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## Solutions for Schools

**Greening school design provides an extraordinarily cost-effective way to enhance student learning, reduce health and operational costs and, ultimately, increase school quality and competitiveness.**

— Gregory Kats, Greening America's Schools

In February 2009, hundreds of schools across the US took part in the National Teach-In on Global Warming Solutions, participating in the national webcast and following up with local discussions about how they could contribute.

### School Carbon Calculators

- [earthteam.net/GWCampaign/calculate.html](http://earthteam.net/GWCampaign/calculate.html)
- [epa.gov/climatechange/wycd/school.html](http://epa.gov/climatechange/wycd/school.html)
- [dott07.com/flash/dott\\_1024.htm](http://dott07.com/flash/dott_1024.htm)

### Green Schools

- Build Green Schools: [buildgreenschools.org](http://buildgreenschools.org)
- EnergySmart Schools: [1.eere.energy.gov/buildings/energysmartschools](http://1.eere.energy.gov/buildings/energysmartschools)
- Green Schools Alliance: [greenschoolsalliance.org](http://greenschoolsalliance.org)
- Green Schools Checklist: [epa.state.il.us/p2/green-schools/green-schools-checklist.pdf](http://epa.state.il.us/p2/green-schools/green-schools-checklist.pdf)
- Green Schools Program: [ase.org/section/program/greenschl](http://ase.org/section/program/greenschl)
- International Walk to School: [iwalktoschool.org](http://iwalktoschool.org)
- Kids for Saving Earth: [kidsforsavingearth.org](http://kidsforsavingearth.org)
- Solar Schools: [solarschools.com](http://solarschools.com)
- Students Leading the Way — Energy Saving Success: [tinyurl.com/2bbxml](http://tinyurl.com/2bbxml)
- The Edible Schoolyard: [edibleschoolyard.org](http://edibleschoolyard.org)
- The Green Squad: [nrdc.org/greensquad](http://nrdc.org/greensquad)
- Wind Energy for Schools: [windpoweringamerica.gov/schools\\_projects.asp](http://windpoweringamerica.gov/schools_projects.asp)

At Akron Westfield Community School, Iowa, students helped to install their school's 600-kW wind turbine. Many schools have installed solar systems, integrating the data into their science and business studies. In a video contest in 2008, McTavish Elementary School, near Victoria, BC, was voted the greenest school in North America for reducing its waste by 80% by composting, paper recycling and soft-plastics recycling.

In Britain all seven classes at the St. Francis of Assisi Academy in Liverpool have a garden, where teenagers grow food and plants, integrating it into their math and geography classes.

All over Europe and North America, schools are taking the initiative to stop buses and cars from idling, to walk and cycle to school, to eat local organic food and grow their own food, to increase recycling, to stop using toxic cleaners and pesticides, and to bring global warming into the curriculum. Schools are also working to rebuild the broken connection with nature, with students spending time in nearby forests, wetlands, rivers and farms.

### Getting Started

Week 1: Organize a lunchtime meeting with your friends. Go around the circle and gather everyone's ideas as to what you could do as a school. Download copies of this Solution from [theclimatchallenge.ca](http://theclimatchallenge.ca), and ask each student to explore one of the listed websites.

Week 2: Brainstorm for ideas. Focus on those that are achievable within three months, and choose the one that is most doable and has the most support. Give your group a name, decide on

*Students from Oak Bay High School, Victoria, Canada, with the solar PV array they fundraised to install on their school's physics lab.*



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your long-term goals, and create a page for your group on Facebook or your favorite networking site.

Week 3: Meet with a teacher you know is sympathetic, and ask for his or her support. You will need everyone's support, including the support staff, teachers, principal, school board and parents.

Week 4: Get to work on the project you have chosen. At the same time, start discussions with staff about how the whole school could become carbon neutral and how long it would take.

If you are a member of staff, organize a meeting with other staff members and discuss how you could make your school more green, using the resources listed below. There is a free *Climate Challenge Teacher's Guide* at [TheClimateChallenge.ca](http://TheClimateChallenge.ca) that uses this book as the basis for class projects.

### **Build Green Schools**

A national US survey of 30 green schools demonstrated that they cost less than 2% more to build than conventional schools, but provide financial benefits that are 20 times as large, saving money by increasing earnings, retaining teachers, reducing colds, flu and asthma, and using less energy and water. A Washington State study showed that high performance lighting caused a 15% fall in absenteeism and a 5% increase in student test scores.<sup>1</sup> "For the average conventional school, building green would save enough money to pay for an additional full-time teacher."<sup>2</sup>

### **Green Curriculum**

- *Climate Challenge Teachers Guide*: [earthfuture.com/challenge](http://earthfuture.com/challenge)
- Climate Curriculum: [worldwildlife.org/climate/curriculum/item5944.html](http://worldwildlife.org/climate/curriculum/item5944.html)
- Climate Change Education Portal: [climatechangeeducation.org](http://climatechangeeducation.org)
- Energy Kid's Page: [eia.doe.gov/kids](http://eia.doe.gov/kids)
- EPA Teaching Center: [epa.gov/teachers](http://epa.gov/teachers)
- Focus the Nation: [focusthenation.org](http://focusthenation.org)
- Green Learning: [greenlearning.ca](http://greenlearning.ca)
- Green Teacher Magazine: [greenteacher.com](http://greenteacher.com)
- *How We Know What We Know About Our Changing Climate: Scientists and Kids Explore Global Warming*, by Lynne Cherry and Gary Braasch, Dawn Publications, 2008
- Lesson Plans from California Green Schools: [ase.org/content/article/detail/2053](http://ase.org/content/article/detail/2053)
- Roofus' Solar & Efficient Home: [1.eere.energy.gov/kids/roofus](http://1.eere.energy.gov/kids/roofus)
- Sustainable School (UK): [suschool.org.uk](http://suschool.org.uk)
- Teaching About Climate Change: [greenteacher.com/tacc.html](http://greenteacher.com/tacc.html)
- The Climate Challenge Game, by Guy Dauncey: [tinyurl.com/2h42nj](http://tinyurl.com/2h42nj)
- Wind with Miller: [windpower.org/en/kids](http://windpower.org/en/kids)
- *The Down-to-Earth Guide to Global Warming* by Laurie David and Cambria Gordon: [scholastic.com/downtoearth](http://scholastic.com/downtoearth)