U.S. is in Beltsville, Maryland, Washington Park, Illinois, and several places in California. There is no concerning air in Idaho currently.

What factors contribute to the air pollution in this community?

Boise is a small city with a major university as one of the main attractions. Boise is surrounded by Mountains which block the movement of air. The city does not have major industrial activity but recently, many tech companies are moving in. There are 235,000 people living in boise (77th most populous are in U.S.). Wildfires are the most common pollutant.

How has health been impacted by air quality? Search for news articles or other health data.

Particle pollution, driven by wildfires which are increasing as a result of the western drought, have led to several Idaho cities being on the top 25 worst short-term particle pollution. On these days, health advisors recommend staying indoors and wearing a mask. The Idaho Department of Environmental Quality strongly recommends sensitive populations (children, elderly, health conditions) to avoid exposure.

What policies or changes have been made to improve air quality? Search for news articles or local environmental agencies.

The Idaho Department of Environmental Quality has passed policies regarding reducing vehicle emissions, limiting wood stove emissions, limiting gasoline refilling and use until the sun is down, banning the burning of trash and yard waste. A complete list of rules and policies can be found here: https://adminrules.idaho.gov/rules/current/58/580101.pdf

These are some questions and ideas we still need to learn about:

How does Idaho mitigate massive wildfire burns?

What will the increase in tech companies do to the local environment?

If Boise's population is growing, how will that affect their air pollution? Will the surrounding mountains reduce clean air flow?