EDUCATOR RESOURCE

Educators! We hope you enjoy this activity with your class! We are excited to receive your submissions for this challenge! Please make sure to visit greenlearning.ca to register or email programs@greenlearning.ca

Learning Outcomes

- Students will learn about Lights Out event and the importance of raising awareness for energy conservation
- Students will think about the opportunities for energy savings in their schools by learning how to baseline energy consumption data in their school and measure their impact

Curriculum Connections

Please refer to Curriculum Connections Sheet

Step 1: Introducing Concepts

Explain the basics about how fossil fuel emissions contribute to climate change by explaining the Greenhouse Effect.

For younger students (K-6), you can open with this video: https://www.youtube.com/watch?v=Sv7OHfpIRfU

For older students (7-12), that likely more familiar with how the greenhouse effect works, you can open with this video: https://www.youtube.com/watch?v=EtW2rrLHs08

Step 2: Before Getting Started

Ask your students to check out this video to kick start their own ideas on how they can save energy at school:

How to Save Energy at School
https://www.youtube.com/watch?v=eHZJ6ZPRe4g

What can you do about Climate Change
https://www.youtube.com/watch?v=QGWs6aIjGlE

Step 3: Choose the Day for Your school's Lights Out event

- Choose the day and time you want to do the school Lights Out event. Make sure to include your students, the principal and school's facility operator
- If you school has energy metering technology installed (i.e. CircuitMeter), ensure that you feel comfortable with the associated software and you know the areas of your school that are being monitored

Step 4: Learn about Energy Metering and Energy Conservation

If your school has installed energy metering technology, then organize an informational session with the Facility Operator to explain to students how to baseline energy usage data.

Ask students to brainstorm all the electronics used in their school that can be turned off during the school Lights Out event. Below are some resources for your use:

Educator Resource "Find the Phantom Load"

Educator Resource "Personal Energy Use Background"

Step 5: Promote the Lights Out Event

Work with your school to do promotional events such as announcements, posters, social media engagement, etc. leading up to the event to bring awareness. Get as many students to participate in the school Lights Out event as possible!

Step 6: Complete the Lights Out Event

Do a morning announcement to get students excited about the event.
Make sure to unplug any unnecessary electrical devices beforehand. Participate in the school Lights Out event and have lots of fun!

Step 7: Celebrate the Impact!

- Work with your Facilities Operator to calculate the savings from your school's Lights Out event and report back to us your energy savings!
- You can do this easily if you have the energy metering technology installed - all you have to do is take a look at the software and calculate your savings!
- If you have watt meters in your school, you can explore plug loads by using Energy Revealed learning activities such as 'Electronic Overload' or 'Start Me Up'
- **Lastly, and most importantly, submit your results**

Step 8: Make an Energy Savings Plan and Take Action!

Keep the momentum going by implementing other energy saving action projects to extend the learning from the school Lights Out event!

Now that you have an understanding of your energy use and how your behaviours can save energy in your school, make an energy savings plan for your school and implement it! You can begin by setting an annual energy savings goal for your school and work towards achieving it through various efforts, which you can learn about in the Energy Revealed program.

Make sure to work with your Facilities Operator and continue monitoring your energy savings!

Step 9: Share & Inspire

Ask students to share their photos, presentations, videos, etc. while completing the Energy Revealed Challenge by tagging us @GreenLearning