



Science for a healthy
planet and safer world

2016-2020 STRATEGIC PLAN

Union of
Concerned Scientists

[Acknowledgments]

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[A Message from Our Chair and President]

Science-Based, Values-Driven



We are pleased to share the Union of Concerned Scientists' Strategic Plan for 2016–2020. This plan embraces a long-term vision of a nation and, ultimately, a world in which science coupled with effective advocacy plays a major role in shaping the choices we make. In our vision, clean energy alternatives replace fossil fuels; healthy foods, grown sustainably, transform our current food and agricultural system; and nations take safe and sensible actions to reduce nuclear threats.

The plan articulates five ambitious goals that will guide our work—goals that address some of the most pressing problems for which science can help provide clear solutions. We detail five-year outcomes that are stepping-stones to the goals. These stepping-stones build upon our successful programs using new approaches and strategies to respond to the urgent demands of our time.

We also recognize that achieving our aspirational goals requires strong partnerships and effective collaboration with other organizations and groups; we have a long and respected record of working with many other groups and will continue to do so.

Over the next five years, we will focus on the following:

- **Promoting science.** Success in reaching our goals depends on elevating the role of science in public decision making. Over the next five years, UCS will highlight the benefits all people enjoy when public policies and decisions are based on rigorous and independent science, and we will use this narrative to counter proposals that would restrict government agencies from using the best available science. We will stand up for scientists who are attacked or harassed, and hold accountable those who distort science for private ends. And we will pair scientists with equity and justice groups to broaden access to science, as we believe all citizens deserve access to science in order to protect the health and safety of their communities.





- **Global warming and a clean energy economy.** The continued growth in emissions of heat-trapping gases is wreaking havoc through extreme heat, droughts, fires, and floods. And time is running out. Our new plan puts forward a very ambitious goal: net zero emissions in the United States by 2050. While the path to this goal is rife with obstacles, reaching it is critical. U.S. leadership is needed to spur the development and deployment of the technologies that will enable the world to avoid the worst impacts of global warming. Over the next five years, UCS (in partnership with others) will advance a strategy that pushes for federal and state policies designed to cut emissions from power plants, cars, and trucks, and to incentivize cleaner alternatives; highlights local impacts of global warming and the need to fund preparedness, resilience, and adaptation measures; and holds fossil fuel producers accountable for their roles in sowing doubt about climate change and blocking necessary reforms. We will also champion greater investment in research and development, knowing that technological advances are key to a cost-effective transition to a clean energy economy. And we will focus our analytical and policy work to advance the use of renewable energy and overcome barriers that stand in the way.
- **Healthy food and farms.** Our current agricultural policies insidiously subsidize unhealthy foods and harmful farm practices, contributing to obesity, diabetes, cardiovascular disease, and a variety of environmental harms. UCS will lead the charge for a national food policy that links agriculture, food, health, and equity. We will use our analytical firepower to demonstrate the true costs of the current food and agriculture system and explain the feasibility of a healthier, more sustainable, and science-based agroecological production system.
- **The nuclear threat.** Twenty-five years after the end of the Cold War, the United States retains outdated and dangerous nuclear weapons policies, and has not done enough to reduce their risks. Over the next five years, UCS will use updated communication strategies to educate and galvanize a new generation of Americans who are unaware of these risks, eliminate Cold War-era policies, and prevent the United States from backsliding on its international commitments. UCS will also continue to press the Nuclear Regulatory Commission and nuclear power plant owners to take the steps needed to make nuclear power plants safer.

Our plan is designed to be flexible and to accelerate progress however the political winds may blow.

Raising Our Level of Influence

The gap between our aspirational goals and the current reality requires us to do more than devise new strategies. Because UCS needs to do everything it can to heighten our effectiveness and level of influence, we commit to raising our standard of excellence throughout the organization. Here is how we will do it:

- **Effective, outcome-based campaigns.** UCS will drive change on the ground by investing in campaigns that are highly purposeful, strategic, and likely to succeed. We will rigorously monitor progress, regularly test our assumptions and theories of change, and make adjustments as we proceed.
- **Learning and innovation.** Continuous learning and innovation are the lifeblood of successful organizations, particularly in a world that is rapidly changing. Even as we focus on achieving concrete outcomes, we will critically examine—and learn from—our successes and failures and experiment with new approaches, making room for fresh ideas and original thinking. Although not all our experiments will succeed, we understand that creative problem solving entails exploration and pushing boundaries.
- **Diversity and inclusion.** While independent, rigorous scientific analysis will continue to be the backbone of UCS, we also recognize that science alone, while powerful, is insufficient to meet the magnitude of the challenges before us. We must become a more inclusive organization. UCS will therefore increase its engagement with people of color, with a particular emphasis on Latinos and African-Americans. This is not only the right thing to do, as these communities often bear the brunt of the problems we face, but also the effective thing to do: we greatly boost our chances of success by working with a broad coalition that includes natural allies and the ideas and perspectives they bring.
- **Compelling communications.** Our success requires clear and compelling communications, and technical analysis and solutions that tangibly impact people’s lives in positive ways. We need to ensure that UCS experts raise their profiles and serve as the “go-to” experts for opinion leaders and policy makers at the federal, state, and community levels. We are excited to see a new generation of young scientists answering our call to engage, and we are committed to giving them meaningful ways to work toward a healthy, safe, and sustainable world.

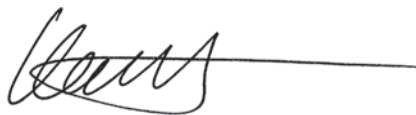
We hope you will find this plan both inspiring and realistic. While we expect the next five years to be politically challenging, the plan we present here is designed to be flexible and to accelerate progress however the political winds may blow.

We look forward to the challenges ahead with optimism, but also a deep sense of urgency. We are confident that we have aimed high with the right goals, and will do everything we can to meet them by turning science into action.

With profound gratitude to our board of directors, our National Advisory Board, and our many supporters and staff,



James McCarthy
Chair



Kenneth Kimmell
President

OUR MISSION

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.

OUR APPROACH

Independent
science

Practical
solutions

Compelling
communications

Inclusive
engagement

Persuasive
advocacy

GOALS AND OUTCOMES

1. Ensure independent science is an essential component of American democracy

› See p. 9 for specific outcomes

2. Achieve net zero global warming emissions in the United States by mid-century, providing essential global leadership to limit the impact of climate change on people and the environment

› See p. 10 for specific outcomes

3. Accelerate the transition to a cost-effective, clean energy economy with widespread benefits for all Americans

› See p. 13 for specific outcomes

4. Achieve a sustainable agriculture and food system that produces healthier and more just outcomes for all Americans

› See p. 14 for specific outcomes

5. Reduce the threat of nuclear weapons and increase the safety of nuclear power

› See p. 16 for specific outcomes



[Adapting to a Changing World]

The policy landscape and public opinion on many of our key issues have shifted dramatically since our last Strategic Plan. Despite the federal government’s failure to establish an economy-wide price or cap on carbon pollution and continued congressional gridlock on many other issues, the past few years have seen significant progress in executive branch policies on power plants and fuel economy standards, along with clean energy policies in the states.

This progress has been supported by falling prices for renewable energy and dramatic advancements in the development and adoption of clean vehicle technology. In addition, as the impacts of climate change become more visible and intense (e.g., historic droughts in the West and Southwest, increased coastal flooding in the East and Southeast), more Americans have become aware of the need for effective policy intervention and lifestyle changes. We have also seen growing demand for fresh, healthy, affordable, and sustainably grown foods. In contrast, progress on reducing the threat from nuclear weapons has largely stalled in recent years.

Given the rapidly changing external landscape, we designed this Strategic Plan to be a living, evolving document. In developing this plan, we articulated our theories of change and explicit assumptions that informed our five-year outcomes. Our commitment to learning and innovation further ensures that we will adjust our strategies and work over time to remain relevant and advance our goals and objectives as the external landscape continues to evolve.



Mission and Approaches

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.

In order to achieve this mission and drive progress toward our long-term goals, we will continue to leverage our strengths and core competencies through:

- **Independent science.** We conduct rigorous scientific and technical analysis.
- **Practical solutions.** We develop feasible, timely, and cost-effective solutions.
- **Compelling communications.** We articulate research findings, campaign activities, and issues with clarity, urgency, and hope. We visualize challenges, solutions, and facts in ways that connect to people's lives and values.
- **Inclusive engagement.** We foster constructive dialogue with people in communities that will be most affected by change, and engage people of diverse backgrounds and political persuasions in order to drive change in public policy, corporate practices, and consumer choices.
- **Persuasive advocacy.** We influence and help decision makers design, adopt, and implement policies informed by evidence and independent science.





Achieving our vision requires a long-term commitment that extends far beyond the horizon of the five-year planning period considered here. We recognize that reaching our long-term goals requires identifying and achieving near-term outcomes that will contribute to long-term progress. This integration of long-range vision and pragmatic persistence, a hallmark of UCS's approach, is critical to our continued success.

Outlined on the following pages are our five long-term goals and their supporting five-year outcomes. Some of these outcomes are quite tangible and even quantitative, but many do not lend themselves to quantification, and are therefore qualitative in nature. We will monitor progress toward all our goals.

GOAL 1

Ensure Independent Science Is an Essential Component of American Democracy

The United States was founded on the conviction that an informed citizenry, armed with evidence and reason, can make wise decisions that promote public health, safety, and well-being. UCS shares that conviction and works to ensure that rigorous, independent science informs public policies, corporate practices, and consumer behavior. We recognize that money has an outsize influence in policy making and that the nation's growing income inequality is eroding our democracy. While science alone cannot solve this problem, it can help. We believe that all people have a right to access the scientific and technical information and expertise they need to protect the health, safety, and well-being of their families and communities, and that this access will lead to better public policy decisions.

We will strive to ensure the provision of independent scientific advice to policy makers. We will act to expose deception and attacks on science, and to hold those responsible accountable in the court of public opinion—whether they are corporations, special interests, politicians, or private citizens. And we will encourage scientists and technical experts to engage actively in civic life—and will defend them from attack when they do.

Five-Year Outcomes

- › Science is a strong and respected component of democratic decision making on critical public health, environmental, and security issues.
- › Scientists and other technical experts actively engage with policy makers and the public to inform public conversations, shape policy debates, and push back against misinformation.
- › Public officials, corporations, and special interests are held publicly accountable for actions that attack scientists, manufacture uncertainty, or erode science-based health, safety, and environmental policies.
- › Congressional and executive branch actions to subvert science-based policy making are defeated.
- › America's scientists partner with social justice and equity groups to enhance access to technical expertise, increase affected communities' input in the development of solutions, and improve the fairness of outcomes for those communities.
- › Thought leaders in science, politics, business, media, civil society, and higher education embrace a concrete set of common principles and best practices for independent science that informs public policy.



U.S. and international policies and efforts, while moving in the right direction, are not reducing emissions as quickly or deeply as needed to avoid truly disruptive climate impacts.

GOAL 2

Achieve Net Zero Global Warming Emissions in the United States by Mid-century, Providing Essential Global Leadership to Limit the Impact of Climate Change on People and the Environment

Time is running out to reduce emissions of heat-trapping gases and limit the impacts of climate change. Extreme heat, sea level rise, flooding, and drought are already causing unprecedented damage and will wreak greater havoc as temperatures rise. U.S. and international policies and efforts, while moving in the right direction, are not reducing emissions as quickly or deeply as needed to avoid truly disruptive climate impacts. Our ambitious goal meets the urgency of the challenge. Strong U.S. global leadership in reducing emissions, sustaining the capacity of our lands to store carbon, and driving technology and policy innovation will make similar reductions feasible in other countries.

To make progress toward this ambitious goal over the next five years, we will:

- **Highlight current and projected climate impacts and their devastating effects on people**—especially in historically disadvantaged communities—and advocate for funds and frameworks to support increased and more effective disaster preparedness and community resilience.
- **Expose deception by the world’s leading oil, coal, and gas companies** and use new scientific approaches to hold companies accountable, link their products to specific climate impacts, build public support for demands that these companies pay for climate damages, and reduce their political influence (as occurred with the tobacco industry).
- **Advocate for a strong economy-wide price or limit on carbon**, which would make renewable energy, nuclear power, and other low- and zero-carbon technologies more cost-competitive with natural gas and coal.
- **Persuade a large and diverse group of states to embrace clean energy and transportation policies**, creating models of success that demonstrate the benefits of clean energy.
- **Capitalize on emerging opportunities to influence the federal transportation policy agenda.** Defend and strengthen clean vehicles and fuels policies by showing that they have been a key factor in driving innovation and lowering transportation costs.
- **Encourage major corporations in the packaged food, personal care, and fast food sectors to adopt “no deforestation” policies** that apply throughout their supply chains, in order to generate greater emissions reductions from land use globally.
- **Encourage the United States to make strong emissions reduction commitments** in the anticipated Paris 2015 climate agreement and thereafter, and to provide technology and financial assistance to countries that will help them make significant reductions.



Five-Year Outcomes

- › Twenty states demonstrate climate leadership by strengthening renewable energy standards, adopting low-carbon fuels policies, creating or joining carbon markets, and/or establishing plans to prepare for climate change.
- › Congress enacts policies on carbon pricing and climate change preparedness.
- › New federal regulations under the Clean Air Act and changes in forestry and land management practices drive additional emissions reductions and carbon retention.
- › The United States issues and maintains strong, technology-forcing fuel efficiency and carbon emissions standards for heavy-duty and light-duty vehicles, setting the stage for the next round of standards post-2025.
- › The carbon intensity of transportation fuel in at least eight states is disclosed and reduced with performance-based low-carbon fuel standards and a system that reports and tracks the carbon content of fuels.
- › Cutting-edge science links major fossil fuel producers to specific climate damages, galvanizing high-profile litigation, shareholder and consumer activism, fossil fuel divestment, and other forms of action.
- › As a result of this pressure, fossil fuel-producing companies stop sowing doubt about climate science both directly and indirectly, and end their opposition to cost-effective emissions reduction policies.
- › Industry leaders in the packaged food, personal care, and fast food sectors commit to eliminating ingredients from their supply chains that drive deforestation.
- › Action plans to significantly increase electric vehicle deployment and infrastructure development are adopted in 10 states.
- › Five states set targets and establish plans to cut oil use in half over 20 years.
- › U.S. leadership on a long-term decarbonization goal galvanizes other countries to strengthen commitments made in the Paris 2015 climate agreement.



GOAL 3

Accelerate the Transition to a Cost-Effective, Clean Energy Economy with Widespread Benefits for All Americans

A clean energy economy can be a win for communities, a win for the economy, and a win for the climate—enhancing all Americans’ quality of life. Even those who are reluctant to accept the overwhelming evidence of climate change often recognize the prudence of investing in low-carbon technologies that clean our air, build new industries, and provide a hedge against climate risk. Global demand for cost-effective clean energy technology is an opportunity for the United States to become a world leader in renewable energy and low-carbon transportation while diversifying economies in key regions of the country. With thoughtful policy design and implementation, clean energy solutions can also provide historically underserved populations with benefits such as expanded access to affordable clean energy and transportation, new employment opportunities, and improved health in currently polluted neighborhoods.

Demand for renewable energy and fuel-efficient vehicles has grown due to advances in technology that have driven down costs and improved performance. During the next five years, UCS will continue to draw upon this experience to demonstrate that the transition to a clean energy economy is achievable and affordable. We will build public support for increased publicly and privately funded research by highlighting the importance and promise of emerging new technologies. We will identify barriers and offer solutions to advance the integration of variable renewable energy sources into the electricity grid and champion policies that use renewable energy and electric vehicles to support one another. To ensure that the clean energy economy has widespread benefits, we will develop and promote policies that create training and opportunities for displaced workers and “energy justice” policies that make renewable energy, energy efficiency, and low-carbon transportation options available in disadvantaged communities. We will promote new policies that cut emissions from our freight system, thus improving public health in many disadvantaged communities.

A clean energy economy can be a win-win for communities, the economy, and the climate—enhancing all Americans’ quality of life. During the next five years, UCS will demonstrate that the transition to a clean energy economy is achievable and affordable.

Five-Year Outcomes

- › The percentage of America’s power coming from renewable energy doubles and deployment of electric vehicles accelerates, as energy system rules are modernized and grid integration technologies adopted.
- › The media and policy makers recognize that emerging clean energy and transportation technologies can make a low-carbon economy viable and cost-effective.
- › Broad bipartisan support emerges for the clean energy and transportation research, development, and deployment essential to lowering costs and driving innovation.
- › Policy incentives that simultaneously bolster a low-carbon power sector and electrification of the transportation sector have champions at the federal and state levels.
- › Sustainable freight strategy in California serves as a model for cleaner, more efficient goods movement for other states and the nation as a whole.
- › Through effective partnership with Latino and African-American organizations, renewable energy and low-carbon transportation options are more available to historically underserved communities.
- › Federal policies are adopted that support the transition of workers in coal-dependent communities into the clean energy economy.

Public investment should enhance public well-being. And yet, the nation's agriculture and food system requires a dramatic transformation to measure up to this very pragmatic expectation.

GOAL 4

Achieve a Sustainable Agriculture and Food System That Produces Healthier and More Just Outcomes for All Americans

The U.S. agriculture and food system subsidizes junk food ingredients instead of healthy food. It is the outcome of a century and a half of public investment that originally sought to stabilize farm income but is now badly out of step with the needs of modern society. Today's agriculture and food policies support a highly productive system, but one that contributes to a variety of crises including the degradation and contamination of our land, water, and air; increasing global warming emissions; and an epidemic of diet-related disease. Meanwhile, healthy, fresh food is increasingly becoming a luxury only the affluent can afford. This is a failure of both the market (the more successful the nation's food industry, the sicker and worse off its people become—particularly its most vulnerable citizens) and the policy making that enables and supports these distorted outcomes.

Public investment should enhance public well-being. And yet, the nation's agriculture and food system requires a dramatic transformation to measure up to this very pragmatic expectation. Such a transformation is consistent with fiscal responsibility, government effectiveness, and a healthy population. The present system is entrenched due to powerful business interests that have grown over the years to take advantage of the outdated subsidies. These wealthy private interests have privileged access to policy makers and disproportionate influence over political representatives in the nation's farm states. Though the needed transition is complex and ambitious, it is achievable if we employ the science of ecologically informed agriculture, and develop



solutions that take into account the direct connections among environment, agriculture, and public health and well-being.

To counter the formidable political powers opposed to change, UCS has already begun building a case and public demand for a comprehensive, coordinated National Food Policy focused on the critical needs of sustainability, health, and equity—elements with broad appeal to diverse constituencies and across the political spectrum.

To accomplish its goals, UCS will rally and connect the disparate voices of the food movement: scientists, universities, farmers, laborers, youth, and health and consumer advocates. We will inform this effort by using our analytical firepower to demonstrate the true costs of the current food and agriculture system while explaining the feasibility of a healthier, more sustainable, science-based agroecological production system. Armed with incisive scientific and policy analysis, UCS is well positioned to propagate our vision for a healthy food and farm future. We will engage allies in the land grant university system. We will advocate for greater investment of the nation's research budget in ecologically informed agriculture. And, by conducting scientific analysis that demonstrates how agroecological practices can capture carbon and reduce heat-trapping emissions, we will make the case for agriculture's important role in bringing global climate change under control.

Five-Year Outcomes

- › The next president takes concrete steps toward a coherent National Food Policy that links agriculture, food, public health, and equity.
- › Federal funding for damaging agricultural practices (such as the overproduction of commodity crops) decreases by 10 percent, while federal funding for agricultural programs based on agroecological science increases by 25 percent.
- › The academic agricultural research community demands increased funding for research programs in agroecological approaches that support the long-term health and productivity of U.S. farmland.
- › Policy makers incentivize and reward agricultural practices and scientific innovations that reduce heat-trapping emissions and capture carbon.
- › Corporations, special interests, and others are held publicly accountable when they mislead the public about the health implications of their products and/or support policies that undermine healthy food and farms.
- › The food movement increases its political power by mobilizing farmers, farm workers, low-income communities, communities of color, food advocates, and innovative entrepreneurs to demand corporate reform and policy transformation.



GOAL 5

Reduce the Threat of Nuclear Weapons and Increase the Safety of Nuclear Power

We must reduce the risk that nuclear weapons—an existential threat to humanity—might be used, while reducing the size of nuclear arsenals worldwide. And, because nuclear power in the United States is not as safe and secure as it should be, we must strengthen the safety of our nation’s nuclear reactors and press for better enforcement of existing U.S. nuclear safety regulations.

A respected team of leading experts positions UCS to address these vital issues and make good on our commitment to work toward a safer world. Our work on nuclear weapons focuses on changing U.S. policies, removing barriers to progress, and increasing the awareness of policy makers and the public about current risks. We focus on U.S. policies and actions because we have the most leverage in this country and because changing U.S. policy is essential to changing the policies of other nuclear-armed nations.

One major risk we currently face is an accidental, unauthorized, or mistaken nuclear launch. The United States and Russia maintain many hundreds of land-based nuclear weapons on “hair-trigger” alert, ready to be launched in a matter of minutes. A remnant of the Cold War, this policy increases risk with no strategic benefit. Removing U.S. missiles from hair-trigger alert—whether or not Russia reciprocates—is one of the most important steps President Obama can take to reduce nuclear risks. We aim to build public and policy maker support for the president or his successor to take this step by executive order.



One barrier to changing U.S. policy is the small number of Japanese policy makers who claim that doing so will weaken the U.S. nuclear umbrella and make Japan more vulnerable to attack. To overcome this challenge, we will educate the Japanese media and policy makers about the benefits of removing U.S. weapons from hair-trigger alert and the strong support for this action that exists in Japan.

The Nuclear Non-Proliferation Treaty (NPT) requires nuclear weapon states to work toward the elimination of their arsenals. UCS will push the United States to cancel provocative plans to build new types of nuclear warheads and a new nuclear-armed cruise missile, both of which run counter to the United States' NPT commitment and send the wrong signal to other countries. In addition, U.S. missile defense programs undermine efforts to limit Russian and Chinese nuclear arsenals because only a large arsenal can be used to overwhelm the missile defense system. We will work to cap the system at its current number of interceptors and restore effective congressional oversight of the program, combining technical analysis and public engagement in our effort to educate and pressure policy makers.

To reduce the risk of terrorists acquiring nuclear weapons materials, we will continue to oppose the U.S. program that would dispose of plutonium from dismantled nuclear weapons by turning it into mixed-oxide (MOX) fuel for power reactors, and we will work to ensure that an alternate, safer disposal method is selected.

In our nuclear power work, UCS will continue to push the U.S. Nuclear Regulatory Commission (NRC), which oversees nuclear power in the United States, to strengthen and enforce its existing regulations. We will use technical analysis and media engagement to expose problems with the NRC's current oversight while partnering with local citizen groups, conducting briefings and conversations with the NRC commissioners, and working with oversight committees in Congress.

Over the next five years, we seek to ensure that the NRC enforces its fire safety rules and post-Fukushima safety requirements, maintains the requirement (which the industry is seeking to eliminate) for "force-on-force" exercises to test whether nuclear plant personnel can defend against terrorist threats, and re-assesses terrorist threats so security requirements are based on real-world scenarios. We will also push to require plant owners to transfer spent reactor fuel from cooling pools to safer and more secure dry casks as soon as possible.

We must reduce the risk that nuclear weapons might be used, reduce the size of nuclear arsenals worldwide, and strengthen the safety of our nation's nuclear reactors.

Five-Year Outcomes

NUCLEAR WEAPONS

- › Increase the number of U.S. policy makers calling for further reductions in the number of U.S. nuclear weapons and their strategic role in the nation's defense.
- › The United States removes intercontinental ballistic missiles from hair-trigger alert.
- › Plans for a new nuclear weapon (IW-1) are cancelled.
- › Plans for a new nuclear cruise missile (LRSO) are cancelled.
- › Japanese officials endorse U.S. nuclear policy changes.
- › U.S. missile defense interceptors are capped at their current number and congressional oversight of the program is restored.
- › The current risk of U.S. nuclear weapons policy is a topic of concern in traditional and social media and among educators.

NUCLEAR POWER

- › The U.S. MOX program is cancelled and an alternate disposal method is selected for excess plutonium from nuclear weapons.
- › The NRC has enforced fire safety rules and post-Fukushima safety requirements.
- › The NRC has maintained its requirement for force-on-force exercises and re-assessed terrorist threats.
- › Congress or the NRC has required the accelerated transfer of spent reactor fuel to dry casks.
- › The NRC has restored policies that provide public access to appropriate information.

[State and Regional Strategy]

With ongoing gridlock at the federal level on a number of our issues, UCS will continue to work on policy change at the state and regional levels when and where we see opportunities for progress. We seek opportunities for progress not only in states that are leading the way, but also in those that are lagging behind.

A key element of our strategy is to build leadership in states, individually and in regional coalitions, to advance clean energy and transportation, climate policy, climate preparedness, and healthy, sustainable food and agriculture systems. Victories at the local, state, and regional levels are critical to keep the forward momentum going and demonstrate the viability of developing and implementing bipartisan, workable solutions that can serve as models for national action.

Our offices in Oakland and Chicago have helped UCS develop strong ties to state and local political, business, and nonprofit leaders in the West and Midwest, respectively, and deepened our in-depth knowledge of local perspectives and conditions. Our staff is thus well positioned to drive innovation and pilot model policies within these regions while working toward progress on UCS's national goals.

Solutions implemented successfully in California provide critical evidence that such policies can also succeed at a national scale, and have global significance due to the state's size, wealth, political clout, and international economic influence. California is already a world leader in economy-wide low-carbon policies, which UCS has helped shape over the last quarter-century. Over the next five years, UCS will deploy research and policy advocacy to help ensure California remains in the vanguard for increasingly aggressive low-carbon policies and a climate-resilient economy—developing policies on renewable energy, grid integration, and clean transportation and fuels (including clean freight movement). Our California office will drive similar change in Oregon and Washington, building on the strong support in these states for policies promoting clean energy and transportation, and



the commitment of all the Pacific Northwest states to craft regional policies that will cut heat-trapping gases. UCS research and advocacy can also help build resilience into water management policies, leading the transition to climate-smart water management throughout California.

The Midwest is also important politically, and is globally significant from both an agricultural perspective (as an important breadbasket) and an energy perspective (because of its abundant renewable energy resources and its historic dependence on fossil fuels). Implementing any energy, climate, or food policy at the national level will be challenging without substantial support from this region, so during the next five years we will work to advance and defend clean energy policies in Midwest states, build support for greater deployment of renewable energy, avoid an overreliance on natural gas, encourage integrated carbon reduction markets, and promote policies that increase support for healthy food and farms.

A key element of our strategy is to build leadership in states, individually and in regional coalitions, to advance clean energy and transportation, climate policy, climate preparedness, and healthy, sustainable food and agriculture systems.

[Organization-wide Priorities]

We are acutely aware of the need for more rapid and widespread progress on our issues, particularly on reducing global warming emissions. We have identified the following five priorities for specific attention and support in order to raise our level of influence, and we intend to provide additional resources to support action in these areas—across all programs—over the next five years.

Create Effective Campaigns

Gearing campaigns toward tangible outcomes increases their likelihood of success and allows us to measure progress and demonstrate impact. This requires a disciplined focus on priorities as well as the capacity to recognize and take advantage of unexpected opportunities. Over the next five years, we will emphasize:

- **Outcomes and impact.** We will outline clear, achievable outcomes in each year of our campaigns, measure the progress of our activities against these outcomes, and explain clearly to our supporters the impact of our efforts. When our activities are not producing satisfactory progress, we will alter our tactics and reconsider our strategies.
- **Training.** Staff across UCS will be trained in campaign strategy to understand how their work directly contributes to a campaign's goal. Priorities for training include teaching UCS staff how to align tactics with desired outcomes, how to choose tactics that best advance strategies, and how to marshal limited resources for maximum effect.
- **Corporate accountability and engagement.** Over the next five years, all campaigns will consider strategies and tactics to improve corporate practices and hold companies responsible when they cause harm or misrepresent science.
- **Urgency.** A good campaign should motivate both our supporters and the issue public. All campaigns must clearly articulate why an issue is urgent, what progress is already occurring, and how our supporters can help us move forward on a clear path toward change.

Foster Learning and Innovation

Fresh thinking is the lifeblood of successful organizations. From political strategy and policy approaches to compelling research and novel engagement, we will promote a culture and practice of innovation. We will prize out-of-the-box thinking, original research, and gathering the best ideas and information from multiple expert sources. When promising new ideas surface, we will develop and promote them to gain strategic advantage. Each year our teams will include an innovation component in their annual work plans to serve as the seed for future initiatives. We will also continue to rely upon our Kendall Science Fellows program, which brings scientists into our organization to work on cutting-edge issues, and to strengthen our ties and engagement with colleges and universities.

Enhancing our practice of self-learning will support and complement innovation. In the process of developing this Strategic Plan we articulated foundational tools that will help guide our learning and innovation. These include explicit assumptions and theories of change for how we expect to achieve our desired long-term outcomes, as well as some illustrative learning questions to assess how and why our work is or is not succeeding. These provide a baseline for revisiting and, as needed, revising our strategies over the life of the plan. We will schedule structured sessions for the board, the Leadership Team, and staff, as well as informal information exchanges (e.g., brown bag lunch meetings). And we will regularly obtain feedback from those outside UCS who know our work.

Engage Diverse Communities

In the past, racially and economically diverse constituencies have not been significantly involved in UCS's work. During the next five years, we will make a sustained commitment to increase the involvement and input of people of color, with a particular emphasis on Latinos and African-Americans. These communities are a significant (and growing) political force, and often bear the brunt of climate change, our flawed food system, and a host of other environmental, health, and social disparities. We will actively work with Latino and African-American scientists and other technical experts, the

politically engaged Latino and African-American electorate, and disenfranchised communities—learning from them and advancing solutions that meet shared goals. Our strategic focus on Latinos and African-Americans does not preclude efforts to connect to and expand our work with other groups. All of these efforts will strengthen a culture of diversity within UCS, including efforts to increase the racial diversity of the UCS staff and board of directors.

Enhance Our Science Network

The UCS Science Network, with approximately 18,000 members nationwide, is our leading mechanism for engagement with American scientists and technical experts. It is a distinctly valuable asset and a powerful tool for change that we have yet to fully realize. To expand and strengthen the network, we will do the following:

- **Engagement.** We will provide members with a wider range of meaningful online and in-person opportunities to participate in UCS campaigns. We will expect programs to proactively develop plans to deploy the Science Network in their strategies, and to collaborate with staff who manage the Science Network to recruit and cultivate appropriate experts.
- **Mutually beneficial opportunities.** We will provide benefits such as online tools, workshops, and peer-to-peer mentoring that offer professional development for members, helping them gain knowledge about policy making that can make them more effective communicators and advocates on our issues.
- **Youth and diversity.** We will continue to recruit younger experts and experts of color to better reflect our society as a whole and to incorporate a broader range of experiences and perspectives.
- **Access.** We will connect scientists directly with decision makers, the media, and other citizens through a service bureau or other means.

Strengthen Our Culture of Communications

Our impact depends on our ability to communicate effectively to target audiences, and on the visibility of our organization and experts in prominent venues. UCS has always had a strong commitment to presenting material that is technically accurate, accessible, and compelling, which raises our level

of influence while bolstering our visibility. Our scientists and analysts do this by working closely with our communications and outreach teams to hone our message for stakeholders and decision makers.

During the next five years, UCS will build upon this strong foundation to further instill a culture of communications that places a premium on getting our work and messages out to a broad range of audiences. Our technical and policy staff will be encouraged—and supported—to establish themselves as the “go-to” experts for opinion leaders and policy makers, through participation in strategically valuable media opportunities, conferences, legislative proceedings, and stakeholder meetings.

We will also work to build the visibility of our top experts and better position UCS as an influential organization by publishing and promoting substantive, timely commentary on key issues.

Finally, we will continue to develop the communication skills of our staff and the quality of their presentations so they are effective communicators in all formats, including new forms of social media.



[Conclusion]

For nearly 50 years, UCS's rigorous scientific analysis has been a key resource for policy makers and other decision makers, helping drive progress on issues that are critical to a healthy environment and a safer world. Our long-term goals center on urgent scientific, environmental, and security issues and, while these goals are ambitious, our approaches, intended outcomes, and proven track record position us well for continued success.

Our last Strategic Plan proved to be a sound foundation for many compelling victories:

- Secured the adoption of fuel efficiency and global warming emissions standards for cars and trucks that will cut the U.S. carbon footprint by more than 10 percent
- Established the Center for Science and Democracy to advance the role of science in public policy and the democratic dialogue
- Helped win whistle-blower protections for scientists
- Achieved ratification of the New START treaty that dramatically reduces U.S. and Russian nuclear arsenals
- Secured commitments from top multinational companies including Colgate-Palmolive, General Mills, Kellogg, Mars, and McDonald's to stop buying palm oil from sources that burn or clear carbon-rich forests and drain high-value swamplands
- Served as the national media's "go-to" experts on nuclear power safety in the wake of the 2011 Fukushima disaster, authoring a definitive book on what went wrong and how similar accidents can be averted elsewhere
- Pressured the U.S. Food and Drug Administration to ban the use of an agricultural antibiotic because of concerns that widespread overuse in animals threatens its effectiveness in human medicine
- Helped shape landmark policies to dramatically reduce global warming emissions at the national and state levels, including an EPA rule to cut carbon pollution from power plants by approximately 30 percent and a cap-and-trade program in California that uses market forces to cut heat-trapping gases from the electricity, transportation, and manufacturing sectors

Organizationally, UCS dramatically increased its communications capacity over the past five years and orchestrated an organization-wide rebranding and the launch of a new website, attracting larger audiences and substantially expanding our base of supporters. We brought new ideas and technical capacity to UCS through the Kendall Science Fellows program, which offers two-year appointments for postdoctoral and mid-career scientists who can catalyze new thinking and provide us with the capacity to work on emerging issues. We maintained our reputation for operational excellence and a vibrant, collegial work environment while increasing our revenues more than 20 percent above the previous Strategic Plan's 2009 baseline.

We understand that sustaining our success in today's dynamic, complex, and challenging external environment will require UCS to adopt a flexible and adaptive strategy. As outlined in this Strategic Plan, we will support ongoing learning to increase collaboration and innovation, make adjustments to our strategies and activities when needed, and ensure that we continue to make swift and sustained progress on our ambitious goals.





**Union of
Concerned Scientists**



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.

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