

WRI FACT SHEET

U.S. Climate Action in 2009–2010

Compiled by Aliza Wasserman

While federal climate change legislation has stalled, federal agencies, states, and Congress made some progress on controlling greenhouse gas emissions in the past two years.

WORLD RESOURCES INSTITUTE 10 g street, ne Washington, dc 20002 **Www.wri.org** The world has been waiting to see if and when the United States would take meaningful action on climate change. The U.S. House of Representatives passed a comprehensive climate and energy bill in June 2009, but by summer 2010, the Senate failed to produce a companion bill, putting into question Congress' seriousness in addressing the climate change problem. While federal climate change legislation has stalled, federal agencies, states, and Congress made some progress on controlling greenhouse gas (GHG) emissions in the past two years. This fact sheet reviews notable steps taken by the Environmental Protection Agency (EPA), Department of Energy (DOE), and through stimulus funding, international finance commitments, regional cap-and-trade programs, and state energy policies. It also identifies political and economic developments that could impact federal climate legislation and additional regulatory action to reduce emissions by federal agencies. While these efforts are important, it is clear that much further action, including a binding cap on carbon, are necessary in the United States.

EPA ACTIVITIES USING EXISTING LEGAL AUTHORITY

Without climate legislation, federal agencies can control greenhouse gases using existing legal authorities. Federal agencies such as EPA use "rulemaking" to write administrative laws authorized by existing legislation. Rulemaking is a multi-step process in which a rule is first proposed by the agency, then commented on by the public, and then revised and finalized by the agency. This process is currently underway to control certain GHG emissions under the Clean Air Act.

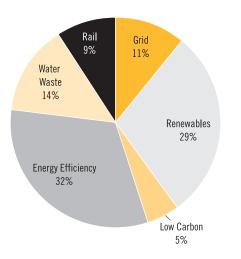
In December 2009, EPA, through the Clean Air Act, found that CO_2 and five other GHGs constitute a threat to public welfare and that emissions from vehicles contribute to climate change. This "endangerment finding" allows the EPA to regulate GHGs under existing provisions of the Clean Air Act. The endangerment finding was followed by a proposal for fuel efficiency improvement standards for cars and light trucks – including SUVs and minivans – in September 2009 that will apply for model year 2017.¹

In May 2010, EPA issued a final rule establishing thresholds for GHG emissions for stationary sources, which will require permits and use of "best available control technologies" to minimize GHGs. Beginning July 2011, the regulations will apply to new and modified facilities that will emit more than 100,000 and 75,000 tonnes of GHGs respectively – including power plants, refineries, and cement factories. This rule will apply to 70 percent of national GHG emissions from stationary sources. The EPA will explore regulating facilities that are no smaller than 50,000 tons after 2016.²

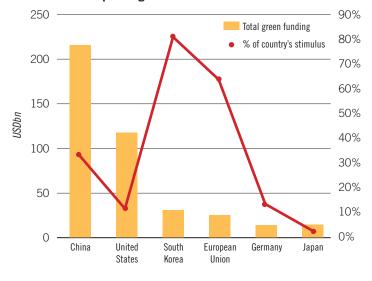
A complete list of significant rulemakings is found in the timeline on page 3.

Breakdown of U.S. Green Stimulus

(TARP and American Recovery Plan)



Green Stimulus Spending



Source: HSBC, Building a Green Recovery

CONGRESSIONAL ACTIVITIES

New climate laws are dependent on Congress passing new legislation. Legislation must be approved by both chambers of Congress — the House of Representatives and the Senate — which act independently, but come together in a "conference committee" to reconcile differences. This must happen during the same two-year congressional session; in this session, by the end of December 2010. The House passed a climate bill in June 2009. If the Senate does not act in the remaining months of 2010, both houses must start the process from the beginning to write, negotiate,and pass new bills in the next session that begins January 2011.

The House climate bill is called the American Clean Energy and Security Act (Waxman-Markey or ACES). It would reduce U.S. emissions by 28 percent below 2005 levels by 2020 (16 percent below 1990 levels) and 40 percent below 2005 levels by 2030 (30 percent below 1990) in 2030. This bill included an economy-wide cap-and-trade program and additional "complementary policies," including mandated reductions through efficiency standards. The full Senate has yet to formally consider a climate bill, but in 2010 debated bills with significant differences. For instance, the bill sponsored by Senator Bingaman, the American Clean Energy Leadership Act, does not set a price on carbon and does not have reliably quantifiable reductions in emissions, while the bill sponsored by Senators Kerry and Lieberman, the American Power Act, would achieve net global emissions reductions equal to 38 percent below 2005 levels in 2020 (28 percent below 1990 levels) and by 55 percent by 2030 (48 percent below 1990). A comparison of emissions reductions under several proposed U.S. climate bills can be found here: www.wri.org/publication/usclimatetargets.

Other completed congressional actions have climate consequences, notably stimulus packages that made green spending a key feature, passed in response to the global economic crisis. The passage of the Emergency Economic Stabilization Act in 2008 and the American Recovery and Rein-

Source: HSBC, Building a Green Recovery

vestment Act in 2009 dedicated \$112 billion to climate-related initiatives, which is three-fold the budget of these programs without the stimulus. Stimulus funding included \$3.4 billion for the Smart Grid Investment Grant awards, the largest grid modernization investment in U.S. history. The Electric Power Research Institute estimates that implementation of smart grid technologies could reduce U.S. electricity use by more than 4 percent by 2030. Green recovery alone will not achieve broader climate objectives but it can reduce the cost of such policies when they are passed.³

WRI analysis finds that for every \$1 billion that the United States spends on green stimulus it reduces emissions, on average, by 592,600 tons.⁴ This means the U.S. stimulus could reduce emissions by around 50mt CO_2 . HSBC estimates that the stimulus' funding of renewables and energy efficiency could avoid 65mt CO_2 , around 1 percent of US CO_2 emissions in 2007.⁵

U.S. PROGRESS TOWARD INTERNATIONAL CLIMATE FUNDING COMMITMENTS

Part of the Copenhagen Accord is a commitment of developed countries to jointly mobilize \$30 billion over the next three years and \$100 billion per year by 2020 to fund climate change activities in developing countries. The U.S. Congress appropriated \$1.304 billion in FY 2010, which is triple its climate related appropriations from FY 2009. On July 29, the U.S. Senate Committee on Appropriations approved \$1.725 billion for FY 2011, which has yet to be approved by the Senate. The United States must still demonstrate how it is going to raise funds for long-term climate obligations, and it is unclear to what extent these funds are 'additional,' a criteria of the Copenhagen fast-start finance pledge. To date, the U.S. funding is budgeted for the following sources:⁶

- Clean energy: \$595M FY 2010; \$751M FY 2011
- Adaptation: \$448M FY 2010, \$577M in FY 2011

 Sustainable landscapes funding: \$261M FY 2010; \$397M in FY 2011 Roughly 60 percent of these so-called 'fast-start' funds will flow through multilateral channels, and the rest through bilateral sources.

- Climate Investment Funds (CIFs) has delivered \$375M in FY 2010 and is estimated to appropriate \$575M for FY 2011
- Clean Technology Fund (CTF): \$300M in FY 2010; \$370M in FY 2011
- Pilot Program for Climate Resilience (PPCR): \$55M in FY 2010; \$65M for FY 2011
- Forest Investment Program (FIP): \$20M in FY 2010; \$95M in FY 2011

- Program for Scaling-up Renewable Energy in Low Income Countries (SREP): \$45M in FY 2011
- Forest Carbon Partnership Facility (FCPF): \$10M in FY10, \$15M in FY 2011
- Least Developed Countries Fund and the Special Climate Change Fund: \$50M in FY 2010; \$70M in FY 2011
- GEF: \$26M in FY 2010; \$90M in FY 2011 (\$49M for clean energy & \$27M for sustainable landscapes)

TIMELINE OF 2009–2010 U.S. CLIMATE DEVELOPMENTS

EPA issues draft rules mandating GHG reporting for sectors comprising 90 percent of the U.S. economy and proposes "endangerment finding," paving the way for possible regulation of GHGs under the Clean Air Act.

President Obama signs an executive order committing federal agencies to broad sustainability goals including reducing GHGs by 28 percent by 2020. The federal government is the largest energy consumer in the country and this will have the equivalent impact as taking 17 million cars off the road.

e	February 2009 🖕 Spring 2009 🤇	June 2009 October 2009
	The American Recovery and Reinvestment Act included over \$80 billion for clean tech- nologies. For example, one goal is to double renewable energy generation in three years, which will power 4-5 million homes.	The House of Representatives passes The American Clean Energy and Security Act, which would reduce emissions by 28 percent below 2005 levels in 2020 (16 percent below 1990) and 40 percent below in 2030 (30 percent below 1990). This is the first climate bill to emerge from one of the houses of Congress.

The Council on Environmental Quality (an arm of the executive branch) issues draft guidance for public comment that would advise federal agencies conducting National Environmental Policy Act (NEPA) reviews (similar to Environmental Impact Assessments) to consider opportunities to reduce greenhouse gas emissions by proposed federal actions (which include certain permits issued by the federal government to private developers).

🔶 January 2010 🛛 🖕 February	2010	April 2010	May 2010
 U.S. submits to the UN Copenhagen Accord emissions in the range of 17 percent below below 1990 levels) with the understanding target of anticipated federal legislation. First mandatory reporting of GHGs goes into for federal climate regulations. EPA require facilities that emit more than 25,000 MMT cover 85 percent of U.S. emissions. The U.S. Securities and Exchange Commiss tasked to protect investors, requires public the physical impacts of climate change (e.g. levels, and changing demand for products and the economic impacts of domestic and emissions-reduction rules, when disclosing 	2005 levels by 2020 (4 percent that it will conform to the final effect, providing data needed s reporting of CO ₂ e from certain of CO ₂ e, which is expected to on, the government body y traded companies to consider . severe weather, rising sea pased on their carbon footprint) international greenhouse gas	EPA and DOT jointly issue regulations for fuel economy of light-duty vehicles that would decrease the emissions rate of new vehicles by approximately 5 percent annually from 2012 to 2016. The rules are predicted to reduce 960 MMT of GHGs over the lives of the vehicles and reduce oil consumption by 1.8 billion barrels. Between January 2009 and April 2010, DOE sets tougher efficiency standards for more than 20 appli- ances.	EPA issues final "tailoring" rule establishing thresholds for GHG emissions for stationary sources, requiring the use of best available control technologies to minimize GHGs for new major facilities or modified existing facilities. President Obama directs the EPA to work with the National Highway Traffic Safety Adminis- tration to further improve fuel efficiency from vehicles. The next steps are to develop first- ever GHG regulations for heavy-duty vehicles and to work with California on the next round of light-duty vehicles. This could result in the first-ever medium and heavy-duty vehicle

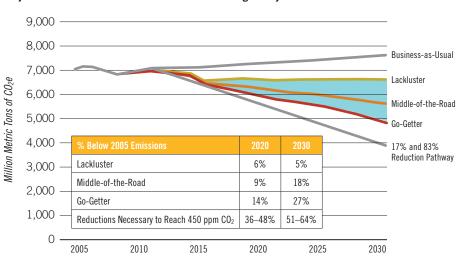
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standards by 2014.

EXISTING FEDERAL AUTHORITIES PLUS STATE ACTION COULD GET THE UNITED STATES TO 14 PERCENT BELOW 2005 LEVELS BY 2020.

While the path forward in Congress is unclear, a recent WRI report found that federal action can reduce U.S. emissions by up to 12 percent below 2005 levels in 2020 (which is 3 percent above 1990 levels) in a 'Go-Getter' scenario, and up to 14 percent (0 percent change from 1990) when combined with state action. If, however, federal agencies fail to leverage these opportunities and states fall short on their announced plans to reduce emissions, 'Middle-of-the-Road' or 'Lackluster' reductions will result, falling even further from the 17 percent reduction by 2020 (3 percent below 1990 levels) that President Obama pledged at Copenhagen.

For more information about these scenarios see Reducing Greenhouse Gas Emissions in the United States Using Existing Federal Authorities and State Action, WRI, July 2010 at www.wri.org/publication/ reducing-ghg-emissions-using-existing-federalauthorities-and-state-action



Projected U.S. Emissions under Different Federal Regulatory Scenarios and State Scenarios

STATE & LOCAL ACTION

More than half of the U.S. states, covering a majority of the U.S. population, have taken steps to reduce their CO_2 output. Specifically:

- Twenty-nine states have binding renewable portfolio standards (RPS), and six have non-binding RPS goals.
- Twenty-two states have minimum energy efficiency standards.
- Twenty-four states have developed comprehensive climate plans.
- Ten states have set legislative economy-wide reduction targets and sixteen states have economy-wide reduction targets set by executive order, which have the same binding nature as law but can be repealed by future state governors.
- Twenty-three states are in the process of developing and implementing mandatory regional CO₂ trading markets.
 - The Northeast and Mid-Atlantic Regional Greenhouse Gas Initiative (RGGI) began in 2009 would reduce emissions from the power sector in the region by 10 percent in 2018. In order to prevent windfall profits and invest in energy efficiency and clean energy, the RGGI states are auctioning over 86 percent of their allowances. Emissions have dropped faster than was anticipated leading to surplus allowances and low allowance prices. However, as of July 2010, the auction has been able to generate over \$660 million for public purposes.

- The Western Climate Initiative (WCI) will be implemented in 2012 and would reduce emissions 15 percent below 2005 levels in the region in 2020. This initiative is truly international in scope, embodying 7 U.S. States and 4 Canadian Provinces, which account for three-fourths of the Canadian population.
- The Midwestern Greenhouse Gas Reduction Accord (MGGRA) proposes to cut emissions 18–20 percent below 2005 levels by 2020 (4–7 percent below 1990).
- Eight states are actively observing and are considering joining regional cap-and-trade systems.
- As of June 2010, 1042 mayors have signed the U.S. Conference of Mayors' Climate Protection Agreement to reduce emissions in line with the Kyoto Protocol targets of 20 percent below 2005 levels by 2012 (7 percent below 1990 levels).

U.S. REGIONAL CLIMATE ACTION

Renewable Portfolio Standards

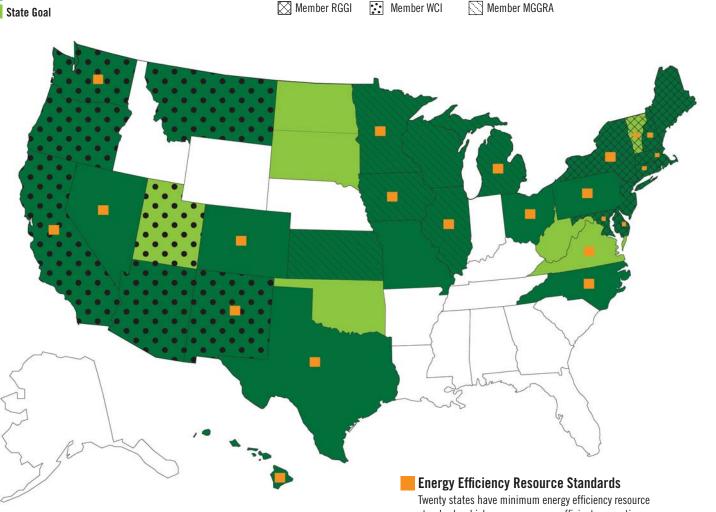
35 states employ renewable portfolio standards or renewable deployment goals, which mandate that utilities get a certain amount of their energy from renewable sources, leading to emissions reductions.

[Source: Federal Energy Regulatory Commission]



Regional cap-and-trade agreements

Three mandatory regional carbon trading markets, the Northeast and Mid-Atlantic Regional Greenhouse Gas Initiative (RGGI), the Midwestern Greenhouse Gas Reduction Accord (MGGRA) and the Western Climate Initiative (WCI) are being established by state governors to limit emissions and spur energy innovation. Twenty-three U.S. states are participating, accounting for nearly half the nation's population. RGGI began auctions in September 2008; WCI and MGGRA should be operational in 2012.



standards which encourage more efficient generation, transmission and use of electricity and natural gas. [Source: ACEEE]

ISSUES TO WATCH

Some developments could determine how further climate action fares in the upcoming months:

The fate of the climate bill

- While at this stage it is unlikely that the Senate will pass a comprehensive climate and energy package by the end of the year, President Obama said he is still committed to getting a bill passed.
- As the climate bills put forward in the Senate vary tremendously, it is not possible to say whether Senate-passed legislation would reach the emissions cuts necessary to meet U.S. commitments under the Copenhagen Accord.

Economic crisis is pushing some states to step back from climate policy

If passed, a November 2010 California ballot measure could halt the state's landmark climate CO₂ policy (AB32) until state unemployment levels drop below 5.5 percent. As of July 2010, 32 percent of Californians support the measure to halt the policy. AB32 was championed by Republican Governor Schwarzenegger; however, the current Californian Republican candidates for the U.S. Senate and Republican candidates for California governor oppose the policy saying it will raise energy prices and hurt the economic recovery.

Litigation challenging EPA rulemakings

- Seventeen legal appeals from industry groups, conservative think tanks, lawmakers and three states have been filed challenging EPA's endangerment finding; some of these lawsuits challenge the climate science on which EPA relied. At least 15 states, along with other interested parties, have intervened on behalf of petitioners, while an opposing group of 19 states, along with New York City and other interested parties, have intervened on behalf of EPA.
- Five legal challenges have been filed against EPA's May 2010 "tailoring" rule, which adjusted EPA's permitting regulations to exclude from mandated compliance with GHG regulation millions of small farmers, businesses, and individuals that emit relatively small amounts of carbon.

Congressional efforts to limit EPA authority to regulate GHGs

The House and Senate are considering proposals to limit or delay the EPA's authority to regulate GHGs under existing legal authority. Senator Rockefeller, who represents the coal-producing state of West Virginia, introduced a bill in March 2010 to freeze for two years EPA's authority to set GHG regulations for stationary sources. His rationale is that Congress rather than the EPA should decide climate policies. In June 2010 the Senate narrowly rejected legislation proposed by Alaska Senator Murkowski that would reverse the "endangerment finding," thereby prohibiting the agency from acting under the Clean Air Act against greenhouse gases. The House of Representatives is considering several similar bills.

2010 elections may alter political dynamics

• Looming mid-term November 2010 elections, which involve a third of the Senate and the entire House of Representatives, are expected to affect the dynamic within the Congress.

ENDNOTES

- 1. http://www.epa.gov/oms/climate/regulations/420f09047a.htm
- 2. www.epa.gov/nsr/documents/20100413fs.pdf
- 3. http://www.whitehouse.gov/the-press-office/president-obama-announces-34-billioninvestment-spur-transition-smart-energy-grid
- 4. A Green Global Recovery?, WRI, February 2009 http://pdf.wri.org/green_global_recovery. pdf
- Building a Green Recovery, HSBC, May 2009 http://www.hsbc.com/1/PA_1_1_S5/content/assets/sustainability/090522_green_recovery.pdf
- A full assessment of U.S. and other national fast-track funding can be found at: http:// www.wri.org/stories/2010/02/summary-climate-finance-pledges-put-forward-developedcountries. These numbers were last updated August 12, 2010.

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