



earthwise

News and Ideas for UCS Members and Activists

California Leads on Clean Energy

On April 12, California Governor Jerry Brown signed into law a bill requiring utilities in the state to obtain at least 33 percent of their electricity from clean, renewable sources by 2020. (The state's previous target was 20 percent by 2010.) The bill was part of a green jobs stimulus package that enjoyed broad, bipartisan support among legislative leaders, electric utilities, ratepayer groups, environmental organizations, and renewable energy businesses.

With the 33 percent target now in place, UCS estimates that California will produce more than one-quarter of the renewable energy required by state standards throughout the country in 2020, and will reduce electricity-related global warming emissions by an amount equivalent to removing almost 3 million cars from the road. In addition, we estimate the standard could generate more than 500,000 new clean energy jobs over the next several decades.

UCS played a lead role in this victory. We helped to write the bill, and helped secure its passage by meeting with and building support among stakeholders, providing technical expertise to legislators and the media, and engaging our California members to voice their support. 🌿

close to home

Save at the Pump, Help the Planet



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Placing large or heavy items in the trunk instead of on the roof (as shown above) helps improve fuel economy during car trips.

Summertime, and the living is easy—at least until you have to fuel up for your big road trip. Gasoline prices are especially painful right now, but if you aren't able to take a bus or train to your destination (both of which are less polluting than driving for trips of 500 miles or less), don't despair. Here are some tips to help you get the most out of each gallon of gas.

Before You Hit the Road

If you are planning a long trip or have a car with lackluster fuel economy, consider renting a fuel-efficient vehicle. Even with the daily or weekly fees, this strategy could be less expensive overall, and saves your personal car from wear and tear.

If you do take your own car, get the oil, spark plugs, and air filter checked, as a properly tuned car will maximize your engine's efficiency. Check your tires too—proper inflation ensures safety and reduces friction between the tire and road, allowing the engine to propel the car forward more easily. Replace worn tires with those labeled as “low rolling resistance,” which also reduces friction and can increase your fuel economy by one to two miles per gallon (mpg).

When you're packing up the car, be weight conscious. For every 100 pounds in your car, fuel economy decreases by 1 to 2 percent. Heavy items should be placed in the trunk instead of on a roof rack, which creates drag.

(continued on back page)

on a personal note

We Can't Wait for Nuclear Power



The nuclear disaster that has unfolded in Japan since March 11 has many Americans questioning the safety of the United States' 104 operating reactors. Those questions add to growing doubts about whether the nuclear power industry can deliver on its promise to contribute the deep reductions in global warming emissions that the world needs.

For most of our 41 years, UCS has been the leading independent watchdog for domestic nuclear safety, and our experts have worked around the clock during the Japanese crisis to help the public, media, and policy makers understand what has been happening there and its impact on people and the environment. Later this spring, we will supplement our initial analysis of the accident with tough-minded recommendations for U.S. nuclear power plant owners, government regulators, and Congress to lessen the risks posed by existing reactors and to strengthen advanced reactor designs and management practices.

UCS has also met with Department of Energy Secretary Stephen Chu, testified before several congressional committees, and released a report identifying 14 "near-misses" at U.S. nuclear power plants in 2010—incidents that occurred because reactor owners, and often the Nuclear Regulatory Commission (NRC), tolerated known safety problems. All of these efforts came on the heels of a report we published in February that shows how billions of dollars in public subsidies proposed for new nuclear plants would shift the investment risks to American taxpayers while siphoning resources away from renewable energy and energy efficiency—options that are safer, more cost-effective, and faster to build or implement than nuclear power.

The events in Japan are a sobering reminder that nuclear energy is not ready for prime time as a climate solution. A single serious accident can paralyze the industry for decades, and we can't afford to lose any more time in our fight against global warming. Our job now is to ensure that the NRC does a much better job of monitoring every operating reactor in the United States, that any proposed reactors face rigorous tests of their safety and affordability, and that we aggressively build clean, renewable energy capacity across the nation.



KEVIN KNOBLOCH, *president*

fast facts



The energy-water collision

U.S. energy policy must begin to address the fact that our current system of powering homes and vehicles requires a massive amount of water:

- U.S. power plants withdrew an estimated 143 billion gallons of freshwater *per day* in 2005 (to cool the steam that drives generating turbines).
- U.S. coal mining operations use between 80 million and 230 million gallons of water per day for purposes such as washing coal of impurities and cooling drilling equipment. This is equivalent to between 6 million and 18 million five-minute showers.
- To provide ethanol for vehicles, an increasing amount of corn is being grown in areas that require irrigation. It takes about 30 gallons of irrigation water in Nebraska to produce enough corn ethanol to drive a typical car one mile. 

Leave a Legacy

Through thoughtful financial and estate planning you can make a larger charitable gift than you may have thought possible, which will help ensure a healthy environment and safer world. To learn more about legacy gifts that will support UCS today and in the future, visit www.ucsusa.org/legacy, or contact Adam Kessler at (800) 666-8276 x8040 or akessler@ucsusa.org.

Urge Congress to Keep Antibiotics Working

What's At Stake

The effectiveness of antibiotics in treating human disease.

How You Can Help

Urge your members of Congress to support legislation that phases out the routine feeding of medically important antibiotics to healthy livestock and poultry.

What's Happening

Alarming new statistics from the Food and Drug Administration (FDA) reveal that 80 percent of antibiotics and related drugs sold in the United States go to livestock and poultry production. Most of these drugs are not used to treat sick animals, but to promote faster growth and compensate for crowded, unsanitary conditions in CAFOs (confined animal feeding operations). The FDA's findings mirror estimates published by UCS 10 years ago.

These data are particularly distressing because many of the drugs used in CAFOs are needed to treat humans who get sick from bacterial infections. Doctors are increasingly frustrated in their efforts to treat such patients because numerous bacteria have developed a resistance to one or more antibiotics. A recent study found that health care costs related to antibiotic resistance total between \$16.6 million and \$26 million annually. Patients fighting resistant infections are sicker longer, and subjected to increasingly powerful and more expensive drugs with more serious side effects.

Congress is currently debating legislation that would help turn the tide on antibiotic resistance. The Preservation of Antibiotics for Medical Treatment Act would require the FDA to review its




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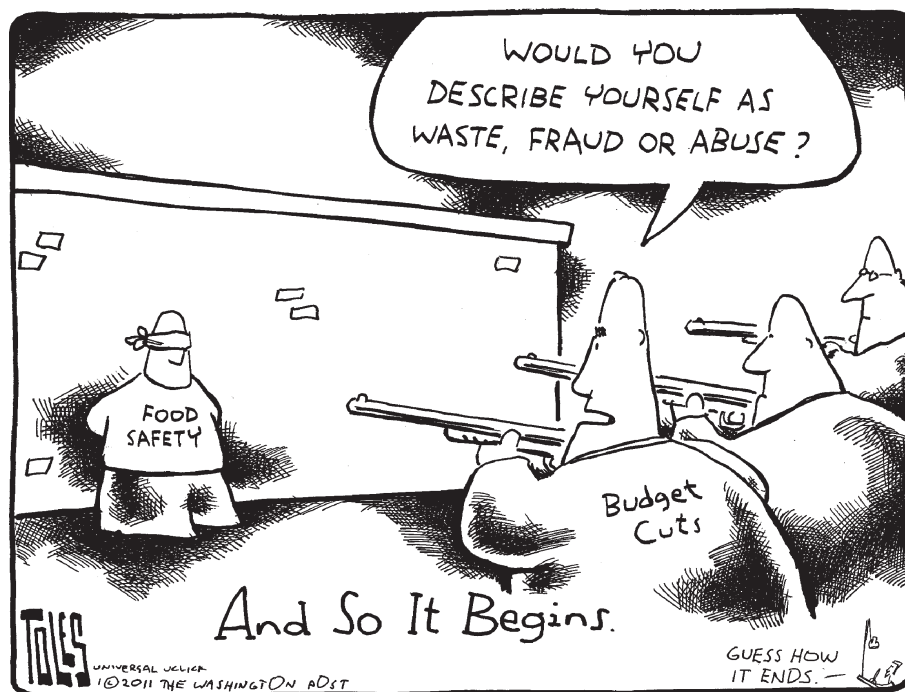
previous approvals of antibiotic use in animal feed, and cancel those found to be unsafe from a resistance standpoint.

What You Can Do

Tell Congress to heed the advice of the American Medical Association and health professionals around the world. Write your legislators and let them know that continuing to misuse antibiotics in animal

agriculture poses a serious threat to public health, and the Preservation of Antibiotics for Medical Treatment Act will go a long way toward reducing this threat. You can send an email from the online UCS Action Center at www.ucsusa.org/action, or call the Capitol Switchboard at (202) 224-3121 and ask to be connected to your legislators' offices. 

drawing conclusions



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Save at the Pump, Help the Planet *(continued from front page)*


A Winning Pace

We often want to get to our destination as quickly as possible, but driving fast is neither safe nor cost-effective: fuel economy drops about 10 percent between 55 miles per hour (mph) and 65 mph, and another 7 percent between 65 mph and 70 mph. “Jackrabbit” starts and hard braking can decrease gas mileage even more. Cruise control can help keep a lead foot in check.

On the flip side, stop-and-go traffic also decreases mileage—while increasing frustration—so plan your drive during off-peak times if possible. Some GPS systems offer real-time traffic updates that you can use to shape your travel plans, including finding alternate routes. And once at your destination, park in the shade to minimize fuel evaporation and keep your car cooler (since air conditioning reduces fuel economy).

Driving a Clean Car Revolution

Although these tips will help reduce your fuel costs and emissions, they represent a drop in the tank compared with the savings higher federal fuel economy standards would bring. As part of our efforts to cut projected U.S. oil use in half by 2030, UCS is calling for a fleetwide average of 60 mpg by 2025—an achievable goal if automakers utilize the technologies available to them.

Write President Obama and tell him that Americans deserve cleaner, affordable vehicle options. Note your car’s make, model, and fill-up cost, and emphasize the fact that higher fuel economy is the best way to reduce pain at the pump—and our nation’s oil dependence. Mail your letter to The White House, 1600 Pennsylvania Avenue NW, Washington, DC 20500; or, send an email through the UCS Action Center at www.ucsusa.org/action. 




dialogue

Why is ocean acidification caused by global warming such a serious problem?

Our world’s oceans help regulate the global climate by absorbing carbon dioxide (CO₂) from the air, and research has shown that the oceans have not only absorbed about 30 percent of human-caused CO₂ emissions over the last two centuries, but also continue to absorb about 1 million tons per hour. However, as this CO₂ is absorbed, seawater becomes more acidic. Since the Industrial Revolution of the mid-1800s, Earth’s oceans have become 30 percent more acidic.

CO₂ depletes carbonate ions in seawater, leaving fewer ions free to build the calcium carbonate-based shells and skeletons of organisms known as calcifiers: corals, crustaceans (e.g., shrimp), echinoderms (e.g., starfish), and mollusks (e.g., clams). This could have a devastating impact on biodiversity and the food chain, as millions of organisms depend on coral reefs for shelter, and on other calcifiers for food.

While ocean pH levels have fluctuated over time, acidity levels have increased at a much more rapid pace than in the past, and will continue to worsen if our CO₂ emissions continue unabated. And it should be noted that proposed “geo-engineering” solutions to global warming, such as injecting light-reflecting particles into the atmosphere, would do nothing to halt ocean acidification even if they succeeded in reducing temperatures (which is not a given). The surest way to avoid the most dangerous impacts on marine ecosystems is to shift quickly to energy sources that produce less CO₂. 

UCS on the web



Telling the real clean car story. While automakers tout some cleaner vehicles in their fleets, their lobbyists are working to undermine future fuel economy and emissions standards. Our new Clean Car Watchdog page on Facebook examines media coverage of the auto industry to uncover the truth behind automakers’ spin, and gives you a chance to respond. Link to the page from www.ucsusa.org/clean_car_watchdog.

earthwise

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National Headquarters
Two Brattle Square
Cambridge, MA 02138-3780