Get Started with the Cool School Challenge

MIDDLE AND HIGH SCHOOL

The Cool School Challenge is a climate education guide to challenge students, teachers, and schools to reduce their carbon footprint.

The Cool School Challenge was developed by the Puget Sound Clean Air Agency and transferred over to the National Wildlife Federation in 2012. Should revisions or changes of any kind are made to Cool School Challenge, the National Wildlife Federation makes no claims regarding, nor is responsible for, the revised materials' accuracy.

Source: climate.nasa.gov
Table of Contents

Overview .................................................................................................................................................. 1
Get Started .............................................................................................................................................. 4
  • Notify teachers and administrators ............................................................................................. 4
  • Form a team .................................................................................................................................... 5
  • Decide on your timeline .................................................................................................................. 6
  • Develop a participation strategy ..................................................................................................... 6
Step 1: Conduct an Audit ....................................................................................................................... 8
Step 2: Create an Action Plan ............................................................................................................... 9
Step 3: Take the Cool School Pledge .................................................................................................. 10
Step 4: Link to Curriculum ................................................................................................................... 11
Step 5: Monitor and Evaluate .............................................................................................................. 12
Step 6: Share your Results .................................................................................................................. 12
Step 7: Apply for an Award! ................................................................................................................. 13
OVERVIEW

The Cool School Challenge is an educational program intended to engage students and teachers in practical strategies to reduce carbon dioxide (CO₂) and other greenhouse gas emissions school-wide, by improving energy efficiency, reducing consumption, increasing recycling, and changing transportation behaviors. Challenge participants will learn how simple actions, taken together, can create a climate of change. Upon completing the Challenge, schools will be eligible to apply for an award through the Eco-Schools USA program.

How It Works

With the guidance of a "Challenge Coach," student teams will learn how to conduct a classroom energy audit and identify significant sources of CO₂ emissions and opportunities for reducing them. They will then recruit as many classrooms as possible into the Challenge, helping them collect data to measure their CO₂ emissions, setting a CO₂ reduction goal, and then developing an action plan for achieving that goal.

The Cool School Challenge is administered by anyone your school designates to be a Challenge Coach, such as a science, math, or group of teachers, administrator, or leader of student organizations. The role of the Challenge Coach is to train, support, and oversee the Student Challenge Leaders in implementing the program at your school.

**Student Challenge Leaders** can be any interested class or group of students. Student Challenge Leaders monitor the participating classrooms' progress and look for ways to motivate and inspire them to achieve the greatest reductions possible. The Cool School Challenge section of the Eco-Schools USA website all the resources need to implement the Challenge, including downloadable audit forms.

**Goals of the Cool School Challenge**

- Educate young people about climate change and everyday actions they can take to reduce their impact locally and globally;
- Reduce carbon dioxide emissions and other greenhouse gas emissions in and around schools;
- Encourage student leadership and empowerment;
- Foster a community of teachers and students working together to reduce their greenhouse gas emissions; and
- Foster a new generation of environmental advocates.
Get Started

The Cool School Challenge encourages flexibility and creativity in making it work for your unique situation: there is no right or wrong way to implement the program. You are welcome to use the materials provided here or adapt them to suit your needs. As you begin planning your approach, here are some suggestions to get started and ensure your success.

Notify teachers and administrators to gain support

Form an Eco-Action Team to include a Challenge Coach & Student Challenge Leader

Develop a sample timeline

Develop a participation strategy

Notify teachers and administrators.

To garner support and buy-in from teachers and administrators, let them know you want to start the Challenge and that you want as much participation from them as possible. You can send a memo or email; arrange to speak at a faculty meeting, etc. See the Sample Introduction Memo, which you can tailor for your use.
Form an Eco-Action Team.

Build a team to administer the Challenge at your school. Ideally, a team will consist of:

- **A Challenge Coach (such as a teacher, administrator, or interested parent).** The program is especially suited for secondary science and math teachers. The role of the Challenge Coach is to train, support, and guide students throughout the process.

- **Student Challenge Leaders.** Student Challenge Leaders are any group of students that want to lead the Challenge at their school. They might be an entire class or smaller group of motivated students (academic, social, or service clubs, for example). Student Challenge Leaders will recruit classroom participation in the Challenge, create CO₂ emission reduction plans for each classroom and, at the end of the Challenge, monitor, evaluate, and summarize the school's accomplishments.

**Cool Ideas**

- Kick off the Challenge with a school assembly, rally, public announcement or other attention-getting means, so everyone in the school knows what you are doing, why and how they can help.

- Offer a prize or other reward to the classroom(s) that achieve the greatest reductions. Especially consider incentives that are climate-friendly, or further encourage greenhouse-gas reducing behavior. You could hold fundraisers, or ask local businesses to donate prizes.

- Organize a school-wide education campaign to increase awareness about climate change along with the various ways students and teachers can take action. Include posters, daily announcements, articles in student publications, speaking at faculty meetings, coordinating behavior-changing activities such as a recycling drive, or a Carpool- or Bike-to-School Week, etc.
Decide on your timeline.

Develop a realistic timeframe for implementing the Challenge. **Here for simplicity, it's been structured as a four-week program, with emissions savings amortized for one school year.** You can certainly keep the Challenge running for an extended period of time! A Sample Challenge Timeline is available for guidance.

Develop a participation strategy.

Spend some time thinking about how to maximize participation in the Challenge. Many of the actions we can take to protect the environment are relatively simple, such as turning off the lights or unplugging machines that are not used! What are some ways you can motivate and inspire schoolmates to participate in the Challenge actively?

Use the Sample Introduction Memo to garner support and buy-in from teachers and administrators.

You should develop a realistic timeframe for implementing the Challenge. For simplicity, the Sample Challenge Timeline is structured as a 40-day program, with emissions savings amortized for one school year. This is only a guideline – you can organize your Challenge in whatever manner works best for you, and can certainly keep the Challenge running for an extended period of time!
TAKE ACTION WITH THE COOL SCHOOL CHALLENGE

STEP 1 CONDUCT AN AUDIT
STEP 2 CREATE AN ACTION PLAN
STEP 3 TAKE THE COOL SCHOOL PLEDGE
STEP 4 LINK TO CURRICULUM
STEP 5 MONITOR AND EVALUATE
STEP 6 SHARE YOUR RESULTS
STEP 7 APPLY FOR AN AWARD
TAKE ACTION

Step 1: Conduct an Audit

Now that your Cool School Challenge team is in place and ready to start reducing emissions at your school, the next step is to conduct an audit to identify sources of CO\textsubscript{2}. You'll begin by gathering information on classroom electricity use, transportation, heating, and waste generation and recycling. You'll then use this data to estimate your classroom's carbon footprint. Repeat the audit process for other classrooms throughout the school - try to recruit as many teachers as possible to participate! The information gathered in the audits will be used to develop an action plan in Step 2, outlining the various ways the classroom can reduce CO\textsubscript{2} emissions.

You'll conduct the audit process twice: at the beginning of the Challenge as part of Step 1, where you will collect baseline information about current classroom behaviors that may be contributing to its carbon footprint, and then again in Step 4 after you've implemented your Action Plan, to see how well each classroom did at reducing its climate impact. This information will help you project the CO\textsubscript{2} reductions possible if the classroom continued climate-protecting behaviors for the entire school year. Begin by reviewing the background information in the Classroom Audit. Conduct the Audit. Use the information gathered in the Audit to estimate classroom emissions by using the online worksheets.

Hint: Be sure to keep your “Pre-Challenge” Audit results and calculations from Step 1 handy so you can compare results in Step 4.
Step 2: Create an Action Plan

Based on your classroom audits results, develop an action plan for each classroom to reduce their CO2 emissions over the school year successfully. Take a look at where most of their emissions are coming from and where it might be possible to change habits and behavior. Turning off half the lights, for example, reduces emissions from lighting by half. Eliminating unnecessary waste – either using materials more efficiently or recycling – can reduce the amount of trash that ends up in the landfill, reducing greenhouse gases.

Give each classroom a goal that is attainable – but not too easy. A reduction goal of 2,000 lbs or more per classroom is usually the right place to start. Or the goal could be to reduce emissions by a certain percent. It might be helpful to give teachers a menu of options to choose from, so they can select the most appropriate actions for their classroom. See sample Action Plan Template.

- The success of the action plan in each classroom depends not only on the teacher, but on all the students who learn in that classroom. Getting them on board is important to meeting your goals. If the teacher is willing, arrange to visit their class to speak directly with the students and brainstorm ideas to enhance their Challenge experience, such as classroom competitions, games, events, etc.

- Post the action plan in a visible location, so everyone is aware of the goals.

- Create “tip signs” near light switches and recycling containers, for example, with reminders to turn things off and recycle properly.

- Identify the “low hanging fruit” and include them in your action plan. Just turning off one panel of lights or using natural light for rooms with windows is an easy way to cut down on electricity use and emissions, and it’s something just about every classroom should be able to do for a few hours each day.
Step 3: Take the Cool School Pledge

For each teacher who accepts the action plan, have them 'pledge' to implement the plan's recommendations. It's up to you to decide how formal to make the pledge: you could create individual pledge sheets for each teacher to sign with the goal clearly stated (see sample Classroom Pledge Template). Or you might post a scorecard in school common areas or other public, high traffic spaces with a list of all participating classrooms and their pledged goals – the sky's the limit! Once you decide on your method, Student Challenge Leaders should gather and compile pledges. It's not a bad idea to have a designated data collector to create a log of classrooms and their CO₂ reduction goals.

- To motivate students and teachers to participate, create signs, posters or other fun visuals to place in each classroom that takes the pledge, so other students and teachers know who in the school is committed to protecting the climate and reducing greenhouse gas emissions.

- School has sent weekly emails, used morning announcements and other forms of communication with different climate ‘tips’ and reminders on ways to protect the planet.

- You could also post each classroom's action plan in a highly visible location, so everyone who uses that classroom can be aware of the goals.
Step 4: Link to the Curriculum

Talk with each participating teacher about how they can link the Cool School Challenge to their classroom curriculum. It is up to the teacher to decide how they will teach climate change, energy, recycling, etc. to their students. Some ideas include:

- Incorporating the classroom auditing process and reducing the classroom's carbon footprint.
- Incorporate a specific climate change or energy focused lesson or activity. Be sure to look at what Eco-Schools USA program offers under each pathway.
- Take an existing lesson and make modifications that place Earth systems, climate, and people at the center.

Educators can use these guidelines, presented by the National Wildlife Federation and the North American Association For Environmental Education, to determine whether K-12 materials on global climate change are:

1. fairly and accurately presented
2. developmentally appropriate
3. instructionally sound
4. easy to use in the classroom
5. action-oriented and supportive of lifelong learning skills

Climate Change: Building Climate Science Knowledge to Enact Local Change on CK12 – free, student directed climate learning resource.
Step 5: Monitor & Evaluate

After implementing your action plan for a set amount of time, you will want to go back and evaluate how much progress each classroom made towards meeting their carbon reduction goals. To do this, you will need to go around to each participating classroom and complete the climate change audit again. You will notice that the audit form you used initially has columns for pre- and post-audit data.

Step 6: Share Your Results

Tally the results for all classrooms and use the Classroom Results Template to inform participating classrooms of their carbon dioxide emissions savings. Share school-wide results with the student body and members of your community.

- Allot time during a school assembly for Student Challenge Leaders to share the Challenge results and make others aware of actions they can take to reduce their carbon footprint

- Post information about the Challenge on your school’s website and in highly visible spots around the school.

- Create a Cool School Challenge report that you can share with parents and community members.

- Submit a press release publicizing the Challenge and highlighting your school’s successes.
Step 7: Apply for an Award

Now that you have completed all the steps, you can apply for an award through the Eco-Schools USA program! Go to the Eco-Schools USA website, login, and complete the applicable award application form. Schools can receive a Bronze or Silver Award upon fulfillment of a designated set of criteria and completion of the respective award form. Green Flag awards are reviewed by an Eco-Schools USA program administrator.

How to Apply for an Award.

- Go to the Eco-Schools USA map, and click on your state in the interactive map to determine if your school is already registered as an Eco-School. If not, go to the registration page and sign-up! Complete the registration form and click 'submit.'

- If you previously registered as an Eco-School, go to the log-in page. Enter your email address and password to access your school's profile.

- On your school's profile page, locate the ‘apply for an award’ menu option. Select the applicable award, and click 'submit.'

- Fill-out the award application and click 'submit.' If the application is only partially completed, you can click 'save' and return to it at a later point.

- If the application is successfully submitted with all criteria met, your school will be awarded the Eco-Schools USA Bronze or Silver Award. You will be able to download and print a personalized certificate of achievement!

- Login with your email used to create your Eco-Schools USA account and update your school's dashboard. Your school's dashboard must be completed if applying for the Green Flag.