



What's Happening Out There?

Student
Reading

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Before you start to feel overwhelmed about our rapidly changing climate, first learn more about what is being done to combat climate change. Each one of us can take positive steps to slowing climate change on Earth, and many people have already begun to work together to make positive changes. Whether undertaken by business

Seattle Mayor Greg Nickels launched the U.S. Mayors' Climate Protection Agreement.
Photo courtesy of the City of Seattle.

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owners, mayors, members of a citizen's group, or United Nations representatives, efforts at local, national, and international levels have begun to stabilize our climate and reduce the impacts of climate change on citizens. By collaborating with people all over the globe, we can have a much greater impact than we can alone.

As you read these examples of groups taking action on climate change, don't forget that you can join their efforts to be part of the solution!

International Collaboration

The most famous international initiative addressing global climate change is the Kyoto Protocol.¹ The Protocol was officially adopted December 11, 1997, in Kyoto, Japan. To date, 175 nations have ratified the document, pledging to abide by its targets for reducing greenhouse gas emissions. The Protocol calls for a reduction in greenhouse gas emissions to at least 5% below 1990 levels, to be completed during the period 2008-2012.

The Kyoto Protocol outlines a number of ways to cut greenhouse gas emissions. Some of these include:

- Increasing energy efficiency—getting more energy from less fuel
- Preserving and enhancing carbon sinks (for example, oceans and forests)
- Promoting sustainable forestry—harvesting trees in such a way that forests continue to thrive
- Promoting sustainable agriculture—reducing soil tillage and water use
- Developing renewable energy sources (for example, solar, wind, and geothermal power)
- Reducing subsidies for greenhouse gas-emitting activities—making it less economically advantageous to pollute
- Limiting greenhouse gases from transportation – reducing emissions from cars, airplanes, and other means of transportation



The Kyoto Protocol promotes the use of sustainable agricultural methods and the protection of forests.

Photos by Laura Skelton

Unfortunately, the Kyoto Protocol itself is not able to stop climate change, but it can certainly help to slow the rate of climate change. Some of the world's largest greenhouse gas producers have not agreed to meet the emissions reductions outlined in the Kyoto Protocol. Others who signed the Protocol may not actually be able to meet its goals. Even if all countries agreed to work toward the goals of the Protocol, greenhouse gas emissions would still be increasing. That's why it's important to take action at a national and local level, as well.

Local Adaptation

Local entities, such as cities and states, are not officially part of the Kyoto Protocol. However, some local governments have opted to meet Kyoto targets themselves. In 2005, Greg Nickels, the mayor of Seattle, Washington, launched the U.S. Mayors' Climate Protection Agreement. Hundreds of U.S. mayors have since signed on to the agreement, pledging to meet Kyoto targets for greenhouse gas emissions in their own communities.² Citizens can urge their local

government to join this effort by visiting the Cool Cities website: <http://coolcities.us>.

Other local climate change agreements have emerged in the U.S. and abroad. Several western U.S. states and Canadian provinces have joined the Western Climate Initiative, which aims to reduce greenhouse gas emissions to 15% below 2005 levels by 2020.³ In the UK, the government of London has launched the London Climate Change Partnership. This group of more than 30 organizations is "helping London prepare for the impacts of climate change."⁴ Many other groups around the world are working to mitigate and adapt to climate change in their local communities.

Strategies for Business and Industry

Many companies are taking steps to reduce their carbon footprints, often by using renewable energy or implementing energy-efficient technology. This can benefit companies by saving them money they would have otherwise spent on excess

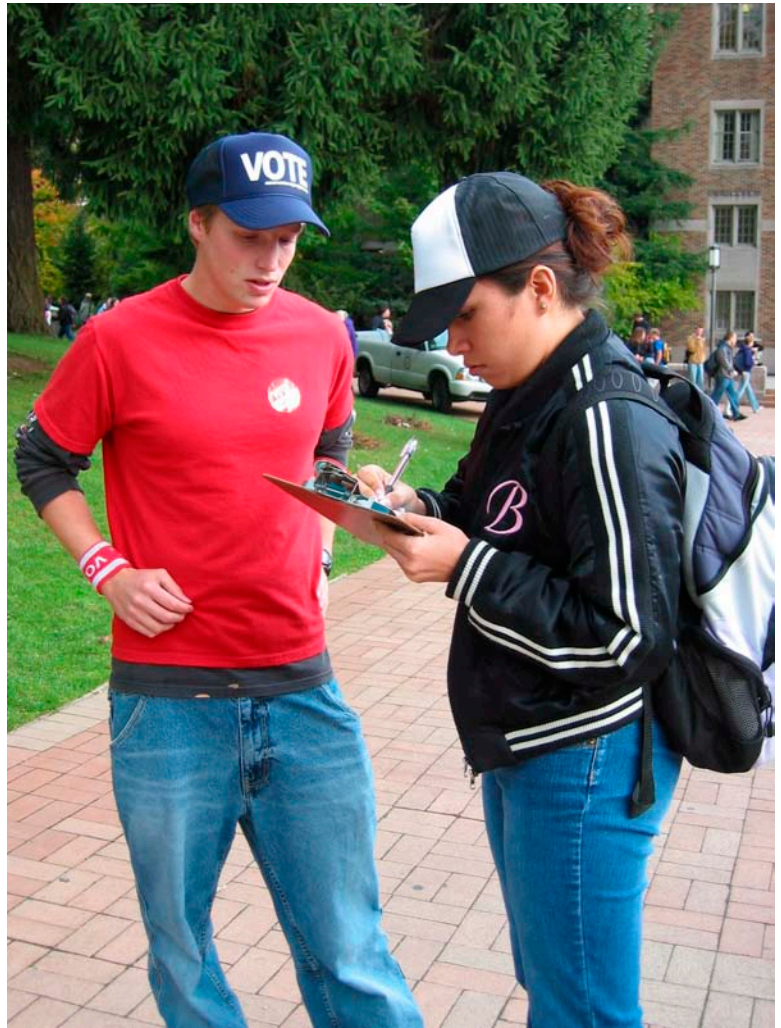
energy. Businesses also benefit when they are publicly recognized for reducing their contributions to climate change. Wal-Mart is one such business trying to reduce its environmental impacts by reducing product packaging and increasing the energy-efficiency of its stores and trucks. According to CEO Lee Scott, these changes will save Wal-Mart money.⁵ What company wouldn't want to save money?

An altogether different approach for businesses is to reduce greenhouse gas emissions through emissions trading. A **cap and trade system** starts with a mandatory limit on total emissions, such as the limits outlined in the Kyoto Protocol. Businesses that are below their maximum allowed emissions (called allowances) may sell their extra allowances to businesses that are above the limit. In many cases, it is cheaper for a company to buy allowances from another business than to make the reductions within their own company.

There are many alternatives to a cap and trade system. For example, a "carbon tax" would require people or businesses to pay a tax on activities such as burning fossil fuels that emit greenhouse gases. Also, businesses may be required (usually by a government mandate) to use specific technologies to reduce emissions or to meet specific environmental performance standards. Refrigerator manufacturers were required to meet energy standards set by the California Energy Commission in the 1970s.⁶ Car manufacturers are often required to meet certain fuel-efficiency standards so that cars achieve a minimum number of miles per gallon.

Individual Action

Some people are trying to reduce their carbon footprint by participating in emis-



sions trading. Individuals can "balance out" the carbon emissions produced when they drive a car or fly in an airplane by investing money in projects that offset these carbon emissions. A **carbon offset** is like a counterbalance – it balances out your personal CO₂ emissions by reducing them elsewhere. For example, you can buy carbon offsets from private companies that spend your money on projects like preserving forests or building wind farms. In 2006, offset companies sold greenhouse gas reductions equivalent to 14.8 million tons of CO₂.⁷ That sounds great, but don't forget that we actually emit 7 billion of tons of CO₂ each year. Many people agree that it is easier (and cheaper)

One way you can shape the future is by educating others about climate change and encouraging them to vote for policies and politicians who will work to reduce climate change.
Photo by Leah Barrett

to emit less CO₂ to begin with.

As with any attempted fix, there are problems that must be addressed if carbon trading systems are to create real change. Currently, there is no system in place to make sure that the same carbon offsets aren't sold more than once. Also, it is difficult to verify that all of the projects advertised to offset emissions are actually being implemented and that they are indeed reducing carbon emissions.⁸

There are countless other ways that individuals can join government and business initiatives to positively affect the climate. A good way to get involved in local, national, and even international efforts to address climate change is to learn more about the issues and to contact government representatives with your concerns and ideas for solutions. Elected officials rely on your input to make decisions that affect us all.

Vocabulary

cap and trade system—a system in which a regulatory agency (usually a government) sets a cap, or limit, on total greenhouse gas emissions allowed by industry; those who exceed their allowable limit can buy emission allowances from others who are below their limit

carbon offset—a voluntary payment by an individual or company to compensate for its greenhouse gas emissions; the money is usually spent in a way that balances the emissions (for example, by protecting forests, which are carbon sinks)

Checking for Understanding

1. Do you think that local climate change initiatives are as important as international initiatives? Why or why not?
2. Why do you think many businesses prefer a cap and trade system to other means of reducing greenhouse gas emissions?
3. What might be a more effective way to help businesses make a positive contribution to the environment?
4. Do you think carbon offsets are a good way to reduce our negative climate impacts? Why might these offsets not be feasible for everyone?
5. What ideas do you have for working to reduce climate change impacts within your own community? What groups in your community could you work with?

¹United Nations, 1998, Kyoto Protocol to the United Nations Framework Convention on Climate Change. http://unfccc.int/kyoto_protocol/items/2830.php.

²US Mayors Climate Protection Agreement, <http://www.seattle.gov/mayor/climate/> (accessed October 2, 2007).

³Western Climate Initiative (WCI), 2007, "Statement of Regional Goal," <http://www.westernclimateinitiative.org>.

⁴London Climate Change Partnership, 2007, "Helping London Prepare for the Impacts of Climate Change," <http://www.london.gov.uk/climatechangepartnership/leaflet-may07.jsp>.

⁵Daren Fonda, "The Greening of Wal-Mart," *Time*, April 3, 2006.

⁶David Goldstein, *Saving Energy, Growing Jobs* (Berkeley, CA: Bay Tree Publishing, 2007), 260.

⁷Alan Zarembo, "Buy Your Way to Carbon Neutrality?" *Seattle Times*, September 23, 2007.

⁸*Ibid.*