

GETTING STARTED WITH ENERGY - SUPPORT PACKAGE

Heating System Survey



Buildings are the centre of most of our lives. Our climate in Nova Scotia requires our buildings to be heated for much of the year. Heating comes at a financial cost, moreover, it causes greenhouse gas emissions that drive climate change. It is important that we don't waste heat. Many schools are centrally heated beyond what is necessary. Often the heat is so excessive that classroom windows are opened while the heat is on. This is very wasteful. Energy costs are rising and the impacts of climate change have become more obvious and now this wasted energy has become a big deal. The people that control the temperature set points at your school may not be in that building every day so they may need your help to find the right temperature for each area of your school. In the process of a Heating System Survey you will learn to waste less energy every day!

Action Plan

Step 1- Learn about the school heating system. Talk to your school Custodian and/or Principal to learn about how temperature is controlled in your school. If they do not have a clear understanding, maybe you can invite someone from your School Board's Operations Department to explain your school's heating system and temperature controls. You could also tell them about your Heating System Survey plans and your hope to waste less energy.



Step 2- Educate students and staff. Ask each classroom to learn about their energy use, including why and how we need to save it. Invite your Green Schools NS Engagement Officer for either a virtual or in-person presentation to get your school started with a Heating System Survey. If you want to do student-to-student education, check out the great slide shows, videos, and books listed below. After the presentation, you could start a discussion with the temperature of the room. Is your classroom too warm? Do you ever open the window when the heat is on? Why do you open the window? Too warm? Too stinky? Are students and staff dressed properly for the season?

Announcement example: "(Your school name) is excited to waste less energy so we will be doing a heating system survey this week to find out if each classroom is too hot, too cold or just right. We will also be looking to find out how many layers of clothing you are wearing. We want our school to be the perfect temperature for learning and keeping the Earth healthy too."

Step 3- Develop your survey. You will find included a sample Heating System Survey but please add or remove any columns to make it work for your school. You can determine how often to conduct the survey based on the desired information. You could conduct the survey every day for a week to see how results vary over a few days. You could also do the survey in the morning, at lunch, and the end of the day in case the temperature varies over the day. Please contact your Engagement Officer if you need help making your survey.



Location:										
Date (Jan 4)	Time (9am)	Room Temp.	Outside Temp.	How does room temperature feel to you:			What are you wearing:			Are there any windows open?
				Hot	Perfect	Cold	Short Sleeve	Long Sleeve	Sweater	

Step 4- Conduct the survey. Who will conduct the survey? Depending on what works at your school, the survey team could be your student leaders or a teacher in each classroom. With each survey, note the date, time, room temperature, outdoor temperature, and how many windows are open. Ask the people in each room if they are hot, perfect or cold by a show of hands, and note the numbers on your survey. Next, count how many people are wearing short sleeves, long sleeves or sweaters. An easy way to see if windows are left open is to look at the school from outside. Do a walk outside at lunch or near the end of the day and note what rooms need to close their windows. If windows are open, ask those teachers why.

Step 5- Develop an action plan based survey results. List all the issues that found during the survey. Then, list several solutions to each issue. For each possible solution think about the barriers, cost, and benefits. Pick the solution you think will work best and give it a try. For example, the issue may be that many windows are left open. Possible solutions could be:

1. Your team closes all the windows in each room (Barriers: It takes time, and takes students out of class. Cost: Time. Benefits: Decrease wasted heat).
2. Ask the teachers to close the windows (Barriers: An additional task for teachers to do. Cost: Students are not being taught during that time. Benefits: Decrease wasted heat).
3. Educate the students to make sure all the windows remain closed (Barrier: They may forget. Cost: Time. Benefit: Decrease wasted heat, and no time is taken out of class to close windows).

Some examples of issues you may find - with possible solutions.

Rooms are too warm - note what students are wearing.

Rooms are too cold - note what students are wearing.

Rooms are too warm later in the day - may need to decrease temperature set point.

Windows are open for fresh air - may need to have air handling unit or vents serviced.

One or more windows are left open - the classroom needs reminders.

One or more windows are stuck open - let your custodian know.

Windows are very drafty - let your custodian know.

Students wear short sleeves and the classroom is hot - need to dress for the weather, lower the temperature.

Heating vents are blocked - need to talk about why it is important to keep vents clear.

Host a Sweater Day. Have a school-wide initiative called Sweater Day to kick off changing your school's temperature. World Wildlife Fund Canada hosts a [National Sweater Day](#) every February to draw attention to the importance of energy conservation. Check out the [Green Schools NS Sweater Day Slideshow](#) or ask for the [Sweater Day Support Package](#). Turn down the heat at school by two degrees for the day and wear sweaters. You could even ask the school to wear ugly sweaters or themed sweaters to make it fun. After Sweater Day



ask each classroom if the change in temperature was noticeable. Ask if they would be willing to wear a sweater every day, or once a week, and turn down the heat. Celebrate your achievements and perhaps you will make this a recurring event!

Step 6- Follow-up with Classroom Checks. If you have an active Green Team or Environment Club, they may want to do classroom checks to see if the windows stay closed and the vents stay clear. Ask your Engagement Officer about the Classroom Checks Support Package. Remember to stay positive and focus on achievements!



Resources

- [Green Schools NS Energy Navigators Activity](#)
- [Green Schools NS Classroom Energy Checklist](#)
- [Green Schools NS Draft Snakes](#)
- [Green School Coldbrook and District Sweater Day Story](#)
- [Green School Berwick and District Sweater Day Story](#)
- [Green School Shelburne Regional High Sweater Day Story](#)

- [National Sweater Day](#)
- [What Is Energy? Video](#)
- [How To Save Energy Video](#)
- [Energy, Let's Save It! Video](#)
- [Green School Coldbrook and District's Sweater Day 2016](#)

Books

- [Why Should I Save Energy? by - Jen Green](#)
- [10 Things I Can Do to Help the World by - Melanie Walsh Scholastic curriculum links](#)
- [How to Help the Earth-by the Lorax \(Dr. Suess\) by - Tish Rabe](#)
- [I Can Save the Earth!: One Little Monster Learns to Reduce, Reuse, and Recycle by - Alison Inches](#)