

Green School Energy Challenge

RESOURCES

School Energy Management Program (SEMP) Energy Assessments

We highly recommend that all GSEC schools use the free energy assessment service provided by the School Energy Management Program (SEMP) of the Vermont Superintendent's Association. Vermont schools are eligible for free energy assessments from SEMP every three years. We recommend you use the energy assessment report about your school to inform any activities you decide to undertake (VEEP will facilitate getting existing reports to GSEC schools this year). If your school has not had an energy assessment from SEMP within the last three years, and/or your facilities manager does not have a copy of your school's most recent report, a school administrator can contact program director Norm Etkind at SEMP (semp@vtvsa.org). SEMP can also help Vermont schools by providing practical advice on energy efficiency and money-saving capital improvements. For more information about SEMP, including contact details for getting an energy assessment, go to vtvsa.org/school-energy-management-program.php.

Idle-Free School Campaigns

Idle-Free School Campaigns aim to reduce idling "hot spots" at schools to help reduce carbon emissions and improve air quality around the school. The idle free campaign was developed by the EPA (epa.gov/region8/idle-free-schools) and was supported for several years by Idle Free Vermont (idlefreevt.org). VEEP will be supporting this program in 2016/17.

Five-step process:

Step 1: In September or early October, initial training session in the classroom.

Step 2: In October, students unobtrusively conduct initial data collection of idling vehicles over four or five days, using note-taking and timing devices.

Step 3: In November or December, school announces support for idle-free campaign in school community, taking steps that include installing new no-idling signs (provided by project), notice in school newsletter and on website, and optional letter and pledge to parents and delivery companies.

Step 4: In mid to late March, students conduct a driver contact event over two or three days, reaching out to idling drivers with information handout and idle-free window decal, asking them to take no-idling pledge.

Step 5: In late April to mid May, students unobtrusively conduct final data collection of idling over four or five days to evaluate effects of their educational efforts.

Recommended: schools without no-idling guidelines adopt them, based on study findings.

Go Vermont: Transportation

Vermont Agency of Transportation's Go Vermont program is a resource for Vermonters who want to reduce the cost and environmental impact of driving (connectingcommuters.org). VEEP has additional funding in the 2016/17 school year to work with schools on transportation projects.

Efficiency VT Opportunities

Efficiency Vermont is Vermont's efficiency utility. They are like any other energy utility, but instead of purchasing and selling energy, they save it! Through education, services, and rebates, Efficiency Vermont helps all Vermont homeowners and businesses choose sustainable energy solutions. If any of the opportunities below are of interest, please be in touch with Efficiency Vermont at 1-888-921-5990 or visit efficiencyvermont.com.

Lighting Design. Lighting design professionals come to the school and offer expert advice on lighting equipment and design and maximum energy savings possible during a lighting upgrade. Significant financial incentives are provided by Efficiency Vermont for this visit. If your facility manager has "replacing lights" on their list already, consider finding a local lighting designer and contacting them directly. They will be able to tell you more about the program, visit the school to see what is needed, and perhaps even work with your students.

Variable Frequency Drives. A variable frequency drive (VFD) helps a motor run only as fast as needed, which saves energy and reduces wear and tear on equipment. Motors that can be turned down by just 10% can save up to 25% in energy costs! VFDs can be installed on air handlers, boiler fans, exhaust fans, hot water pumps, rooftop units, and many other applications. This might be part of an energy project for your school.

Thermal-Saving Equipment Rebates. Is your school heated with an old boiler or furnace? Does the kitchen exhaust system have control mechanisms in place? How does the school heat water? Maybe you don't even know how much energy they are using. Efficiency Vermont can provide guidance, and potentially a rebate to bring down the cost of new equipment. A quick list of potential opportunities for saving thermal energy includes domestic hot water efficiency measures, system optimization, kitchen hood exhaust controls or efficient boilers and furnaces.

Municipal Streetlight Program. Efficiency Vermont partners with Vermont's utilities to help reduce annual streetlight costs by eliminating unnecessary streetlights and replacing remaining fixtures with LEDs. The Municipal Streetlight Program has been very popular with Vermont cities and towns, and students can be a great resource in helping conduct a street-by-street survey of existing streetlights and identify opportunities for eliminating unnecessary streetlights.