Union of Concerned Scientists

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earthwise

News and Ideas for UCS Members and Activists

Public Health Victory in Maine

In keeping with its state motto, *Dirigo* (Latin for "I lead"), Maine recently became the first state in the nation to adopt a meat purchasing preference policy that will help preserve the efficacy of antibiotics. The policy, adopted in May, encourages food purchasers for state institutions to select meat products from animals raised without antibiotics in their feed. Routinely feeding animals antibiotics for non-therapeutic purposes promotes the development of antibiotic-resistant bacteria, making it harder to treat infections in human patients.

The Union of Concerned Scientists helped achieve this historic victory by providing scientific studies and policy guidance to the state legislature and the committee that developed the purchasing policy. UCS Food and Environment Program Director Margaret Mellon also testified in support of the policy before Maine's agriculture committee.

At the federal level, Maine's bipartisan congressional delegation is taking the lead on this issue as well. Senators Olympia Snowe and Susan Collins and Representatives Thomas Allen and Michael Michaud all support the Preservation of Antibiotics for Medical Treatment Act, a bill that would phase out the use of antibiotics as animal feed additives.

close to home

Three Home Energy Hogs

Most homeowners don't replace an appliance until it breaks, but old appliances could be costing you hundreds of dollars in avoidable energy costs—and contributing to global warming by emitting excess carbon dioxide. Replacing an older model of one of the three appliances listed below could help you achieve significant water, energy, and environmental savings.

© Getty Images

Upgrading to more energy-efficient appliances saves money in the long run.

Water Heaters

Your water heater is often the second-largest energy consumer in the home (after space heating and cooling), accounting for 13 percent or more of your annual energy costs. And most U.S. households have inefficient, poorly insulated storage tank heaters that work to keep an unnecessarily large volume of water hot all day and night; if your water heater is more than 10 years old it is probably operating at less than 50 percent efficiency.

While the U.S. Department of Energy does not currently certify water heaters under its Energy Star program, energy-efficient models are available. Consider a tankless design, or simply look for the highest Energy Factor number when comparing labels.

Refrigerators

Refrigerators, which have to run 24 hours a day, are the biggest energy consumer in the kitchen. New Energy Star-certified models, which sell for between $600 and $1,000, will use about half the energy of a 10-year-old conventional model and save about $35 in yearly energy costs. What's more, if all U.S. households upgraded to Energy Star-rated refrigerators, more than 48 million metric tons of carbon dioxide would be kept out of the atmosphere.

To maximize your energy savings, choose an Energy Star-rated refrigerator that has the freezer on the top or bottom, which uses about 15 percent less energy than

(*continued on back page*)

on a personal note

Members Make the Difference

Earlier this year, I received an invitation to meet with a U.S. senator about sustainable livestock production. Here was a welcome opportunity to show an influential lawmaker how the overuse of antibiotics in animal agriculture is putting public health at risk, and to encourage him to support legislation that would help preserve the vital role of these drugs in human medicine. We might not have had this opportunity were it not for the UCS member who arranged the meeting—a business owner whose food production company provides jobs in the senator's state.

Not every UCS member may literally be able to open doors for us, but I am no less grateful for the contributions every member makes to our success. Your generous donations enable us to hire and deploy experts on our issues and undertake the communications and advocacy campaigns needed to bring our analysis to the attention of the public and policy makers alike.

Many of you also take a more active role by participating in conference calls about our issues, education days in our nation's capitol, and our online Action Network—an easy and effective means of putting timely pressure on elected officials, regulators, and corporations. And some members of our National Advisory Board and Sound Science Initiative, like the business owner mentioned above, are in a position to arrange meetings with key decision makers in which we can make our case in person.

When I travel around the country, the highlight of each stop is often a speaking engagement or informal get-together arranged by a UCS member. I was especially energized by this year's climate change forum organized by Dr. Tor Törnqvist at Tulane University in New Orleans and an outing with Vermont resident Ames Byrd's friends and neighbors to discuss scientific integrity.

UCS wouldn't be where it is today without this network of support, and I want to thank you once again for your commitment and involvement.

Kevin Knobloch, *president*

UCS in the news

Kids deserve cleaner school buses

The UCS report *School Bus Pollution Report Card 2006*, released in May, underscores the threat diesel pollution poses to children's health and encourages federal appropriators to help replace and/or clean up the nation's half-million diesel school buses. The report graded every state's school bus fleet in terms of pollution and existing cleanup programs; none received an A.

In a May 24 Associated Press story, report author and UCS Senior Vehicles Analyst Patricia Monahan stated, "When it comes to protecting kids' health, an 'average' job of cleaning up bus emissions is unacceptable." The report received national coverage in *USA Today,* the *Washington Post,* and the *Los Angeles Times*; specific state-related findings were reported by the *Saint Paul Pioneer Press, Denver Post,* and *Kansas City Star.* Monahan discussed the report in more than 20 radio interviews, and more than 250 television stations including CNN Headline News and MSNBC mentioned our findings as well.

A Lasting Impact

You can help ensure a healthy planet for future generations by including UCS in your will or living trust. For more information about charitable bequests and other legacy giving opportunities, please contact Adam Kessler at (800) 666-8276 x8040 or *akessler@ucsusa.org.* Or, visit *www.ucsusa.org/ucs/join/legacy-gifts.html.*

Science Should Not Be Censored

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What's at Stake

Policies that protect our health and environment.

How You Can Help

Urge the Environmental Protection Agency (EPA) to prevent the censorship of science within the agency.

What's Happening

Independent science is essential for federal policy makers to reach informed decisions about issues that affect our everyday lives. Unfortunately, scientific research is increasingly being misused for apparently political reasons. At the EPA—the leading federal agency charged with protecting public and environmental health—science relating to issues such as mercury emissions, air quality, and climate change has been manipulated, suppressed, and distorted during the past few years like never before.

Earlier this year, a scientist at the National Aeronautics and Space Administration (NASA) claimed he had been censored by NASA officials for speaking publicly about climate change. The resulting public outrage led NASA to admit its wrongdoing and establish a policy that has the potential to improve open communication of scientific information. The EPA should now demonstrate its own respect for independent science by adopting a similar scientific openness policy.

Such a policy would ensure decision makers have access to the best available science—and preserve the First Amendment rights of federal scientists. The EPA policy should:

- commit the agency to open scientific and technical dialogue with the public, press, and Congress;
- officially recognize the right of scientists to express their personal views;
- allow EPA scientists to share information with the scientific community at professional conferences and events;
- ensure scientific research is released in a timely fashion and not held up in a long political screening process.

What You Can Do

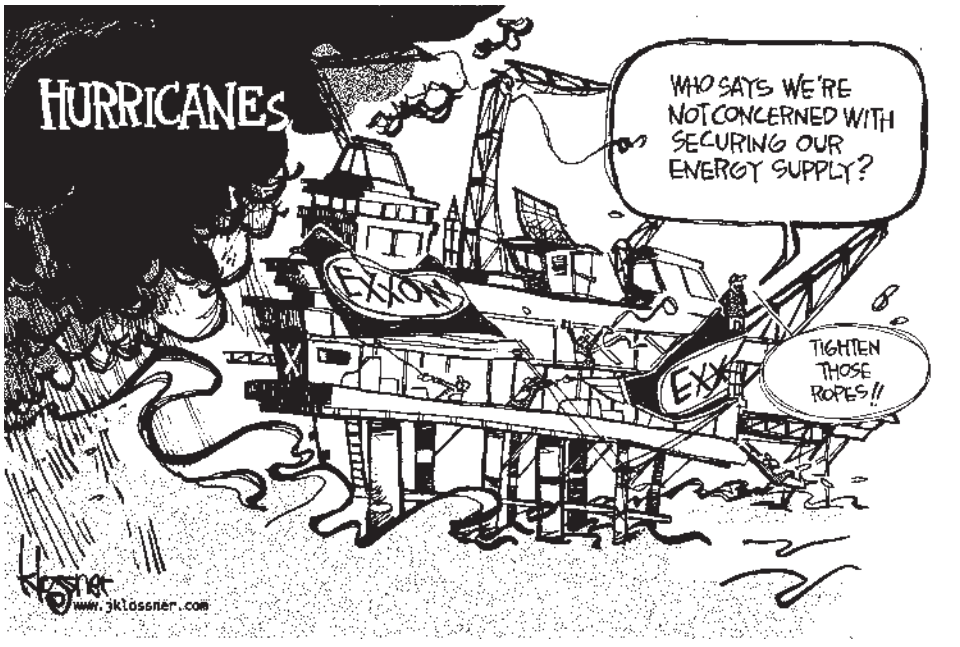
Write a letter to EPA Administrator Stephen Johnson and ask him to create a scientific openness policy that will preserve public access to taxpayer-funded research. Remind him that independent science is critical for policy makers to reach informed decisions on important health and environmental issues.

Send your letter to:

Stephen Johnson
Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue NW
Washington, DC 20460

Or, send an email from the online UCS Action Center at *www.ucsaction.org.*

drawing conclusions



Home Efficient Home (*continued from front page*)

side-by-side models. (Top-freezer models cost less than bottom-freezer models.) Also, avoid through-the-door icemakers and water dispensers; while they reduce the need to open the door, they increase energy consumption 15 to 20 percent.

Look for the EnergyGuide label to compare one model's operating costs against another.

Clothes Washers

The majority of the energy consumed by a washing machine is used to heat water, and conventional top-loading washing machines use about 40 gallons of water per load. Energy Star-rated washers by comparison use about 25 gallons per load, a 40 percent savings in water that translates into an energy cost savings of approximately 50 percent.

Energy Star-rated washers do cost more up front—about $500 for top-loaders and $800 for front-loaders, compared with $300 for conventional models—but they save $50 or more each year in water and energy costs. Those savings will more than offset the additional up-front cost over the machine's typical 11-year lifetime.

Short-term Costs, Long-term Benefits

Each appliance essentially has two price tags—the purchase price and the operating cost. Annual operating costs can be found on the yellow-and-black EnergyGuide label required on most appliances. By calculating the lifetime operating costs of an appliance, you might find that the model with the higher purchase price represents a better deal in the long run. And many rebates on Energy Star-rated appliances (or discounts on equipment installation) are available to sweeten the deal; ask your retailer or local utility.

To learn more about energy-efficient appliances, visit the Department of Energy's Energy Star website (*www.energystar.gov*).

UCS on the web

Tell us your story! If you own a hybrid vehicle, visit the "Who's Got Hybrids?" section of our Hybrid Center website *(www.hybridcenter.org)* and join the more than 550 folks who have posted photos and stories about their driving experience. "Who's Got Hybrids?" is just one of the many informative features that earned the Hybrid Center a Webby Award earlier this year.

dialogue

Switchgrass is being touted as a promising energy resource. What is switchgrass and what is its potential?

Long a favorite of cattle, switchgrass is a tall, fast-growing grass native from Florida to Saskatchewan that could reduce our dependence on the fossil fuels that currently power our vehicles and electric utilities. Although corn-based ethanol has been getting a lot of attention, switchgrass and other kinds of plant matter used in "cellulosic" ethanol require fewer fossil fuels to grow and yield three to five times as many gallons of ethanol per acre as corn. As a result, the production and burning of cellulosic ethanol generates 70 to 90 percent less carbon dioxide (the primary contributor to global warming) than corn-based ethanol. It is currently too expensive to produce cellulosic ethanol on a commercial scale, but new technologies are expected to make this process more affordable within 10 years.

Another way in which switchgrass can reduce fossil fuel use is to burn it along with coal in a power plant, a process known as co-firing. Iowa is set to co-fire switchgrass in one of its power plants, displacing five percent of the energy this plant typically generates from coal–approximately 35 megawatts, or enough to power about 3,000 homes.

UCS is working to promote policies and practices that will ensure switchgrass and other energy crops (together referred to as biomass) are cultivated, harvested, and processed in a sustainable manner. To learn more about biomass energy, visit the Clean Energy section of the UCS website *(www.ucsusa.org/clean_energy)*.

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Union of Concerned Scientists

a member of Earth Share

The Union of Concerned Scientists is a nonprofit partnership of scientists and citizens combining rigorous scientific analysis, innovative policy development, and effective citizen advocacy to achieve practical environmental solutions.

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