

**U.S. CLIMATE ACTION NETWORK**

**THE GOOD, THE BAD, AND THE UGLY:  
A GUIDE TO U.S. CLIMATE POLICY**

**U.S. Climate Action Network Report  
COP10, December 2004**

## **ABOUT THE REPORT**

This Report is an update to and compilation of two reports released at COP9, USCAN's "Faking Action: The Truth Behind U.S. Global Warming Policy" and WWF's "Rising Tide: Growing Momentum on Global Warming in the U.S." Special thanks go to WWF for permission to update their report as a network and for contributions to the updating process.

## **USCAN MEMBERS AND AFFILIATES CONTRIBUTING TO THIS REPORT:**

Center for International Environmental Law: [www.ciel.org](http://www.ciel.org)  
Clean Air-Cool Planet: [www.cleanair-coolplanet.org](http://www.cleanair-coolplanet.org)  
Clear The Air: [www.cleartheair.org](http://www.cleartheair.org)  
Climate Solutions: [www.climatesolutions.org](http://www.climatesolutions.org)  
Coalition for Environmentally Responsible Economies: [www.ceres.org](http://www.ceres.org)  
Environmental Defense: [www.environmentaldefense.org](http://www.environmentaldefense.org)  
Greenpeace: [www.greenpeace.org](http://www.greenpeace.org)  
ICLEI Local Governments for Sustainability: [www.iclei.org/us](http://www.iclei.org/us)  
National Environmental Trust: [www.net.org](http://www.net.org)  
Natural Resources Defense Council: [www.nrdc.org](http://www.nrdc.org)  
Redefining Progress: [www.rprogress.org](http://www.rprogress.org)  
Union of Concerned Scientists: [www.ucsusa.org](http://www.ucsusa.org)  
US Public Interest Research Group: [www.uspirg.org](http://www.uspirg.org)  
World Wildlife Fund: [www.wwfus.org](http://www.wwfus.org)

## **WHO IS "USCAN"?**

USCAN is the U.S. branch of the Climate Action Network (CAN), a global network of over 325 environment and development NGOs working for equitable measures to limit human-induced climate change to ecologically sustainable levels. USCAN is the focal point for global warming information and advocacy of over fifty U.S. advocacy organizations. USCAN and its members actively monitor and influence the climate change treaty negotiations as well as domestic climate-related policies.

## **FOR MORE INFORMATION ABOUT USCAN:**

**Visit** [www.usclimatenetwork.org](http://www.usclimatenetwork.org)

### **Contact:**

Lee Hayes Byron, USCAN Coordinator  
Phone: +1 202.513.6240  
Email: [lhbyron@climatenetwork.org](mailto:lhbyron@climatenetwork.org)

Gary Cook, Regional Network Director  
Phone: +1 202.513.6274  
Email: [gcook@climatenetwork.org](mailto:gcook@climatenetwork.org)

U.S. Climate Action Network  
1200 New York Avenue, NW, Suite 400  
Washington, DC 20005 USA

Fax: +1 202.789.0859

**Table of Contents:**

|   |           |
|---|-----------|
| <b>EXECUTIVE SUMMARY</b>  | <b>4</b>  |
| Another Four Years: Continuing and Upcoming Threats to Progress | 4         |
| Signs of Growing Momentum                                       | 4         |
| Rest of the World: Stay the Course                              | 6         |
| <b>1.0 GROWING MOMENTUM ON GLOBAL WARMING IN THE U.S.</b>       | <b>9</b>  |
| 1.1 State Legislation   | 9         |
| 1.2 Regional Emissions Reduction Agreements                     | 13        |
| 1.3 U.S. Congress on Climate Change                             | 14        |
| 1.4 Climate Change Litigation                                   | 16        |
| 1.5 Growing Investor Concern                                    | 19        |
| 1.6 Local Elected Officials                                     | 20        |
| 1.7 Public Opinion on Global Warming                            | 22        |
| 1.8 Grassroots Mobilization                                     | 23        |
| 1.9 Scientists Speak Out on Climate Change                      | 25        |
| 1.10 Businesses Taking Action Despite Regulatory Void           | 26        |
| <b>2.0 BUSH CONTINUES TO OPPOSE PROGRESS AND FAKE ACTION</b>    | <b>30</b> |
| 2.1 International Disengagement                                 | 31        |
| 2.2 Bush Administration Global Warming Policies and Programs    | 33        |
| 2.3 Carbon Dioxide Regulation and Registry                      | 35        |
| 2.4 Energy Policies   | 38        |
| 2.5 Climate Change Science and Information Provision            | 40        |
| 2.6 Technology and Sequestration Programs                       | 44        |

## EXECUTIVE SUMMARY

The results of the November 2<sup>nd</sup> U.S. elections left many in the United States and around the world wondering about the future of climate change policy, both in the U.S. and internationally. As the international community moves forward with the Kyoto Process, the question of what is being done to reduce U.S. emissions during President Bush's second term becomes increasingly urgent. There is no question that as the world's largest global warming polluter, the U.S. must make a significant shift in its global warming and energy policies, and soon, if we hope to avert the most severe climate change predictions. Understanding the prospects for action on global warming in the United States, however, requires a holistic look at the policies and positions at all levels. While the world should not expect any change from President Bush in his second term, the complete picture of U.S. climate action includes many significant and promising developments. This report attempts to provide a comprehensive look at global warming policies and programs in the U.S., both highlighting the positive developments building momentum around the country, and providing an assessment of the barriers to action and the various business as usual, fossil-fuel heavy initiatives championed by the Bush Administration.

### **Another Four Years: Continuing and Upcoming Threats to Progress**

During President Bush's first term, his climate policy had disastrous national and international implications. The Bush Administration steadfastly opposed any attempt to put mandatory controls on rising U.S. emissions, pulled the U.S. out of the Kyoto Protocol, and instead put forward an energy policy that would ensure rising U.S. emissions for decades to come. Unfortunately, **there is no indication nor any reason to believe there will be any significant policy shift from President Bush in his second term.**

Since the election, the Bush Administration has reconfirmed its opposition to mandatory controls on global warming pollution and has sought to interpret the President's narrow victory as a "validation" of Bush's environmental policy and agenda – despite the fact that this issue was barely addressed during the presidential campaign. In addition, President Bush and the Republican leadership in Congress have included among their legislative priorities several bills that pose significant threats to controlling emissions, including the fossil-fuel heavy energy bill and the "Clear Skies" electricity sector regulation that would weaken the Clean Air Act and do nothing to address carbon dioxide emissions. Not content to just promote destructive policies at the federal level, the Administration and Congressional opponents of action to curb global warming may seek to undermine states' rights to act through an effort to block state adoption of progressive vehicle emissions policies.

### **Signs of Growing Momentum**

Fortunately, though, actions on climate change around the country are building the momentum toward a significant shift in U.S. climate politics. Despite their recent electoral success, President Bush and the Republican leadership are increasingly isolated in their refusal to recognize the need for mandatory regulation of global warming

pollution. While they may significantly slow action at the federal level for now, it is important to remember that building support for mandatory national climate controls was expected to be a difficult multi-year effort no matter who won the election and to look beyond the White House at the many encouraging signs of leadership from U.S. states, businesses, Congressional leaders, and the American public.

#### Leadership from U.S. States

As a result of increasing public concern and frustration with the failure of the federal government to take action, a number of U.S. states have begun to take steps to curb their emissions. States across the country are moving forward with both mandatory controls on greenhouse gas emissions and policies that support the development and deployment of clean energy technology, building the markets for climate solutions. This movement at the state level has received strong support from Republican and Democratic leaders alike, with several Republican Governors involved in the development of mandatory controls.

Perhaps most significantly, states both in the Northeast and along the West Coast are currently negotiating regional agreements to regulate CO<sub>2</sub> in several key sectors. While the details are still being worked out, these agreements show significant promise and would set important precedents for other states as well as the U.S. Congress. The creation of regional carbon markets within the U.S., if sufficiently rigorous, could provide opportunities for linkages to international carbon markets, providing important incentives for other parts of the U.S. to engage as well.

Ironically, the leadership efforts by states are often touted by the U.S. State Department as evidence of the U.S. taking action to reduce emissions. The reality is that states are acting out of frustration from the vacuum of leadership at the federal level, and in fact many have gone forward with mandatory regulation of CO<sub>2</sub> over the strong objections of the Bush White House.

#### Committed Leaders in the U.S. Congress

The Climate Stewardship Act, which would set an economy-wide cap on U.S. emissions, reached a near majority in an October 2003 Senate vote and has growing bipartisan support in the both the House and Senate. Although it is unlikely to pass in 2005, Senators McCain and Lieberman have pledged to continue to bring it up for a vote until it does in an effort to raise the profile of the issue and force Senators to be held accountable for their positions. The Climate Stewardship Act remains the focus of federal policy discussions and has been gathering increasing attention in the U.S. Congress, in the press, and among key constituencies.

#### A Shift Within U.S. Business

Significant actors in the U.S. business community are also recognizing the need for responsible action. Many have begun to implement reductions individually as a result of a desire to take advantage of new markets and efficiency cost savings, the need to prepare for future regulation, as well as growing pressure from shareholders and consumers. An increasing number of U.S. companies are committing to report and analyze the climate

impact and risk associated with their operations, to voluntarily reduce emissions, and have even begun to recognize the inevitability of and need for mandatory climate controls. The entry into force of the Kyoto Protocol and the implementation of the European Emission Trading System promise to significantly increase the pressure on the U.S. business community, as will the state and regional programs being developed domestically.

### **Rest of the World: Stay the Course**

With this collection of positive movements, the tide is clearly rising around the administration. Until the president changes his position (or, more likely, until the next administration is elected), the rest of the country will continue to work around the White House to implement policies and programs to protect the climate and it is the unfortunate reality that the rest of the world must do the same.

The entry into force of the Kyoto Protocol is an historic victory for the global community given President Bush's withdrawal. Its implementation will also provide further evidence of the feasibility of and opportunities presented by solutions to climate change. As the international community begins to discuss the next steps, it is particularly important to maintain the Kyoto framework as a basis for a post-2012 regime and not to give in to or wait for the Bush Administration. With the president's consistent opposition to any approach that would specifically limit emissions or even put in place concrete deployment commitments for low-emissions technologies, the Bush Administration would be a destructive presence at the negotiating table, undermining the ultimate goal of the Convention and the framework for long-term progress.

Once the U.S. has developed the domestic political will to act, the Kyoto framework should be acceptable to the U.S., as it was largely U.S. designed and is compatible with the serious domestic policy proposals currently under consideration. Until then, the best way to ensure that the U.S. reengages constructively in the future is to maintain the current path and make it clear to the administration that global warming is a top foreign policy priority for the international community and inadequate solutions will not be accepted. It may require looking beyond a four-year horizon, but with political will clearly growing, real action on global warming at the federal level is within sight.

## **The Good: Top Ten Signs of Growing Momentum on U.S. Climate Policy**

**1) State Climate Legislation:** Seven U.S. states have imposed mandatory limits on CO<sub>2</sub> emissions, including policies directed at electric sector emissions, mobile sources, and state-wide targets. Eighteen states have passed legislation mandating that a portion of their electricity be generated by renewable energy resources.

**2) Regional Emissions Reduction Agreements:** The New England States and Eastern Canadian Premiers agreed to return emissions in the region to 2000 levels by 2010 and to reduce by 10 percent by 2020. Nine Northeastern states and potentially Pennsylvania and Maryland will participate in a regional cap and trade program to reduce greenhouse gas emissions. The West Coast Governors are also developing a program to cooperatively reduce emissions and are considering a similar cap and trade program.

**3) U.S. Congress:** A vote on mandatory national carbon restrictions fell just short of a majority in the Senate in 2003 and the bill has a long list of cosponsors in the House. Other bills to cut carbon emissions and to mandate renewables deployment also have strong bipartisan support.

**4) Lawsuits:** A number of states and NGOs have filed suit against the Bush Administration challenging their refusal to regulate CO<sub>2</sub> as a pollutant and have also recently sued the five largest U.S. electric utility companies.

**5) Investor Action:** Shareholder resolutions relating to global warming are driving companies to take action. U.S. Shareholders in 2004 filed 30 global warming resolutions, with record levels of support and several agreements by companies to publicly report on their actions in response to growing regulatory pressures. The scope of filers has also broadened to include multi-billion dollar portfolio managers.

**6) Local Elected Officials:** Mayors from more than 150 cities, representing 46 million Americans, signed a statement calling for the federal government to act on global warming, urging action now as municipalities are already feeling climate impacts. 153 cities and counties have also made specific emissions reduction commitments with Cities for Climate Protection.

**7) Public Opinion:** Polls of the American public have consistently found that three quarters favor a reduction in greenhouse gases and a majority think the U.S. government was wrong not to accept Kyoto.

**8) Grassroots Mobilization:** Members of the religious, Environmental Justice, and student communities are calling on the Bush Administration and Congress to take action. Citing disproportionate impacts and the moral obligation to act, these communities are calling for federal action, organizing affected groups, and implementing campaigns to achieve reductions.

**9) Scientists Speak Out:** Scientists wrote to Senators to confirm the gravity of the problem and also joined with faith leaders in a call for a vote on mandatory carbon limits in the Senate. More than 46,000 scientists, including 48 Nobel Laureates, have signed a statement criticizing the Bush Administration for its politicization of science on climate change and other issues.

**10) U.S. Businesses Make Commitments:** Despite lack of regulator clarity, many U.S. companies are acting now to prepare for future emissions restraints. Several major multinational companies have committed to emissions reductions now, some higher than those required by the Kyoto Protocol, to plan for what many expect to be the inevitable regulation of carbon in the United States.

## **The Bad and The Ugly: Top Ten Things to Remember**

### **When the Bush Administration Says They “Take Global Warming Seriously”:**

**1) Withdraws From the Kyoto Protocol:** The Bush administration has never provided any credible analysis to substantiate its claim that the Kyoto Protocol would seriously harm the U.S. economy, even though this was one of their main reasons for withdrawing.

**2) Opposes Mandatory National Emissions Cap.** In strongly opposing the Climate Stewardship Act in the 2003 vote in the U.S. Senate (to cap U.S. emission at 2000 levels in 2012), the White House exaggerated cost impacts and said it was unfair that some other countries don't have mandatory emission targets.

**3) Opposes Mandatory Power Plant Emissions Cap.** Shortly after coming into office, President Bush reversed his campaign promise to limit CO<sub>2</sub> emissions from power plants, instead proposing legislation that ignores global warming and weakens existing clean air law.

**4) Energy Policy Subsidizes Fossil Fuel Expansion:** The Bush Administration has promoted national energy legislation that provides dirty energy sources with six times more subsidies than renewable energy and energy efficiency. Meanwhile, they opposed requirements approved by the U.S. Senate to increase renewable electricity production over the next two decades.

**5) Voluntary Emissions Intensity Plan Rapidly Increases Emissions:** Under the Bush “plan,” U.S. emissions will rise 32 percent above 1990 levels by 2012. The administration’s voluntary 18 percent improvement in emissions intensity is the projected trend in the absence of any new policies in this sector.

1) **6) Cut Support for Energy Efficiency and Renewables.** Research on clean coal, carbon sequestration, and hydrogen will not yield results for decades and diverts funding away from renewable energy sources and efficiency solutions that are available now.

**7) Undermining the Science:** The Bush Administration claims to support sound science, but clouds the issue by exaggerating uncertainties, censoring or rejecting new information, and selecting studies based on their policy implications.

**8) Voluntary “Climate VISION” Allows More Rapid Increase.** The U.S. electricity generation companies’ voluntary goal allows emissions to increase 13 to 16 percent in 10 years, faster than U.S. government forecasts of emissions growth.

**9) Opposes Mandatory Emissions Reporting.** The White House even opposes mandatory greenhouse gas emissions reporting for U.S. companies.

**10) International Cooperation on Research, Not Emission Reductions:** Science and technology research cooperation with other countries should complement, not replace, binding U.S. emission reduction commitments.

## **1.0 GROWING MOMENTUM ON GLOBAL WARMING IN THE U.S.**

*"We hope to see the problem addressed at the federal level, but we're not waiting around."*  
— David Danner, Energy Adviser to Washington State Governor, Gary Locke

Faced with a federal government that for the last decade has either been incapable of taking action or is openly hostile to any policy that would require emissions reductions, many states and municipalities across the U.S. have decided that they can no longer afford to wait on Washington, and are stepping up to address global warming. Among the policies being implemented are mandatory reductions of greenhouse gases, mandates that electric utilities use renewable energy to provide a minimum percentage of the power supply, and increasingly stringent energy efficiency standards. States and cities recognize that there is not an inherent conflict between a stable environment and a sound economy—in fact, many see climate-friendly energy technologies as an area of economic growth and are trying to position themselves as leaders in this field. Polls reveal that there is broad public support in the U.S. for such action. Many U.S. companies see global warming legislation as inevitable and are taking action now, even in the face of regulatory uncertainty, in order to prepare for future requirements.

For those familiar with social change movements in the U.S. it is really not a surprise to see states and cities leading the federal government. Indeed, America's most important social movements, from civil rights and women's suffrage to the environmental movement itself, were the result of activism at the state level, which ultimately brought about a strong Federal response. It is clear that a patchwork of state global warming regulations is not the preferred approach to global warming. However, states are determined to pursue such an approach until the federal government implements responsible global warming policies. In this context, countries wishing to engage the U.S. on the issue of global warming must not only familiarize themselves with developments in Washington, but also with those across the nation. Countries can no longer plan their future engagements with the U.S. based solely on the pronouncements of the Bush Administration. This section of the report gives a brief overview of some of the signs that there is growing momentum towards action on global warming in the U.S.

### **1.1 State Legislation**

Growing increasingly impatient with Washington's lack of progress toward a policy to control greenhouse gas emissions nationwide, many states have chosen to take matters into their own hands. At least 23 states have passed laws that will reduce greenhouse gas emissions, including policies that limit or cap CO<sub>2</sub> emissions and others that require a specific portion of their state's electricity be generated by non-emitting renewable energy resources. While they can't create nationwide emissions reductions, these measures do impact some of the largest population centers in the country. As with many other political movements in the United States, the regulatory approaches that are being developed on a state level could someday serve as a model for a national global warming policy.

## **Mandatory CO<sub>2</sub> Emissions Reductions**

To date, 7 states have imposed mandatory limits on CO<sub>2</sub> emissions, including 4 policies directed specifically at electric sector emissions, a vehicle emissions policy and 2 state-wide reduction policies.

### Maine:

On June 26, 2003, the Governor of Maine signed a bill mandating a statewide plan for reducing greenhouse gas emissions to 1990 levels by 2010, becoming the first U.S. state to enact legislation requiring a statewide reduction in greenhouse gas (GHG) emissions. By 2006, Maine's Department of Environmental Protection (DEP) must develop a long-term climate action plan for the state to meet the goals set by the New England Governors/Easter Canadian Premiers (NEG/ECP) to reduce CO<sub>2</sub> emissions to 1990 levels by 2010, 10 percent below 1990 levels by 2020, and eventually by as much as 80 percent. The bill also calls for an inventory of GHG emissions from all state-owned facilities and state-funded programs.<sup>1</sup>

### Connecticut:

In June 2004, the Governor of Connecticut signed into law a bill establishing goals for the state of reducing greenhouse gas emissions to 1990 levels by 2010, to 10 percent below 1990 levels by 2020, and to 75 to 85 percent below 2001 levels over the long term. This bill codifies goals consistent with those adopted by the New England Governors/Easter Canadian Premiers. The bill also requires the state to develop a plan by early 2005 for achieving the first two goals, and requires the state Department of Environmental Protection to establish a greenhouse gas registry for major stationary sources, starting in July 2006.

### California:

In July of 2002, California became the first state to mandate reductions in CO<sub>2</sub> emissions from passenger cars and trucks. California law will require automakers to achieve "the maximum feasible and cost-effective reduction" of greenhouse gas emissions starting with 2009 models.<sup>2</sup> In September 2004 the California Air Resources Board unanimously adopted emissions standards that will phase in GHG reductions for all new vehicles sold in the state, reaching a 30% reduction by 2016. Although the rule will face legal challenges by the auto manufacturers, Governor Schwarzenegger and the State of California remain committed to the program and confident in the State's authority to take action to reduce its largest source of greenhouse gas emissions.

Given other states' ability to adopt California's more stringent emissions standards, this law will have impact far beyond California's borders. This year Connecticut and New Jersey joined New York, Maine, Massachusetts, Vermont, and Rhode Island in passing legislation to adopt California's current multi-pollutant vehicle standard, providing them the option of implementing the GHG standard in the future. New York, Massachusetts, and Connecticut have already indicated they will follow California's GHG standard and campaigns are being launched in additional states. With this expansion to other states, a significant percentage of the automotive market will be required to meet the California standards, providing substantial pressure on the automobile manufacturers to convert their entire fleet rather than bear the costs of selling vehicles to meet two standards across the country.

---

<sup>1</sup> Maine Statutes: *Title 38 §576*: <http://janus.state.me.us/legis/statutes/38/title38sec576.html>

<sup>2</sup> California: *Assembly Bill 1493*, signed into law by Governor Gray Davis 22 July, 2002.  
[http://www.energy.ca.gov/global\\_climate\\_change/documents/ab\\_1493\\_bill\\_20020701\\_enrol.pdf](http://www.energy.ca.gov/global_climate_change/documents/ab_1493_bill_20020701_enrol.pdf)

### New Hampshire:

In 2002, New Hampshire passed a law to regulate power plant emissions of CO<sub>2</sub> through a multiple pollutant reduction program. The program requires a reduction of CO<sub>2</sub> emissions to 1990 levels by 2010. New Hampshire Department of Environmental Services recommendations for a lower future cap are currently pending before the state legislature.<sup>3</sup>

### Massachusetts:

In 2001, Massachusetts passed legislation requiring that six of its oldest, dirtiest power plants reduce their emissions of key air pollutants. The law requires the power plants to reduce their carbon dioxide emissions by 10 percent below a 1997-1999 baseline by 2006 (or 2008 if the plant chooses to comply by repowering).<sup>4</sup> In May 2004, Massachusetts' Governor Mitt Romney released the state's new Climate Protection Plan, which adopts the goal agreed upon by the New England Governors/Eastern Canadian Premiers (referenced above). The state will also require large emitters to report their emissions to a new statewide greenhouse gas inventory and tracking system. In addition, the Climate Protection plan will make Massachusetts the first state in the nation to require that expected CO<sub>2</sub> emissions be taken into account in planning new transportation projects.

### Oregon:

In 1997, Oregon enacted legislation requiring all new power plants to reduce, avoid, sequester or displace their CO<sub>2</sub> emissions. The law requires new power plants to meet a standard equal to 17 percent less CO<sub>2</sub> than the most efficient plants operating in the country.<sup>5</sup> Since then, Governor Kulongoski has convened a group of stakeholders that have issued draft recommendations calling for adoption of greenhouse gas reduction goals and timelines similar to those of the New England states, adoption of California global warming emission standards for vehicles, and development of a "carbon content standard" for retail electricity sales.

### Washington:

On March 31, 2004 Washington's Governor Gary Locke signed into law a bill that requires all new power plants over 25 MW to offset 20% of their CO<sub>2</sub> emissions. The law, modeled on that adopted by Oregon, also applies to existing facilities planning modifications that would increase CO<sub>2</sub> emissions by 15% or more. The reductions can be achieved through application of combined heat and power technology or through investment in external mitigation projects.<sup>6</sup> In addition, on October 20th, the governor called for Washington state to set greenhouse gas emissions targets, returning to the 1990 statewide emissions level by 2010 and to 10 percent below 1990 levels by 2020.<sup>7</sup> This announcement set Washington on the path to adopting an economy-wide cap in addition to the power-sector reductions already in place.

---

<sup>3</sup> *HB 284 FN*: <http://www.gencourt.state.nh.us/legislation/2002/hb0284.html>

<sup>4</sup> Massachusetts Department of Environmental Protection (DEP) *Regulation 310 CMR 7.29*:  
<http://www.state.ma.us/dep/bwp/daqc/daqcpubs.htm#regs>

<sup>5</sup> Oregon Energy Laws and Facility Siting Regulations - <http://www.energy.state.or.us/siting/rules.htm>  
<sup>6</sup> Press Release. Office of Governor Gary Locke. 2004. Gov. Gary Locke Signs Bills Strengthening Environmental Protection Policies. March 31, 2004. <http://www.governor.wa.gov/press/press-view.asp?pressRelease=1573&newsType=1>

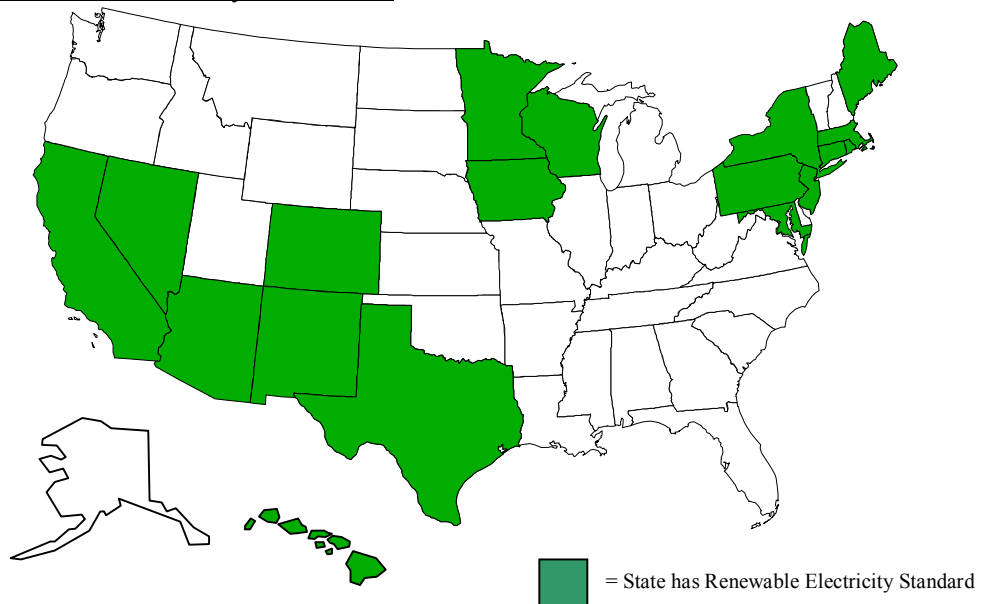
<sup>7</sup> Press Release. Office of Governor Gary Locke. 2004. Gov. Gary Locke Signs Sustainability Executive Order, Calls for Action on Global Warming. October 30, 2004. <http://www.governor.wa.gov/press/press-view.asp?pressRelease=1715&newsType=1>

## Mandatory Renewable Energy Programs

In a significant trend supporting renewable energy deployment across the country, 18 states have passed legislation mandating that a specified portion of their electricity be generated by non-emitting renewable energy resources, five of them just this year:

|                |  |
|----------------|--|
| Arizona:       | 1.1% by 2007, 60% Solar                  |
| California:    | 18% by 2012; 20% by 2017                 |
| Colorado:      | 10% by 2015                              |
| Connecticut:   | 10% by 2010                              |
| Hawaii:        | 20% by 2020                              |
| Iowa:          | 2% by 1999                               |
| Maine:         | 30% by 2000                              |
| Maryland:      | 7.9% in 2019                             |
| Massachusetts: | 4% by 2009                               |
| Minnesota:     | 19% by 2015 for one utility: Xcel Energy |
| Nevada:        | 15% by 2013, 5% Solar                    |
| New Jersey:    | 6.5% by 2008                             |
| New Mexico:    | 10% by 2011                              |
| New York:      | 24% (6.5% new) by 2013                   |
| Pennsylvania:  | 8% by 2020                               |
| Rhode Island:  | 16% in 2019                              |
| Texas:         | 2.2 by 2009                              |
| Wisconsin:     | 2.2% by 2011 <sup>8</sup>                |

### States With Renewable Electricity Standards:<sup>9</sup>



<sup>8</sup> For more information on state renewable portfolio standards see [http://www.ucsusa.org/clean\\_energy/renewable\\_energy/page.cfm?pageID=47](http://www.ucsusa.org/clean_energy/renewable_energy/page.cfm?pageID=47)

<sup>9</sup> [http://www.ucsusa.org/clean\\_energy/renewable\\_energy/page.cfm?pageID=895](http://www.ucsusa.org/clean_energy/renewable_energy/page.cfm?pageID=895)

Together, the Union of Concerned Scientists estimates that these 18 states will create a market for 22,670 MW of new renewable energy by 2017 and that these state renewable energy standards will reduce CO<sub>2</sub> emissions by 56.8 MMT CO<sub>2</sub> equivalent by 2017. Several other states are also considering such legislation, including Delaware, Illinois, and Washington DC and there are efforts to increase the current standards in Arizona, Texas, and Wisconsin. In addition, while not a mandatory requirement, in June of 2004, the Western Governors Association, representing 18 Western states agreed to a goal to build 30,000 megawatts of renewable power production in the region by 2015 and to cut power demand 20 percent by 2020.<sup>10</sup>

## **1.2 Regional Emissions Reduction Agreements**

### **NEG/ECP's Climate Change Action Plan**

Seeking to protect their economy and public health, in 2001, the governors of the six New England states joined five Eastern Canadian Premiers in pledging to cut greenhouse gas emissions to 1990 levels by 2010, with a further 10 percent reduction by 2020. Within several decades, their Climate Change Action Plan aims to cut emissions 75 to 85 percent below current levels.<sup>11</sup>

The New England Governors/ Eastern Canadian Premiers agreement directs each state and province to develop its own implementation plan. NGO's in the region have formed the New England Climate Coalition to ensure that the agreement leads to real action and that each state plan contains the elements necessary to make "meaningful progress toward the deep long-term reductions needed to limit or avoid harmful climate change."<sup>12</sup>

### **Regional Greenhouse Gas Initiative (RGGI)**

In April of 2003, New York's governor, George Pataki invited 10 Northeastern and Mid-Atlantic states to join New York in a regional market for greenhouse gas reductions.<sup>13</sup> Currently, Maine, New Hampshire, New York, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, and Delaware are participating in the effort to develop the Regional Greenhouse Gas Initiative. In addition, Maryland, Pennsylvania, the District of Columbia, the Eastern Canadian Provinces, and New Brunswick are participating as observer states. The proposed plan calls for a multi-state cap-and-trade program that would initially focus on reducing CO<sub>2</sub> emissions from the power sector. Participating states are currently negotiating the targets, timetables, burden allocation, and the rules for the trading system, which would be enshrined in a model rule for adoption by each participating state. The negotiations are expected to be completed by April 2005 and the outcome will be closely watched as it will set an important precedent for other state and regional initiatives.

---

<sup>10</sup> Clean and Diversified Energy Initiative for the West. June 22, 2004.

<http://www.westgov.org/wga/policy/04/clean-energy.pdf>

<sup>11</sup> New England Governors/ Eastern Canadian Premiers. The Committee on the Environment and Northeast International Committee on Energy. 2001. *Climate Change Action Plan*. August 2001.

[http://www.mtpc.org/RenewableEnergy/public\\_policy/climate\\_change\\_action\\_plan\\_2001.pdf](http://www.mtpc.org/RenewableEnergy/public_policy/climate_change_action_plan_2001.pdf)

<sup>12</sup> For more information on the Coalition Principles see <http://newenglandclimate.org/files/Principles.pdf>

<sup>13</sup> Press Release. Office of Governor George E. Pataki. 2003. *GOVERNOR ANNOUNCES COOPERATION ON CLEAN AIR INITIATIVE Leaders of Northeast States Will Participate in Regional Strategy to Curb Emissions*. 23 July, 2003. [http://www.state.ny.us/governor/press/year03/july24\\_03.htm](http://www.state.ny.us/governor/press/year03/july24_03.htm)

## **West Coast Governors' Global Warming Initiative**

Hoping to succeed with a collective strategy, the governors of California, Oregon and Washington in September of 2003 announced an initial joint strategy to reduce global warming, which includes using their combined purchasing power to buy fuel-efficient vehicles for official use; developing uniform appliance-efficiency standards; collaborating to measure and report greenhouse-gas emissions; and reducing the use of diesel generators on ships.<sup>14</sup> Upon the program's announcement, Washington's Governor Locke said, "The governors of the West Coast states have concluded that in the absence of meaningful federal action, we must act individually and regionally to address the sources of global warming."<sup>15</sup>

On November 18<sup>th</sup> 2004, the Western governors approved a series of recommendations that were jointly developed by the three states, including a commitment to: set new targets for state vehicle fleet GHG emissions; develop strategies and policies to achieve increases in retail sale of renewable sources of electricity by one percent or more annually in each state; adopt energy efficiency standards for up to 14 products not regulated by the federal government; and incorporate aggressive energy efficiency measures into updates of state building energy codes, aiming for at least 15% cumulative savings by 2015 in each state. The governors also agreed to explore more comprehensive regional measures such as GHG reduction targets, an emission trading program, and vehicle emission standards.<sup>16</sup>

### **1.3 U.S. Congress on Climate Change**

Progress in Congress is well behind that being witnessed in many of the states. One hears scientific arguments during Senate debates that are so far behind the current state of scientific knowledge on this issue they would be laughed at anywhere else in the world. Despite this, careful consideration of the trend over the last few years shows that even in Congress, support for action is growing. Though there is still much work needed to achieve legislation with binding emissions reduction caps in Congress, there are signs that momentum is building which could lead to binding limits in the near future.

Until recently, the most high profile vote on climate change in the U.S. Senate was on the Byrd-Hagel resolution of 1997, which has been wrongly portrayed as a vote to reject the Kyoto Protocol. In fact, the resolution's primary sponsor, Senator Byrd recently saw a need to go on the record to correct mischaracterizations of the resolution. Senator Byrd stated, "This administration has attempted to hide behind S. Res. 98 to defend its current do-nothing and know-nothing policies on climate change, and I strongly object to that. The difference between my view and that of this administration is simple. I believe the problem is real and demands action. The administration does not." Later he stated, "I am compelled to observe that it is the height of hypocrisy for this administration or its supporters in industry to claim that they are defending the goals and provisions of S. Res. 98. They cannot make such a claim in the debate

---

<sup>14</sup> National Governors Association. Center for Best Practices. 2003. *West Coast Governors Announce Tri-State Strategy to Reduce Global Warming*. 10/16/2003. [http://www.nga.org/center/frontAndCenter/1,1188,T\\_ENVIRONMENT\\_EMERGENCY%5ED\\_6015,00.html](http://www.nga.org/center/frontAndCenter/1,1188,T_ENVIRONMENT_EMERGENCY%5ED_6015,00.html)

<sup>15</sup> Press Release. Office of Governor Gary Locke. 2003. *West Coast Governors Unite on Global Warming Strategy*. 22 September 2003. <http://www.governor.wa.gov/press/press-view.asp?pressRelease=1430&newsType=1>

<sup>16</sup> Press Release. Office of Governor Gary Locke. 2004. *West Coast Governors Strengthen Joint Climate Protection Strategy*. November 18, 2004. <http://www.governor.wa.gov/press/press-view.asp?pressRelease=1732&newsType=1>

today or in any international forum. Nothing could be further from the truth. This administration can no longer hide behind the mantle of that resolution.”<sup>17</sup>

### **Climate Stewardship Act**

In what represented an historic shift in the Congressional global warming debate, the U.S. Senate voted for the first time on a mandatory national cap on greenhouse gases in October of 2003. Senators John McCain (R-AZ) and Joe Lieberman (D-CT) introduced the bipartisan Climate Stewardship Act (S 139) in the first few days of the 108<sup>th</sup> Congress.<sup>18</sup> The October 2003 vote on the senate floor was on a modified version of the bill, which would have created a mandatory economy-wide cap to return national greenhouse gas emissions to 2000 levels by 2010. Although the bill failed to pass, 43 senators voted to begin imposing mandatory requirements to restrict greenhouse gas emissions. This number has political significance in, given the rules governing debate in the U.S. Senate, over forty Senators have the ability to block any future efforts to exclude carbon dioxide limits from energy or clean air legislation. In March of 2004, the Climate Stewardship Act was introduced in the House of Representatives by Representatives Wayne Gilchrest (R-MD) and John Olver (D-MA). With over 80 bi-partisan co-sponsors, this House version of the Climate Stewardship Act provides further evidence of the momentum building toward legislative action on climate change.

### **Other Climate Change Legislation**

In addition to the Climate Stewardship Act, there are also bills that set mandatory caps on carbon dioxide as a part of multi-pollutant electricity sector regulation. The Clean Power Act and the Clean Smokestacks Act are companion bipartisan bills in the Senate and House that would reduce carbon dioxide emissions from power plants to 1990 levels by 2009. Both bills have received significant support in Congress. In 2004, the Clean Power Act was reintroduced by Senators James Jeffords (I-VT), Susan Collins (R-ME) and Joe Lieberman (D-CT) and has 20 cosponsors. The Clean Smokestacks Act was reintroduced in the House in May by Representatives Henry Waxman (D-CA) and Sherwood Boehlert (R-NY) and has 100 cosponsors. Senator Tom Carper (D-DE) followed a similar model when he introduced the Clean Air Planning Act of 2003 in April with three Republican cosponsors. The Carper bill has a significantly lower target for carbon dioxide reductions, requiring utilities to be at 2001 emissions levels by 2013. One important obstacle to the passage of the administration’s version of the multi-pollutant legislation, “Clear Skies,” thus far has been the bill’s failure to address carbon dioxide pollution.

These bills are not the only sign that some in Congress are tiring of the “just say no” approach to climate change. Committees in both Congressional bodies passed resolutions addressing climate change in State Department reauthorization bills.<sup>19</sup> These resolutions were non-binding and were not passed into law but showed significant support for action to reduce U.S. emissions and reengage in international negotiations. The attention to the issue in general has also greatly increased in Congress. Among other things, Senator McCain has held over 12 hearings on global

---

<sup>17</sup> Congressional Record\_\_Senate. 30 October 2003. S13585-S13586. *Statement of Senator Robert Byrd on S. 139.* [http://frwebgate.access.gpo.gov/cgi-bin/getpage.cgi?dbname=2003\\_record&page=S13585&position=all](http://frwebgate.access.gpo.gov/cgi-bin/getpage.cgi?dbname=2003_record&page=S13585&position=all)

<sup>18</sup> Bill Summary and Status. 108<sup>th</sup> Congress. 2003. S. 139. <http://thomas.loc.gov/cgi-bin/bdquery/z?d108:s.00139>:

<sup>19</sup> H.R. 1950 § 730 (as reported from committee)

[http://thomas.loc.gov/cgi-bin/cpquery/?&dbname=cp108&maxdocs=100&report=hr105p1.108&sel=TOC\\_247174&S925 § 813](http://thomas.loc.gov/cgi-bin/cpquery/?&dbname=cp108&maxdocs=100&report=hr105p1.108&sel=TOC_247174&S925%20%247174) (as reported from committee) <http://thomas.loc.gov/cgi-bin/query/C?c108:/temp/~c108Hb9AI8>

warming while Chairman of the Senate Commerce Committee and he and Senator Clinton led a bipartisan Congressional delegation trip to view climate impacts in the Arctic.

### **Renewable Energy Standards**

In addition, renewable energy also enjoys bipartisan support in Congress. A national Renewable Energy Standard (RES), also known as the Renewable Portfolio Standard, requiring utilities to generate at least 10 percent of their electricity from renewable sources has been passed twice by the U.S. Senate as part of the energy package. In a 2002 vote on the Senate Energy bill, the RES received support from 58 Senators including 7 Republicans. The RES has never been considered by the full House, but on September 10, 2002, 143 House members, including 21 Republicans signed a Dear Colleague letter urging members to include a strong RES in the energy bill. During the energy bill conference in 2004, the Senate again supported the RES, but the amendment was later stripped out of the energy bill conference report by the House. The RES is likely to be an issue again in the next Congress either as part of a Senate energy package or as part of other energy-related pieces of legislation including attempts to reduce natural gas prices, rewrite the Clean Air Act, or on other climate-related bills.

### **1.4 Climate Change Litigation**

*"The EPA's recent flip-flop regarding its authority to regulate greenhouse gas emissions ignores the Clean Air Act and all the problems that global warming will cause. We just want the EPA to do its job. It shouldn't be too much to ask."*

— Maine Attorney General, Steven Rowe<sup>20</sup>

Many have dismissed global warming litigation as an empty threat, assuming that new legislation was necessary in order to legally require action on global warming. However, with precedent beginning to emerge that indicates global warming issues should be considered in environmental assessments, and with a growing number of states, cities and NGOs filing suits to challenge the Bush Administration's and industry's interpretation of existing statutes, this is now one of the most exciting areas to watch.

In the U.S., cases currently filed and anticipated fall into four categories:

- 1) Failure to take climate change into account in environmental assessment processes required under U.S. law (the National Environmental Policy Act);
- 2) Challenging EPA's decision not to recognize carbon dioxide as a pollutant under the Clean Air Act;
- 3) Holding large emitters of global warming pollution accountable under the common law of public nuisance; and
- 4) Arguing that failure to act to prevent climate change should be recognized as a violation of human rights.

---

<sup>20</sup> Press Release. Office of Massachusetts Attorney General. 2003. *Massachusetts, Connecticut and Maine to Challenge EPA's Refusal to Regulate Greenhouse Gas Emissions*. 3 September, 2003. <http://www.ago.state.ma.us/txt/202petition.htm>

## National Environmental Policy Act Cases

In August 2002, Friends of the Earth, Greenpeace and the City of Boulder filed suit against two U.S. government agencies - the Export Import Bank (Ex-Im) and the Overseas Private Investment Corporation (OPIC). The suit alleges that OPIC and Ex-Im illegally provided over \$32 billion in financing and insurance for oil fields, pipelines and coal-fired power plants over the past ten years without assessing their contribution to global warming and their impact on the U.S. environment as required under key provisions of the National Environmental Policy Act (NEPA). This case is expected to go to trial in 2005.

A recent NEPA case establishes a very useful precedent for other NEPA suits. In October of 2003, the U.S. Court of Appeals for the Eighth Circuit ruled that the federal government improperly failed to take into account the long-term effects on air pollution, including carbon dioxide emissions, for a proposed railroad to transport coal from Wyoming to Minnesota. The Sierra Club, one of several groups fighting the railway, argued that the project would increase emissions of pollutants including carbon dioxide and mercury. The decision in *Mid States Coalition for Progress vs. Surface Transportation Board* states, "We believe it would be irresponsible for the Board to approve a project of this scope without first examining the effects that may occur as a result of the reasonable foreseeable increase in coal consumption."<sup>21</sup>

## Clean Air Act Cases

Among the lawsuits currently making their way through U.S. courts, those with the greatest potential to force responsible action to reduce greenhouse gas emissions are the cases based on EPA's authority to regulate carbon dioxide under the Clean Air Act.

In October 2003, twelve states, several cities, and more than a dozen environmental groups joined forces to challenge the Bush Administration's continued failure to confront global warming. The plaintiffs are contesting the unprecedented ruling by the Environmental Protection Agency (EPA) that summarily disavowed the agency's longstanding jurisdiction under the Clean Air Act to regulate global warming emissions. The states, cities and groups challenged the EPA decision in the Court of Appeals for the D.C. Circuit.

The EPA ruling, released in August 2003, was issued in response to an administrative petition asking the EPA to regulate greenhouse gas emissions from cars and other mobile sources to help address global warming. The original petition was filed in 1999 by the Center for Technology Assessment, Greenpeace and other environmental groups. A public comment period on the 1999 petition received 50,000 comments—the vast majority of which supported the call for action against global warming. When, more than three years later, the Administration had not taken any action the groups sued EPA for its failure to respond. Citing the administration's failure to recognize the significant and broad impacts they will face, the states challenging EPA's decision are geographically dispersed across the country, including: California, Connecticut, Illinois, Maine, Massachusetts, New Jersey, New Mexico, New York, Oregon, Rhode Island, Vermont, and Washington. The cities of Baltimore, and New York filed a separate petition as did a group of more than a dozen of the nation's largest environmental organizations.

---

<sup>21</sup>For a link to full text of *Midstates Coalition for Progress vs. Surface Transportation Board* see: <http://www.me3.org/issues/coaltrain/>

## **Common Law of Public Nuisance**

Two recent lawsuits have opened up a new front on the fight against global warming. Eight states and New York City have filed suit against the five largest U.S. electric utility companies. Two land conservation trusts with coastal land preserves that are threatened by sea level rise have filed a parallel lawsuit.<sup>22</sup> The suits were filed under the common law of public nuisance, an effective legal tool for controlling pollution, charging that these five power companies contribute significantly to hotter heat waves, increased air pollution, rising sea levels, dying forests, and a host of other ills suffered by members of the public in these states. The suit brought by the two conservation groups argues that lands set aside by those groups for the public benefit are now threatened by global warming.

Both suits ask that the power companies curb their global warming pollution. The five companies – American Electric Power, Southern Company, Tennessee Valley Authority, Xcel Energy, and Cinergy – operate 174 power plants in 20 states. These plants emit nearly 650 million tons of carbon dioxide each year, contributing 25 percent of emissions from the U.S. electric sector and 10 percent of all U.S. emissions.

## **Human Rights Case**

The Inuit Circumpolar Conference plans to file a human rights petition against the United States in January 2005. The petition will be lodged with the Inter-American Commission on Human Rights. Commission reports constitute authoritative interpretations of human rights law and, as such, can influence governments to take action. The petition is designed to increase political pressure by casting the United States as a human rights violator and by demonstrating that the causal link between emissions and impacts is sufficiently established to support litigation. It will demonstrate that people are being harmed *today*, not just in some hypothetical future period, making the Inuit the proverbial “canaries in the coal mine.”

The effort is supported by the recent release of the Arctic Climate Impact Assessment (ACIA), which sets out the scientific basis of the Inuit’s case and confirms that they and other peoples of the Arctic are facing a mortal threat. The Inuit hope that their petition, which is based on the issues identified in the ACIA, will reinforce its message and elevate its relevance in the policy debate.

The petition will be prepared with the help of Earthjustice and the Center for International Environmental Law. Sheila Watt-Cloutier, the Inuit Circumpolar Conference Chair, will announce the ICC’s intention to file in Buenos Aires, during the 10<sup>th</sup> Conference of the Parties of the UN Framework Convention on Climate Change. The filing will take place at the Commission’s office in Washington, D.C. in January 2005. Following the filing, the Inuit hope other threatened communities will file amicus briefs or join the petition directly.

---

<sup>22</sup> The eight states are California, Connecticut, Iowa, New Jersey, New York, Rhode Island, Vermont, and Wisconsin. The land conservancies are the Audubon Society of New Hampshire and the New York-based Open Space Institute.

## **1.5 Growing Investor Concern**

*“We are heartened to see some major U.S. companies pushing past the insularity caused by lack of policy at the Federal level, and responding to shareholders’ requests that they manage the risks, and seize the opportunities presented by the worldwide desire to limit carbon dioxide emissions.”*

— Andrew Logan, Oil Industry Analyst, Coalition for Environmentally Responsible Economies

One sure sign that concern over global warming is spreading beyond the environmental community is the growing concern among investors about whether the companies they invest in are prepared to deal with the challenge of global warming. For the 2004 proxy season, shareholders filed 30 resolutions relating to global warming with U.S. companies, with record levels of support and several historical company announcements in response.<sup>23</sup>

It is inherently difficult to build significant support for shareholder resolutions over the objection of company management, but over the last few years, votes on global warming resolutions have been continually setting new records for support. A first-time global warming resolution filed in 2003 with American Electric Power, the largest emitter of carbon dioxide in the U.S., received nearly 27 percent of the vote. Other electric utilities, TXU and Southern, received 24 and 23 percent respectively. In 2004, the resolutions filed against these companies were withdrawn because the companies agreed to publicly report their responses to growing pressures to reduce greenhouse gases and other emissions. In all, five out of the six electric power companies approached in 2004 reached agreements with the filers to increase disclosure on the financial risks associated with global warming.<sup>24</sup> In addition, in 2004 there was an expansion of shareholder resolutions in the oil and gas sector. Shareholders filed 13 resolutions with 10 oil and gas companies, 5 of which faced these resolutions for the first time. As a result, Chevron/Texaco now discloses its entire greenhouse gas footprint and is incorporating a cost of carbon into its investment decisions. Valero, the largest independent refiner in the U.S., agreed to reduce its emissions 5% by 2008 and greatly expand its disclosures on global warming. The resolutions against those oil and gas companies that refused to address shareholder concerns received record votes, including the highest vote ever for a global warming proposal, 37%, at Houston-based Apache.<sup>25</sup> Even at Exxon/Mobil, perhaps the most active corporate opponent of action on global warming, 22 percent of shareholders voted in favor of a global warming resolution in 2003.<sup>26</sup>

The shareholder requests to companies to quantify their risk are being supported by independent studies analyzing risk to specific sectors of the economy. A report from World Wildlife Fund and Innovest Strategic Value Advisors shows that some of the world's largest power companies could face costs equivalent to over 10 percent of 2002 earnings if they fail to take steps to prepare for

---

<sup>23</sup> Investor Responsibility Research Center, 2003 *Proxy Season Scorecard*.  
[http://www.irc.org/company/05192003\\_Scorecard.html](http://www.irc.org/company/05192003_Scorecard.html)

<sup>24</sup> Southern Company, TXU Agree to Report to Shareholders on Preparedness for Greenhouse Gas Limits. CERES Press Release, April 28, 2004.

<sup>25</sup> Global Warming Resolutions at US Oil Companies Bring Policy Commitments from Leaders and Record High Votes at Laggards. CERES Press Release, April 28, 2004.

<sup>26</sup> Investor Responsibility Research Center, 2003 *Proxy Season Scorecard*. – Global Warming, May 19, 2003. <http://www.irc.org/company/global.html>

upcoming global warming regulation.<sup>27</sup> Another recent report by The World Resources Institute and Sustainable Asset Management analyzed how emerging global warming policies, or carbon constraints, will affect the financial performance and competitiveness of ten leading global auto companies. While some companies' earnings could increase by up to 8 percent because of carbon constraints, others may decline by as much as 10 percent -- indicating just how important this issue is for investors and portfolio managers.<sup>28</sup>

The scope and commitment of investors involved in these efforts is continually growing, further indicating an increasing level of concern on the issue of global warming across all sectors and regions in the U.S. While the initial resolutions were filed by small, primarily faith-based pension funds, the filers now include multi-billion dollar portfolio managers, with the number of public pension funds filing resolutions doubling in 2004. Beyond the individual company campaigns, concerned investors are speaking out more broadly on the critical need for increased information on climate risk in general. In April of 2004, thirteen pension leaders signed letters to the Chairman of the Securities and Exchange Commission (SEC) asking that companies be required to include analysis of global warming risks in routine disclosures to the SEC. The signers included the state treasurers and comptrollers from California, Connecticut, Maryland, Maine, New Mexico, New York, Oregon, and Vermont, four labor pension fund leaders, and the New York City Comptroller, collectively representing the assets of nearly \$800 billion.<sup>29</sup> This request was a follow up to the Investor Call to Action issued at the Investors Summit on Climate Change held at the UN in November of 2003. At that meeting the issue drew the attention of major investors and attracted high level political participation, including UN officials such as Kofi Annan and Klaus Toepfer, former Vice President Al Gore and former Undersecretary of State Timothy Wirth. At that meeting, the Investor Network on Climate Risk was formed to continue to examine the issue and pursue actions to address it.

## **1.6 Local Elected Officials**

Municipalities were the early actors on global warming in the U.S. Cities for Climate Protection, a global campaign of the International Council for Local Environmental Initiatives (ICLEI) that works with more than 153 cities and counties in the United States to implement solutions to climate change.<sup>30</sup>

Local governments play a crucial role in addressing global warming because they directly influence and control many of the activities that produce greenhouse gas emissions. They also have the responsibility and authority to protect the quality of community life and to provide efficient and reliable services. Decisions about land use and development, investments in public transit, energy-efficient building codes, waste reduction and recycling programs all affect local air quality and living standards as well as the global climate. Local government must also address local impacts of increased floods, heat waves, asthma and other health concerns that come with global warming. By participating in ICLEI Cities for Climate Protection municipalities can

---

<sup>27</sup> For More information on *Power Switch: Impacts of Climate Policy on the Power Sector* see <http://www.worldwildlife.org/news/headline.cfm?newsid=587>

<sup>28</sup> For more information on *Changing Drivers: The impact of climate change on competitiveness and value creation in the automotive industry*, see: [http://newsroom.wri.org/newsrelease\\_text.cfm?NewsReleaseID=267](http://newsroom.wri.org/newsrelease_text.cfm?NewsReleaseID=267)

<sup>29</sup> Thirteen Pension Leaders Call on SEC Chairman to Require Global Warming Risks in Corporate Disclosure. CERES Press Release, April 15, 2004.

<sup>30</sup> For more information on Cities for Climate Protection see: <http://www.iclei.org/us/ccp/>

receive valuable assistance, and learn from one another's experience, in order to implement programs and policies which improve energy efficiency and result in greenhouse gas emissions reductions in all sectors: buildings, manufacturing and industrial facilities, municipal fleets, waste management, land-use planning, renewable energy applications, transportation, and local government operations.

In April, the Cities of San Diego and San Francisco received EPA Climate Protection Awards to acknowledge their work to achieve their reduction goals of 15% below 1990 by 2010 and 20% below 1990 levels by 2012 respectively.<sup>31</sup> Referring to his city's Community Sustainability Program, San Diego Mayor Dick Murphy said, "Through this program, the City has become a leader in the use of energy-efficient technologies, creating renewable forms of energy, advancing innovative solid waste management and implementing alternate fuel programs for City vehicles. Each of these programs has contributed to reducing greenhouse gas emissions and has provided a model for communities throughout the United States."

Action on global warming has not been limited to the big cities. David B. Cohen, the mayor of Newton, Massachusetts also received a Climate Protection Award in 2004 for his leadership in municipal energy efficiency and renewable installations. The number and size of communities involved in efforts to reduce GHG emissions is exceeded only by the number of programs and measures they have instituted. From LED traffic lights and anti-idling campaigns, to tax incentives for green buildings and renewable energy installations and purchases, technological innovations and expanded use of alternative energy sources, municipalities large and small are making significant changes to reduce their contributions to global warming.<sup>32</sup>

In some cases municipal leaders have joined together to try to influence federal policy-makers. Hoping to influence passage of the McCain-Lieberman "Climate Stewardship Act", in October 2003, 155 U.S. Mayors sent a statement to Congress urging federal leadership in the fight against global warming. In addition to outlining why addressing global warming is important to municipalities and highlighting the reductions being pursued at the local level, the statement said, "As Mayors responsible for the well being of our communities, we urge the federal government to maintain, enhance and implement new domestic policies and programs that work with local communities to reduce global warming pollution."<sup>33</sup> This statement was mentioned on the floor of the Senate during the debate on the bill and represented an important indication of nationwide bilateral support for action. The City of New Orleans, in one of the most vulnerable areas of the United States also passed a resolution calling on their Senators to support the bill.

In addition, the Cities for Climate Protection Campaign has joined together with the members of Native American Reservations (through the Intertribal Council on Utility Policy (ICOUPE)) in the Energy Independence Day Campaign, calling upon the federal government to "reduce global warming pollution and support renewable energy development on Native lands" and to reform its extensive transmission system to support the delivery of new renewable energy from rural America.<sup>34</sup> The Energy Independence Day Campaign also promotes tribally-owned clean energy projects as a means to meet the emission reduction goals of Cities for Climate Protection,

---

<sup>31</sup> Summaries of the 2004 Climate Protection Award Winner's Accomplishments. US Environmental Protection Agency. April 20, 2004. [http://www.epa.gov/cpd/awards/winners\\_summaries4-20-04.doc](http://www.epa.gov/cpd/awards/winners_summaries4-20-04.doc)

<sup>32</sup> For more information, visit <http://www3.iclei.org/us/participants.cfm> or [http://www.cleanair-coolplanet.org/for\\_municipalities.php](http://www.cleanair-coolplanet.org/for_municipalities.php)

<sup>33</sup> Mayors' Statement on Global Warming. 2003. [http://www.iclei.org/us/mayors\\_statement/statement.pdf](http://www.iclei.org/us/mayors_statement/statement.pdf)

<sup>34</sup> American Leaders, Declaration of Energy Independence. July 4, 2004. ICLEI and Intertribal Coup. [http://iclei.org/us/energyindependence/eid\\_declaration.pdf](http://iclei.org/us/energyindependence/eid_declaration.pdf)

providing a clean energy solution for cities and building sustainable economies and job opportunities for Tribal communities. ICOUP is now operating the first Native American owned wind power generation site and plans to build others through a unique funding and development arrangement with Native Energy, a small renewable energy company in Vermont.<sup>35</sup>

## **1.7 Public Opinion on Global Warming**

Polls conducted in the last three years reveal that the vast majority of the U.S. public believes that global warming is a real threat and supports legislative efforts to reduce greenhouse gas emissions.

A poll conducted by Zogby International in October of 2003 revealed that Americans feel strongly that the U.S. should reduce its greenhouse gas emissions. It found that Americans by a 4 to 1 ratio support action to reduce GHG emissions. The poll, conducted on the eve of the Senate vote on the McCain-Lieberman Climate Stewardship Act (see section 1.3 above), revealed the following results.

- Three-fourths (74 percent) of the respondents support legislation proposed by Senator John McCain and Joseph Lieberman to require major industries to reduce greenhouse gas emissions to year 2000 levels within the next seven years.
- Two in three (67 percent) respondents agree with the statement that ‘addressing global warming by requiring major industries to reduce greenhouse gas emissions can improve the environment without harming the economy.’<sup>36</sup>

The Zogby poll is consistent with a poll conducted by Harris Interactive in September of 2002 which found that a large majority of the public believes that global warming is a real threat. Moreover, it revealed that most people who have seen, heard or read of the Kyoto and Bonn agreements to limit the emissions of carbon dioxide and greenhouse gases approve of them. And a clear 54 percent majority of respondents thinks that the government is wrong not to accept the international agreements.<sup>37</sup>

In June of 2004, a poll by University of Maryland’s Program on International Policy Attitudes and Knowledge Networks found significant support for existing policies to address global warming, even if it meant increased costs. The support for the targets of the McCain-Lieberman Climate Stewardship Act was quite strong at 81 percent, and when asked if they would still support the bill if it meant an increase in household costs of \$15 per month (an MIT study estimated the costs at about \$20 per year), 67 percent said yes. Fifty-two percent even said that a candidate’s support for the bill would increase their likelihood of voting for him or her. In addition, 63 percent favored higher fuel efficiency standards even if it meant higher vehicle costs and 64 percent said they want their member of Congress to support the Kyoto Protocol.<sup>38</sup>

---

<sup>35</sup> For more information about this Windbuilders™ program, visit <http://www.nativeenergy.com/index.html>

<sup>36</sup> Zogby International. 2003 *Americans Favor Reduction in Global Warming by 4-1, New Zogby International Poll Reveals*, October 22, 2003. <http://www.zogby.com/search/ReadNews.dbm?ID=749>

<sup>37</sup> Harris Interactive. 2002. *Majorities Continue to Believe in Global Warming and Support Kyoto Treaty*, Harris Poll #56, October 23, 2002. [http://www.harrisinteractive.com/harris\\_poll/index.asp?PID=335](http://www.harrisinteractive.com/harris_poll/index.asp?PID=335)

<sup>38</sup> Eight in Ten Support McCain Lieberman Climate Change Legislation. PIPA/ Knowledge Networks Press Release. June 25, 2004. [http://www.pipa.org/OnlineReports/ClimateChange/PressRelease06\\_25\\_04.pdf](http://www.pipa.org/OnlineReports/ClimateChange/PressRelease06_25_04.pdf)

This support has consistently been found to be broad and diverse across the various regions and constituencies, including union households, all races, and all regions. In June of 2004, National Wildlife Federation commissioned a poll of licensed sportsmen nationwide. The results found that 75 percent of hunters and anglers think the U.S. should reduce its emissions of greenhouse gases, 74 percent see addressing global warming as a high priority, and 63 percent think global warming is or will impact hunting and fishing conditions. It is important to note that 68% of those polled voted for George W. Bush in 2000.<sup>39</sup>

## **1.8 Grassroots Mobilization**

There is growing concern about climate change engagement in calling for solutions within a broad set of grassroots activists across the country. Below are several examples within the environmental justice, religious, and student communities in the United States.

### **Environmental Justice**

In early 2002, a coalition of twenty-eight U.S. environmental justice, climate justice, religious, policy and advocacy organizations called on the Bush Administration and Congress to take action on global warming. The coalition, which calls itself the Environmental Justice and Climate Change Initiative, is seeking immediate and just steps on global warming policy with a focus on energy efficiency, renewable energy, and conservation policies while seeking equitable measures to protect and assist the communities most affected by global warming. They note that people of color, indigenous people, low-income people and workers bear a disproportionate impact of global warming impacts. For decades, extreme and unnecessary social, health, and economic impacts of American society's dependence on fossil fuel have harshly impacted these communities.<sup>40</sup> In addition to weighing in at the federal level, members of environmental justice organizations testified in favor of California's regulation to reduce the greenhouse gas emissions from motor vehicles. In the face of arguments from the auto industry that the regulation would hurt poor people through increased automobile costs, California EJ activists testified about the greater threat that global warming poses to their communities.

Several studies have been released recently that confirm the disproportionate impact of global warming on minorities and they have spurred additional attention within those communities to the issue. The Congressional Black Caucus Foundation (CBCF) recently released a report on global warming and African-Americans that found both that global warming disproportionately hurts Blacks and that policies to protect Blacks are also good for all Americans. After the release of the CBCF report several CBCF members signed on as co-sponsors to the Climate Stewardship Act in the House of Representatives. Other congressional caucuses have indicated a possible interest in releasing similar reports for the communities they represent. In addition, the United States General Accounting Office published a report in December 2003 entitled, "Alaska Native Villages: Most Are Affected by Erosion, but Few Qualify for Federal Assistance," in which the office reported that 184 communities in the state, many native villages in existence for close to 1,000 years, experience some level of erosion and flooding at an increasing rate due to global

---

<sup>39</sup> National Hunter-Angler Survey Results. July 12, 2004. Bellwether Research and Consulting Memo to National Wildlife Federation. <http://www.nwf.org/nwfwebadmin/binaryVault/ExecutiveSummary.pdf>

<sup>40</sup> Press Release. Environmental Justice and Climate Change Initiative. 2002. *Leading Environmental Justice, Climate Justice, Religious and Policy Organizations Unite to Call for Action on Climate Change*. 28 January, 2002. <http://www.ejcc.org/releases/020128.html>

warming. The Office also found that villages that seek funding for projects to address flooding and erosion from the U.S. Army Corps of Engineers often fail to qualify for assistance because economic costs exceed the expected benefits. In response, these communities have banded together to pass an Alaska Senate joint resolution to urge the federal government to ease the strict cost benefit analysis rules to help communities in the state threatened by erosion and flooding.

In March 2004, students, academics, and activists from around the world gathered at the University of Michigan for a student-initiated conference called “Just Climate? Environmental Justice and Climate Change”. The aim of the conference was to further the dialogue about how global climate change will affect disadvantaged communities and to identify efforts to mitigate and adapt to these changes as well as policies and collaborative projects aimed at approaching climate justice. The participants of the conference endorsed 14 principles of Climate Justice recognizing: “Poor nations, people of color, Indigenous Peoples, and low-income communities in all nations are the first to experience negative global warming impacts such as sea level rise, flooding, drought, heat-death and illness, respiratory illness, infectious disease, and economic and cultural displacement.” In addition, the EJCC has established the Climate Justice Corps, which trains a new generation of climate justice advocates and builds capacity of host organizations to successfully advocate for their communities on climate policy.

## **Religious Community**

The faith community has also significantly increased its involvement in the issue. In 2002 the Evangelical Environmental Network initiated a national campaign asking “What Would Jesus Drive?,” adding a moral dimension to the fuel economy debate and gaining significant attention from the media and policy makers. Through a targeted ad campaign, congregation education, press events, and meetings with automakers, the campaign drew attention to the equity implications of global warming and the links to individual transportation choices, encouraging members of the religious community to drive hybrids over gas guzzling sport utility vehicles. Drawing on the success of that campaign, the Interfaith Climate and Energy Campaigns in 11 states have since shifted the attention to state government vehicle fleets through the “What Should the Governor Drive” campaign. Armed with economic analyses of fuel cost savings (at a time when states are facing significant budget deficits), the campaign calls on governors to make significant commitments to increase their purchase of hybrid vehicles for state fleets. There are also campaigns in many states targeting congregations and their members encouraging energy efficiency improvements as a faith-based contribution to solving global warming.

In addition to state-based campaigns, the interfaith community has been voicing its support for addressing global warming at the federal level. In February of 2002, more than 1,200 religious leaders of various denominations signed a letter to U.S. Senators urging the adoption of policies such as increasing vehicle fuel efficiency and regulating carbon dioxide emissions from power plants. In July of 2004 an even broader interfaith coalition submitted letters from 1,000 mainline Protestant, Jewish, Roman Catholic and Orthodox clergy from 45 states and organized visits to Senators in their district offices pressing for increased federal attention to global warming and another vote on the Climate Stewardship Act. In addition, for the first time, the U.S. Conference of Catholic Bishops sent their own letter to all Senators calling for a vote. In the letter, the conference urged Senators to consider the fate of poor workers and nations when addressing global warming.<sup>41</sup> This strong interfaith voice on Capitol Hill has been crucial to broadening the

---

<sup>41</sup> Faith-Based Stance on Environment: A group of evangelicals meets to discuss a pro business, pro green agenda. Larry B. Stammer. Los Angeles Times. July 4, 2004.

base of support for the Climate Stewardship Act and educating key legislators on the moral basis for addressing global warming.

## **Student Movement**

Students around the country are also increasingly engaged in the effort to achieve a responsible U.S. climate policy. In this growing student movement, students are campaigning for and helping implement campus commitments to reduce emissions and are a significant force in the effort to build the political pressure for solutions at the state and federal levels. In October of 2004, 281 college and high school groups in the U.S and Canada teamed up with the Energy Action Coalition, a group of 18 environmental organizations to hold events supporting a "Declaration of Independence from Dirty Energy." That declaration demands dramatic increases in vehicle fuel efficiency, a shift in subsidies from fossil fuels to clean energy, a domestic mandatory cap on GHG emissions, and U.S. reengagement internationally.

### **1.9 Scientists Speak Out on Climate Change**

In addition to producing an ever-increasing number of scientific reports highlighting the existing and projected impacts of climate change, the U.S. scientific community has also become more vocal in the political context as well. In response to the pattern of scientific manipulation by the Bush Administration, over sixty leading scientists signed a statement in February 2004 voicing their concern over the misuse of science by the administration and calling for regulatory and legislative action to restore scientific integrity to federal policymaking. The statement cites the administration's treatment of climate science as one example, stating that "the administration has consistently misrepresented the findings of the National Academy of Sciences, government scientists, and the expert community at large" in support of the president's decision to avoid regulating GHG emissions.<sup>42</sup> Since its original release, over 46,000 scientists have signed the statement and the Union of Concerned Scientists released further evidence of such abuse in July. The concern was so great that 48 Nobel Laureates even dropped the usual scientific protocol calling for non-partisanship and signed a letter endorsing Senator John Kerry for president.<sup>43</sup>

In advance of the vote on the McCain-Lieberman Climate Stewardship Act in October of 2003, more than 1,000 scientists from across the nation endorsed a "State of Climate Science Letter" sent to the U.S. Senate, re-confirming the scientific community's consensus on climate change, including the proliferation, causation and range of impacts of global warming. The letter warns of the consequences of not employing immediate measures to curb greenhouse gas emissions and states, "the main conclusions of the IPCC and NRC reports remain robust consensus positions supported by the vast majority of researchers in the fields of climate change and its impacts. The body of research carried out since the reports were issued tends to strengthen their conclusions."<sup>44</sup>

In addition, in May of 2004, in advance of what many expected to be a second vote on the Climate Stewardship Act, prominent scientists joined forces with a broad spectrum of religious leaders in publishing a statement urging action on climate change and renewed attention to the

---

<sup>42</sup> Restoring Scientific Integrity in Policy Making. Union of Concerned Scientists. [www.ucsusa.org](http://www.ucsusa.org)

<sup>43</sup> Bush vs. the Laureates: How Science Became a Partisan Issue. Andrew Revkin. New York Times. October 19, 2004.

<sup>44</sup> For more information on signatories to this statement see:[http://www.ucsusa.org/global\\_environment/global\\_warming/page.cfm?pageID=1264](http://www.ucsusa.org/global_environment/global_warming/page.cfm?pageID=1264)

bill in the Senate. The unique joint statement claimed that “policies that devalue scientific consensus, withdraw from diplomatic initiative, and seek only voluntary initiatives do not seem to us an adequate response to this crisis.”<sup>45</sup>

### **1.10 Businesses Taking Action Despite Regulatory Void**

Companies make business and investment decisions based on signals that they receive in the marketplace and some of the strongest market signals are regulatory requirements. In the U.S., this puts companies in a difficult position. While the federal government continues to postpone action on global warming, most multinational companies have significant holdings in parts of the world that are establishing carbon constraints, renewable energy mandates, and/or emissions trading systems. More than 120 nations, including Russia, Canada, Japan and the European Union (EU) states, have ratified the Kyoto Protocol, which will enter into force on February 16<sup>th</sup> 2005, and these countries are in the process of implementing policies to meet its targets. The EU already has a directive on renewable energy in place (22 percent by 2010) and an Emissions Trading System that will start functioning in January of 2005, placing a value on global warming emissions.<sup>46</sup> While the U.S. has not ratified the Kyoto Protocol or established a national framework for reducing greenhouse gas emissions, multinational companies must meet the requirements of other nations. For domestic companies there are a number of state efforts underway that apply to operations and products sold in the leading economies in the U.S. Just the states in the Northeast and West Coast Regional agreements, for instance, represent over a third of U.S. economic production and population.<sup>47</sup> For companies that must make decisions about long-lived capital investments, it is necessary to take the international and state policy contexts into account and to make some assumptions about future carbon constraints at the federal level in the U.S.

Adding to the business concerns surrounding regulatory scenarios for carbon emissions, there were a record number of global warming-related shareholder resolutions filed at U.S. companies in 2003 and 2004. Thirty CO<sub>2</sub>-related shareholder resolutions were filed against companies in the oil and gas, automotive, appliance, and electric utility sectors this year, requesting that companies disclose the financial risk of their carbon dioxide emissions, assess the economic benefit of reducing the company’s emissions, and utilize clean, renewable energy technologies. In addition, some businesses are also feeling the pressure from insurers and from recent lawsuits against high-emitting electric power companies.

Many U.S. business leaders say they know that global warming regulation in the U.S. is coming, but they are reluctant to take action without greater certainty about what will be required. Coalitions of U.S. business and industry leaders have supported inclusion of market mechanisms in global, national and state climate regulation to allow business the flexibility to meet regulator requirements in the least-cost manner. Ironically, though this approach was incorporated in the Kyoto Protocol, U.S. companies will not be able to apply this mechanism to their actions to reduce emissions within the U.S. until the U.S. ratifies the treaty.

---

<sup>45</sup> Earth’s Climate Embraces Us All: A plea from Religion and Science for Action on Global Climate Change. National Religious Partnership for the Environment. May 21, 2004.

<sup>46</sup> DIRECTIVE 2001/77/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL. 27 September 2001. [http://www.climnet.org/EUenergy/re\\_dir\\_27\\_09\\_01.pdf](http://www.climnet.org/EUenergy/re_dir_27_09_01.pdf).

For detailed information about the emissions trading directive see: <http://www.climnet.org/EUenergy/ET.html>

<sup>47</sup> For more detail see section 1.1 of this paper.

Despite the current uncertainties about future regulatory requirements, and their inability to participate in the global carbon market, many U.S. companies are preparing themselves to be more competitive under future carbon regulations by taking voluntary action to reduce emissions now. A number of companies have already established comprehensive climate management strategies that consider the role and potential value of global warming gases when making investment decisions, inform electricity and energy use decisions, drive decisions towards other emissions-reducing strategies, and move the company towards establishing specific emission reduction targets.

### Voluntary Action

There are companies in many economic sectors taking on voluntary targets. American Electric Power has voluntarily committed through the Chicago Climate Exchange to reduce its emissions by four percent over four years. Johnson & Johnson is one of eight companies which has committed through World Wildlife Fund's Climate Savers Program to reduce its emissions to 7 percent below 1990 levels by 2010 in absolute terms. Just this year, several new commitments were made that are worth noting. As the result of a significant consumer action campaign organized by Rainforest Action Network, Citigroup and Bank of America each made historic commitments to address the global warming issue both internally and within their finance portfolios. In January of 2004 Citigroup became the first private bank to commit to report the greenhouse gas emissions from the power sector projects in its project finance portfolio and they also pledged to identify additional investments in renewable energy and energy efficiency, which will help reduce emissions in activities funded by Citigroup.<sup>48</sup> Bank of America, the second largest U.S. bank, followed a few months later with unprecedented targets and timelines to reduce its greenhouse gas emissions and those associated with its investment portfolio by 7 percent by 2008.<sup>49</sup> In addition, Xanterra Parks and Resorts joined the WWF Climate Savers program, committing to reduce carbon dioxide emissions 10 percent below 2000 levels by 2015. Xanterra is the country's largest park and resort management company and has also pledged to reach out to their customers of families and outdoor enthusiasts on the issue in state and national parks across the country.

### Benefits to the Bottom Line

These early actors recognize that by taking actions now to reduce emissions from their products, in their processes, and from upstream sources, they will be at an advantage when it comes to identifying methods to comply with future regulations and many have found it is good for the company's bottom line and helps them position themselves as leaders in the emerging market for low emissions technologies. Belying the claims of the Bush Administration and Congressional nay-sayers that meaningful climate action must harm the U.S. economy, companies report that improved practices when it comes to energy management, product portfolio changes, and facility and process design are saving them millions of dollars. For example, over a 12-year period, IBM cut 11.3 billion kilowatt hours of electricity, avoided 7 million tons of CO<sub>2</sub> emissions, and saved \$660 million in expense (equivalent to 69 percent of 2001 dividends paid to IBM shareholders).<sup>50</sup> Johnson & Johnson's investments in energy conservation and implementation of the company's

---

<sup>48</sup> Citigroup Environmental Policy. January 22, 2004.

[http://www.ran.org/ran\\_campaigns/global\\_finance/citi\\_victory\\_policy.html](http://www.ran.org/ran_campaigns/global_finance/citi_victory_policy.html)

<sup>49</sup> Bank of America Maps New Climate Change, Forest Policies. Environmental News Service. May 18, 2004 .

<sup>50</sup> IBM. 2003. *Energy Management and Climate Savers Program @ IBM Corporation*. Proceedings of Annual Climate Savers Conference. March 12, 2003, Washington, DC.

Enhanced Best Practices have resulted in \$22 million annual savings for the company.<sup>51</sup> DuPont has cut its greenhouse gas emissions by 65% since 1990, saving hundreds of millions of dollars in the process. And BP has achieved a 10% reduction in emissions and saved \$650 million in three years.<sup>52</sup> And telecommunications giant Verizon saved more than \$60 million over three years after a one-time \$25 million investment – and continues to pocket tens of millions in energy costs savings annually<sup>53</sup>

It is important to note that small- to medium-sized corporations have also realized the bottom-line benefits to action on global warming. Shaw's Supermarkets, the second-largest grocery chain in New England, for instance, saves more than \$3.7 million annually thanks to a chain-wide, integrated program of energy efficiency upgrades, monitoring, and equipment innovation – the equivalent of selling \$150 million in groceries. And a small injection-molding company, Harbec Plastics, in Ontario, New York, is gaining a national reputation as a leader in energy efficiency, technology, and renewable energy innovation.<sup>54</sup>

### University Action

In addition to businesses, a number of colleges and universities have taken leadership roles in this effort.<sup>55</sup> Actions by institutions such as the University of New Hampshire, Tufts, and Yale, for instance, include creation of campus initiatives dedicated to reducing CO<sub>2</sub> emissions as a part of the institutions' sustainability efforts. Colleges like Middlebury and Skidmore have implemented both campus-wide GHG reduction programs and academic programs focusing on climate change and the environment. Colby College won an EPA Environmental Merit Award in April of 2004, highlighting it as a leader among the scores of institutions that have instituted aggressive energy efficiency, green building, transportation management, and conservation efforts to reduce emissions while serving as models for action by other institutions and communities.

### The Need for Mandatory Controls

While these success stories are encouraging, it is clear that voluntary business efforts will simply not be sufficient to make the emissions reductions needed to stabilize atmospheric carbon concentrations at safe levels. Despite the promotion of an extensive array of voluntary programs by the Environmental Protection Agency and non-governmental organizations, over the past decade emissions within the United States climbed approximately 14 percent. It is clear that mandatory emissions limits are the only way to send a strong market signal that will ensure that enough U.S. companies make the changes necessary to move forward to a low-emissions future. Five U.S. Power Companies have recognized this need and combined voluntary commitments with stated support for mandatory carbon constraints. In WWF's PowerSwitch! Program, Austin Energy, Burlington Electric Department, FPL Group, Sacramento Municipal Utility District, and Waverly Light and Power became the first U.S. power companies to support a mandatory cap on CO<sub>2</sub> emissions and also committed to improving performance through concrete efficiency and/or renewables commitments. FPL Group, for instance, which is one of the largest U.S. power companies, committed to increasing energy efficiency in its power generation facilities by 15% in addition to enhancing its demand side management programs.

---

<sup>51</sup> Johnson & Johnson. 2003. *Climate Savers Greenhouse Gas Update*. Proceedings of Annual Climate Savers Conference. March 12, 2003, Washington, DC.

<sup>52</sup> Global Warming: Consensus is Growing among scientists governments, and business that they must act fast to combat climate change. Business Week Cover Story. August 16, 2004.

<sup>53</sup> See <http://cleanair-coolplanet.org/information/pdf/verizon.pdf>

<sup>54</sup> See [http://cleanair-coolplanet.org/information/pdf/Harbec\\_case\\_study.pdf](http://cleanair-coolplanet.org/information/pdf/Harbec_case_study.pdf)

<sup>55</sup> More information available at [http://www.cleanair-coolplanet.org/for\\_campuses.php](http://www.cleanair-coolplanet.org/for_campuses.php)

In addition, even some of the largest power companies that have traditionally been opposed to action against climate change are beginning to prepare for emissions limits instead of denying the problem. In a report requested by shareholders and released in August of 2004, American Electric Power analyzed the potential effects of global warming regulations on its operations. AEP is America's largest electric power generator and the largest emitter of carbon dioxide among electric generation owners, relying heavily on coal. AEP's report says "enough is known about the science and environmental impacts of climate change for us to take actions to address its consequences." In addition, the report points out the need for regulatory certainty and the efficiency benefits of a cap and trade program and finds the costs of the Climate Stewardship Act currently before Congress to be manageable.<sup>56</sup> Similarly, in a shareholder report released December 1, 2004, another of the nation's largest electric power companies, Cinergy Corp., endorsed the idea of a national greenhouse gas cap and stated that such a cap would not hurt their bottom line. The report calls the Climate Stewardship Act "a promising sign" and says that Congress should act to limit carbon dioxide emissions to "take the unnecessary uncertainty out of national environmental policy."<sup>57</sup> While there is still significant opposition to action within much of U.S. industry, these statements and the recent wave of commitments within the U.S. business community represent a significant shift in industry's response to the global warming issue and indicate movement within a constituency that is critical to any political solution.

---

<sup>56</sup> An Assessment of AEP's Actions to Mitigate the Economic Impacts of Emissions Policies. American Electric Power. [www.aep.com/environmental/performance/emissionsassessment/docs/FullReport.pdf](http://www.aep.com/environmental/performance/emissionsassessment/docs/FullReport.pdf)

<sup>57</sup> Cinergy Backs U.S. Emissions Cap. Jeffrey Ball and Antonio Regalado. The Wall Street Journal. December 2, 2004. and Cinergy voices support for greenhouse gas cap. Matthew Dalton. Dow Jones Newswires. December 1, 2004

## **2.0 BUSH CONTINUES TO OPPOSE PROGRESS AND FAKE ACTION**

The U.S. administration would like the world to believe that it can be a responsible partner in international efforts to address global warming, despite having turned its back on the world by pulling out of the Kyoto Protocol. However, the fact is that U.S. emissions are up 16 percent since 1990 and the current administration is doing nothing to reverse that trend. The Bush Administration methodically emphasizes scientific uncertainties, but ignores the urgent need to begin reducing emissions now. It adopts lofty goals to develop the technologies of the future, but fails to support the deployment of the climate-friendly technologies we have today. Most importantly, the Bush administration strongly opposes any legislation that would place mandatory limits on U.S. heat-trapping gas emissions, and promotes an energy policy heavily skewed toward conventional fossil fuel energy sources. These policies will dramatically increase U.S. contributions to global warming and will make it harder to implement reduction policies in the future.

Since the withdrawal from Kyoto, the administration has attempted to mask its fundamental hostility towards real action on global warming with several initiatives that are nothing more than an attempt to appear to be taking the issue seriously. Upon examination of those initiatives, it is evident that they constitute a collection of inadequate, misleading, and even counterproductive policies that are far from answering the call for responsible climate action by the United States, the world's largest emitter of global warming gases.

Members of the Bush Administration are traveling the world touting their Climate Change Science Plan (CCSP) and promoting programs that support what it deems as "climate-friendly" technologies. However, these initiatives are simply designed to draw attention away from the administration's indefensible inaction on real policies to curtail emissions. The initiatives proposed by the President focus almost exclusively on research and development. Programs such as the CCSP and funding for geological sequestration and hydrogen fuel research are not looking to produce results for ten to twenty years, thereby using research as an excuse for inaction. The science planning program is in direct conflict with the administration's efforts to obscure the science of global warming. Similarly, the technology programs are not linked to the policy drivers that are necessary to achieve their deployment and the administration has even opposed some of those drivers that have been proposed in Congress. The long time frame and the lack of a policy commitment to effect the changes envisioned make these programs more a form of delay than a real attempt to solve the problem at hand.

Other initiatives presented by the administration are misleading, claiming to be taking real action, when in fact they only maintain the status quo. The greatest example of this is President Bush's voluntary 18 percent greenhouse gas intensity target. The misleading intensity target looks like meaningful progress, but in fact is only a continuation of past U.S. emissions trends and will allow U.S. emissions to increase 32 percent above 1990 levels by 2012. The administration is also claiming credit for implementing programs that were already in place when they took office. These claims are intended to mislead the American public and the international community into thinking that real action is being taken, while the administration works behind the scenes to perpetuate dependence on fossil fuels, and resulting increases in U.S. emissions.

Perhaps most important are the Bush Administration's counterproductive stances on specific policies. The President has actively opposed policies both in the Congress and in individual states that would have begun to make positive progress in decreasing U.S. emissions of greenhouse gases. Even more damaging have been the administration's energy and air pollution

policies, driven by the secret deliberations of Vice President Cheney's Energy Task Force. These policies will encourage continued operation of obsolete coal-fired power plants and the development of additional fossil fuel capacity in the U.S., making it more difficult to address global warming in the future.

In analyzing the major global warming-related positions and policies adopted by the Bush administration since taking office, this section of the report aims to reveal President Bush's true record. False promises, lofty research goals, and counterproductive actions are no substitute for real reductions in global warming pollution. Scientific realities and American public opinion demand that the President stop faking action and begin to take responsible steps to reduce U.S. emissions of global warming pollution.

## **2.1 International Disengagement**

### **Kyoto Protocol**

In March 2001 the Bush administration pulled the U.S. out of the Kyoto Protocol, citing lack of participation by developing countries and harm to the U.S. economy. After this withdrawal, the Bush Administration refused to put forth a meaningful alternative, effectively removing the U.S. from international discussions on global warming. Despite this attempt to kill the only international mechanism to address global warming, the international community came together in Bonn, Germany in July of 2001 and agreed to move forward to ratify and implement the treaty. On February 16<sup>th</sup>, 2005, that commitment will be realized with the historic entry into force of the Kyoto Protocol.

President Bush based his rejection of the treaty on several seriously flawed arguments. The claim that developing countries do not participate is not only inaccurate, it is morally reprehensible. The United Nations Framework Convention on Climate Change (UNFCCC) requires all countries, including developing countries, to establish programs to address greenhouse gas emissions and to report on progress. It, however, also calls upon developed countries to take the lead in making reductions, given their greater responsibility for the problem and capability to solve it. Developed countries, while they only represent 25% of the world's population, are responsible for more than 75% of accumulated global warming pollution emitted into the atmosphere to date. This translates into significant inequities in the level of development and the health and standard of living of individuals. The average person in India, for example, uses less electricity in a year than the average American uses every two weeks. Despite these disparities, many developing countries have made progress in reducing the greenhouse gas emission rates from their economies through improved transport, forestry and other policies. This, while U.S. emissions have increased 16% since 1990. It is morally bankrupt to argue that the United States should refuse to take additional action until the world's poor countries take the same action. Additionally, the Bush Administration fails to acknowledge that the Kyoto Protocol would, in itself, lead to the development, deployment, and transfer to developing countries of clean energy technologies. Those technologies would ensure that as these countries grow, they would do so by building the sustainable, clean infrastructures needed to curb their emissions in the future.

The Bush Administration has provided no serious analysis to substantiate its claim that the Kyoto Protocol would seriously harm the U.S. economy. The only study the President relied upon was a report by the Energy Information Administration, which failed to consider the obvious and inexpensive solutions presented by energy efficiency improvements and which ignored the Kyoto Protocol's flexible market mechanisms, which the United States had spent years negotiating.

Numerous other analyses have shown that it is possible to reduce greenhouse pollution to levels called for in the Kyoto agreement without harming the U.S. economy.<sup>58</sup>

## **U.S. Bilateral Agreements**

Since pulling out of the multilateral process, the Bush Administration has been organizing bilateral discussions with countries around the world. Since June 2001, the administration has met with 19 countries plus the European Union in an effort to increase cooperation primarily on science and technology. While international cooperation on research and technology and the sharing of experience and knowledge are important, these discussions are no substitute for and perhaps a distraction from the multilateral efforts to reduce global emissions. Among the developed countries, the U.S. is the only partner in these agreements that is not also committed to taking real action on emissions domestically. Even Australia has agreed to meet its Kyoto commitments even though it is no longer a Party to the treaty.<sup>59</sup> While technology assistance from the U.S. is essential to help developing countries shift toward a cleaner development path, it is disingenuous for the U.S. to offer to pay for minor changes abroad while refusing to take meaningful actions at home.

## **International Renewables Initiatives**

At the World Summit on Sustainable Development (WSSD) in August of 2002, the Bush Administration led the charge against a number of meaningful actions on renewable energy including:

- Renewable energy targets
- A target on providing clean and affordable energy services to the 2 billion without those services
- The phasing out of harmful subsidies on fossil fuel

To defeat these initiatives, the Bush Administration worked closely in alliance with OPEC countries, blocking a positive agenda by many European and developing countries for international targets on renewable energy and the provision of energy services.

In order to move beyond the watered-down renewables agreement reached at the WSSD, German Chancellor Gerhard Schroeder announced the organization of an intergovernmental conference in June of 2004 to prepare the ground for a global expansion of renewable energy. Over 3,000 participants and 154 countries attended the Renewables 2004 conference. While the Bush Administration was not as obstructionist as they had been at the WSSD, they did prevent some strong language on renewables from being included in the political declaration, and perhaps more importantly, their commitments in the International Action Programme were weak and contradictory with their positions on domestic renewables policy. In addition to continued technology research, the U.S. Department of Energy's primary commitment was to reduce the generating costs of geothermal, solar photovoltaic, and on and offshore wind to five, six, three, and five cents per kilowatt-hour respectively.<sup>60</sup> These goals are not, however, consistent with the administration's positions domestically. The greatest cost reductions achieved thus far on

---

<sup>58</sup> See, for example, U.S. DOE, *Scenarios for a Clean Energy Future*, November 2000.  
[http://www.ornl.gov/ORNL/Energy\\_Eff/CEF.htm](http://www.ornl.gov/ORNL/Energy_Eff/CEF.htm)

<sup>59</sup> Australian Emissions Trading Forum, Background and Objectives,  
<http://www.aetf.net.au/topics.html?DocumentName=ForumBG.html>

<sup>60</sup> World Governments Commit to Increase Renewable Energy Use. DOE Office of Energy Efficiency and Renewable energy, June 2004.

renewable energy have been driven by government policies that create a market for these technologies and the Bush Administration has opposed a federal renewable energy standard citing economic harm.<sup>61</sup> Twelve U.S. states also attended the conference, many of whom have established state renewable standards. John Geesman, Chairman of the California Energy commission even expressed embarrassment at the U.S. delegation's performance.<sup>62</sup> That embarrassment is particularly understandable when one compares the U.S. commitments to those made by developing countries such as China, which pledged to expand renewable energy to 10% of its generating capacity by 2010, and the Philippines, which committed to doubling renewable energy use by 2013.<sup>63</sup>

## **2.2 Bush Administration Global Warming Policies and Programs**

### **President Bush's Global Warming Plan**

President Bush's voluntary global warming plan announced on February 14, 2002, will let emissions of heat-trapping pollutants continue growing at the same rate they have grown over the last 10 years. The president's proposal uses the misleading goal of an 18 percent improvement in emissions intensity to disguise the fact that overall global warming pollution will increase, not decrease. The Chairman of the White House Council on Environmental Quality admitted this fact in testimony before the U.S. Senate in July of 2002, saying, "greenhouse gas emissions will rise under our approach, no question about that." Under the president's plan, U.S. emissions in 2012 will be 32 percent above 1990 levels and still rising.<sup>64</sup>

In the decade from 1990-2000, U.S. emissions intensity (defined as the ratio of total global warming pollution to total gross domestic product) decreased by 17.4 percent. Over that same decade, the U.S. economy grew by nearly 40 percent, and total U.S. emissions grew by over 14 percent.<sup>65</sup>

The Bush plan simply calls for a continuation of the status quo. It sets a completely voluntary target to maintain exactly the same rate of improvement in emissions intensity as over the last decade-- another 17.5 percent reduction by 2012. (The plan sets a target of reducing from today's level of 183 metric tons of global warming pollution per million dollars of gross domestic product (GDP) to 151 metric tons by 2012 -- a 17.5 percent change -- and then rounds this number up to 18 percent.)<sup>66</sup> However, over the same period, the Bush plan forecasts another 38 percent increase in GDP. So emissions will increase once again by 14 percent from 2002 to 2012 -- the

---

<sup>61</sup> Letter to Chairman Billy Tauzin, House-Senate Conference on H.R. 4, from Energy Secretary Abraham. June 27, 2004.

<sup>62</sup> Worldwatch In Action: Special Report on the International Conference for Renewable Energies; Renewables2004 Concludes Successfully in Bonn. June 2004.

<sup>63</sup> INFORSE Welcomes the Outcome of the Bonn Renewables2004 Conference, but Insists that Countries Must Strive Harder to Reach Sustainable Development in Energy. INFORSE Press Release. June 9, 2004.

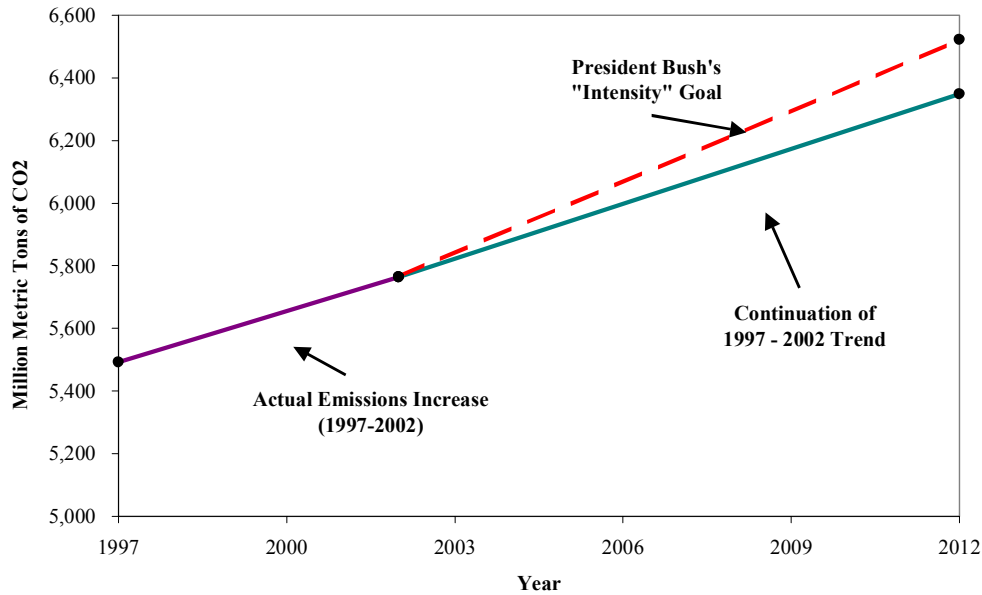
<sup>64</sup> RIVM (2002). Evaluating the Bush Climate Initiative. <http://www.rivm.nl/bibliotheek/rapporten/728001019.html>

<sup>65</sup> World Resources Institute (2002). Analysis of Bush Administration Greenhouse Gas Target, February 14, 2002. [http://www.wri.org/pdf/analysis\\_bush.pdf](http://www.wri.org/pdf/analysis_bush.pdf)

<sup>66</sup> White House (2002). Global Climate Change Policy Book. <http://www.whitehouse.gov/news/releases/2002/02/climatechange.html>

same percentage as the last decade.<sup>67</sup> Looking at the more recent trend in emissions, this plan would even allow more global warming pollution at a faster rate than if we simply continue the pollution trend of the past five years (see graph).<sup>68</sup> Even by the administration's own assessment, the plan will reduce emissions from business-as-usual by only 106 million metric tons of Carbon (MMTC) in 2012, a fraction of the amount needed to stabilize or reduce emissions relative to current levels. Cumulative emissions through 2012 are estimated to be less than 2 percent below business-as-usual.<sup>69</sup>

### U.S. Carbon Dioxide Emissions from Energy



Besides having a weak target, the Bush plan is also highly unlikely to make a difference because it is voluntary, involves almost no new programs, and has no mechanism for reviewing interim progress before 2012. The U.S. has had a voluntary approach for the last decade, during which time emissions rose 14 percent. There is no reason to believe that continuing a voluntary approach will be any more successful. An evaluation by the Government Accounting Office (a research agency run by the U.S. Congress) found that only 3 of the 30 elements of the plan contained emission reduction projections and had been initiated since the inception of the program. The review found that the plan was little more than business-as-usual, stating that of the 18 percent intensity reduction goal, 14 percent would occur anyway, “absent any new (Bush administration) policy.”<sup>70</sup>

<sup>67</sup> WRI (2002); Natural Resources Defense Council (2002), Untangling the Accounting Gimmicks in White House Global Warming, Pollution Plans. <http://www.nrdc.org/globalWarming/agwcon.asp>

<sup>68</sup> National Wildlife Federation, Beneath the Hot Air: Government Data Expose the Truth Behind President Bush's Global Warming Plan, June 2003. [www.nwf.org/climate/](http://www.nwf.org/climate/)

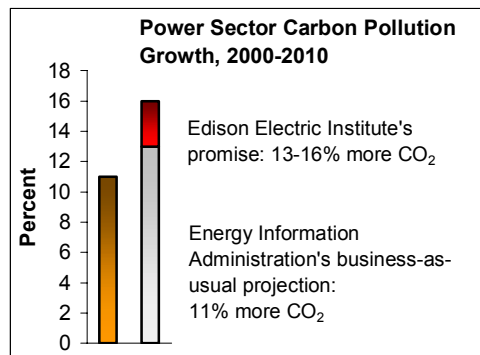
<sup>69</sup> GAO (2003) at page 4.

<sup>70</sup> GAO (2003). Preliminary Observations on the Administration's February 2002 Climate Initiative, Testimony before the U.S. Senate Commerce Committee, October 1, 2003. Page 7. <http://commerce.senate.gov/pdf/stephenson100103.pdf>

## Climate VISION

In order to achieve this inadequate intensity goal, the President is relying largely upon voluntary industry commitments, through his Climate VISION initiative. Upon the launch of this program on February 12, 2003, industries from various sectors of the U.S. economy announced commitments to reduce their greenhouse gas intensity over the next decade, but these commitments were often less than even business as usual and fall short of achieving even the president's 18% intensity goal. The electricity sector, for example, has undertaken one of the few quantified voluntary targets, aiming to reduce its greenhouse gas intensity by 3 to 5 percent (measured per kWh generated).<sup>71</sup> However, this intensity reduction would let emissions increase by 13 to 16 percent between 2000 and 2010, even more than the 11 percent growth forecast by the Energy Information Administration.<sup>72</sup> Sadly, this voluntary "target" would allow emissions to increase even more than that forecasted under President Bush's own plan.

Even with these inadequate goals, implementation of this program has been stalled. An April 2004 press report found that more than a year after the announcement was made, most of the covered sectors had failed to develop concrete plans as to how they will comply. At that point, of the 12 sectors involved only one had developed a work plan. In addition, the majority of the trade associations that negotiated the weak targets have no requirements that their members comply. The voluntary approach has failed to reduce U.S. emissions over the last decade, and this program is only further evidence that mandatory controls are needed for any real global warming plan to be effective. But, as catalogued below, President Bush has opposed even the most modest attempts at developing a mandatory approach.



### 2.3 Carbon Dioxide Regulation and Registry

In virtually every instance that the current U.S. Administration has had an opportunity to take even minimal action to begin to address the problem of global warming, they have failed. Time and again, and measure after measure, the Bush Administration has chosen instead to refuse to deal with the issue, or worse, to fake action. When others have chosen to lead – the U.S. Congress, states, or municipalities – they have consistently opposed these actions, and instead pointed to their all-voluntary plan to increase heat-trapping gas emissions, to the detriment of the

<sup>71</sup> US EPA (2003). Meeting President Bush's Climate Challenge to Business and Industry. [http://www.epa.gov/newsroom/factsheet\\_021203.htm](http://www.epa.gov/newsroom/factsheet_021203.htm)

<sup>72</sup> Compare, Edison Electric Institute (2002), EEI, Industry Allies Launch Power Partners to Support President Bush's Climate Initiative, <http://www.eei.org/issues/news/releases/030212.htm>, with Energy Information Administration (2003), Annual Energy Outlook 2003, Reference Case Forecast, Table 19.

U.S. public, the environment, and the world. Below are some specific instances highlighting the Bush Administration's intransigence on federal greenhouse gas regulations, and a nationwide greenhouse gas registry – neither of which is in place in the U.S.

### **White House Opposition to the McCain/Lieberman Climate Stewardship Act**

When the Climate Stewardship Act came to the floor of the Senate for a vote on October 30, 2003, the White House issued an official statement opposing its passage. The bill would have mandated U.S. global warming pollution reductions to 2000 levels by 2010, utilizing a market-based trading program to allow for the most efficient emissions reductions to be achieved.

An economic analysis of the McCain/Lieberman bill, completed by the Massachusetts Institute of Technology (MIT), a highly-respected U.S. academic institution, showed it would have minimal impacts on the U.S. economy, costing only \$20 per household per year. The Bush Administration cited numerous reasons for opposing the measure, but most were inaccurate or disingenuous, at best. For example, they cited findings from at least two economic analyses that were unrelated to the bill that was voted on; they stated that the measure was “similar to what would be required to implement the Kyoto Protocol”, though that was clearly not the case (Kyoto would mandate U.S. emissions to 7 percent below 1990 levels); and said it would require “deep and immediate cuts in fossil fuel use, with significant negative economic impacts, in order to meet an arbitrary greenhouse gas emissions target.” However, the MIT analysis of the bill showed that there would be no such dramatic cuts in fossil fuel use, and minimal economic impacts, and even possible positive impacts to the economy, from the bill.

Ironically, the Bush Administration stated there was no need for action on global warming beyond its own voluntary emissions increasing plan, which it described as an “ambitious goal to reduce the greenhouse gas intensity of the American economy by 18 percent by 2012” – a goal that actually increases net greenhouse gas emissions.

### **Bush Administration Decision not to Regulate Carbon Dioxide as a Pollutant**

In October, 1999, several groups filed a legal petition with the Environmental Protection Agency (EPA) demanding that the agency regulate automobile emissions of carbon dioxide and other heat-trapping gases under the Clean Air Act. The petitioners argued that under the Clean Air Act, carbon dioxide (CO<sub>2</sub>) and other heat-trapping gases are air pollutants that can reasonably be anticipated to harm public health and welfare, and that because these air pollutants are released from motor vehicles, the EPA is required to take action to reduce these emissions.

In August, 2003, the Bush administration issued a notice denying the petition, arguing that Congress had not granted EPA authority under the Clean Air Act to regulate CO<sub>2</sub> and other heat-trapping gases for global warming purposes; and that the EPA had determined that setting GHG emission standards for motor vehicles was “not appropriate at this time,” pointing instead to the administration's voluntary greenhouse gas reduction measures.

In October of 2003, twelve U.S. states, joined by several cities and environmental groups, filed a legal appeal challenging the Bush Administration's decision on the issue.<sup>73</sup>

---

<sup>73</sup> See Section 1.7 above for more information.

## **Carbon Dioxide from Power Plants**

Given that the president made a campaign pledge to regulate carbon dioxide from power plants – a pledge he abandoned just 53 days after taking office – this is perhaps the most egregious of Bush's actions on the issue of global warming. In lieu of a plan to regulate carbon emissions from power plants, the Bush Administration is promoting a plan, deceptively called the Clear Skies Initiative, which weakens existing Clean Air Act controls on three power plant pollutants (sulfur dioxide, mercury, and nitrous oxide), and which fails to cap the carbon dioxide emissions that are driving global climate change.

Under this Clear Skies Initiative, the amount of coal burned by electric power companies would increase by 7.3%, according to an analysis by the Environmental Protection Agency. This translates to an increase of 79 million tons of coal, with the associated increases in CO<sub>2</sub>, between now and 2020.<sup>74</sup>

While since proposing the Clear Skies Initiative the Bush Administration has been unable to move it through Congress, the White House, EPA, and Council on Environmental Quality have each stated that their number one environmental goal for the next 16 months is to pass Clear Skies legislation. The success thus far in blocking Clear Skies has been viewed as a repudiation of Bush's lack of action on climate issues, but changes in Congress since the election will make that effort more difficult. Failure to stop Clear Skies would greatly hamper the efforts to achieve US domestic action on global warming.

## **Nationwide Greenhouse Gas Emissions Registry**

Despite the Bush Administration's self-ascribed support for 'all-voluntary' policies to address global warming, they were adamantly and vocally opposed to the creation of a voluntary nationwide greenhouse gas emissions' registry during debate of the energy bill in 2002. The registry, sponsored by a bipartisan group of Senators, was crafted so that only those emitters producing more than 10,000 metric tons of carbon equivalents annually would be voluntarily obliged to report their emissions. It contained a provision that would make the registry mandatory for emitters above this same threshold only if, after five years in place, fewer than 60 percent of U.S. emissions were registered.

The registry was viewed by most members of the U.S. Senate as a minimal provision for credible, transparent global warming policies of any nature – voluntary or otherwise – which would establish the information systems, measurement and accounting standards, and baseline protections necessary to provide an incentive to U.S. businesses to measure and reduce their emissions. The Bush Administration actively opposed the measure. Despite this opposition, the measure was unanimously adopted by the Senate in 2002. Unfortunately (for that particular provision), though the bill passed the Senate that year, it never made it through final House and Senate deliberations, and thus died when the Congress adjourned at the end of that year. In a curious twist, the Senate in 2003 again adopted the entire energy bill as passed in 2002 – including the nationwide greenhouse registry opposed by the administration – but the climate change provisions were immediately stripped by its opponents, and were not included in the final energy package that was considered and again blocked by the Senate at the conclusion of the 2003 Congressional session.

---

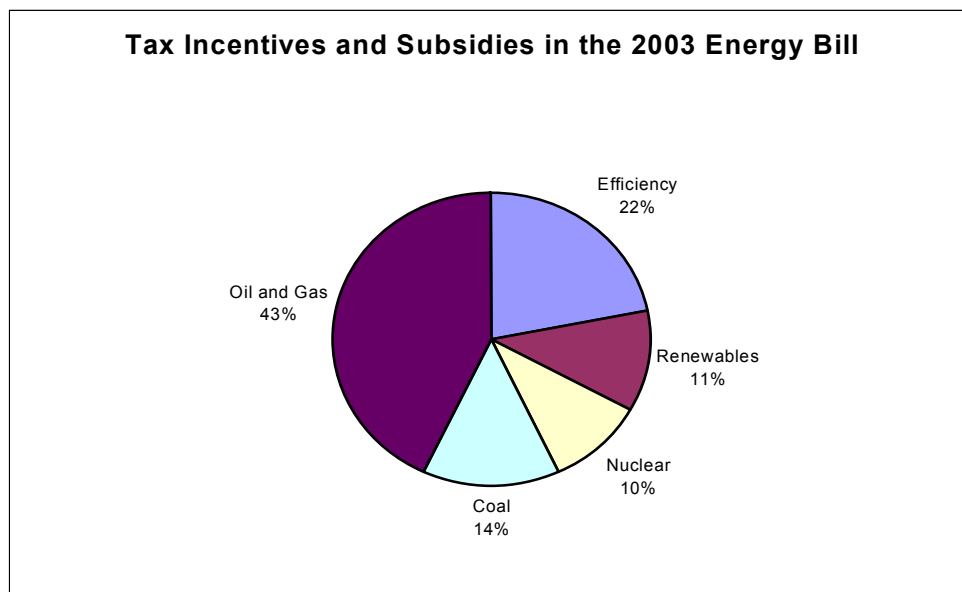
<sup>74</sup> Natural Resources Defense Council, *Bush clean air plan would boost coal use*, April 17, 2002. [http://nrdc.org/bushrecord/airenergy\\_powerplants.asp#559](http://nrdc.org/bushrecord/airenergy_powerplants.asp#559)

## 2.4 Energy Policies

### **National Energy Policy**

The energy policies proposed by the Bush administration have consistently promoted fossil fuel exploration and production, ignoring or erecting barriers to renewable technologies and worsening global climate change. The Bush Administration's first energy bill proposal, presented on May 21, 2001, gave the fossil fuel and nuclear energy industries billions of taxpayer dollars in subsidies. It was predicted that the plan would accelerate CO<sub>2</sub> emissions, increasing the cumulative amount of CO<sub>2</sub> output by 40 billion tons by the year 2020, a growth of 35 percent.<sup>75</sup>

After a failed attempt in 2002, the energy bill emerged from the closed-door negotiations of the Congressional Conference in November 2003 with full Bush Administration support. This bill is a collection of subsidies, tax breaks, and loopholes benefiting big energy companies that would cost consumers and taxpayers billions of dollars, while threatening their health and environment. The energy bill gives more than \$37 billion in tax incentives and subsidies to the oil, nuclear, and coal industries, more than twice the amount allocated for renewable energy and energy efficiency. Overall, dirty energy sources would receive nearly six times as much as clean sources such as wind, geothermal, and solar (see chart).<sup>76</sup> The Bush administration and the Republican Congress have given the fossil fuel industries control of America's energy policy, at a cost of billions of dollars to taxpayers, missed opportunities for job creation, and billions of tons of additional global warming pollution. The energy bill was blocked by filibuster in the Senate at the end of 2003, but it remained a priority for the administration throughout 2004 and a version will likely reemerge in the new Congress in 2005.



<sup>75</sup> Natural Resources Defense Council, *Slower Costlier and Dirtier: A Critique of the Bush Energy Plan*, May 2001.

<sup>76</sup> U.S.PIRG, *Energy Bill Gives Away Twice the Subsidies and Tax Breaks to Dirty Energy Sources as Clean Energy and Efficiency Programs*, November 20, 2003.

## Opposition to Promotion of Renewable Energy

In the negotiations on the U.S. energy bill, the Bush Administration joined with several utilities in opposing a provision that would have required power companies to produce 10% of their energy from renewable sources by 2020, quadrupling the amount of clean energy produced in the United States. In 2002 and 2003, the U.S. Senate passed this provision for a Renewable Energy Standard (RES), which has been successfully demonstrated in numerous states including Texas. It was, however, removed from the final energy bill that emerged from the Republican-controlled Conference Committee in 2003.

In a letter to Congress, Energy Secretary Spencer Abraham states that the administration opposes the RES because it could raise consumer costs.<sup>77</sup> Two analyses by the Department of Energy's own Energy Information Administration, however, found that this RES would have virtually no impact on electricity prices and could save consumers as much as \$13.2 billion.<sup>78</sup> In addition to consumer savings, renewable energy would bring significant economic and environmental benefits. By 2020, the RES would produce \$18 billion in new capital investment and reduce about 38 million metric tons of carbon emissions a year.<sup>79</sup>

In addition to opposing this significant step forward in renewable energy production, the Bush-supported energy bill also takes steps backward from current policies on renewable energy. It would repeal the provisions in current law that require utilities to purchase renewable energy when it is cheaper than other sources. In addition, it would erect a new barrier for renewable energy generators by providing priority access to transmission lines to older, polluting sources rather than newer, cleaner ones. Another policy that promoted renewable energy was a provision of the 2002 Farm Bill that provides loans, loan guarantees, and grants to farmers, ranchers, and small rural businesses for renewable energy and energy efficiency projects. While the legislation provides \$23 million per year in mandatory funding for that program, the administration's budget requested less than half of that suggesting the full amount could not be spent.<sup>80</sup> In the final Congressional appropriation agreed in November 2004, legislators disagreed with the administration and provided full funding.

## Energy Efficiency

In May of 2002, the Bush administration weakened a major efficiency standard for air conditioners. The new standard would have eliminated one-third of the energy savings that had been expected by 2006 under the previous regulation. This reduction in efficiency translates to the need for 48 new power plants by 2020.<sup>81</sup> Environmental and consumer groups, along with ten

---

<sup>77</sup> Letter to Chairman Billy Tauzin, House-Senate Conference on H.R. 4, from Energy Secretary Abraham. June 27, 2004.

<sup>78</sup> Energy Information Administration, *Impacts of a 10-Percent Renewable Portfolio Standard*, SR/OIAF/2002-03, February 2002. [www.eia.doe.gov/oiaf/servicerpt/rps/pdf/sroiaf\(2002\)03.pdf](http://www.eia.doe.gov/oiaf/servicerpt/rps/pdf/sroiaf(2002)03.pdf). Energy Information Administration, *Analysis of a 10-Percent Renewable Portfolio Standard*, SR/OIAF/2003-01, May 2003. [www.eia.doe.gov/oiaf/servicerpt/rps2/pdf/sroiaf\(2003\)01.pdf](http://www.eia.doe.gov/oiaf/servicerpt/rps2/pdf/sroiaf(2003)01.pdf).

<sup>79</sup> Union of Concerned Scientists, *Renewing Where we Live*, September 2002. [www.ucsusa.org/clean\\_energy/renewable\\_energy/page.cfm?pageID+999](http://www.ucsusa.org/clean_energy/renewable_energy/page.cfm?pageID+999).

<sup>80</sup> FY 2005 Proposed Budget for Energy Efficiency Programs: Overall funding cut slightly for third year in a row. Alliance to Save Energy Fact Sheet, February 2004

<sup>81</sup> Natural Resources Defense Council, Bush administration rolls back air conditioner efficiency standards, May 23, 2002. [http://nrdc.org/bushrecord/airenergy\\_renewables.asp#585](http://nrdc.org/bushrecord/airenergy_renewables.asp#585)

states filed a lawsuit claiming the administration acted illegally in reversing the standard already issued by the previous administration. On January 13, 2004, the U.S. Court of Appeals for the Second Circuit reversed the Bush Administration rollback, reinstating the standard. As a result of this court decision, 51 million metric tons of carbon will be avoided (the equivalent of taking 34 million cars off the road for one year).<sup>82</sup>

In addition, the Bush Administration's history of budget requests on energy efficiency programs indicates that even these marketplace-friendly, cost effective programs are subject to the President's cuts. In his first budget request to Congress covering the 2002 fiscal year, President Bush proposed a 35% cut in the Department of Energy's energy efficiency and renewable energy research and development budget. For the 2003 fiscal year, the President learned from his past criticisms and only proposed a 1% decrease in the overall energy efficiency budget. But, for 2004, the same budget was cut by \$35 million.<sup>83</sup> This latest decrease was accompanied by an increase in funding of research into fuel cell vehicles, but such a tradeoff shortchanges technologies and programs proven to be effective in favor of long-term research, which may or may not pay off in the coming decades. Similarly, in the 2005 request, while the overall amount is roughly flat with that of the previous year, major funding shifts within the budget again indicate the administration priority of long-term research over short-term reductions. A significant increase in funding of fuel cell vehicles research hides reductions of 17% in programs including equipment standards, state energy programs, and federal energy management programs.<sup>84</sup> These cuts have been made despite many administration studies detailing the significant economic and environmental benefits of efficiency programs.

## **2.5 Climate Change Science and Information Provision**

### **Climate Change Science Plan**

In July of 2003, the Bush administration released its strategic plan to research global warming. The report, released by the Climate Change Science Program, called for increased research into climate science to help resolve the "uncertainty" surrounding global warming. The ten-year plan to study the impacts of human activity and natural processes on the Earth's climate is intended to coordinate the research efforts of thirteen federal agencies.

The danger of the Bush Administration's proposal is that while the research on uncertainties and natural variability continues, the window of opportunity to avoid dangerous climate change is closing. Most of the research called for in the plan is directed at refining scientific understanding of global warming, while downplaying all that is already agreed upon by the Intergovernmental Panel on Climate Change and a broad consensus of the scientific community. The plan consciously ignores the U.S. "Climate Action Report," which concludes that global warming poses a severe threat to the United States. In addition, the plan almost entirely avoids research on the need to reduce greenhouse gas emissions, the consequences and costs of delay, or the

---

<sup>82</sup> Administration Rollback of Energy Standards Illegal: Air Conditioners Must Comply with 2001 Regulations. NRDC Press Release, January 13, 2004.

<http://www.nrdc.org/media/pressreleases/040113a.asp>

<sup>83</sup> Alliance to Save Energy analyses, available at: <http://ase.org/policy/budget/index.htm>

<sup>84</sup> FY 2005 Proposed Budget for Energy Efficiency Programs: Overall funding cut slightly for third year in a row. Alliance to Save Energy Fact Sheet, February 2004.

[http://www.ase.org/uploaded\\_files/policy/Budget%20Fact%20Sheet%20FY05%20b.pdf](http://www.ase.org/uploaded_files/policy/Budget%20Fact%20Sheet%20FY05%20b.pdf)

scientific advances that could help facilitate emissions reductions or support mitigation policy decisions. The National Research Council of the National Academies reviewed the final plan and in their report, released in February of 2004, they criticized the administration for not identifying sufficient funds for new initiatives. They also pointed out that one of the biggest weaknesses in the plan was the lack of references to existing research examining the potential impacts across the United States, particularly the 2001 National Assessment.<sup>85</sup>

A complete plan would not only study the science of climate change, but would also direct efforts towards reducing carbon emissions, promoting renewable energy, and developing policies that reduce our impact on global warming with minimal harm to the economy. Even if the program concludes that the threat of global warming is very real, its failure to explore solutions to the problem over the next ten years will leave us no better prepared to deal with global warming in the future. A much more comprehensive approach is needed.

### **U.S. National Communication**

In May 2002, the Bush Administration produced the “Climate Action Report,” the Third National Communication as required under the UNFCCC. This report, that was quietly sent to the UN, represented a significant policy shift for the administration by including a strong recognition that the problem of global warming is primarily caused by heat-trapping gas emissions from human activities. But, shortly after its release, both the President and then EPA Administrator Christie Todd Whitman distanced themselves from the report. President Bush dismissed this report as being a “report put out by the bureaucracy,” when in fact it had been produced by members of his own administration, including the EPA, White House Council on Environmental Quality, and the State Department, among others. Administrator Whitman then indicated that she was unaware of the report until she read about it in the newspaper. The administration then submitted a revised version of the report to the UNFCCC, adding a section pointing to uncertainties of the science before the original science portion.

Despite this confusion and denial by high-level officials, the “Climate Action Report” revealed that government scientists and Bush Administration officials clearly agree with the scientific and international communities that global warming is a severe problem, and it put the administration on the record as acknowledging that problem. Unfortunately, the policy choices made since the report’s release are more in line with the president’s denial.

### **Control and Censorship of Global Warming Research**

*“In more than three decades in government, I have never seen anything approaching the degree to which information flow from scientists to the public has been screened and controlled as it is now.”*

--James Hansen, Director of NASA Goddard Institute for Space Studies

The Bush Administration has asserted direct control over the scientific information that it allows to reach the public on climate change and many other issues. This pattern has involved selection or suppression of research findings to suit predetermined policies, weighted advisory panels,

---

<sup>85</sup> Panel Urges Bush to Finance Climate-Change Research. By ANDREW C. REVKIN. New York Times, February 18, 2004.

limited access to internal White House debates, suppression of discussion within federal agencies, and significant revisions in government reports and releases. As mentioned above, over 46,000 scientists have signed a statement criticizing the Bush Administration for its politicization of science. In two recent New York Times articles, many of these offenses to scientific integrity were revealed by several frustrated government scientists. Some changes involved edits to a headline or title of a press release in order to down play risks or definitiveness. On August 14, 2003, for example a National Oceanic and Atmospheric Administration (NOAA) press release on temperature trends was changed from “NOAA reports record and near-record heat in the West, cooler than average in the East, global temperatures much warmer than average” to “NOAA reports cooler, wetter than average in the East, hot in the West.”<sup>86</sup> Other examples of influence were more direct. James Hansen, Director of the National Air and Space Administration’s Goddard Institute for Space Studies claims that a senior administration official told him not to discuss dangerous consequences of rising temperatures. In a presentation of the dangers of climate change to NASA’s Administrator Sean O’Keefe in 2003, Dr. Hansen recalls that, “the administrator interrupted me; he told me that I should not talk about dangerous anthropogenic interference,” because of the uncertainties involved.<sup>87</sup>

### Selective Research

Perhaps most pervasive is the administration’s habit of selectively choosing research to suit a predetermined policy goal rather than on the basis of scientific soundness. When the president rejected his campaign promise to regulate CO<sub>2</sub> from power plants, for instance, he relied on one study by the Department of Energy that estimated high economic costs by assuming, among other things, that no technological innovation would occur. It was revealed in the New York Times article that the EPA on two separate occasions countered this analysis and expressed the view that the president should keep his pledge. An EPA memo dated March 7, 2001 says the EIA study “was based on assumptions that do not apply” and “inflates the costs of achieving carbon dioxide reductions.” In a second attempt to convince the president, a March 9<sup>th</sup> memo concluded “it is clear that global warming is an issue that must be addressed.” The President, however, ignored these assessments and the many other studies that found such regulation reasonable, and focused on the one study that supported his position.<sup>88</sup>

### EPA Report on the Environment

One of the most blatant efforts by the Bush Administration to distort the communication of important scientific information to the public came with a draft report released by the U.S. Environmental Protection Agency (EPA) in June 2003. The EPA’s *Draft Report on the Environment* was supposed to be the first comprehensive statistical overview of environmental problems facing the United States. But, in the section that was to address global warming, the Bush White House edited out widely held scientific analysis on the causes and effects of global warming.

In one of the clearest examples of such censorship, the sentence from the draft report, "Climate change has global consequences for human health and the environment" was cut by reviewers in the Bush White House and was replaced with "The complexity of the Earth system and the interconnections among its components make it a scientific challenge to document change,

---

<sup>86</sup> Bush vs. the Laureates: How Science Became a Partisan Issue. Andrew Revkin. New York Times, October 19, 2004.

<sup>87</sup> The Environment: NASA Expert Criticizes Bush on Global Warming Policy. Andrew Revkin. New York Times, October 26, 2004.

<sup>88</sup> Bush vs. the Laureates: How Science Became a Partisan Issue. Andrew Revkin. New York Times, October 19, 2004.

diagnose its causes, and develop useful projections of how natural variability and human actions may affect the global environment in the future.” Other deletions included the removal of conclusions of U.S. Government reports linking human activity with global warming and deletion of data showing marked temperature increases during the 1990s when compared with historic trends, replacing it instead with information from a study funded by the American Petroleum Institute.

In the face of this White House censorship, the EPA elected to delete the entire chapter on global warming, rather than include information that is not scientifically accurate. Since the draft report release, no final report has been issued, but the EPA has said it plans to address climate change in its next such report in 2006.<sup>89</sup>

### Our Changing Planet

In a pronounced shift from previous administration statements, an administration report to Congress on federal climate science research in August of 2004 includes conclusions that confirm the human influence on the climate and summarizes research showing that global warming is already having a significant effect on plants and animals and has contributed to the severe drought in the West. The Report entitled “Our Changing Planet” finally recognizes what scientists have been saying for years, but the administration was quick to point out that it has “no implications for policy.”<sup>90</sup> While the administration has made a small improvement by not dismissing the report (as it did with the National Communication) or editing it to reflect their position (as it did with the Report on the Environment), it is clear that despite the ever more convincing science, the administration is standing firm in its opposition to real action on the issue.

### **Arctic Climate Impact Assessment**

The Bush Administration’s influence on the flow of information on climate change is not limited to domestic or internal administration disputes. In the intergovernmental process to assess the impact of climate change on Arctic ecosystems and communities, the U.S. delegation has tried to steer the process away from strong statements on policy and attempted to delay the report of findings. The Arctic Climate Impact Assessment (ACIA) was commissioned in 2000 by the eight nations with Arctic territory, including the U.S. It was conducted by 250 scientists and found that rising temperatures have already eroded glaciers and melted sea ice and permafrost, impacting native Arctic communities and wildlife.

The strong impacts revealed further erode the administration’s argument for inaction and they have been active in the process to limit the report’s influence. It was revealed at a Senate hearing by a representative of the Inuit Circumpolar Conference that the administration was trying to suppress the policy recommendations that were mandated by the original international agreement on the production of the report. The State Department claimed there was not enough scientific evidence to develop detailed policy proposals, despite the four-year long scientific investigation. This spurred Senators John McCain, Olympia Snowe, and Frank Lautenberg to send a letter to Secretary of State Colin Powell calling on him to maintain the policy recommendations.<sup>91</sup> Once it was agreed that a policy document would be issued, the U.S. representatives were active in

---

<sup>89</sup> Powell Gets Earful on Arctic Warming Assessment Agreement. Andrew Freedman, Environment and Energy Daily. September 29, 2004.

<sup>90</sup> Administration Shifts On Global Warming. Juliet Eilperin. Washington Post. August 27, 2004.

<sup>91</sup> Powell Gets Earful on Arctic Warming Assessment Agreement. Andrew Freedman, Environment and Energy Daily. September 29, 2004.

weakening that document, removing references in initial drafts to strategies that “should aim at the reduction of the emission of greenhouse gases,” with the final document only recommending that countries review the ACIA “as they implement and consider future policies on global climate change.”<sup>92</sup> In addition, there were reports that the U.S. delegation pushed to have the report release postponed until after the Presidential election. Some European scientists involved in the process provided the press with some excerpts in advance of the official release in an attempt to hold the administration accountable.<sup>93</sup>

## **Air Pollution Trends Report**

In 2001, for the first time in 6 years, the annual federal report on air pollution trends produced by the Environmental Protection Agency excluded the section on global warming, eliminating the reporting of carbon dioxide emission trends to the American public. This omission continued in the recently released 2002 report. While most air pollution emissions tracked in the trends report have fallen over the last decade, carbon dioxide emissions have increased, up 0.8% from 2001 to 2002 alone.<sup>94</sup> This removal of crucial information from the report is yet another example of the administration’s efforts to obscure and hide the science and trends of greenhouse gas emissions.

## **2.6 Technology and Sequestration Programs**

### **Climate Change Technology Program**

In parallel with the administration’s Climate Change Science Program, the Department of Energy is directing a multi-agency Climate Change Technology Program, which aims to develop “breakthrough technologies” that will help achieve long-term emissions reductions. The details of the program are still being developed in a workplan that is currently under inter-agency review, but already announced programs and initial drafts indicate the plan will concentrate on fossil fuel and nuclear technologies with little to no near-term reductions anticipated. The administration’s strategy is clearly to place a large and risky bet on future technology developments while avoiding the application of existing technologies now. Several of the existing initiatives under this program are outlined below.

### **Hydrogen R&D Program**

In January of 2002, the Bush administration announced the FreedomCAR partnership between the federal government and U.S. automakers to create a fuel-cell-powered vehicle. In February 2003 they announced the Hydrogen Fuel Initiative, a program to accelerate development of advanced technologies for producing, delivering, storing and using hydrogen. And in April of 2003, Secretary of Energy Abraham announced the International Partnership for a Hydrogen Economy to implement the Hydrogen vehicle and fuel goals internationally. While

---

<sup>92</sup> U.S. Wants No Warming Proposal: Administration Aims to Prevent Arctic Council Suggestions. Juliet Eilperin. Washington Post. November 4, 2004; and Arctic Nations Cool on How to Fight Global Warming. Environmental News Service. November 30, 2004.

<sup>93</sup> Study Finds Warming Trend in Arctic Linked to Emissions . Andrew Revkin. New York Times. October 29, 2004.

<sup>94</sup> Emissions of Greenhouse Gases in the United States 2002: Executive Summary. Energy Information Administration, October 2003. [www.eia.doe.gov/oiaf/1605/ggrpt/summary/overview.html](http://www.eia.doe.gov/oiaf/1605/ggrpt/summary/overview.html)

environmental groups support the potential of a future hydrogen-based transportation sector, there are a number of concerns with the administration's proposal.

### Delayed Improvements

Experts agree that fuel-cell vehicles will not become available for at least another 10 to 15 years, and it could be 20 or 30 years before they become widespread enough to make a dent in U.S. carbon dioxide emissions from the transportation sector. Increased research into fuel cell vehicles will provide no benefits in the near term and will do nothing to boost the performance of the more than 100 million cars that will be sold in the United States in the interim period. In fact, the long term FreedomCAR initiative replaced the Clinton-era Partnership for a New Generation of Vehicles program that aimed to develop highly efficient vehicles by 2008. In addition, the Bush Administration program does not hold the automobile industry accountable for delivering fuel cell vehicles to the market on any concrete schedule. Meanwhile, the technology exists today, through hybrid engines and efficient vehicle design, to immediately and significantly reduce global warming pollution from vehicle tailpipes, but the administration opposes any significant increase in vehicle fuel efficiency standards.

### The Source of the Hydrogen

Another major concern with the Bush Administration's proposal is its strategy for producing the hydrogen fuel. Although the only emission from a fuel cell is harmless water vapor, if production of hydrogen either comes directly from fossil fuels or requires the input of fossil fuels, then heat-trapping gas emissions may not be reduced. Unless the electricity needed to produce hydrogen comes from low-carbon or carbon-free sources, greenhouse gas emissions will simply have shifted from the tailpipe to the smokestack.

Any hydrogen program that wishes to guarantee real reductions in heat-trapping gas emissions must include significant development of carbon-free hydrogen production, of which a significant portion must be based on renewable energy sources. Unfortunately, the Bush Administration's proposal not only fails to devote any additional money towards renewable energy, but it also redirects funding away from renewable programs to pay for research into fuel cell technology. Furthermore, the Bush administration is focusing heavily on producing hydrogen from fossil fuels, in particular coal. While Energy Department officials claim that the carbon will be captured and stored, this solution is still far from proven and the administration continues to oppose the emission limits that would be needed to drive investment to develop this technology. In any case, fossil fuel based hydrogen production with carbon capture and storage should not be viewed as a panacea and should at most be only part of a portfolio of carbon free options.

In order to genuinely reduce our emissions of heat-trapping gases, the hydrogen that powers fuel cells must be produced with low to zero carbon emissions. By not recognizing this need, the administration's hydrogen projects will do very little to actually accomplish the goals it claims to pursue, and will prevent us from taking action to reduce our emissions today.

### **Geological Carbon Sequestration**

In February of 2003, President Bush announced the development of FutureGen, a \$1 billion, 10-year demonstration project to build a coal-based electricity and hydrogen plant with geological sequestration with contributions from industry and international partners. In June of 2003, the Bush administration joined 13 other countries in unveiling the Carbon Sequestration Leadership Forum. The forum is an international climate change initiative focusing on the development of

carbon capture and storage technologies. The program is focused on improving research, facilitating technology transfer, and coordinating joint projects between entities.

The fact that atmospheric carbon dioxide concentrations are so high and are projected to rise means that, in addition to reducing carbon emissions, it might be necessary to remove carbon from the atmosphere in order to avoid the destructive impacts of global warming. However, this technology has yet to be proven safe or effective and carbon sequestration efforts could undermine serious attempts to reduce carbon dioxide emissions, allowing the U.S. to continue to ignore the cause of the problem. Carbon sequestration should not be considered a panacea in solving the global warming problem and funding for sequestration efforts should be provided only in addition to significantly increased funding for reducing emissions. In addition, it should be recognized that reducing emissions provides a variety of additional benefits beyond mitigating global warming, including domestic economic development and providing energy security. For example, a responsible energy policy based on maximizing energy efficiency and the use of renewable energy sources would also improve public health by reducing ozone smog and particulate pollution, reduce toxic runoff from coal mines, reduce damage from oil spills, and reduce pressure to develop pristine areas, such as the Arctic National Wildlife Refuge.

In the context of a fully comprehensive effort to address global warming, the Bush Administration's efforts to promote carbon sequestration may be valid and necessary. However, the administration's reluctance to raise automobile fuel economy standards, refusal to consider carbon dioxide a pollutant under the Clean Air Act, and skepticism that global warming is actually a problem caused by heat-trapping gas emissions clearly demonstrate that the administration is not pursuing such a comprehensive approach. Instead, investments in carbon sequestration are displacing the funds and substituting for the concrete policies needed to apply existing clean energy technologies and to effectively address global warming.

### **Biological Sequestration Policies**

In June of 2003, the U.S. Department of Agriculture announced that the agency will consider rewarding conservation grants and subsidies to farmers and ranchers who implement management practices that help reduce greenhouse gas emissions and sequester carbon, such as changing tilling practices, increasing crop rotation, and reducing overgrazing. USDA estimates that the new incentives will reduce or sequester 12 million metric tons of greenhouse gases annually by 2012.

While incentives for farmers and landowners to reduce emissions and sequester carbon are worthwhile, the USDA overestimates the climate benefit of these initiatives. Most misleading is its inclusion of the effect of increased funding by Congress of conservation activities in the 2002 Farm Bill. Historically, the Conservation Reserve Program, a program setting aside idle or marginal farmland, has been enrolled at levels varying from 33.9 million to 36.4 million acres. The 2002 Farm Bill increased the enrollment cap from 36.4 to 39.2 million acres. Therefore, in order to increase sequestration in farmlands, USDA would have to consistently keep 39.2 million acres in the CRP (approximately 34.1 million acres were enrolled in 2003). Only this additional 2.8 million acres would lead to reducing the amount of heat-trapping gases in the atmosphere. And, unless Congress continuously raises the limit on CRP enrollment, this is a one-time increase in sequestration, with no way to ensure that the sequestered carbon remains in place once the programs end. In addition, carbon offsets from these CRP lands are sometimes being double counted, as some industries are claiming credit for these programs through the voluntary emissions registry program in addition to the government's claim. In the bigger picture, though,

if the administration truly wants to drive investments that will benefit farmers, it should support rather than oppose sensible renewable energy promotion and greenhouse gas reduction policies.

### **Methane Capture Programs**

The U.S. Environmental Protection Agency has been implementing programs designed to encourage methane recovery on landfills, coal mines, and natural gas systems for the past decade. In July of 2004 the president announced the establishment of an international partnership called Methane To Markets that will expand those programs through international cooperation and technology transfer. At the first Ministerial level meeting held on November 17, thirteen countries agreed to join the partnership aiming to advance international cooperation on the recovery of methane as a clean energy source.<sup>95</sup> The administration has made a commitment to spend up to \$53 million over the next five years to encourage companies to provide participating countries with appropriate technologies. While these programs are among the only initiatives within the administration's portfolio of technology initiatives that present potential for near-term greenhouse gas emissions reductions, the limited scale and impact of the programs do little to counteract the administration's overall opposition to progress on the issue. This was highlighted by the fact that on the same day as the Ministerial announcement, Senator John McCain was holding a Senate hearing on the impacts of global warming on the Arctic where he highlighted the need for mandatory limits on emissions and called the President's climate policy "disgraceful."<sup>96</sup> In addition, some of the efforts within the Methane to Markets program represent a repackaging of programs initiated under previous administrations. Finally, the commitment for funding has yet to be included as a part of the administration budget request to Congress and therefore it cannot be determined if that funding will materialize or to what extent it will affect the funding of other important efficiency and renewables programs.

---

<sup>95</sup> 13 Countries Plus United States Will Recover Methane. Environmental News Service. November 17, 2004.

<sup>96</sup> 14 Nations to Participate in Plan to Reduce Methane. By Juliet Eilperin. Washington Post, November 17, 2004.