

# Decoding Carbon

## #DECODINGCARBON

Activity: How does Canada contribute to global GHG emissions?



### Learning Outcomes

By the end of this activity learners will:

- Understand Canada's historic and current emissions relative to other countries.
- Explore and answer the question "Considering Canada's emissions relative to other countries, why should Canada act on climate change?"

### Curriculum Connections

#### Alberta

- Grade 10 Science
- Grade 10 Social Studies
- Grade 11 Social Studies

#### British Columbia

- Grade 10 Science
- Grade 10 Environmental Science
- Grade 11 Environmental Science
- Grade 12 Environmental Science

#### Ontario

- Grade 10 Science
- Grade 12 Canada & World Studies

### Length of Activity

1 – 1.5 hours

### Length of Activity

Topic Background

Activity Worksheet

Activity Answer Key

Marking Rubric

Internet Enabled Device

### Step 1 (5 minutes)

Begin by reading out the following text to your class: Climate change is a global issue, affecting all countries in the world to varying degrees. By understanding the concept of Climate Injustice, in the activity "Building a Low Carbon Future: The Need for Collective Action" we learned that many countries that are not responsible for emitting greenhouse gases to the atmosphere are paying a heavy price for the consequences of climate change. This poses a moral question of what role each country, including Canada, should play in addressing the negative impacts caused by climate change?

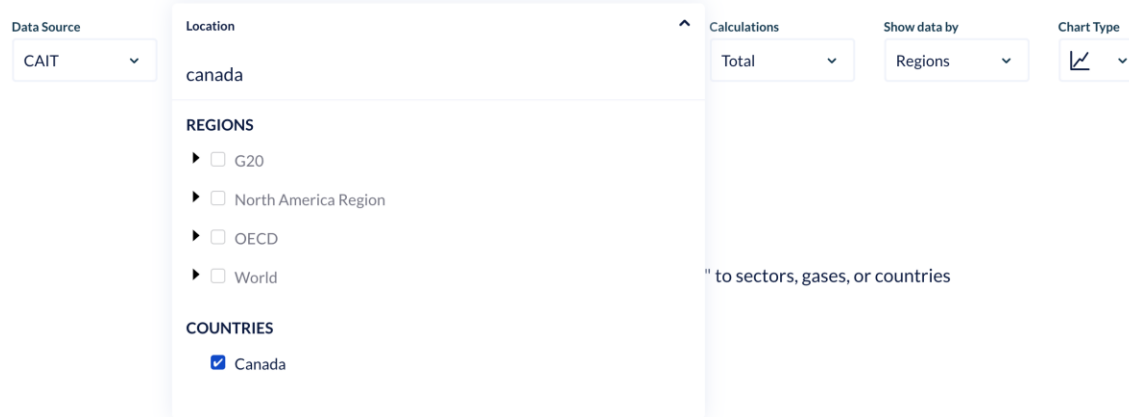
### Step 2

1. Working in groups, learners will explore Canada's emissions compared to the world by using the tool provided by Climate Watch, [link to tool](#) (15 minutes)
2. Learners will download the Activity 7 Worksheet. Using the tool provided by Climate Watch, students will record their findings in the worksheet. Students will find out the countries that make up the top 10 emitters category by clicking on the drop-down filter "Top Emitters" under location to find out the names of top emitters.



After finding the names of the emitters, learners will record the names of these countries on the worksheet. Then, learners will filter these countries individually under location and countries, together with Canada.

### Global Historical Emissions



Once all the countries have been individually selected, learners will look at the graph for total GHG emissions and per capita GHG emissions (this can be selected under “calculations”). Educators can confirm the data with the Excel answer key provided on the activity webpage.

- Learners will find out where Canada ranks in the world in its total GHG emissions and its per capita GHG emissions. Have learners record their findings second table on activity worksheet. **(15 minutes)**
- Learners will make an individual journal entry reflecting on the question: “Considering Canada’s emissions relative to other countries, do you think Canada should act on climate change - why or why not?” Entry should be one page maximum. **(10 minutes)**