

The background image is a photograph of two men on a wooden porch that is partially submerged in floodwater. One man, shirtless and wearing shorts, is standing on the porch steps, holding a large blue plastic water jug. The other man, wearing a white t-shirt and white pants, is standing in the floodwater, also holding a large blue plastic water jug. They appear to be filling the jug. The scene suggests a lack of access to clean water and the impact of flooding on daily life.

**Union of
Concerned Scientists**

c

Catalyst

Volume 14, Fall 2015

**Where Climate
Change Hits
First and Worst**

*Communities on the
front lines*

**A Trade Group's
Toxic Influence**

Van Jones Interview

Catalyst, ISSN 1539-3410, is published quarterly by the Union of Concerned Scientists. Text of articles from *Catalyst*, duly acknowledged, may be reprinted free of charge. Artwork may not be reproduced.

© 2015 Union of
Concerned Scientists

 *Catalyst* is printed on chlorine-free recycled paper with 100% post-consumer content.

EDITORIAL DIRECTOR
Seth Shulman

MANAGING EDITOR
Bryan Wadsworth

PRODUCTION MANAGER
Heather Tuttle

CONTRIBUTING WRITERS
Elliott Negin
Pamela Worth

DESIGN
Rigsby Hull

COVER
© Getty Images/Mario Tama

BACK COVER
© iStockphoto.com/DenisTangneyJr

The Union of Concerned Scientists puts rigorous, independent science to work to solve our planet's most pressing problems. Joining with citizens across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.

This publication is financed by contributions from individual members; you can join UCS by sending a tax-deductible contribution of \$25 or more to UCS Development, Two Brattle Square, Cambridge, MA 02138-3780.

CHAIR
James J. McCarthy

PRESIDENT
Kenneth Kimmell

NATIONAL HEADQUARTERS
Two Brattle Square
Cambridge, MA
02138-3780

PHONE
617.547.5552

EMAIL
ucs@ucsusa.org

WEB
www.ucsusa.org

ON THE COVER: A New Orleans resident delivers fresh water to his neighbor on a flooded street in September 2005, in the wake of Hurricane Katrina.

Together, We Strengthened the Clean Power Plan



By Ken Kimmell

On behalf of UCS, I attended a ceremony in the East Room of the White House in which President Obama unveiled the Environmental Protection Agency's (EPA's) final Clean Power Plan. The most ambitious measure to reduce U.S. global warming pollution in history, the plan aims to cut carbon dioxide emissions from our nation's power plants by approximately 32 percent.

When the draft plan was announced, we at UCS praised it as a good first step—but we knew it could be stronger and we submitted detailed comments (111 pages long) to show how. We emphasized that the EPA had underestimated the role renewable energy could play, that the rule's renewable energy goals could

UCS members joined with our scientists to push for strengthening this landmark rule and our recommendations were heeded.

be strengthened based on the track record of the last five years, and that the rule needed to avoid encouraging overreliance on natural gas as a means of driving down emissions.

I am pleased to report that virtually all our recommendations are incorporated in the final plan. It is a remarkable achievement and a testament not only to our shared efforts and the efforts of climate activists across the country, but also to the president's bold and visionary leadership. I am proud of the outstanding work our staff of scientists, economists, and analysts did on this important rule—efforts that were reinforced by the thousands of UCS supporters who urged the Obama administration to strengthen it. Together we made a difference in improving this landmark policy. {C}

Ken Kimmell is president of UCS.

What steps do you recommend at the local level to help more people eat healthier food?

Inspire others to eat healthier by example. It's "contagious," and helps others start paying more attention to their food choices. Speak with your supermarket manager to encourage him/her to carry more wholesome food items. You can also elevate the conversation by writing letters to your newspaper editor.

Judy E. Buss, nutritional cooking instructor, Lakeland, FL

What we eat as children we will eat all our lives, so school food is crucial. Food purveyors have joined the tobacco and fossil fuel industries in merchandising doubt. To help more people eat healthier food locally, parents must know to ignore this manufactured doubt and get entire school districts to stock all their cafeterias with healthy food, tastily prepared and easy to eat.

Margaret Gwathmey, Harwood, MD

We must use science and education to show people they don't have to be victims of the fast food and processed food industries. I get so frustrated while watching TV seeing an advertisement for the latest double cheeseburger followed by an ad for the latest diabetes drug. Asking our government to stop subsidizing the food that is bad for us and support fruit and veggies should also be on the to-do list.

Mary Pryde, Norco, CA

More healthy food outlets in "food desert" areas, so that healthy options are available, low-cost, and convenient.

Sauna Haines, Berkeley, CA

Ask food markets to discount low-fat and low-salt versions of products whenever the standard version is advertised at a discount price. Second, if plain frozen meat and vegetables really are as good for health as the corresponding fresh foods, then an effort should be made to publicize this, especially to those on a tight budget that sometimes leads to the purchase of junk foods.

Michael Ratner, Arlington, MA

There is nothing fresher or more local than [food grown on] one's own property. Moreover, the benefits of growing your own food go far beyond health to such matters as the environment, flavor, great lessons for raising kids, exercise, recycling "waste," not supporting industrial agriculture, and saving money.

Peter Burkard, Sarasota, FL

WE WANT TO KNOW

What proposals about renewable energy or energy efficiency are people debating now in your town or state?

We will publish selected responses (edited for length) in the spring issue of *Catalyst*. Email your response to catalyst@ucsusa.org.



[IN THIS ISSUE]

8 Where Climate Change Hits First and Worst

Communities already experiencing the impacts of global warming are often the least equipped to deal with it. UCS is working to ensure they get the help they need.

14 Toxic Influence

How a Chemical Industry Trade Group You've Never Heard of Threatens Your Health

2 First Principles Together, We Strengthened the Clean Power Plan

3 Observations

4 Advances

12 Inquiry Van Jones: We Need to Share the Benefits of a Green Economy

18 Ideas in Action How Do I Go Solar?

20 Member Profile The Original Concerned Scientist: Kurt Gottfried

23 Final Analysis Triumph and Tribulation on California's Energy Frontier

Climate Deception Report Helps Spur Action

This summer's publication of *The Climate Deception Dossiers*, the first major report in the Union of Concerned Scientists' climate accountability campaign, made headlines by publishing internal memos from the major fossil fuel companies that offer incontrovertible evidence that the companies were fully aware of climate science from as early as 1981 and yet still actively and knowingly worked to deceive the public about it. The report drew responses from five of the six fossil fuel companies targeted and helped spur one company—Shell—to take action.

In August, shortly after the report's publication, Shell announced that it will not renew its membership in the American Legislative Exchange Council (ALEC), an industry-funded group that influ-

ences policy makers to block or weaken important climate policies. UCS had urged the company to leave ALEC for more than a year, had met with Shell employees, and, working with partners, had sent the company more than 130,000 emails from scientists and citizens urging the move. As Angela Anderson, director of the UCS Climate and Energy Program, noted in our press release on Shell's decision: "If other fossil fuel companies want to be taken seriously when they say they support action on climate change, they should do the same." Chevron, ExxonMobil, and Peabody Coal still support ALEC while BP, ConocoPhillips, and Occidental Petroleum have all left the organization in recent months.

The Climate Deception Dossiers, and many of its accompanying materials,

grabbed public attention. The video related to the report (online at www.ucsusa.org/decadesofdeception), for example, has been viewed more than 254,000 times on Facebook. The report's release garnered strong traditional and social media coverage, with more than 70 news articles, including one in *The Guardian* that was shared more than 134,000 times on Facebook and ranked #1 on Reddit on the day of the report's release with a potential reach of roughly 1 million readers.

The report and media accounts about it have helped spur an emerging conversation about the issue. *Inside Climate News* has surfaced revealing new details about ExxonMobil's role. And some are already calling for prosecuting the major fossil fuel companies on racketeering charges.



Discoverer of Other Worlds Aims to Protect This One

In a gratifying development, William Borucki, the principal investigator of NASA's Kepler mission, is generously donating \$100,000 of the proceeds from his 2015 Shaw Prize in astronomy to UCS to support the organization's work addressing climate change. The Shaw Prize, awarded in astronomy, life science, medicine, and mathematics, is considered among the most prestigious honors in those fields. Borucki won the prize for his Kepler work, which has resulted in the discovery of more than 1,000 planets outside the solar system.

"I've spent a large portion of my career searching for other worlds," Borucki says. "What we've found has underscored how important it is to protect this one. While we can detect other worlds, we cannot go to them. Our future is here on Earth and we can do much more to ensure that our planet's climate remains hospitable."

Borucki spent his scientific career in public service at NASA, starting with the Apollo missions in 1962, and retired in July. He holds degrees in meteorology and physics from California State University–San Jose and the University of Wisconsin, respectively.



Shaw Prize recipient William Borucki



Pushing Starbucks, Avon, and Clorox on Deforestation

A UCS-led social media campaign spurred 200,000 supporters to petition Starbucks to go deforestation-free, successfully pressuring the company to open negotiations with UCS. The coffee giant is now in discussions with UCS about deforestation-free sourcing for not just palm oil but also all wood, paper, soy, and cattle (e.g., beef, leather) products. The meetings with Starbucks come on the heels of successful negotiations with cosmetics giant Avon, which strengthened its palm oil policy this summer under pressure from UCS, as well as an agreement from Clorox, owner of Burt's Bees and Green Works, to develop the company's first deforestation-free sourcing commitment for palm oil.

Equally important, UCS convinced Singapore-based First Resources, one of the largest palm oil producers in Indonesia, to create a policy that would prevent deforestation and rights abuses in their own operations. Miriam Swaffer, UCS corporate policy advocate on tropical forests, negotiated with First Resources personally at the company's headquarters.

As Swaffer explains, UCS seeks to end tropical deforestation not only because it's the right thing to do, but also because oil palm forests represent an obvious target for

reducing carbon emissions. Deforestation related to palm oil production has, in recent years, accounted for roughly 10 percent of global warming emissions.

Catalyst Expands

As longtime *Catalyst* readers will notice, this issue is longer than usual. To bring members the fullest and richest account of all the exciting work UCS is undertaking these days, we've decided to retire our newsletter *Earthwise* in favor of a significantly expanded *Catalyst*, adding pages and moving to a quarterly schedule from three issues a year. Members will also receive a special year-end mailing highlighting the year's top accomplishments.

Let us know what you think. Our members and supporters are a vital part of our efforts at UCS and, as we expand our work on many fronts, we want to keep you informed—and enlist your help—in the best way possible. You can also sign up for our monthly email newsletter and action alerts by visiting www.ucsusa.org/action-center.

Proposed Nutrition Label Follows the Science on Sugar

In a major win for science and public health this summer, the U.S. Food and Drug Administration (FDA) concurred with the position taken by more than 23,000 UCS members and supporters and endorsed a proposed revision to the Nutrition Facts label that appears on roughly 700,000 packaged food items. The new label will give consumers more information about sugar hidden in their food, by specifying the amount of “added sugar” in a product (i.e., the sugar that does not naturally occur in a product’s other ingredients) as well as the percentage of an adult’s recommended daily intake of sugar this added sugar represents.

The FDA’s proposed label is a win for science because, counter to the misinformation put out by the sugar lobby, the scientific evidence is strong that consuming too much sugar contributes to diseases affecting millions of Americans—diseases much worse than tooth decay. The proposal withstood pressure from the powerful packaged-food industry’s lobbyists and adhered to the recommendations of the Dietary Guidelines Advisory Committee, an independent body of experts tasked with reviewing the scientific research and helping the U.S. government develop its 2015 Dietary Guidelines for Americans.

The committee’s report earlier this year found evidence of an association between high added-sugar consumption—especially in the form of sugar-sweetened beverages—and tooth decay, obesity, type 2 diabetes, and heart disease.

“This is how policy should work—agencies listening to scientists and relying on the best available research to make smart policies,” says Andrew Rosenberg, director of the Center for Science and Democracy at UCS. “By setting a daily limit for added sugar, the FDA is acting in the public interest.”

The proposed label is also a win for public health because Americans remain remarkably uninformed about the health dangers of excessive sugar intake and even about how much sugar they are already consuming: an average of more than 19 *teaspoons* of sugar each day. Exacerbating the problem is the fact that an estimated 74 percent of all packaged foods contain added sugar, including many “unsweet” products such as soups, salad dressings, and crackers.

Nutrition Facts	
Serving Size 2/3 cup (55g)	
Servings Per Container About 8	
Amount Per Serving	
Calories 230	Calories from Fat 72
% Daily Value*	
Total Fat 8g	12%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	12%
Dietary Fiber 4g	16%
Sugars 1g	
Protein 3g	
Vitamin A	10%
Vitamin C	8%
Calcium	20%
Iron	45%
* Percent Daily Values are based on a diet of other people's secrets.	

Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per 2/3 cup	
Calories	230
% Daily Value*	
QUICK FACTS:	
12%	Total Fat 8g
12%	Total Carbs 37g
	Sugars 1g
	Protein 3g
AVOID TOO MUCH:	
5%	Saturated Fat 1g
	Trans Fat 0g
0%	Cholesterol 0mg
7%	Sodium 160mg
	Added Sugars 0g
GET ENOUGH:	
14%	Fiber 4g
10%	Vitamin D 2mcg
* Percent Daily Values are based on a diet of other people's secrets.	

The current Nutrition Facts label, left, lists only the total amount of “sugars,” whether added or naturally occurring. The proposed new version, right, includes a separate line to highlight “added sugars” in processed foods.



As UCS documented in two 2014 reports—*Added Sugar, Subtracted Science* and *Sugar-coating Science*—the sugar and packaged-food industries have actively worked to confuse the American public both about the amount of sugar in products and the science linking sugar intake to obesity and disease. With the period for public comments on the FDA’s proposed label ending in October, UCS will be doing everything we can to make the truth known and ensure the label gets finalized swiftly and with its provisions intact.

UCS Ranks Among the Most Influential Climate Groups

For the past three years, the Venice, Italy-based International Center for Climate Governance (ICCG) has issued a science-based ranking of the world’s most influential “think tanks” on climate and energy policy, and UCS has made it into the top 10. Notably, the ICCG bases its rankings on an analysis of various statistical data, including output of articles, books, and reports; Web traffic; and citations in social media, weighted according to the organization’s size. Only organizations unaffiliated with government or academic institutions are considered.

This year, UCS ranked tenth in influence out of 244 organizations studied worldwide.

UCS Helps Secure Support for Iran Deal

The recently finalized nuclear deal with Iran, which lifts international sanctions on the country in exchange for strict limits on its nuclear program for at least the next decade, was overwhelmingly supported by scientists with expertise in nuclear weapons technology and policy. UCS helped get this message out.

Most notably, UCS board member Richard L. Garwin, a physicist who helped design the world’s first hydrogen bomb and has long advised Washington on nuclear issues, wrote an influential public letter in August—praising the deal as innovative and stringent—that was endorsed by 32 of the nation’s top scientists and nuclear experts. Lisbeth Gronlund and

David Wright, co-directors of the UCS Global Security Program, signed the letter and UCS helped circulate it to scientists and publicize it.

Later that month, Gronlund and Wright also voiced their support for the deal in a separate letter signed by 70 security experts. “The Iran deal includes many innovative and important provisions,” says Wright, “but it is also detailed and complex, running to more than 150 pages. The endorsement by independent experts really mattered in this case.”

For more on the important role scientists played in the Iran deal, see UCS President Ken Kimmell’s blog post on the subject at www.ucsusa.org/irandeal.



Secretary of Energy Ernest Moniz (left) speaks at a September 2015 press conference about the Iran nuclear deal, along with Illinois Representative Bill Foster (center) and UCS board member Richard Garwin (right).

**WHERE
CLIMATE CHANGE HITS**

FIRST AND WORST



Communities already experiencing the impacts of global warming are often the least equipped to deal with it. UCS is working to ensure they get the help they need.

BY PAMELA WORTH

People sit on a rooftop in New Orleans on August 30, 2005, waiting to be rescued after Hurricane Katrina. Poor populations are more likely to lack transportation during disasters, leaving them little choice but to stay home and weather the storm.

Gilberto Turcios has lived for 13 years—and through Hurricanes Wilma and Rita—in the small city of Opa-locka, Florida, about a half-hour north of downtown Miami. He doesn't recall which storm blew the roofs off his neighbors' houses, but he does remember the government-issued blue tarps.

They were intended to be a temporary measure for those who had suffered damages after the storm had passed, with more assistance promised.

"Apparently the government hired a company, and then that company hired another company, and that company hired another company . . . and they went really cheap with the blue tarps," Turcios says. No further aid was provided.

"They did a quick fix and forgot about it. Eventually it was left up to the residents to deal with the mess," he says.

Turcios describes Opa-locka as a residential community whose population is largely African-American and Latino, with a few small businesses, a lot of families, and homes for low-income seniors. It is also a community changing because of climate change.

These days, he says, it's hotter, more humid, and it rains more. "Flooding is happening more often, there's more floodwater than usual, and there's more damage to houses than ever before."

Turcios knows a lot could be done to help prevent flooding damage to homes like his. But even with his job as a bank security guard, he's not sure he can afford those measures—such as elevating his home by putting it on stilts. He doesn't know what Opa-locka is doing to prepare for climate-related impacts, but he does know this: while South Florida has experienced relatively few storms over the last 10 years, it is only a matter of time before the next big one hits.

ON THE CLIMATE FRONT LINE

In Florida, like the rest of the United States, poor populations often bear the brunt of climate impacts, living on the front lines of rising seas, catastrophic storms, and drought.



Extreme weather exacts an emotional as well as physical toll on affected communities.

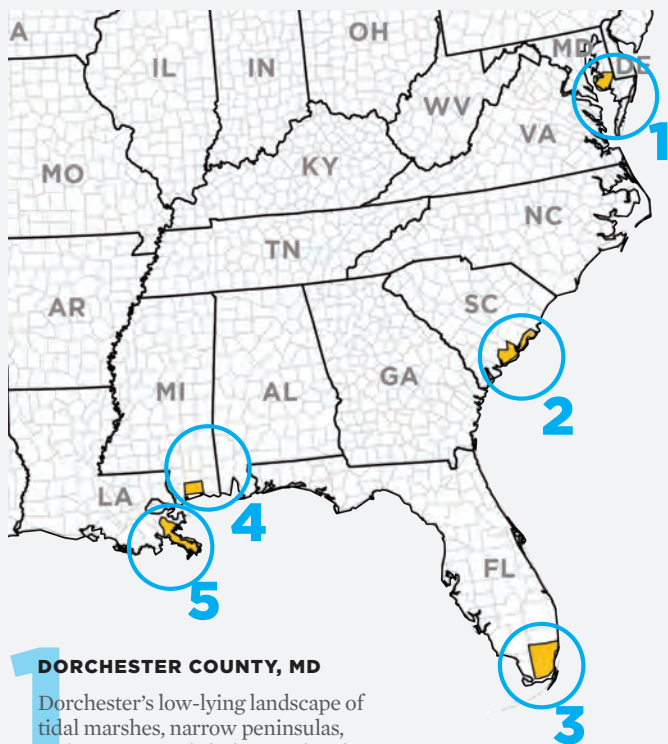
These frontline communities are disproportionately communities of color: according to 2011 data, wealth inequality along racial lines has burgeoned dramatically in the United States in recent years. The typical black household has just 6 percent of the wealth of the typical white household; the typical Latino household has 8 percent.

Low-income communities cope with chronically low investment in their neighborhoods, poorly built and maintained infrastructure, and the legacy of housing policies that have effectively segregated towns and cities—in some cases, forcing poorer populations to live closer to power plants, airports, waste sites, and otherwise undesirable land that is often affected "first and worst" by natural disasters.

And when those natural disasters strike, efforts to help communities recover often fail those most in need—as when the promise to rebuild Opa-locka's roofs only resulted in the distribution of blue tarps.

When natural disasters strike, efforts to help communities recover often fail the people who need help the most.

Studies show that low-income and communities of color in the New York-New Jersey area were among the hardest hit by Hurricane Sandy, and continue to struggle to find housing. One study of an African-American community in Maryland affected by Sandy found that residents there experienced flooding in their streets for days longer than other communities, and had more difficulty accessing food and housing. In New Orleans, where Hurricane Katrina and the subsequent levee failure and flood



DORCHESTER COUNTY, MD

Dorchester's low-lying landscape of tidal marshes, narrow peninsulas, and country roads linking isolated communities is threatened by rising seas and sinking land. More than a foot of sea-level rise projected by 2045 will worsen saltwater intrusion; damage roads, bridges, and infrastructure; and harm the region's agriculture and seafood industry.

HIALEAH AND OPA-LOCKA, FL

The inland, low-lying cities of Hialeah and Opa-locka currently experience street flooding during routine rainstorms. With 9 to 24 inches of sea-level rise projected by 2060, flood risks will worsen. Investments are urgently needed in storm-ready infrastructure to make these low-income, Hispanic and African-American communities more resilient and provide opportunities for employment and economic revitalization.

PLAQUEMINES PARISH, LA

Much of Plaquemines Parish lies below sea level and was hit hard by Hurricane Katrina. Several of its minority communities are ground zero for the harsh confluence of socioeconomic vulnerability and flood risks from projected sea level rise and land subsidence, and are working to shape state and local adaptation plans to meet their needs.

CHARLESTON, SC

The historic city of Charleston regularly faces tidal flooding, a situation that will worsen with continued sea level rise. The city's climate challenge is to address the needs of elderly and low-income communities alongside its commitment to protect its business and tourism interests. Investments in natural buffers, flood control measures, and climate-resilient subsidized housing provide a path forward.

GULFPORT-BILOXI, MS

Located in Harrison County, Gulfport has long been plagued by storm surge flooding reaching far inland, epitomized by the impacts of Hurricanes Katrina and Rita in 2005. The African-American community of Turkey Creek is working hard to preserve wetlands and cultural heritage sites, rebuild livelihoods, and ensure equitable access to funding for resilience.



Poor populations often bear the brunt of climate change, living on the front lines of rising seas, catastrophic storms, and other extreme weather.

killed hundreds, the majority of people who were trapped in the city and left waiting for rescue and aid were overwhelmingly African-American and poor.

Poor populations, and elderly nursing home residents, are more likely to lack transportation during disasters. And the fact that these populations may also have a high prevalence of chronic health problems increases their vulnerability to other storm-related hazards. In Opa-locka during Hurricanes Katrina and Wilma, for example, Turcios says the news and other media kept locals informed about evacuation locations and procedures, but people without cars and/or driver's licenses—predominantly the poor and elderly—had little choice but to stay home and weather the storms.

BUILDING RESILIENCE—EQUITABLY

The Union of Concerned Scientists is working in partnership with several environmental justice organizations to contribute scientific information and collaboratively develop policy recommendations that will help communities on the front lines of climate change prepare for and cope with its effects—from dangerous storms to repeated tidal flooding.

“Our priority is working to help ensure that our nation's transition to cleaner energy and more resilient communities is equitable,” says Rachel Cleetus, lead economist and climate policy manager at UCS. “These changes have to include opportunities, especially jobs and infrastructure investments, for underrepresented communities.” (See our related interview with Van Jones on p. 12.)

The communities highlighted above represent just a few of the many places along the East and Gulf coast that face disproportionate impacts from sea level rise and storm surge.

The first step in building equitable climate resilience, Cleetus says, is to identify particularly vulnerable communities. Efforts to cut emissions nationwide will benefit people everywhere, but resilience to climate impacts must be built up in specific locations. The disproportionate burden of climate change faced by African-Americans, Latinos, and other people of color requires greater policy attention and resources.

To aid in this effort, Cleetus and her team have developed a screening tool to help identify “hot spot” communities in the United States by measuring both socioeconomic factors and vulnerability

Building equitable climate resilience means targeting additional resources toward helping communities prepare for climate risks.

to sea level rise. Drawing attention to these communities’ special planning needs can inform decisions about the resources required to adequately protect their residents.

For example, the UCS tool identified Orleans Parish in Louisiana as a high-risk area when taking into consideration both climate impacts and socioeconomic factors such as poverty rates and per capita income. Within 15 years, the parish faces a projected sea level rise of 6 to 10 inches and a threefold increase in tidal flooding events, but many parish residents cannot afford to adequately prepare for these events, and are already struggling with storm surge flooding and land loss today. UCS is recommending the creation of a National Climate Resilience Fund to help protect the residents of Orleans Parish and similar communities with federal funds targeted specifically to such hot spots (see the sidebar).

Although UCS is calling on national leaders to work toward climate equity, it is just as important to listen to the residents of communities who are learning to cope with climate change about what their towns and cities need, and how they have managed to keep their neighborhoods together through worsening conditions. Members of these communities are keenly aware of the gaps in current resources and policies that need to be closed, and they must have a voice in the process of building community resilience.

“Any successful effort has to start by including local leaders in the decision-making process and listening to their needs and concerns,” Cleetus points out.

(continued on page 22)

How to Make Climate Resilience Effective and Fair



UCS is working with partners to help enact policies that ensure that communities on the front lines of climate change are better prepared and protected from the consequences of climate change. Among our recommendations:

- **Target funding for hazard mitigation and disaster recovery to those most at risk.** Federal disaster aid programs such as the Federal Emergency Management Agency’s Individual Assistance and Hazard Mitigation Grant Programs should specifically allocate a portion of funds to meet the needs of frontline communities.
- **Provide access to the best available, community-informed, actionable science and data.** Whenever possible, this information should not just be provided to communities in need but also be developed in consultation with local stakeholders.
- **Make investments in transportation, energy, health, and shelter for communities in need.** Planning ahead and making smart investments can limit disruptions and dislocations in communities and reduce the need for long-term taxpayer-funded assistance.
- **Establish a National Climate Resilience Fund.** Authorized by Congress, this fund would require a level of funding sufficient to help prepare and protect communities from the impacts of climate change, including sea level rise and coastal flooding.
- **Cut carbon emissions.** Because any efforts to build resilience in coastal communities will be quickly overwhelmed if climate change and sea level rise continue unchecked, they must be coupled with swift and dramatic reductions in global warming pollution.

We Need to Share the Benefits of a Green Economy

But it won't happen unless we ensure equal access to clean technologies, says prominent social justice advocate Van Jones.



Van Jones is a lawyer and environmental and social justice advocate. A cofounder of the Oakland, California-based Ella Baker Center for Human Rights, he has served as special advisor to the White House Council on Environmental Quality, and founded organizations including #YesWeCode and Rebuild the Dream. Jones is a regular CNN commentator and contributor, and the author of *Rebuild the Dream* (2011) and the *New York Times* best seller *The Green Collar Economy* (2008).

*The environmental movement has changed a lot since you published *The Green Collar Economy*. How would you characterize it today?*

V.J.: We're in the middle of another green boom. The first was a consciousness boom, an attempt to change policy. Now we're in an economic green boom, and more focused on deploying new technologies with new companies within the existing policy framework. I'm optimistic that the momentum will continue—but I'm not optimistic that it will continue in a way that will help everybody.

In my first book, I laid out the dangers of what I call eco-apartheid, where you have ecological haves and have-nots—and that seems to be upon us now. Today, there are some people who have access to organic food, solar power, and hybrid cars while others are still choking in last century's pollution- and poison-based economy.

If we're going to have ecological equity—which is the only basis for a stable green growth agenda—we have to expand the number of people who can participate in the green boom.

How is the mainstream green boom failing underrepresented communities?

V.J.: What we're seeing right now, especially in the solar industry, is what we feared they'd do: go to the easiest-to-serve markets, with affluent owners and premier housing stock. About 80 percent of the boom is getting these people's homes solarized.

The clean energy industry is doing what every other industry does: try to make as much money for itself as possible without a lot of social consciousness. But clean energy is different. Because clean energy companies are the enemies of polluters, they need the public on their side.

What are the dangers of leaving poor and underserved communities out of the green economy?

V.J.: What's wrong is that we know we have some communities that are going to get hit first and worst with everything bad about climate disruption. We're not going to be shocked by which communities and countries get decimated. These same communities benefit last and least from everything good coming from the green economy. They're the last ones to get solar panels and healthy, organic foods, and that's morally wrong.

But it's not just a moral problem. It's ultimately a political problem. Big, polluting utility companies are now going to underserve African-American communities and telling them, "Affluent white folks are getting solar panels and jumping off the grid. That means you're stuck with the cost of maintaining and repairing the whole grid."

This creates the conditions for a backlash alliance between polluters and poor people. Polluters are making arguments that solar power and net metering are going to raise people's energy bills and hurt poor people. It's not like on the other side we can jump up and say, "Au contraire, you do in fact have an equal shot if you're poor, or if you're a person of color, to

In communities of color, nothing good happens by accident. A green economy strong enough to lift people out of poverty requires a deliberate effort.

solar-power your house”—because it’s not true. Shame on the solar industry for leaving a hole big enough for our opponents to drive through. We are literally leaving the argument to them.

As a consequence, early in 2015, the entire African-American organization of state legislators voted against net metering and against solar. To put that in perspective, every African-American member of Congress voted for cap-and-trade in 2009. The greenest bloc in Congress during that fight was black. And in 2015, we lost every black state legislator.

What can the renewable energy industry do differently to serve underrepresented communities?

V.J.: The problem is half science and half policy. If it were only a science problem, we would have already won. We’re losing on the policy.

The bottom line is that nothing good happens in communities of color accidentally. If there’s going to be a green economy strong enough to lift people out of poverty, there needs to be deliberate effort. The good news is there’s no actual resistance on the part of the industry to doing that. It just requires some focus, effort, policy, and financing.

How do you explain to people who are not on the front lines of the fight for environmental justice why it is important to expand access to the green boom?

V.J.: Let’s talk about math. The greenest bloc of voters in the United States is African-Americans. This is a large voting bloc that is already on your side, and even willing to pay a little more for the government to move on an environmental agenda.

Beyond that, we have a growing voting population that is increasingly people of color: African-Americans, Latinos, Native Americans, Asian-Americans. By 2040, they’ll be the majority in this country. You can leave all of those voters to have conversations with polluters about their energy bills . . . *if you want*. It just makes the math worse for you if you want to win anything. The math says you count the existing votes you have, and you keep them.

We can also talk about science. The research now is very clear: the more complex a problem you’re trying to solve, the more you want a heterogeneous group of problem solvers. And there is no bigger or more complex problem than global climate disruption. If you believe in science you want heterogeneity.

We need to create a green growth alliance where we can grow the green economy in a fair way—making sure everyone benefits from the work and the wealth and the better health that comes from it. This is how we win. This is how we save the world. (C)





American
Chemistry
Council

TOXIC INFLUENCE

*How a Chemical Industry Trade Group You've
Never Heard of Threatens Your Health*

BY ELLIOTT NEGIN

Lumber Liquidators, North America's largest hardwood flooring retailer, took a major hit earlier this year when CBS's *60 Minutes* reported that the company was selling Chinese-made laminate flooring containing dangerous amounts of the carcinogen formaldehyde.

A day after the broadcast, the company punched back, insisting that its laminate flooring is "completely safe to use as intended" and that the news program's tests were flawed. "We stand by every plank of wood and laminate we sell all around the country," the company's statement contended.

Despite those assurances, Lumber Liquidators pulled the suspect flooring off the market and provided thousands of customers with home air-quality test kits. But even that wasn't enough to stanch the bleeding. Sales plummeted, its stock tanked, several top company officials resigned, and irate home owners filed at least 135 lawsuits. Meanwhile, the Consumer Product Safety Commission is investigating the case and the Justice Department is expected to file criminal charges.

Largely lost in the coverage of Lumber Liquidators' debacle, however, is a bigger issue: Why are there no federal restrictions on formaldehyde emissions in the home considering it was first recognized as a health threat some 30 years ago?

According to the recent Union of Concerned Scientists report *Bad Chemistry*, it's the same reason why the endocrine disruptor bisphenol A (BPA) is still in food containers, toxic flame retardants are still in furniture, and tens of thousands of untested, unregulated chemicals are currently in commercial use: the undue influence of the U.S. chemical industry, in the form of its premier trade association, the American Chemistry Council (ACC).

Founded more than 140 years ago as the Manufacturing Chemists' Association, the ACC is now an operation with a \$100 million annual budget, representing the interests of 155 corporate members including chemical companies such as Dow, DuPont, and Olin, pharmaceutical firms Bayer, Eli Lilly, and Merck, and petrochemical giants BP, ExxonMobil, and Shell. Over the years, the organization has successfully delayed, weakened, and blocked science-based health, environmental, and workplace protections at the state, national, and even international levels.

The American Chemistry Council is trying to undermine federal standards for formaldehyde emissions.

For example, the ACC has lobbied against establishing federal rules on silica dust exposure and disclosing the chemicals used in hydraulic fracturing. It has been instrumental in limiting community access to information about local chemical plants. And it is spearheading an industry campaign to undermine the first-ever federal standards for formaldehyde emissions from furniture, flooring, and other common items found in U.S. homes.

"Companies shouldn't be allowed to get away with hiding behind their trade associations to influence the political process without accountability," says Gretchen Goldman, a UCS analyst and lead author of *Bad Chemistry*. "This is the same playbook the tobacco industry and oil companies have used to undermine science. People and communities suffer when chemical companies can buy industry-friendly policies."

THE LONG ROAD TO FEDERAL PROTECTION

Scientists have long been aware of the short-term health effects of formaldehyde, which include nausea, headaches, and irritation of the skin, eyes, nose, and throat. It can also exacerbate asthma, especially in children. These kinds of exposure often occur in the home, mainly from the glue in composite wood (which includes particle board, plywood, and laminated veneer), cigarette smoke, and unvented kerosene heaters and gas or wood-burning stoves.

Prolonged exposure in the workplace is even more problematic. In 1980, laboratory studies found formaldehyde can cause nasal cancer in rats. Since then, epidemiological studies of U.S. workers routinely exposed to the chemical found they are at greater risk of contracting leukemia, particularly myeloid leukemia, and nasopharyngeal cancer. In 2011, the Department of Health and Human Services' National Toxicology Program listed the chemical



Thousands of Hurricane Katrina refugees suffered from health ailments after moving to emergency trailers that were found to contain dangerous levels of formaldehyde. The crisis prompted the EPA to propose limits on formaldehyde in building materials and furniture.

as a known human carcinogen, and just this year, it was linked to amyotrophic lateral sclerosis, or Lou Gehrig's disease.

Formaldehyde was one of more than 62,000 chemicals already in commercial use at the time Congress passed the Toxic Substances Control Act in 1976 and therefore "grandfathered" from the law's provisions—meaning the chemical could continue to be used without testing to demonstrate its safety. That doesn't mean it can't be regulated, however, and federal emissions standards for workplace exposure have been on the books for some time. In 1987, the Occupational Safety and Health Administration slashed the federal limit for an eight-hour workday formaldehyde exposure by two-thirds, from 3 parts per million (ppm) to 1 ppm. In 1992, the agency reduced it another 25 percent, to 0.75 ppm.

By contrast, despite increasing scientific evidence of the risks posed by exposure to formaldehyde, regulation of exposure in the home has been stalled for years.

California first declared formaldehyde a toxic air contaminant back in 1992, but the issue didn't get much traction until 2005, when the cheaply constructed emergency trailers housing thousands of Hurricane Katrina refugees were found to have unsafe levels of the chemical, resulting in respiratory problems, burning eyes, and other ailments. Front-page stories on these "toxic trailers" prompted public health advocates to ask the Environmental Protection Agency (EPA) to establish limits on formaldehyde in building materials and furniture used in homes.

California responded first, placing limits on emissions from composite wood products that went into effect at the beginning of 2009. A year later, Congress passed legislation based on California's standard. Yet five years have passed and the EPA has failed to issue a federal standard.

What's holding it up? The ACC and a handful of other trade groups and companies are furiously lobbying their friends in Congress to weaken the standard.

Over the years, the ACC has delayed, weakened, and blocked science-based health and environmental protections.

DISTORTING THE SCIENCE

According to *Bad Chemistry*, the ACC is central to the industry's effort to undermine the formaldehyde standard, leading a loose coalition that includes furniture makers, the Chinese government, and lawmakers from states with significant furniture manufacturing.

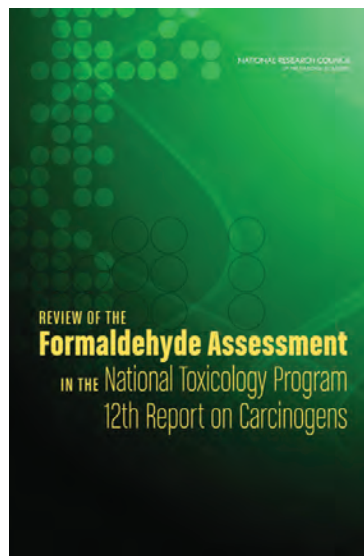
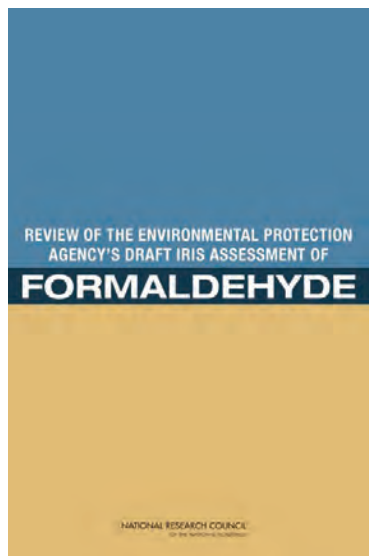
The ACC website emphasizes the chemical's "invaluable role" and overstates the effectiveness of voluntary standards. The trade group also distorts the scientific evidence about formaldehyde by falsely claiming that indoor exposure is too low to be harmful and questioning the science linking the chemical to asthma and cancer.

But the ACC has been doing a lot more than just posting disinformation on the Internet. Along with Koch Industries—owner of Georgia-Pacific, one of the largest U.S. formaldehyde and plywood manufacturers—it has been currying favor on Capitol Hill with large sums of lobbying and campaign cash.

From 2010 through 2014, the ACC spent more than \$51 million to lobby members of Congress and the Obama administration.



The binders used to glue together wood fibers in particleboard, plywood, and other building materials often contain formaldehyde.



Senators James Inhofe (left) and David Vitter (right), who have received money from the American Chemistry Council, both worked to delay the EPA's efforts to regulate formaldehyde emissions. At least two independent scientific reviews of the EPA's formaldehyde assessment have confirmed that the chemical is indeed a human carcinogen.

Over that same period, it contributed \$1.46 million to federal campaigns. And during the 2014 election cycle alone, it spent \$1.8 million on more than 6,000 political ads.

Two beneficiaries of the formaldehyde lobby's largesse are Senators James Inhofe of Oklahoma and David Vitter of Louisiana; each has played a key role in slowing the EPA's efforts. As far back as 2004, for example, Inhofe pushed the agency to delay an assessment of formaldehyde's health risks.

Formaldehyde is just one of some 62,000 chemicals whose use is “grandfathered” by the current law—and some have been linked to serious health problems.

When the agency finally released its findings in 2009, Vitter further delayed action by holding up the appointment of an EPA research and development director and demanding that then-EPA Administrator Lisa Jackson agree to have the National Academy of Sciences review the agency's assessment. This has resulted in two academy reports, both of which confirmed what was already known: Formaldehyde is a human carcinogen.

PUTTING PUBLIC SAFETY FIRST

The saga of the formaldehyde standard is not over, and there will likely be more industry-sponsored efforts to weaken it further. But, as noted above, formaldehyde is only one of more than 62,000 chemicals whose use is grandfathered by the Toxic Substances Control Act (TSCA), and more than a few have been linked to serious health problems. So the overarching question is whether Congress will update the law in a way that will enable the EPA to protect the public from harmful chemicals.

Congress has been deliberating how to reform TSCA since 2008, and there are bills currently in play in both the House and Senate. Whether either bill ultimately strengthens TSCA remains to be seen. The fact that the ACC's annual lobbying budget has jumped 300 percent over the last six years suggests that the trade group sees TSCA as a critical issue and is applying its money and muscle to influence lawmakers.

Outside of the ACC and its allies, most would agree we need chemical policies that protect the public's health and safety, not industry profits. But how do we get there? An important first step is to hold chemical companies and the ACC accountable for their efforts to influence decision makers and undermine science. The public has a right to know about potentially harmful chemicals in products as well as who is influencing its elected officials and regulators.

“We have to base public health policy on the best available science and not the priorities of chemical manufacturers,” Goldman says. “And that means getting safer chemical alternatives into our products. Our elected officials need to step up and put their constituents first—not their campaign contributors.” {C}

How Do I Go Solar?

By John Rogers



With prices for household solar photovoltaic (PV) systems falling by almost 45 percent from 2010 to 2014, electricity from a rooftop system might now cost about the same as what you get from your utility. For those considering “going solar,” here are some pointers to help you through the process.

CHOOSE A FINANCING OPTION

A key choice to make is deciding who will own the solar panels—you or the solar company (or a bank). There are a range of options:

- **Leases and power purchase agreements (PPAs).** Under these types of arrangements, allowed in almost all states, home owners pay little or nothing up front, then pay a monthly fee or a pre-set rate for the solar-generated electricity.
- **System loans.** Various public and private entities ranging from credit unions to government agencies provide

or support loans for home owners buying PV systems.

- **Cash or self-financing.** Cash purchases aren't an option for everyone, but if a home equity line of credit is available, it may have lower interest rates and tax benefits than other options.

TAKE ADVANTAGE OF INCENTIVES

A federal tax credit for investments in clean energy can give you back 30 percent of the purchase price. Some states also have rebates or requirements for utilities to offer PV system owners a chance for additional savings or revenue. And local

utilities may have their own rebates too. All told, credits and rebates can cut the cost by half or more.

EVALUATE YOUR SITE

A key step in the design process for a rooftop solar system is to figure out not just what you can afford, but also what your roof can generate. Online tools can help determine the amount of sun that reaches a region, or even a specific roof. Other factors such as a roof's slope, age, and the material from which it is made also contribute to whether your home is solar-ready.

But rooftop solar is not limited to those with sun-drenched roofs: renters, condominium owners, and people with shaded roofs who cannot take advantage of solar on their own roofs can benefit from “shared solar” solutions. For example, some states allow a household to buy a piece of a larger solar system placed elsewhere, and to take advantage of that solar generation to offset the home's electricity use.

FIND A SOLAR COMPANY

Whether you find a system provider via the Internet or word of mouth, sharing a few key pieces of information with them will help speed the process:

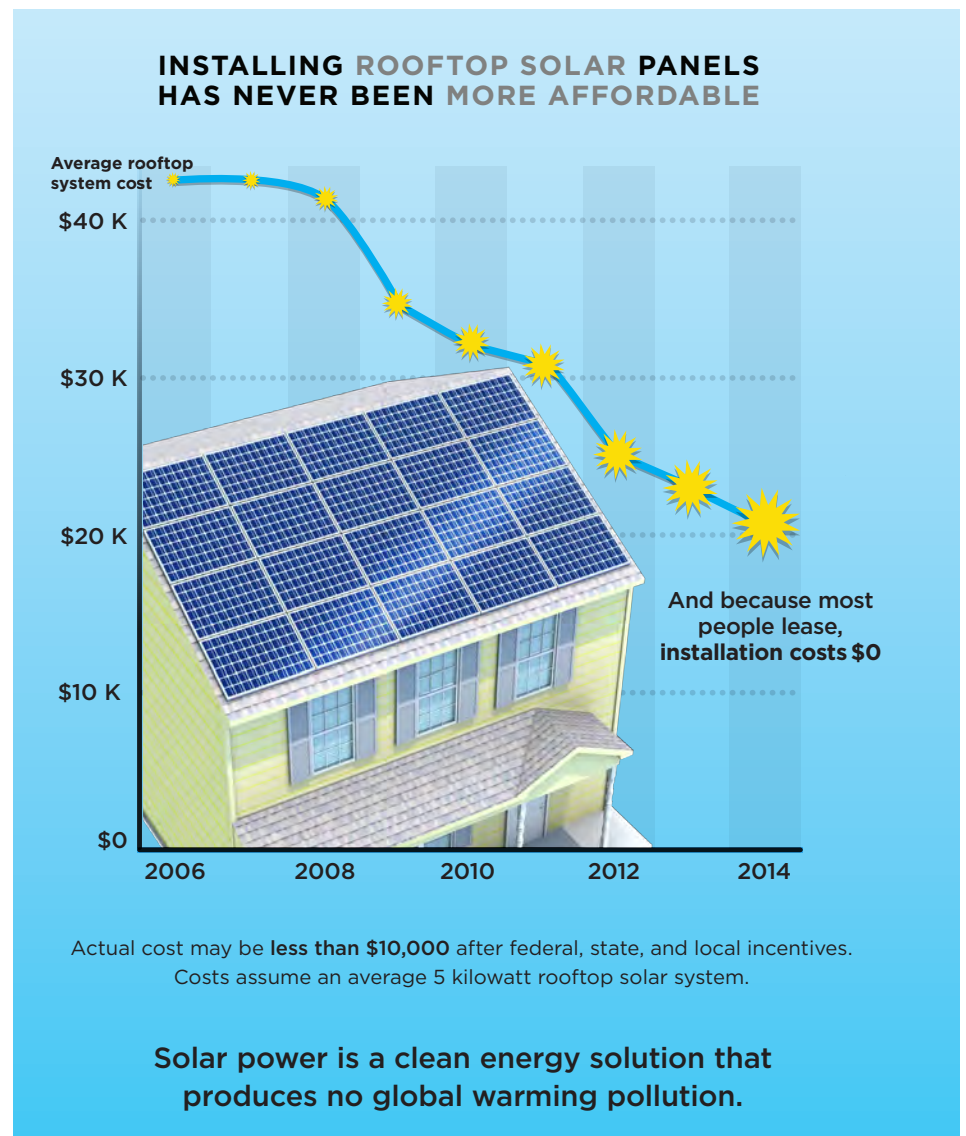
- **Where you live.** Companies can do a rough estimate of the solar energy potential in your locale even before they visit.
- **What you are looking for.** Help set the proper level of expectations by thinking about how much of your electricity you are hoping to get from solar.
- **How much electricity you use.** Copies of your recent electricity bill will give

a solar company an idea of your typical consumption and usage patterns.

After this initial contact, interested companies will likely carry out a site visit, taking detailed solar energy readings and assessing the condition of your home's roof and electric panel to figure out what is possible, and provide you with quotes.

From there, you're on your way to powering your home with a clean, renewable source of electricity. {C}

John Rogers is a senior analyst in the UCS Climate and Energy Program. Read more from John on our blog, *The Equation*, at <http://blog.ucsusa.org>.



The Original Concerned Scientist:

KURT GOTTFRIED

In the late 1960s, Kurt Gottfried was years into a career as a professor of physics at Cornell University, happily married with two small children, and well-known in his field for his work and intellect. Most physicists would have delighted in his life and accomplishments, but Gottfried was deeply concerned about a growing threat to civilization—from the unchecked exploitation of scientific knowledge for military purposes.



Kurt Gottfried discusses national missile defense at a press conference in April 2000, after the release of the UCS report *Countermeasures* (of which he was a coauthor). The findings of the report led then-president Bill Clinton to declare later that month that he would not deploy a missile defense system.

When he accepted a visiting professorship at MIT for the academic year 1968–1969, Gottfried inadvertently landed upon the perfect project to address his concerns. Back in Cambridge, Massachusetts, where he had earned his doctorate, he was reunited with his former roommate Henry Kendall; the two friends responded to the political turbulence of 1969 by playing leading roles in the founding of a unique organization: one that sought to tap the power of science, to stem the threat posed by science itself.

Forty-six years later, Kurt Gottfried is still active in the Union of Concerned Scientists. He has served on the board since its inception, including a 10-year stint as chair, and remains the organization's moral compass. Intolerant of dishonesty and injus-

tice, he has used his standing as an accomplished physicist to stand up repeatedly for peaceful resolutions of conflicts and the protection of humankind.

“He is the epitome of a concerned scientist,” says Lisbeth Gronlund, who co-directs UCS’s Global Security program with David Wright; the two have worked with Gottfried for decades.

EARLY YEARS

Gottfried was born in Vienna, Austria, to Jewish parents. After their home was raided on *Kristallnacht*, his parents fled with nine-year-old Gottfried and his younger sister, eventually immigrating to Montreal, Canada.

“Though he was young, his exposure to the Nazi regime shaped his life-long antipathy to authoritarian government,” says

Gronlund. “And his commitment to scientific integrity,” adds Wright.

In Montreal, Gottfried grew up, graduated from McGill University, and met and married his wife, Sorel, in 1955. That same year, he had earned a PhD in theoretical physics at MIT, where he’d roomed with Kendall, the future Nobel Prize winner and his fellow UCS cofounder.

During the year that Gottfried returned to teach at MIT, the Vietnam War was on every mind, with the draft creating tension among students and faculty. Gottfried—whose mentors had played leading roles in the Manhattan Project, developing the atomic bomb—was alarmed by the burgeoning nuclear arms race, and the commitment of science and scientists to creating ever more powerful nuclear weapons.

“We are immersed in one of the most significant revolutions in man’s history. The force that drives this revolution is . . . relentless exploitations of scientific knowledge. That many of the transformations [from this revolution] have been immeasurably beneficial goes without saying. But, as with all revolutions, the technological revolution has released destructive forces and our society has failed to cope with them.”

—KURT GOTTFRIED, MARCH 4, 1969

When a group of MIT students held a walkout to protest university involvement in the war, Gottfried and his colleagues saw an opportunity to start a broad, national movement that would wield science as a tool for peaceful progress. He drafted a statement (excerpted above), and they organized a nationwide teach-in on March 4, 1969—thus forming the Union of Concerned Scientists.

For a few years, UCS was little more than a mailbox and a handful of reports on nuclear weapons and anti-ballistic missile systems. Gottfried credits Kendall with transforming UCS into a tangible organization through his whistle-blowing work on nuclear power plant safety. Both Kendall and Gottfried, working with eminent physicists Hans Bethe and Richard Garwin, drew attention and acclaim to UCS by demonstrating the infeasibility of the “Star Wars” missile defense program during the 1980s. However, it was Gottfried who led what was possibly UCS’s most influential campaign.

A MOVEMENT FOR SCIENTIFIC INTEGRITY

Frustrated by the deliberate—and successful—efforts of the Bush administration in the early 2000s to distort and manipulate scientific knowledge in service of its political aims, Gottfried drafted a statement calling for the restoration of scientific integrity in the United States, and recruited hundreds of prominent scientists, including Nobel laureates, university heads, and former presidential advisors, to sign. From this push, a broader audience was made aware of the political censorship and manipulation affecting research at federal agencies such as the Environmental

Protection Agency. And UCS’s membership expanded, as a much wider swath of science professionals such as physicians and medical researchers joined what would become the Science Network.



Kurt Gottfried (left), along with Matthew Meselson (then chair of the Federation of American Scientists) and UCS Global Security Program Co-Director Lisbeth Gronlund (then a PhD candidate at Cornell), participate in a trans-Atlantic video conference on nuclear weapons issues in 1986.

In addition to his work with UCS, Gottfried was also deeply engaged in campaigns in support of scientists in the former Soviet Union and South America

who were imprisoned for expressing views in conflict with the dogmas of their authoritarian rulers. He personally arranged for two politically persecuted scientists to leave their home countries and come to Cornell, where he was teaching (and is now a professor emeritus).

Many physicists with Gottfried’s achievements and reputation in the field would be content with their accomplishments. And many great scientists, adds Wright, focus almost exclusively on their work and not its real-world ramifications. However, he says, Gottfried has always considered how scientific work fits into a larger picture.

“Those of us involved with UCS do feel that scientists have an obligation to society,” says Gottfried. “The notion that scientists can spend their careers doing public advocacy—that from a scientific point of view is still interesting and intellectually honest—is something that we helped to foster. We need to keep the public and our government informed about the implications of science.” {C}

Renaming the Living Legacy Society

The members of the Union of Concerned Scientists’ planned giving program share a deep commitment to a healthier, safer future for the next generation, and generations after that. In their commitment and caring, they follow in Kurt Gottfried’s footsteps.

Those supporters who have arranged to sustain UCS in this work for years to come are now part of the Kurt Gottfried Society—renamed from the Living Legacy Society in his honor. We are proud to take the opportunity to pay tribute in this way to our founder and friend.

More information on the Society can be found on the back cover of this issue.

Where Climate Change Hits First and Worst

(continued from page 11)

KNOWLEDGE IS POWER

Earlier this year, members of the UCS climate team traveled to several cities contending with rising sea levels, providing information and speaking with residents and local leaders about strategies for managing the inevitable flooding. However, successfully communicating this information to policy makers can be an uphill battle in states such as Florida, where Governor Rick Scott has for years reportedly forbidden state officials from even mentioning climate change.

One person who has made it her mission to give voice to the challenges facing Floridians on the front lines of climate change is Audrey Peterman, an environmental consultant and author who has lived in Fort Lauderdale on and off for 30 years. She has seen erosion damage the beaches she loves, sending sand in sheets across the nearby A1A highway and requiring the construction of seawalls. She's seen high tides flood the marina parking lot to levels her neighbors agree are unprecedented. But what disturbs her most is that she's seen development in low-lying neighborhoods continue as though nothing unusual is happening—as though climate change is not a threat.

“For us,” Peterman says, “the biggest challenge is that there's not enough information going into the communities about what's going to happen.” She says residents are left unprepared for the consequences of climate change.

“I've been talking for years about the potential impact on low-income communities and communities of color. But they're not getting this information from the city or the county. They don't see it underscored by the government. They think it's something way out there that will affect other people, in the future,” Peterman says. She is calling for communities across the United States to

“Some communities will face climate impacts sooner than others but, ultimately, this is everyone's story.”

RACHEL CLEETUS

Lead Economist and Climate Policy Manager at UCS

organize, gather information from zoning boards and city and county commissions, and make a case to their local leaders.

“We need to find out what's going on, and then lobby our elected officials,” she says. “We need to let them know that we know what's coming, we're not going to sit still, and we're not going to be the victims.”

As Peterman notes, communities on the front lines of climate impacts bear an outsized burden now, but eventually all Americans will experience the consequences of global warming. The kind of climate resilience policies we put in place to help frontline communities will have ramifications and lessons for every town, city, and state in the country.

“Fairness, justice, and equity are core democratic values. As a nation, we need to bring these principles to bear as we work together to confront the challenge of climate change,” Cleetus says. “Some communities will face climate impacts sooner than others but, ultimately, this is everyone's story.” {C}

[THANK YOU]

“

My analysis shows that more than half of all U.S. states are on track to meet the EPA's new Clean Power Plan goals, even some of the states voicing the loudest opposition. Your support helps spread the facts and push back against misinformation from well-funded industry lobbying groups. Together, we can fight for clean energy and win.

”

—JEREMY RICHARDSON, SENIOR ENERGY ANALYST



Triumph and Tribulation on California's Energy Frontier

By Adrienne Alvord



This September, California passed landmark legislation establishing that fully 50 percent of the state's electricity will be generated from renewable resources like wind and solar

energy by 2030, and the state will double its energy efficiency economy-wide. It's a remarkable achievement that offers proof of the enormous role renewable energy can play in powering the world's largest economies considering that California's would rank eighth among nations.

The Union of Concerned Scientists played a vital role in the passage of this legislation by providing smart lead testimony, groundbreaking analytics, and translating complex issues into language legislators and the public could understand. One of the amazing aspects of this debate, indicative of the maturity of the state's renewable energy sector, is how widely the 50 percent renewable goal was accepted—allowing most of the discussion to center on the best ways to achieve it. That was a conversation to which UCS analysts were particularly well suited, and their input made a big difference.

As notable as this achievement is in lighting a path for the rest of the nation and the world, it is also a cautionary tale. California Governor Jerry Brown had outlined a vision that also included a 50 percent reduction in oil usage by 2030. Unfortunately, this provision had to be tabled for the year due primarily to the scale and ferocity of the oil industry's campaign against it.



Nearly 4,000 UCS members and activists in California sent postcards such as the one above to their legislators in support of clean energy policy.

Much of this campaign was waged by the Western States Petroleum Association (WSPA), which ran a massive and highly dishonest campaign that included the

With pathbreaking legislation, half of the state's electricity will come from clean energy resources by 2030.

prominent use of a front group masquerading as a consumer organization and outright lies designed to stir up fear and paranoia. The goal of WSPA's hail of

misleading and just-plain-false information was clearly to pressure lawmakers to reject this provision, and its strategy succeeded—for now. Fortunately, however, Governor Brown has significant executive powers to ensure that California continues to reduce its need for petroleum.

California's energy triumph and oil setback both hold potent lessons for the rest of the country: first, that we can set and achieve ambitious targets that will help reduce global warming emissions and, equally important, that we will need to redouble our efforts to successfully overcome the unscrupulous scare tactics of entrenched fossil fuel interests. {C}

Adrienne Alvord is the UCS California and Western States Director. Read more from Adrienne on our blog, *The Equation*, at <http://blog.ucsusa.org>.



Protecting the planet: our shared legacy.

In 1969, Union of Concerned Scientists cofounder Kurt Gottfried envisioned a world in which science could be put into service to improve people's lives. Since then, UCS has worked for a safer world and a healthier planet: through science-based advocacy for renewable energy, nuclear safety, reductions in carbon emissions, sustainable agriculture, cleaner cars and trucks, and an informed, engaged public.

Today, we honor Kurt by lending his name to the special group of donors who sustain our mission for future generations by supporting UCS with planned gifts.

To learn about joining the Kurt Gottfried Society, please return the postcard inside this issue of Catalyst, or contact Director of Planned Giving Ken Dolbashian at (617) 301-8014 or kdolbashian@ucsusa.org.

Our shared legacy can be a safer, healthier world.

