

# SCHOOL ENERGY REVIEW

## ABOUT THIS ACTIVITY

Students will go through the School Energy Review activity to learn more about how their school uses energy. After being split into four groups, each group will focus on one energy-consuming group to gather data, suggest changes to consume less energy, and present their findings and suggestions to the class.

## GOALS/OBJECTIVES

This activity allows students to take the practical knowledge they've gained about energy efficiency and apply it to their school. Students will identify energy-consuming products, technologies, and equipment in the school and determine how the school can potentially reduce its energy use.

## LEARNING OUTCOMES

This unit addresses all five global competencies in science: critical thinking, creativity, citizenship, connection to self, collaboration.

This is an inquiry-based learning experience that emphasizes the use of scientific instruments to gather accurate measurements and draw conclusions from observations.

## LESSON PLAN

What you'll need:

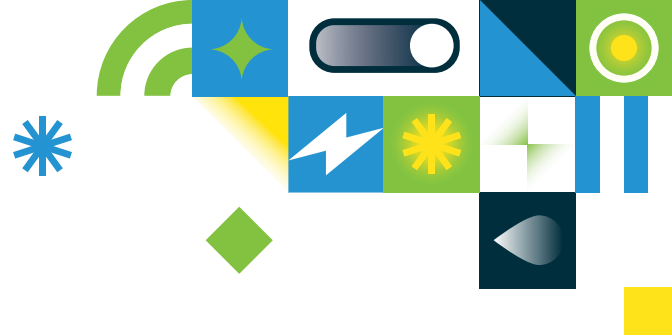
- School Energy Review kit ([order a kit here!](#))
- School Energy Review worksheets (found on the School Energy Review resource page on the Generation E website)

## INSTRUCTIONS

1. Fill out our [resource order form](#) to request a School Energy Review kit. The kit includes the following items, which are needed to complete the activity:
  - Two portable electricity usage monitors
  - Two thermometers
  - Two light meters
  - Two flow rate bags
  - Two flashlights

**The kit must be shipped back to us after your activity; this is free of charge. The flow rate bags don't need to be returned.**

2. Review the School Energy Review presentation with your class. We can also deliver this presentation to your class for free. [Book a workshop](#) if you're interested!
3. Split your class into four groups and assign them to the following teams:
  - Electronics and appliances
  - Lighting\*
  - Heating and cooling\*
  - Water and windows
4. Provide each group with the corresponding worksheet for their topic. Let the students know that it's important to read the whole worksheet before starting the activity. You can find printable PDFs for each of the four teams on our website.



5. Either assign or discuss as a class which classrooms and other rooms in the school will be part of the review. This can differ between groups.
6. Once the data is collected and any additional research has been completed, each team will prepare a presentation and share their findings and suggestions with the class. If appropriate, invite a decision-maker for the school to watch, too!

\*Your school's custodian may need to be available to answer questions for the heating and cooling and lighting groups. Alternatively, you could ask the custodian the following questions ahead of time and provide their responses to your students:

1. What type of boiler does the school have (steam or hot water)?
2. If hot water, is it medium or high efficiency?
3. What is the school's heating source (electricity, natural gas, propane, fuel oil, or wood)?
4. What type of lighting is used most throughout the school?

## TIME REQUIREMENTS

The approximate time requirements for each component of the activity are as follows:

1. School Energy Review presentation (50 minutes)
2. School Energy Review activity (60 to 90 minutes)
3. Additional research and presentation preparation (60 to 90 minutes; this can potentially be done outside of class)
4. Class presentations (60 minutes)

## CONTINUE YOUR REVIEW

A great activity to complete after your School Energy Review is Green Action Centre's Waste Audit! Their team can lead your students through a hands-on audit where they'll guide the group through inspecting, documenting, and analyzing the waste generated at the school. This will help determine educated changes that can be made to reduce waste. Find out more and book your audit at [info@greenactioncentre.ca](mailto:info@greenactioncentre.ca).