



earthwise

News and Ideas for UCS Members and Activists

A Victory for Clean Air, Public Health

In May, the Environmental Protection Agency (EPA) ordered the cleanup of diesel engines used in construction, agricultural, and other “nonroad” equipment. The new rule, which will be phased in over the next 11 years, will hold most nonroad diesel engines to the same standards as diesel highway trucks and buses, reducing engine emissions by more than 90 percent.

Nonroad diesel engines are a major source of air pollution in every state and metropolitan area, generating smog-forming nitrogen oxides and as much toxic soot as all diesel trucks and buses on U.S. highways. The EPA estimates its new emission standards will prevent 12,000 premature deaths and one million lost workdays each year.

Significant citizen input—including some 25,000 comments generated by UCS—played a vital role in the development of a strong rule. We applaud the EPA’s decision, but it is one of the few bright spots in the current administration’s otherwise dismal track record on environmental policy. We hope a recent EPA proposal for stricter emission standards for ships and trains (the last major source of nonroad pollution) enjoys similar success. 

close to home

Support Your Local Farmer

Leigh and Wenonah Hauter live and work on an eight-acre farm in Virginia’s Bull Run Mountains. Every weekday between June and October, Leigh heads to one of five delivery locations in Washington, DC, and northern Virginia with bins of fresh vegetables, fruits, herbs, flowers, and eggs. Customers line up to fill their bags, exchange friendly greetings but no cash, and head home to prepare meals using seasonal produce Leigh picked just hours before.



CSA farms provide shareholders with fresh, locally grown produce.

The Hauter farm is an example of community-supported agriculture (CSA), a movement that has taken hold on more than 1,000 farms across the country. CSA farmers sell yearly shares in their harvests to consumers in neighboring communities (the Hauters’ shares start at \$295 each). This arrangement helps defray farming costs and provides farmers with financial stability at the start of the growing season, when it is most needed. In exchange, shareholders receive weekly deliveries of produce and other goods as they come into season. In the first week of July, for example, shareholders received garlic, potatoes, basil, lettuce, and kohlrabi.

Back to Basics

Leigh acknowledges that the CSA approach is a radical departure from most consumers’ typical food-buying experience. “Most Americans plan their meals [and] then buy their food,” he said. “With this type of program, it is the other way around—you get your food when it is ripe and then plan your meals around what is available.” In addition to fresh, local produce, CSA farms give people an opportunity to try new foods and learn new recipes.

The differences between CSA and conventional farming methods are striking as well. More than 90 percent of CSA farmers grow organic food that is free from genetic engineering, conventional pesticides, and synthetic fertilizers. Many

(continued on back page)

on a personal note

A Positive Spin on Disastrous Images



Early this summer, I took my 13-year-old daughter, Molly, to see the blockbuster film *The Day After Tomorrow*, in which humankind's failure to respond to global warming sends the world careening into a new ice age in the space of a few weeks. I was somewhat hesitant to bring Molly to this movie not because its plot stretched scientific facts to pump up the entertainment value, but because it was rooted

in truth. Earth will continue to warm and extreme weather events will become more common unless we take swift action to reduce our emissions of heat-trapping gases.

Molly's generation is inheriting a world whose climate has been placed in peril by human actions—and the inaction of human leaders. I imagined it could be a scary experience for a young person to see such a devastating future played out on the big screen, and Molly didn't say much after the movie. But later, when a high wind began blowing through the treetops in our backyard, she took anxious notice of the sudden weather shift in a way she would not have before.

Our children may have other, more urgent, fears (such as terrorism), but I wonder if fear of climate change—the prospect of maiming our planet's ability to sustain life—will be for our children what fear of nuclear warfare was for my generation. Thankfully, just as human resolve led us back from the brink of nuclear devastation, it is not too late to rewrite the script for global warming.

The Day After Tomorrow gave UCS an opportunity to educate decision makers and the public not only about the causes and consequences of climate change, but solutions as well. We have emphasized the fact that, with bold leadership and ingenuity in the form of advanced, more efficient energy and vehicle technologies, humankind can meet the challenge of global warming as it has other seemingly insurmountable tasks in the past. That's the message that will bring hope and inspiration to Molly's generation.


KEVIN KNOBLOCH, *president*

UCS in the news

Missile defense report's message heard in Senate

On May 13, the Union of Concerned Scientists released *Technical Realities*, a report illustrating why the U.S. missile defense system scheduled for deployment this fall would prove ineffective against a real attack. The report authors, including Dr. Lisbeth Gronlund, co-director of the UCS Global Security Program, presented their findings at a press conference in Washington, DC.

The report generated stories in the *Washington Post*, *Philadelphia Inquirer*, *Seattle Times*, London's *Times*, Reuters, *Aerospace Daily*, and *Defense Daily*, and editorials in the *San Francisco Chronicle* and *Boston Globe*. Gronlund was quoted in a Copley News Service story and interviewed by the NBC affiliate in Anchorage, Alaska—the state where missile interceptors will be based.

Senator Barbara Boxer (D-CA) cited the UCS report during floor debate, saying, "I agree with the scientists...Before we declare the system operational, we should know that it has been tested in a realistic manner." 

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Bring Fuel Economy Estimates up to Date



What's at Stake

Accurate fuel economy information for consumers.

How You Can Help

Tell the Environmental Protection Agency (EPA) to revise its outdated fuel economy tests using real-world data.

What's Happening


The EPA measures fuel economy using a test originally developed in the early 1970s. Vehicle technology, traffic patterns, and driving habits have changed significantly since then, but the test has not. As a result, the EPA window stickers on new vehicles often overestimate actual fuel economy. This discrepancy amounts to about \$20 billion in unanticipated fuel costs for U.S. drivers every year—a concern compounded by this year's high gas prices.

It is time for the EPA to revise its fuel economy test. Consumers deserve to know what they are buying, and lawmakers deserve accurate information so they can develop sound policies on rising gas prices, oil dependence, and global warming.

What You Can Do

Calculate your vehicle's real-world fuel economy (see box for instructions)

and send this information to the EPA as evidence of its outdated testing procedures. Urge the agency to provide accurate fuel economy information to the public by bringing its tests up to date.

Send your letter to:
 Michael Leavitt
 Administrator
 Environmental Protection Agency
 1200 Pennsylvania Ave., NW
 Washington, DC 20460 

How to calculate fuel economy

- 1) Fill your vehicle's fuel tank completely and record the current odometer reading (e.g., 50,915).
- 2) Drive your car as you normally do. When the fuel starts to run low, fill the tank completely as you did before, recording the number of gallons you just pumped (e.g., 14.583) and your new odometer reading (e.g., 51,267).
- 3) Subtract the old odometer reading from the new reading to determine the total miles you've driven (51,267 – 50,915 = 352). Then divide miles driven by gallons of fuel to obtain your vehicle's fuel economy (352 ÷ 14.583 = 24.1 miles per gallon).
- 4) Note the make, model, and year of your car, and estimate how much driving you did in town versus on the highway.

drawing conclusions



Support Your Local Farmer (continued from front page)



Leigh Hauter, owner of the Bull Run CSA farm.


also strengthen their local communities by providing discounted or free shares to low-income families and donating a portion of their weekly harvest to food shelters.

The Big Picture

Most supermarkets import more than 85 percent of the food from other states or countries. In fact, food in the United States travels an average of 1,300 miles from the farm to the supermarket, a journey that requires large amounts of energy for refrigeration and fuel for transport.

Buying locally grown produce from CSA farms saves energy, lessens our reliance on fossil fuels, reduces pollution, and boosts local economies by creating jobs and income for small farms. Studies by the University of Massachusetts, for example, have found that if Massachusetts produced just 35 percent of its own food, the state could add \$1 billion annually to its economy.

The cost of a CSA share varies from farm to farm but is, on average, comparable to produce prices in a local supermarket. The cost of the Hauters' CSA share, for example, amounts to less than \$20 per week during the growing season and provides enough produce for a two-person household. People who eat few vegetables or cannot afford the up-front cost of a full share could consider splitting the cost with a friend or neighbor, or looking for a farm that sells half shares.

To learn more about community-supported agriculture, or find CSA farms in your area, visit the U.S. Department of Agriculture website at www.nal.usda.gov/afsic/csa. 




dialogue

The film The Day After Tomorrow created a controversy over abrupt climate change. How real is this threat?

While many people have become accustomed to thinking of human-caused climate change occurring over the course of decades or centuries, scientific evidence shows that climate change has occurred much more quickly, in decades or even years. These abrupt climate changes have been linked to changes in the ocean circulation pattern called thermohaline circulation.

As cold, salty water sinks in the North Atlantic Ocean, warmer water is pulled north from the tropics to replace it. This circulation helps warm air temperatures over Europe. Global warming, however, could increase precipitation and melt ice caps and glaciers, releasing more fresh water into the North Atlantic. This less salty water would not be dense enough to sink and pull warm water northward, causing air temperatures in the region to drop significantly. This would not, however, cause an ice age, because any cooling would occur only in regions currently warmed by the ocean circulation, and Earth as a whole is warming.

Along with the possibility of an abrupt temperature shift, climate change makes droughts, torrential rains, heat waves, and other extreme weather events more likely. We can slow global warming and minimize the risk of these potentially disastrous events by reducing our emissions of heat-trapping gases.

For answers to other questions about abrupt climate change, visit the UCS website at www.ucsusa.org/global_environment/global_warming/page.cfm?pageID=1405. 

UCS on the web

High gas prices got you down? The average SUV owner spends \$11,000 on gasoline over the vehicle's lifetime. A fuel-efficient model could save thousands of dollars and keep tons of heat-trapping gases out of the atmosphere. Find out how much money—based on local gas prices—a more fuel-efficient vehicle could save you by using our online calculator at www.suvsolutions.org/calculator.asp.

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