



Issue Brief

State Actions on Climate Change: A Focus on How Our Communities Grow

October 2009

BACKGROUND

The Environmental and Energy Study Institute (EESI) has long recommended that energy use and climate change should play a central role in decisions made regarding land use. EESI's landmark paper, [*Energy and Smart Growth: It's about How and Where We Build*](#), commissioned by the Funders' Network for Smart Growth and Livable Communities in 2004, made great strides in raising awareness of how community development – buildings, modes of transportation, even landscape design – directly relates to greenhouse gas emissions. Subsequently, EESI built a partnership with the American Planning Association to develop educational tools to enable planners to better incorporate a climate change lens and energy sustainability into their daily work. Through this partnership, EESI embarked on an analysis of how state climate action plans address land use issues and found that it is a new and evolving aspect of this process. What follows is a summary of the findings, with web links to the plans being referenced, wherever possible. It is our hope that this summary will encourage those working on plans, whether at the regional, state or local level, to focus on land use reform as a key element for reducing greenhouse gas emissions and our reliance on fossil fuels.

OVERVIEW

The past few years have seen significant progress in the development of state climate action plans. Because each state represents unique geographic and socioeconomic conditions, the actions taken by states to address climate change cover a broad range of strategies and are now in various stages of development and implementation. Historically, California has been a frontrunner in progressive environmental policy, and here again it continues to lead in addressing climate change. California is currently implementing several pieces of legislation related to energy and climate change, including those that focus on land use and transportation. As of July 2009, there are 37 states implementing a state climate action plan. These plans vary significantly, with some having advisory groups tasked with creating climate mitigation recommendations, while some already have passed legislation implementing specific land use practices. Among the 13 states with no formal climate action plan in progress, five have signed on to regional climate change agreements to lower greenhouse gas emissions by certain target times. In total, 42 of the 50 states have taken formal steps to address climate change through some means, whether by a statewide climate action plan or regional agreement. It must be noted that **this report is focused on actions through July 2009**; further measures taken by states after this time period were not included in this report.

This analysis particularly looked at the type of land use policies and practices included, as well as their frequency among state plans. Specifically, the study examined state plans for their inclusion of transportation, green building, and land use or “smart growth” practices. Among these three areas, transportation practices were the most dominant feature of many state action plans, along with, to a lesser degree, green building policies. Some common transportation policies incorporated into these plans included the adoption of California’s vehicle emissions standard (the country’s most aggressive standard), creating more mass transit options, and providing incentives to lower commuter vehicle miles traveled. Green building policies often featured stronger building codes and appliance standards, as well as financial

incentives for consumers to purchase energy efficient materials. Specific smart growth practices appear to be the *least* likely component of state action plans. Those plans that included the most far-reaching and comprehensive measures to reduce greenhouse gas emissions were those most apt to incorporate smart growth practices.

A [table](#) at the end of this report provides a graphic display of the more specific aspects of urban planning incorporated into public climate action plans. Key actions, such as reducing VMT (vehicle miles traveled) or including transit-oriented, infill or mixed-use development, are labeled individually under each state's plan. In addition, any greenhouse gas reduction targets adopted or regional climate action plans to which a state belongs are provided in the table.

Useful resources for general information:

http://www.epa.gov/climatechange/wycd/stateandlocalgov/state_planning.html

http://www.epa.gov/cleanenergy/energy-programs/state-and-local/state_planning.html

http://pewclimate.org/what_s_being_done/in_the_states/action_plan_map.cfm

<http://www.climatestrategies.us/>

ALABAMA

The state of Alabama published an assessment of greenhouse gas (GHG) emissions in an [advisory panel report](#) in 1997. The outline provided suggestions and voluntary action, but made no mandates. Some of the general areas covered included:

- Building efficiency standards, commercial sector
- Traffic lights coordination
- Auto maintenance for old and newer cars
- Public transportation

[Table](#)

ALASKA

In July 2002, the Attorney General of Alaska joined the Chief Legal Officers of California, Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont in a letter to President George W. Bush, asking that administration to address the issue of climate change through comprehensive national policies on greenhouse gas (GHG) emissions.

On July 7, 2006, [HCR 30](#) was signed into law creating the Alaska Climate Impact Assessment Commission to hold hearings throughout the state and examine the effects of climate change. It released its [final report](#) on March 17, 2008. In 2006, Gov. Sarah Palin signed on as an Observer to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration between Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce GHG emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

Alaska is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to: 1) meet or exceed the goals of obtaining 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, 2) to encourage adequate funding for state energy efficiency and renewable generation programs, and 3) to facilitate development of regional energy markets.

On September 14, 2007, Gov. Palin signed Administrative Order No. 238, officially forming the Alaska Climate Change Sub-Cabinet. The Sub-Cabinet was charged with preparing and implementing an [Alaska Climate Change Strategy](#). On April 17, 2008, they released a [document](#) which offers recommendations for dealing with anticipated climate change and includes information such as:

- The state's knowledge of the actual and foreseeable effects of climate warming in Alaska
- Measures and policies to prepare communities in Alaska for the anticipated impacts from climate change

- Alaska's participation in regional and national efforts addressing causes and effects of climate change

Resource: <http://www.climatechange.alaska.gov/>

Table

ARIZONA

The state of Arizona established the [Arizona Climate Change Advisory Group](#) (CCAG) on February 2, 2005, as well as a [Southwest Climate Change Initiative](#) with New Mexico on February 28, 2006, to collaborate on strategies to address the impacts of climate change in the Southwest and reduce greenhouse gas (GHG) emissions in the region.

Arizona is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to: 1) meet or exceed the goals of obtaining 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, 2) to encourage adequate funding for state energy efficiency and renewable generation programs, and 3) to facilitate development of regional energy markets.

In August of 2006, the Arizona CCAG officially introduced its [Climate Change Action Plan](#). The state pledged to reduce GHG emissions to 2000 levels by 2020 and 50 percent below 2000 levels by 2040. Some of the recommendations included:

Buildings

- Demand-side efficiency goals and establish funds, incentives, and programs to achieve them
- State leadership programs to achieve energy savings and promote clean energy
- Enhanced appliance efficiency standards
- Building standards/codes/design incentives for energy efficiency

Land Use

- Policies to promote smart growth planning, infill, increased density
- Transit-oriented/pedestrian-friendly development
- Multi-modal transit options

Transportation

- State clean car program
- Reduction of vehicle idling
- Standards for alternative fuels
- Hybrid vehicle promotion and incentives
- Feebates
- Pay-as-you-drive insurance
- Low rolling resistance (LRR) tires and tire inflation
- Replacement/retirement of high-emitting diesel fleet, biodiesel implementation
- 60-mph speed limit for commercial trucks

On September 8, 2006, Gov. Janet Napolitano signed [Executive Order 2006-13](#), which directed the Arizona Department of Environmental Quality to coordinate with the Arizona Department of Transportation to adopt and implement California's vehicle emissions standards. On January 10, 2008, the Arizona Department of Environmental Quality (ADEQ) announced draft rules requiring that each automobile manufacturer reduce overall GHG emissions from its total sales in the state by 37 percent by 2016.

On February 26, 2007, Gov. Napolitano signed on as a Partner to the [Western Climate Initiative](#) (WCI). The WCI is collaboration among Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce GHG emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

Resource: <http://www.azclimatechange.gov/>

[Table](#)

ARKANSAS

In March 2007, the Arkansas Legislature passed [Act 696 of 2007](#), creating the Governor's Commission on Global Warming, a 21-member commission dedicated to studying issues related to global warming, the state's emerging carbon market and pollutant reduction goals to be included in a comprehensive strategic plan. In October 2008, the Governor's Commission released its [final report](#). Some of the recommendations included:

Land Use

- Smart growth, including pedestrian and bicycle infrastructure
- Mixed use, open-space protections,
- "Greyfield" redevelopment, infill development, transit-oriented development

Transportation

- Transit service
- Light-duty vehicle miles traveled (VMT) in urban areas
- Federal Safe Routes To School program

Resource: <http://www.arclimatechange.us/>

[Table](#)

CALIFORNIA

Over the past few years California has shown some impressive leadership on combating global warming. On July 22, 2002, Gov. Gray Davis approved [AB 1493](#), a bill directing the California Air Resources Board (CARB) to develop standards to achieve the maximum feasible and cost-effective reduction of greenhouse gases (GHGs) from motor vehicles. Now the California Vehicle Global Warming law, it requires automakers to reduce emissions by 30 percent by 2016. While the Clean Air Act preempted states from adopting emission standards for new motor vehicles and motor vehicle engines, it allowed the U.S. Environmental Protection Agency (EPA) to waive this preemption for California unless EPA made certain findings. Acting at the direction of the California legislature, CARB adopted greenhouse gas emission regulations for passenger cars, light-duty trucks and medium-duty passenger vehicles beginning with the 2009 model year. On December 21, 2005, CARB submitted a request that EPA grant a waiver for these regulations. EPA denied this request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

On September 7, 2002, Gov. Davis approved [SB 812](#), requiring the California Climate Action Registry to adopt procedures and protocols for project reporting and carbon sequestration in forests. California convened an interagency task force, housed at the California Energy Commission, to develop these procedures and protocols.

In July 2002, the Attorney General of California joined the Chief Legal Officers of Alaska, Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont in a letter to President George W. Bush, asking that administration to address the issue of climate change through comprehensive national policies on GHG emissions.

In June 2005, Gov. Arnold Schwarzenegger signed [Executive Order S 3-05](#), which called for the following reductions in state greenhouse gas emissions: 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050. [AB 32](#), the California Global Warming Solutions Act of 2006, was signed by Gov. Schwarzenegger on September 27, 2006. The bill specifically required CARB to:

- Establish a statewide GHG emissions cap for 2020, based on 1990 emissions by January 1, 2008
- Adopt mandatory reporting rules for significant sources of GHGs by January 1, 2009
- Adopt a plan by January 1, 2009, indicating how emission reductions will be achieved from significant GHG sources via regulations, market mechanisms and other actions
- Adopt regulations by January 1, 2011, to achieve the maximum technologically feasible and cost-effective reductions in GHG, including provisions for using both market mechanisms and alternative compliance mechanisms
- Convene an environmental justice advisory committee and an economic and technology advancement advisory committee to advise CARB
- Ensure public notice and opportunity for comment for all CARB actions
- Prior to imposing any mandates or authorizing market mechanisms, CARB must evaluate several factors, including but not limited to impacts on California's economy, the environment and public health; equity between regulated entities; electricity reliability, conformance with other environmental laws and ensure that the rules do not disproportionately impact low-income communities

In 2006, Gov. Schwarzenegger signed on as a Partner to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration among Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce GHG emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

California is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to 1) meet or exceed the goals of obtaining 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, 2) to encourage adequate funding for state energy efficiency and renewable generation programs, and 3) to facilitate development of regional energy markets.

Additionally, Gov. Schwarzenegger signed [Executive Order S 1-07](#) in January 2007, which created a low-carbon fuel standard that calls for the reduction of the carbon intensity of California's transportation fuels by at least 10 percent by 2020.

In February 2008, the California Public Utilities Commission and California Energy Commission issued an [update](#) to the state's Energy Action Plan. The report set goals for meeting the state's electricity and natural gas needs and asserted that efficiency is the most important tool for GHG reduction in the energy and gas sectors, which is needed to help comply with AB 32 and [SB 1368](#).

In October 2008, Gov. Schwarzenegger signed [SB 375](#), a bill that offered local governments regulatory and other incentives to encourage more compact new development and transportation alternatives. This law directed the California's 18 metropolitan planning organizations (MPOs) to align their transportation, housing, and regional land-use plans with GHG reductions in mind. The law included:

Land Use

- Each region's Regional Housing Needs Assessment (RHNA) – the state mandated process for local jurisdictions to address their fair share of regional housing needs – will be adjusted to become aligned with the land use plan in that region's Sustainable Communities Strategy in its RTP (which will account for GHG reduction targets)

Transportation

- CARB will set regional GHG reduction targets after consultation with local governments. That target must be incorporated within that region's Regional Transportation Plan (RTP), the long-term blueprint of a region's transportation system. The resulting model will be called the Sustainable Communities Strategy

In June 2009, the CARB adopted a regulation that required new cars sold in California, starting in 2012, to have windows that reflect or absorb heat-producing rays from the sun. This will help keep cars cooler, increase their fuel efficiency and reduce global warming pollution.

Resource: <http://gov.ca.gov/issue/energy-environment/>

[Table](#)

COLORADO

The Colorado Department of Public Health and Environment published a [technical analysis and GHG mitigation strategy](#) in September 1998. Based on this report and subsequent consultation, the state officially introduced its [climate action plan](#) in November of 2007. The plan, which opened by stating that it is in its first installment and does not include the full array of measures needed to comprehensively address climate change in the state, lacked a dedicated land use element. It established a greenhouse gas (GHG) reduction goal of 20 percent below 2005 levels by 2020.

Some of the major climate initiatives included:

- Agricultural offset market
- Transportation
 - Clean cars
 - Other measures
- Electric energy
 - Providing reliable and sustainable energy supplies
 - Efficiency
 - Renewable energy
 - Clean coal
 - Investor-owned utilities
 - Municipal utilities and rural electric coops
 - New power plants
- Natural gas
- Solid waste and recycling
- GHG emissions reporting
- Climate education and the new energy economy

In 2006, Gov. Bill Ritter signed on as an Observer to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration among Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce GHG emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

Colorado is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to 1) meet or exceed the goals of obtaining 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, 2) to encourage adequate funding for state energy efficiency and renewable generation programs, and 3) to facilitate development of regional energy markets.

On April 22, 2008, Gov. Ritter issued [Executive Order B-007-08](#), which established a Colorado Climate Advisory Panel. The Governor asked the Panel to provide him with recommendations on how the state can achieve its GHG reduction goals.

Resource: <http://www.cdphe.state.co.us/environmentatoz/index.html>

[Table](#)

CONNECTICUT

The state of Connecticut passed a number of bills on global warming in the early to mid 1990s, including – in 1990 – the first state global warming law to require specific actions for reducing CO2 emissions.

Connecticut is one of the states that agreed in 2001, under the auspices of the New England Governors and Eastern Canadian Premiers (NEG/ECP), to a voluntary short-term goal of reducing regional greenhouse gas (GHG) emissions to 1990 levels by 2010 and by 10 percent below 1990 levels by 2020. The NEG/ECP [long-term goal](#) is to reduce emissions to a level that eliminates any dangerous threats to the climate – a goal scientists suggest will require reductions 75 to 85 percent below current levels. The goals of the [2001 NEG/ECP plan](#) include:

Buildings

- Update residential and commercial building energy codes
- Promote energy efficient and energy improvement mortgages
- Revise energy conservation loan program
- Weatherization assistance program
- Energy start homes program
- High-performance buildings: state-funded and privately funded projects
- Training for building operators
- Green campus initiative
- [34 other recommendations](#)

Land Use

- Transit, smart growth, and vehicle miles traveled (VMT) reduction package

Transportation

- California LEVII standards
- GHG feebate program
- Fleet vehicle incentives and initiatives
- Tailpipe GHG emissions standards
- Public education initiative
- Hydrogen infrastructure research and demonstration program
- Clean diesel and black carbon initiative

In July 2002, the Attorney General of Connecticut joined the Chief Legal Officers of Alaska, California, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont in a letter to President George W. Bush, asking the current administration to address the issue of climate change through comprehensive national policies on GHG emissions.

On September 29, 2003, Connecticut joined the Regional Greenhouse Gas Initiative ([RGGI](#)), an effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions through a cap and trade program. The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO₂ (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10 percent below Phase I levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four carbon dioxide allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow VMT growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures
- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

On May 4, 2004, Gov. John Rowland signed the Clean Car Act, [PA 04-84](#), requiring the Department of Environmental Protection to adopt regulations implementing [California's vehicle emissions standards](#), and to keep the Connecticut regulations current with changes California makes. EPA denied California's request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

On February 15, 2005, the Governor's Steering Committee on Climate Change submitted the [Connecticut Climate Change Action Plan 2005](#) to the General Assembly, fulfilling the requirements of PA 04-252. The goal is to reduce GHG emissions to 1990 levels by the year 2010 and an additional 10 percent below that by the year 2020. Primary policy recommendation areas of the plan include transportation and land use, residential, commercial and industrial energy use, agricultural, forestry and waste emissions, electricity generation, and education and outreach.

On June 4, 2007, Gov. Jodi Rell signed [HB 7432](#), which broadened and increased the state's green buildings requirement. On June 2, 2008, Gov. Rell signed into law [HB5600](#), setting a statewide GHG reduction target of 10 percent below 1990 levels by 2020 and 80 percent below 2001 levels by 2050.

Resource: http://ctclimatechange.com/climate_change.html

[Table](#)

DELAWARE

In January 2000, the Delaware Climate Change Consortium along with the Center for Energy and Environmental Policy at the University of Delaware formed a state [climate change action plan](#). It established a statewide target reduction in carbon emissions to 7 percent below 1990 levels by 2010. Some of the activities implemented are:

Buildings

- Industrial sector energy efficiency upgrades incentives
- Energy efficiency standards for residential buildings and appliances
- Energy conservation measures in lighting and HVAC systems for commercial sector

Land Use

- Land use policies
- Vehicle miles traveled (VMT) reduction policies

Transportation

- Incentives for the purchase and sale of fuel efficient vehicles
- Minimum fuel efficiency standards for new cars (Corporate Average Fuel Economy (CAFE) Program)
- Mandates and market mechanisms to encourage alternative fueled vehicles

On September 29, 2003, Delaware also joined the Regional Greenhouse Gas Initiative ([RGGI](#)), an effort by Northeastern and Mid-Atlantic states to reduce CO2 emissions through a cap and trade program. The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO2 (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10 percent below Phase 1 levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four CO2 allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow VMT growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures
- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

In 2009, the Governor's Energy Advisory Council released a new [Delaware Energy Plan](#). Some of the provisions include:

Buildings

- Updated residential and commercial energy codes
- Adoption of a State Energy Efficiency Policy and a Public Buildings and Facilities Renewable Energy Policy

Land Use

- Smart growth and transit oriented development

Transportation

- Standards for an alternative commute program
- Vehicle fees and/or fuel taxes

Resource: <http://www.dnrec.delaware.gov/ClimateChange/Pages/Climate%20change%20and%20Delaware.aspx>

Table

FLORIDA

On July 13, 2007, Gov. Charlie Crist signed [Executive Order 07-126](#), directing the Florida Department of Management Services to set Leadership in Energy and Environmental Design (LEED) green building standards for the state's new and existing state-owned buildings. The order requires the Department of Management Services to only approve the purchase of new vehicles with the greatest fuel efficiency in a given class, as required for that vehicle to minimize emissions of greenhouse gases (GHGs). State-owned vehicles must also use ethanol and biodiesel fuels when available.

In addition, on July 13, 2007, Gov. Crist signed [Executive Order 07-127](#), which increased the energy performance of new buildings 15 percent from the 2007 energy code by 2009. It established statewide GHG emission reduction targets of 2000 levels by 2017, 1990 levels by 2025, and 80 percent below 1990 levels by 2050. It also adopted [California's GHG standards for motor vehicles](#). The U.S. Environmental Protection Agency (EPA) denied California's request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

Also on July 13, 2007, Gov. Crist signed [Executive Order 07-128](#), which created a new Governor's Action Team on Energy and Climate Change to develop a "comprehensive energy and climate change action plan" that would lay out policy options and suggest strategies for meeting the orders' goals and provide analysis of whether to implement mandates, voluntary standards, or market-based regulatory mechanisms. On August 13, 2007, Gov. Crist appointed 21 team members to create a Florida Climate Change Action Plan that will include strategies beyond the Governor's Executive Orders to reduce emissions, including recommendations for proposed legislation for consideration during the 2008 Legislative Session and beyond. On November 1, 2007, the Action Team submitted [Phase 1 of the Florida Climate Action Plan](#). In October 2008, Florida's Action Team on Energy and Climate Change issued its [final report](#) to Gov. Crist with 50 policy recommendations to reduce emissions that include:

Buildings

- Community development proposals must meet *Leadership in Energy and Environmental Design (LEED)* building standards or other approved certification
- Minimum statewide green building standards

Land Use

- Mixed-use development incentives
- Compact development
- Pedestrian-friendly development

Transportation

- Transportation management system
- Low-carbon fuel standard
- Telework programs, job-sharing, and carpooling programs to reduce vehicle miles traveled (VMT)
- Variable-parking and smart parking programs

In June 2008, Gov. Crist signed into law [House Bill 7135](#), the 2008 Energy and Economic Development Legislation, a comprehensive energy and economic development policy. The goals of this policy include:

- Renewable Portfolio Standard for utilities as well as a Renewable Fuel Standard
- Requirement for major emitters to report emissions through the Climate Registry and a call for the development of a cap and trade system to regulate greenhouse gas emissions
- Expanded incentive programs to continue encouraging development in alternative and renewable energy technologies, including the Solar Rebate Program and the Renewable Energy and Energy-Efficient Technologies Grant Program

Resource: <http://www.dep.state.fl.us/climatechange/default.htm>

[Table](#)

GEORGIA

The state of Georgia holds no state action plan. However, the [State Energy Strategy](#), issued December 2006, states that the government can create energy management teams and plans to establish baselines, audit buildings, implement energy efficiency measures, and monitor performance with the goal of reducing energy consumption in public buildings.

[Table](#)

HAWAII

Hawaii is one of the states most vulnerable to the effects of climate change, with threats from both predicted sea level rise and loss of biodiversity. In November 1998, the State of Hawaii enacted a [climate change action plan](#). Some of the activities implemented involve:

Buildings

- Efficient residential appliance program
- Residential, industrial, and small-large commercial sector energy assessments

Land Use

- Land use policies to reduce congestion and need for transportation
- Visibility of driving costs
- Mass transit
- Bicycle and pedestrian transportation system infrastructures

Transportation

- Honolulu clean cities program
- Reduce congestion through transportation control measures (TCM)
- Incentives for alternative fuel vehicle ownership
- Ethanol-blend based gasolines

- Electric vehicle deployment

In 2001, Hawaii acted to require that renewable energy comprise a growing percentage of the state's electric generation. Renewable energy requirements are set at 7 percent in 2003, 8 percent in 2005, and 9 percent in 2010.

On June 2, 2006, Gov. Linda Lingle signed [Senate Bill 3185](#), establishing a statewide energy efficiency utility and energy efficiency portfolio standard of 10 percent in 2010, 15 percent in 2015, and 20 percent in 2020.

Hawaii is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to 1) meet or exceed the goals of obtaining 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, 2) to encourage adequate funding for state energy efficiency and renewable generation programs, and 3) to facilitate development of regional energy markets.

In June 2007, Gov. Lingle approved [House Bill 226](#), which established a greenhouse gas (GHG) emissions reduction task force that will prepare a work plan and regulatory scheme for achieving the state's GHG emissions limit of 1990 levels by 2020. The new plan is due before December 1, 2009.

On June 26, 2008, Gov. Lingle signed [Senate Bill 644](#), which requires single-dwelling homes to have solar water heaters starting January 1, 2010.

[Table](#)

IDAHO

In 2006, Gov. C. L. "Butch" Otter signed on as an Observer to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration among Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce greenhouse gas (GHG) emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

Idaho is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to 1) meet or exceed the goals of obtaining 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, 2) to encourage adequate funding for state energy efficiency and renewable generation programs, and 3) to facilitate development of regional energy markets.

On May 16, 2007, Gov. Otter signed an [executive order](#) to establish a state policy regarding the role of government in the reduction of GHGs. The order required that each state agency create a GHG emission inventory and identify changes that can be made to reduce GHGs within each agency.

Gov. Otter issued [Executive Order 2007-21](#) on December 21, 2007, establishing a policy to reduce fossil fuel use and greenhouse gas emissions from state vehicles.

Resource: http://www.deq.state.id.us/air/prog_issues/climate_change/ghg_state_government.cfm

[Table](#)

ILLINOIS

The state is in the process of developing a comprehensive climate plan. On October 5, 2006, Gov. Rod Blagojevich signed [Executive Order 2006-11](#) that established the Illinois Climate Change Advisory Group. The Advisory Group has broad representation, including, business leaders, labor unions, the energy and agricultural industries, scientists, economists,

and environmental groups from throughout the state. The Advisory Group made initial recommendations to the Governor in June 2007; [final recommendations](#) were submitted in September 2007. They include:

Land Use

- Smart growth initiatives and expansion of mass transit

Transportation

- California vehicle emissions standards for automobiles
- Incentives for fuel efficient vehicles
- California low-carbon fuels standard
- Fuel efficiency and/or low carbon fuel requirements for all government
- Passenger and freight rail upgrades

On February 13, 2007, Gov. Blagojevich announced a goal to reduce greenhouse gas (GHG) emissions to 1990 levels by 2020 and 60 percent below 1990 levels by 2050.

On November 15, 2007, Gov. Blagojevich, along with the governors of Wisconsin, Minnesota, Indiana, Iowa, Michigan, Kansas, Ohio, South Dakota, and the provinces of Ontario and Manitoba signed the [Midwestern Regional Greenhouse Gas Reduction Accord](#). The agreement will serve as a regional strategy to achieve energy security and reduce GHG emissions that cause global warming. The Accord will 1) establish GHG reduction targets; 2) develop a cap and trade mechanism to help achieve those reduction targets; 3) establish a system tracking and management of credits; and 4) develop and implement additional steps as needed to achieve the reduction targets, such as a low-carbon fuel standards and regional incentives and funding mechanisms.

Also on November 15, 2007, the state of Illinois as well as Iowa, Indiana, Nebraska, Minnesota, Michigan, Kansas, Ohio, South Dakota, North Dakota, and Wisconsin signed the [Midwestern Energy Security and Climate Stewardship Platform](#), which laid out the following goals:

- CO₂-management to create a regional transportation and storage infrastructure
- A bioproduct procurement program to support the growth of the region's bioeconomy
- Electricity transmission adequacy to support thousands of new megawatts of wind energy
- Renewable fuels corridors and coordinated signage to promote renewable fuel usage across the Midwest
- Advanced bioenergy permitting to assist states with the latest technologies
- Low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy

Resource: <http://www.epa.state.il.us/air/climatechange/>

[Table](#)

INDIANA

The state of Indiana holds no state climate action plan. However, in 2006, Indiana released a strategic energy plan entitled [Hoosier Homegrown Energy](#). The goals include:

- Update building codes for public housing and other buildings
- Requiring applicants to the Department of Local Government Finance to consider geothermal heating and cooling systems
- Incentives for energy efficiency investments that maximize the use of waste heat, as well as fuel cells
- Alternative pricing regulatory mechanisms that encourage utilities to promote efficiency and conservation by their customers without incurring negative financial results

On November 15, 2007, the governor of Indiana, along with the governors of Wisconsin, Minnesota, Illinois, Iowa, Michigan, Kansas, Ohio, South Dakota, and the provinces of Ontario and Manitoba signed the [Midwestern Regional](#)

[Greenhouse Gas Reduction Accord](#). The agreement will serve as a regional strategy to achieve energy security and reduce greenhouse gas (GHG) emissions that cause global warming. The Accord will 1) establish GHG reduction targets; 2) develop a cap and trade mechanism to help achieve those reduction targets; 3) establish a system for tracking and management of credits; and 4) develop and implement additional steps as needed to achieve the reduction targets, such as a low carbon fuel standards and regional incentives and funding mechanisms. Indiana signed on as an observer to the regional cap and trade program, along with Ohio and South Dakota.

Also on November 15, 2007, the state of Indiana as well as Iowa, Nebraska, Illinois, Minnesota, Michigan, Kansas, Ohio, South Dakota, North Dakota, and Wisconsin signed the [Midwestern Energy Security and Climate Stewardship Platform](#), which laid out the following goals:

- CO₂-management to create a regional transportation and storage infrastructure
- A bioproduct procurement program to support the growth of the region's bioeconomy
- Electricity transmission adequacy to support thousands of new megawatts of wind energy
- Renewable fuels corridors and coordinated signage to promote renewable fuel usage across the Midwest
- Advanced bioenergy permitting to assist states with the latest technologies
- Low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy

Resource: <http://www.in.gov/oed/>

[Table](#)

IOWA

The Iowa Department of Natural Resources and the Iowa State University published a [state climate change action plan](#) in December 1996, mainly concerned with agriculture measures and transportation issues. Some of the activities implemented involve:

Transportation

- Reduction of single occupancy trips through various measures
- Vehicle fleet efficiency through a feebate program
- Mass transit
- Research and implement advanced vehicle technology, alternative fuel use, and economic incentive programs

On April 27, 2007, Gov. Chet Culver signed [Senate File 485](#), a bill related to greenhouse gas (GHG) emissions. Part of this bill created the Iowa Climate Change Advisory Council (ICCAC), which consists of 23 governor-appointed members from various stakeholder groups, and 4 nonvoting, ex officio members from the General Assembly. To facilitate progress, ICCAC has divided itself into five subcommittees: Energy Efficiency and Conservation, Clean and Renewable Energy, Transportation and Land Use Efficiency, Agriculture, Forestry, and Waste Management, and Cross-Cutting Issues, ICCAC's immediate responsibilities include submitting a proposal to the Governor and General Assembly that addresses policies, cost-effective strategies, and multiple scenarios designed to reduce statewide GHG emissions. Further, a [preliminary report](#) was submitted on January 1, 2008, with a [final report](#) submitted in December 2008. Recommendations address areas such as:

Transportation

- Smart growth bundle with transit
- Expansion and improvement of transit infrastructure
- Passenger rail service
- Adopt best workplaces for commuters

On November 15, 2007, the governor of Iowa, along with the governors of Wisconsin, Minnesota, Indiana, Illinois, Michigan, Kansas, Ohio, South Dakota, and the provinces of Ontario and Manitoba signed the [Midwestern Regional Greenhouse Gas Reduction Accord](#). The agreement will serve as a regional strategy to achieve energy security and

reduce GHG emissions that cause global warming. The Accord will 1) establish GHG reduction targets; 2) develop a cap and trade mechanism to help achieve those reduction targets; 3) establish a system tracking and management of credits; and 4) develop and implement additional steps as needed to achieve the reduction targets, such as a low-carbon fuel standards and regional incentives and funding mechanisms.

Also on November 15, 2007, the state of Iowa as well as Nebraska, Indiana, Illinois, Minnesota, Michigan, Kansas, Ohio, South Dakota, North Dakota, and Wisconsin signed the [Midwestern Energy Security and Climate Stewardship Platform](#), which laid out the following goals:

- CO₂-management to create a regional transportation and storage infrastructure;
- A bioproduct procurement program to support the growth of the region's bioeconomy;
- Electricity transmission adequacy to support thousands of new megawatts of wind energy;
- Renewable fuels corridors and coordinated signage to promote renewable fuel usage across the Midwest;
- Advanced bioenergy permitting to assist states with the latest technologies; and
- Low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy.

On December 14, 2007, Gov. Culver's Office of Energy Independence called for new automobile emissions standards similar to California's standards. The proposal needs the approval of the Iowa Legislature before it can take effect.

Resource: <http://www.iaclimatechange.us/>

[Table](#)

KANSAS

The state of Kansas holds no state climate action plan. However, in 2006, Gov. Kathleen Sebelius signed on as an Observer to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration among Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce greenhouse gas (GHG) emissions 15 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

Kansas is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to 1) meet or exceed the goals of obtaining 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, 2) to encourage adequate funding for state energy efficiency and renewable generation programs, and 3) to facilitate development of regional energy markets.

On November 15, 2007, Gov. Sebelius, along with the governors of Wisconsin, Minnesota, Illinois, Indiana, Iowa, Michigan, Ohio, South Dakota, and the provinces of Ontario and Manitoba signed the [Midwestern Regional Greenhouse Gas Reduction Accord](#). The agreement will serve as a regional strategy to achieve energy security and reduce GHG emissions that cause global warming. The Accord will 1) establish GHG reduction targets; 2) develop a cap and trade mechanism to help achieve those reduction targets; 3) establish a system tracking and management of credits; and 4) develop and implement additional steps as needed to achieve the reduction targets, such as a low-carbon fuel standards and regional incentives and funding mechanisms.

Also on November 15, 2007, the state of Kansas as well as Iowa, Indiana, Illinois, Minnesota, Michigan, Nebraska, Ohio, South Dakota, North Dakota, and Wisconsin signed the [Midwestern Energy Security and Climate Stewardship Platform](#), which laid out the following goals:

- CO₂-management to create a regional transportation and storage infrastructure;
- A bioproduct procurement program to support the growth of the region's bioeconomy;
- Electricity transmission adequacy to support thousands of new megawatts of wind energy;

- Renewable fuels corridors and coordinated signage to promote renewable fuel usage across the Midwest;
- Advanced bioenergy permitting to assist states with the latest technologies; and
- Low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy.

On March 21, 2008, Gov. Sebelius issued [Executive Order 08-03](#), establishing the Kansas Energy and Environmental Policy (KEEP) Advisory Group to focus on addressing GHG emissions. KEEP is tasked with developing an action plan to reduce GHGs in Kansas, and in January 2009 the group submitted an [interim report](#), with a final report expected by January 2010. Some of the recommendations in the interim report include:

Buildings

- Improved building codes for energy efficiency
- Training of building code officials in energy code enforcement
- Feebate program to encourage energy efficiency in building design
- Reduced-cost or free residential energy audits

Land Use

- Smart growth planning, modeling and tools
- Bike and pedestrian infrastructure
- Targeted open-space protection

Transportation

- Incentives for car sharing
- Improved and expanded transit service
- Movement of freight from truck to rail

Resource: <http://ksclimatechange.us/>

Table

KENTUCKY

The state of Kentucky published a [greenhouse gas \(GHG\) mitigation strategy](#) in 1998; some of the recommendations include:

- Feebates to encourage purchase of fuel efficient vehicles
- Residential and commercial sectors-improve the observance and enforcement of building energy codes
- Residential sector-promote energy-efficient mortgages (EEMs) and institute a home energy rating system

In November 2008, Gov. Steve Beshear introduced a [comprehensive state plan](#) for the state, which calls for a 20 percent reduction from 1990 levels in greenhouse gas emissions by 2025. One of the goals in the plan is to offset at least 18 percent of Kentucky's projected 2025 energy demand with energy efficiency. Some of the strategies include:

- An Energy Efficiency Resource Standard (EERS) established to support the energy efficiency portion of the REPS with a goal of reducing energy consumption by at least 16 percent below projected (with no changes) 2025 energy consumption
- Transportation energy efficiency programs that contribute another two percent reduction representing energy savings corresponding to approximately 500 million gallons of motor fuel annually
- Education, outreach and marketing programs to support energy efficiency activities
- An energy efficiency program established for state government that has aggressive internal energy savings targets

Resource: <http://www.energy.ky.gov/>

[Table](#)

LOUISIANA

The state of Louisiana holds no state climate action plan. In January of 2008, Gov. Bobby Jindal issued [Executive Order Number BJ 2008-8](#), which establishes a 'green government' and sets a range of goals for energy efficiency in various sectors. Some of its main provisions are:

- Energy efficiency goals for state-owned buildings
- Energy analysis of all state facilities and taking action to reduce energy consumption
- A review of purchasing practices to conserve energy by procuring energy efficient appliances and by following best management practices
- Fuel economy goals for the state fleet and expansion of the number of hybrid and other fuel efficient vehicles in the fleet

Resource: <http://www.gov.state.la.us/>

[Table](#)

MAINE

In 1997 the state acted to require that 30 percent of Maine's energy generation come from renewable sources. In July of 2002, the Attorney General of Maine joined the Chief Legal Officers of Alaska, Connecticut, California, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont in a letter to President George W. Bush, asking the current administration to address the issue of climate change through comprehensive national policies on greenhouse gas (GHG) emissions.

Maine is one of the states that agreed in 2001, under the auspices of the New England Governors and Eastern Canadian Premiers (NEG/ECP), to a voluntary short-term goal of reducing regional GHG emissions to 1990 levels by 2010 and by 10 percent below 1990 levels by 2020. The NEG/ECP long-term goal is to reduce emissions to a level that eliminates any dangerous threats to the climate - a goal scientists suggest will require reductions 75 to 85 percent below current levels. The goals of the [2001 NEG/ECP plan](#) include:

Buildings

- Update residential and commercial building energy codes
- Promote energy efficient and energy improvement mortgages
- Revise energy conservation loan program
- Weatherization assistance program
- Energy start homes program
- High-performance buildings: state-funded and privately funded projects
- Training for building operators
- Green campus initiative
- [34 other recommendations](#)

Land Use

- transit, smart growth, and vehicle miles traveled (VMT) reduction package

Transportation

- California LEVII standards
- GHG feebate program
- Fleet vehicle incentives and initiatives
- Tailpipe GHG emissions standards
- Public education initiative
- Hydrogen infrastructure research and demonstration program

- Clean diesel and black carbon initiative

On June 26, 2003, Governor Baldacci signed [PL 237](#) that would mandate a statewide plan for reducing GHG emissions to 1990 levels by 2010. The bill also calls for an inventory of GHG emissions from all state-owned facilities and state funded programs. By 2006, Maine's Department of Environmental Protection (DEP) must develop a long-term climate action plan to reduce Maine's GHG emissions to 1990 levels by 2010, 10 percent below 1990 levels by 2020, and, ultimately, 75-80 percent below 2003 levels by a date yet to be determined.

On September 29, 2003, Maine also joined the Regional Greenhouse Gas Initiative ([RGGI](#)), an effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide (CO₂) emissions through a cap and trade program. The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO₂ (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10 percent below Phase I levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four CO₂ allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow VMT growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures
- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

On December 1, 2004, the state of Maine enacted a [climate change action plan](#). Some of the activities implemented are:

Buildings

- State residential and commercial building codes and practices
- Appliance and equipment efficiency standards
- Federal ENERGY STAR and “climatewise” programs
- Create financial incentives for residential energy conservation improvements

Land Use

- Work with municipalities, developers, and homebuilders to design and build more energy efficient patterns of development

Transportation

- MDOT transportation plans to maximize potential emissions reductions

In December 2005, the Board of Environmental Protection adopted amendments to Chapter 127, New Motor Vehicle Emission Standards, which incorporated [California's vehicle emissions standards](#) for new motor vehicles sold in Maine. EPA denied California's request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

In January 2006, the state issued its [first update](#) to its climate change action plan, and in January 2008, a [second update](#) was released.

[Table](#)

MARYLAND

In July 2002, the Attorney General of Maryland joined the Chief Legal Officers of Alaska, Connecticut, California, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont in a letter to President George W. Bush, asking the current administration to address the issue of climate change through comprehensive national policies on greenhouse gas (GHG) emissions.

In 2004, the Maryland Energy Administration organized the [GHG Emissions Reductions in Maryland, Volume 1: Current State and Government Activities](#). This resource was created to provide a snapshot of those activities for private and public information, as well as for use as an evaluation tool in developing statewide policy.

In April 2007, Gov. Martin O'Malley signed the 2007 [Clean Cars Act](#), which adopts the California vehicle emissions standard.

On April 20, 2007, Gov. O'Malley signed [Executive Order 01.01.2007.07](#) that established a [Climate Change Commission](#) charged with collectively developing an action plan to address the causes of climate change, prepare for the likely consequences and impacts of climate change to Maryland, and establish firm benchmarks and timetables for implementing the Commission's recommendations. The Maryland Commission on Climate Change was charged with advising the Governor and the General Assembly on matters related to climate change. Specifically, it will:

- Undertake an assessment of climate change impacts, calculate Maryland's carbon footprint, and investigate climate change dynamics with the assistance of the University System of Maryland
- Work together with the Maryland Department of the Environment, the Maryland Energy Administration and a broad set of stakeholders, including renewable and traditional energy providers and the business community, to develop a comprehensive greenhouse gas and carbon footprint reduction strategy
- Coordinate with the Maryland Departments of Natural Resources and Planning, and a comprehensive group of planners, emergency responders and environmental organizations, as well as business and insurance representatives, to develop a strategy for reducing Maryland's vulnerability to climate change, with an initial focus on sea level rise and coastal hazards

Additionally, the order establishes a goal for reducing GHG emissions to 1990 levels by 2020 and 80 percent below 2006 levels by 2050. A [preliminary report](#) was published on January 14, 2008, and a final comprehensive climate plan is due after April 2008. Some of the measures include:

Buildings

- Stronger building codes and inspections to improve energy efficiency and systems
- Appliance and lighting efficiency standards

Transportation

- Excise tax on new motor vehicles with the lowest fuel economy ratings
- Pay-as-you-drive insurance programs

In April 2007, Maryland also joined the Regional Greenhouse Gas Initiative ([RGGI](#)), an effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions through a cap and trade program. The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO₂ (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10 percent below Phase 1 levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four CO₂ allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow vehicle miles traveled (VMT) growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures
- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

On April 24, 2008, Gov. O'Malley signed SB 208, the [High Performance Buildings Act](#), into law. The act requires all new public construction and major renovation projects greater than 7500 square feet to achieve either the LEED Silver standard or two Green Globes.

In August 2008, the Maryland Commission on Climate Change released a [Climate Action Plan](#) outlining strategies to mitigate the effects of climate change. These include:

Land Use

- Integrated planning for land use and location efficiency

Transportation

- Transit service and expand transit infrastructure (rail, bus)
- Connectivity of non-automobile transportation modes between cities through infrastructure and technology investments
- Pay-as-you-drive insurance
- Sidewalks and bikeways to increase pedestrian and bicycle travel
- Incentives, pricing and resource measures

On May 7, 2009, Gov. O'Malley SB 278, the [Greenhouse Gas Emissions Reduction Act](#), which requires the state to achieve a 25 percent reduction in GHGs from 2006 levels by 2025. It requires the Department of the Environment to submit a proposed GHG reduction plan by 2011, and to adopt the final plan by 2012.

Resource: <http://www.mdclimatechange.us/>

[Table](#)

MASSACHUSETTS

Massachusetts is one of the states that agreed in 2001, under the auspices of the New England Governors and Eastern Canadian Premiers (NEG/ECP), to a voluntary short-term goal of reducing regional greenhouse gas (GHG) emissions to 1990 levels by 2010 and by 10 percent below 1990 levels by 2020. The NEG/ECP long-term goal is to reduce emissions to a level that eliminates any dangerous threats to the climate - a goal scientists suggest will require reductions 75 to 85 percent below current levels. These goals of the [2001 NEG/ECP plan](#) include:

Buildings

- Update residential and commercial building energy codes
- Promote energy efficient and energy improvement mortgages
- Revise energy conservation loan program
- Weatherization assistance program
- Energy start homes program
- High-performance buildings: state-funded and privately funded projects
- Training for building operators

- Green campus initiative
- [34 other recommendations](#)

Land Use

- Transit, smart growth, and vehicle miles traveled (VMT) reduction

Transportation

- California LEVII standards
- GHG feebate program
- Fleet vehicle incentives and initiatives
- Tailpipe GHG emissions standards
- Public education initiative
- Hydrogen infrastructure research and demonstration program
- Clean diesel and black carbon initiative

In July 2002, the Attorney General of Massachusetts joined the Chief Legal Officers of Alaska, Connecticut, California, Maine, Maryland, New Hampshire, New Jersey, New York, Rhode Island and Vermont in a letter to President George W. Bush, asking the current administration to address the issue of climate change through comprehensive national policies on GHG emissions.

The Massachusetts Department of Environmental Protection released an extensive [climate change protection plan](#) in May 2004. Some of the activities implemented are:

Buildings

- Comprehensive sustainable design initiative for state buildings
 - The Division of Capital Asset Management will seek LEED certification for all new construction and major renovation projects
- Sustainable building design roundtable
- Sustainable design among construction professionals
- Work collaboratively with the trust's green buildings program
- Trust's partnership with the Massachusetts Department of Education's green schools program
- Sustainable design approaches into MEPA projects

Land Use

- Transportation and land use sustainable development principles
- Mass transit-oriented development
- Vehicle miles traveled (VMT) reduction strategies
- Public transit infrastructure upgrades
- Bicycle and pedestrian transit infrastructure upgrades
- Vehicle movement signal efficiency

Transportation

- Carpool lane access for clean vehicles
- Strong vehicle emissions standards
- Cleaner vehicles and fuels in public transit fleet
- Incentives for alternative fuel vehicle ownership

On January 9, 2006, Massachusetts adopted [California's vehicle emissions standards](#), which will take effect in Massachusetts starting with 2009 model year vehicles. EPA denied California's request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

In January 2007, Massachusetts also joined the Regional Greenhouse Gas Initiative ([RGGI](#)), an effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions through a cap and trade program. The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO₂ (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10 percent below Phase 1 levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four CO₂ allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow VMT growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures
- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

On August 13, 2008, Gov. Deval Patrick signed the [Global Warming Solutions Act](#), which establishes a statewide and regional registry of greenhouse gas emissions. The Secretary of Energy and Environmental Affairs will set a 2020 emissions limit between 10 percent and 25 percent below 1990 levels and adopt a plan for meeting that limit by January 1, 2011. The law also requires the Secretary to establish 2030 and 2040 levels, eventually leading up to the required 80 percent reduction by 2050.

On April 23, 2008, the Advanced Biofuels Task Force (as created by Gov. Patrick and legislative leaders in November 2007) released their recommendations, including a Low Carbon Fuel Standard (LCFS). Governor Patrick then instructed the State Department of Energy and Environmental Affairs to begin developing a LCFS, while he works with other states to try to create a regional LCFS.

Resource: <http://www.mass.gov/dep/air/climate/index.htm#dep>

[Table](#)

MICHIGAN

The state of Michigan is in the process of developing a comprehensive climate action plan. On November 14, 2007, Governor Jennifer Granholm signed [Executive Order 2007-42](#), creating the Michigan Climate Action Council. The duties of the Council included:

- Produce an inventory and forecast of greenhouse gas (GHG) emissions in Michigan and their sources from 1990 to 2020
- Consider potential state and multi-state climate change mitigation and adaptation actions in each of the following sectors, and such other sectors as deemed appropriate by the Council:
 - Energy supply
 - Residential
 - Commercial and industrial
 - Transportation
 - Land use
 - Agriculture
 - Forestry
 - Waste management

- Compile a comprehensive climate action plan for this state with specific recommendations for reducing GHG emissions in Michigan, including, but not limited to, identification of mitigation and adaptive measures for state and local units of government, businesses, and Michigan residents to minimize climate change and better prepare for the effects of climate change in Michigan
- Advise state and local governmental entities on measures to address climate change

On November 15, 2007, the governor of Michigan, along with the governors of Wisconsin, Minnesota, Indiana, Illinois, Iowa, Kansas, Ohio, South Dakota, and the province of Manitoba signed the [Midwestern Regional Greenhouse Gas Reduction Accord](#). The agreement will serve as a regional strategy to achieve energy security and reduce GHG emissions that cause global warming. The Accord will 1) establish GHG reduction targets; 2) develop a cap and trade mechanism to help achieve those reduction targets; 3) establish a system tracking and management of credits; and 4) develop and implement additional steps as needed to achieve the reduction targets, such as a low-carbon fuel standards and regional incentives and funding mechanisms.

Also, on November 15, 2007, the state of Michigan as well as Iowa, Indiana, Illinois, Minnesota, Nebraska, Kansas, Ohio, South Dakota, North Dakota, and Wisconsin signed the [Midwestern Energy Security and Climate Stewardship Platform](#), which laid out the following goals:

- CO₂-management to create a regional transportation and storage infrastructure
- A bioproduct procurement program to support the growth of the region's bioeconomy
- Electricity transmission adequacy to support thousands of new megawatts of wind energy
- Renewable fuels corridors and coordinated signage to promote renewable fuel usage across the Midwest
- Advanced bioenergy permitting to assist states with the latest technologies
- Low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy

On March 1, 2009, the Michigan Climate Action Council completed the [Climate Action Plan](#) which includes 54 policy recommendations for reducing GHG emissions and addressing related energy and commerce issues in Michigan. Some of the measures include:

Buildings

- More stringent building codes for energy efficiency
- Net metering for distributed generation
- Training and education for building design and operation

Land Use

- Promoting growth management options that result in compact, mixed-use, transit oriented, walkable communities

Transportation

- Promote low-carbon fuel use in transportation
- Truck idling programs
- Expand development and use of more efficient vehicle designs and/or hybrid propulsion systems
- Expand use of intelligent transportation systems
- Enhancing public transit options
- Increase rail capacity and address rail freight system bottlenecks
- Promote use of marine transport for freight

Resource: <http://www.miclimatchange.us/>

[Table](#)

The Minnesota Pollution Control Agency released in February 2003 a [climate change framework for action](#) which partly identifies several existing programs on which the state can improve in order to reduce greenhouse gas (GHG) emissions. In 2002, the state acted to require that electric generation be provided by 425 MW wind and 125 MW biomass. The Public Utilities Commission ordered electric generation to reach 400 MW more wind by 2012.

On December 12, 2006, Gov. Tim Pawlenty introduced a [Next Generation Energy Initiative](#) with steps to create more renewable energy, more energy conservation, and less carbon emissions for Minnesota. From this, a Climate Change Advisory Group (MCCAG) began meeting in April 2007 to prepare a [Climate Mitigation Action Plan](#), which was released in April 2008. Some of the measures include:

Buildings

- Maximize savings from the utility conservation improvement program
- Improved uniform statewide building codes
- Green building guidelines and standards based on *Architecture 2030*
- Incentives and resources to promote combined heat and power
- Non-utility strategies and incentives to encourage energy efficiency and reduce GHG emissions
- Conservation improvement-type program for propane and fuel oil efficiency energy performance disclosure
- Promote technology-specific applications to reduce GHG emissions
- Support strong federal appliance standards and require high state standards in the absence of federal standards

Transportation

- Improved land-use planning and development strategies
- Expand transit, bicycle, and pedestrian infrastructure
- Climate-friendly transportation pricing/pay-as-you-drive
- “Fix-it-first” transportation investment policy and practice
- Workplace tools to encourage carpooling, bicycling, and transit ridership
- Freight mode shifts: intermodal and rail
- Low-GHG fuel standard
- Infrastructure management
- Fleet emission reductions
- Reduce maximum speed limits

On May 21, 2007, Gov. Pawlenty signed the [Next Generation Energy Act of 2007](#), which pledges to reduce statewide greenhouse gas emissions to a level at least 15 percent below 2005 levels by 2015, 30 percent below 2005 levels by 2025, and at least 80 percent below 2005 levels by 2050.

On November 15, 2007, the governor of Minnesota, along with the governors of Wisconsin, Iowa, Indiana, Illinois, Michigan, Kansas, Ohio, South Dakota, and the province of Manitoba signed the [Midwestern Regional Greenhouse Gas Reduction Accord](#). The agreement will serve as a regional strategy to achieve energy security and reduce greenhouse gas emissions that cause global warming. The Accord will 1) establish greenhouse gas reduction targets; 2) develop a cap and trade mechanism to help achieve those reduction targets; 3) establish a system tracking and management of credits; and 4) develop and implement additional steps as needed to achieve the reduction targets, such as a low-carbon fuel standards and regional incentives and funding mechanisms.

Also on November 15, 2007, the state of Minnesota as well as Iowa, Indiana, Illinois, Nebraska, Michigan, Kansas, Ohio, South Dakota, North Dakota, and Wisconsin signed the [Midwestern Energy Security and Climate Stewardship Platform](#), which laid out the following goals:

- CO₂ management to create a regional transportation and storage infrastructure
- a bioproduct procurement program to support the growth of the region’s bioeconomy
- electricity transmission adequacy to support thousands of new megawatts of wind energy
- renewable fuels corridors and coordinated signage to promote renewable fuel usage across the Midwest
- advanced bioenergy permitting to assist states with the latest technologies

- low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy

Resource: <http://www.mnclimatechange.us/>

[Table](#)

MISSISSIPPI

The state of Mississippi holds no climate action plan. In 2007, a bill ([SB 2663](#)) was introduced to create a state climate commission looking at the effects of climate change, but it did pass out of committee.

[Table](#)

MISSOURI

The state of Missouri published [action options for reducing GHG emissions](#) in July 2002; some of the policy options include:

Buildings

- Improve the energy efficiency in state facilities program
- Energy-efficient loans, education and partnerships with schools and local governments
- Support federal appliance standards
- Support home energy rating systems
- Support ENERGY STAR labeling
- State-sponsored incentive programs for residential energy efficiency

Transportation

- Promote the fuel efficiency of highway vehicles
- Promote alternative and renewable fuel use in highway vehicles
- Support measures that reduce the need for travel and support a variety of efficient methods for travel

Resource: <http://www.dnr.mo.gov/energy/cc/cc.htm>

[Table](#)

MONTANA

Montana is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

The state's first [Climate Change Advisory Committee](#) meeting took place on July 13, 2006. Montana completed its [climate action plan](#) in November 2007. Some of the major elements of the plan include:

Buildings

- Goal to induce ¼ of new and existing homes and commercial/institutional buildings in Montana to reduce per-unit-floor-area consumption of grid electricity and natural gas by 20 percent by 2020 in existing buildings and by 50 percent in new buildings by 2020
- Incentives for energy efficient home construction
- Rewards programs for "beyond code" energy efficiency/emissions reduction improvements
- Increased tax incentives for energy-efficiency/renewable energy systems

Land Use

- Growth and development bundle promoting infill, densification and brownfield redevelopment
- Mixed-use and transit-oriented development
- Smart growth planning, modeling and tools
- Targeted open space protection
- Expanding transit infrastructure and service
- Increasing transportation service

Transportation

- Light-duty vehicle/clean car standards
- Fuel efficient replacement tires program
- Consumer information on vehicle MPG,
- Financial and market incentives for low GHG vehicle ownership and use

Additionally, on November 19, 2007, Gov. Schweitzer announced that Montana had signed on as a Partner to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration among Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce greenhouse gas emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

Resource: <http://www.mtclimatechange.us/>

Table

NEBRASKA

The state of Nebraska holds no state climate action plan. However, Nebraska is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

On November 15, 2007, the state of Nebraska as well as Iowa, Indiana, Illinois, Minnesota, Michigan, Kansas, Ohio, South Dakota, North Dakota, and Wisconsin signed the [Midwestern Energy Security and Climate Stewardship Platform](#), which laid out the following goals:

- CO₂ management to create a regional transportation and storage infrastructure;
- A bioproduct procurement program to support the growth of the region's bioeconomy;
- Electricity transmission adequacy to support thousands of new megawatts of wind energy;
- Renewable fuels corridors and coordinated signage to promote renewable fuel usage across the Midwest;
- Advanced bioenergy permitting to assist states with the latest technologies; and
- Low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy.

Table

NEVADA

Nevada is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

The state of Nevada established a Climate Change Advisory Committee by [executive order](#) in April 10, 2007, to propose recommendations to reduce greenhouse gas emissions. Additionally, the Public Utilities Commission acted to require that 5 percent of retail electricity supplies to be renewable, increasing 2 percent biannually to 15 percent in 2013. The state of Nevada released its [final report](#) in July 2008. Some of the measures include:

Buildings

- Create new efficient building standards
- Energy efficient building codes

Transportation

- Advanced travel center electrification
- Clean-fueled bus program
- Clean fuels and clean vehicle incentive program
- Monitor the status of California motor vehicle emissions
- Reduce GHG emissions from motor vehicles
- State fleets for alternative fuel cars
- Environmental study for high speed train between Las Vegas and Anaheim
- Incentives for ethanol-blended fuels
- Incentives for bio-diesel fuel

In 2007, Gov. Gibbons signed on as an Observer to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration between Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce greenhouse gas emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

Resource: <http://gov.state.nv.us/Climate/>

[Table](#)

NEW HAMPSHIRE

New Hampshire is one of the states that agreed in 2001, under the auspices of the New England Governors and Eastern Canadian Premiers (NEG/ECP), to a voluntary short-term goal of reducing regional greenhouse gas (GHG) emissions to 1990 levels by 2010 and by 10 percent below 1990 levels by 2020. The NEG/ECP [long-term goal](#) is to reduce emissions to a level that eliminates any dangerous threats to the climate -- a goal scientists suggest will require reductions 75 to 85 percent below current levels. The goals of the [2001 NEG/ECP plan](#) include:

Buildings

- Update residential and commercial building energy codes
- Promote energy efficient and energy improvement mortgages
- Revise energy conservation loan program
- Weatherization assistance program
- Energy start homes program
- High-performance buildings: state-funded and privately funded projects
- Training for building operators
- Green campus initiative
- [34 other recommendations](#)

Land Use

- Transit, smart growth, and vehicle miles traveled (VMT) reduction package

Transportation

- California LEVII standards
- GHG feebate program

- Fleet vehicle incentives and initiatives
- Tailpipe GHG emissions standards
- Public education initiative
- Hydrogen infrastructure research and demonstration program
- Clean diesel and black carbon initiative

The New Hampshire Department of Environmental Services has outlined a [Climate Change Challenge](#) in December 2001, which outlined over 70 voluntary and regulatory activities. Some of the activities implemented are:

Buildings

- Promote energy efficient appliances for use in residential
- Revise energy efficiency codes to include more energy efficient standards
- Facilitate marketing mechanisms to promote the purchase or renewable energy sources

Land Use

- Pursue integrated transportation planning to reduce VMT
- Expand mass transit infrastructure
- Continue to facilitate funding for bicycle and pedestrian infrastructure
- Promote land use strategies that serve to reduce fuel energy usage

Transportation

- Pursue improvements to federal CAFE standards for passenger cars efficiency regulations
- Promote alternative fueled vehicles and fueling infrastructure
- Promote clean fleet initiatives at Manchester Airport
- Vehicle emissions and maintenance testing to reduce vehicle emissions
- Promote telecommuting, alternative work schedules, carpooling and use of mass transit

In July of 2002 the Attorney General of New Hampshire joined the Chief Legal Officers of Alaska, Connecticut, California, Maine, Maryland, Massachusetts, New Jersey, New York, Rhode Island and Vermont in a letter to President George W. Bush, asking the current administration to address the issue of climate change through comprehensive national policies on GHG emissions.

On September 29, 2003, New Hampshire also joined the Regional Greenhouse Gas Initiative ([RGGI](#)), an effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions through a cap and trade program. The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO₂ (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10 percent below Phase 1 levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four CO₂ allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow VMT growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures
- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

In December 2007, Gov. Lynch issued [Executive Order Number 2007-3](#), which established a Climate Change Policy Task Force and charged the task force with developing a Climate Change Action Plan for the State of New Hampshire. The

Executive Order directs the task force to submit the action plan to the Governor by September 1, 2008, later extended to December 2008. In March 2009, the Climate Change Policy Task Force released the [Climate Action Plan](#) with the long term goal of reducing GHGs by 80 percent by 2050. The following are some recommendations of the plan:

Buildings

- Upgraded building codes
- Increased use of combined heat and power
- Higher efficiency equipment

Land Use

- Greenhouse gas development fees
- Streamlined approval for low greenhouse gas development projects
- Land use patterns that reduce VMT through high density, mixed use developments

Transportation

- Improved traffic flow
- Commuter trip reduction incentives
- Reduce VMT through an integrated, multi-modal transportation system by improving bus service, rail service and bicycle and pedestrian infrastructure
- Adopt California Low Emission Vehicle Standards

Resource: <http://www.nh.gov/climate/>

[Table](#)

NEW JERSEY

The New Jersey Department of Environmental Protection and Sustainability released a [greenhouse action plan](#) in December 1999. Though the plan is broad and unspecific, there are a few notable exceptions. Some of the activities implemented are:

Transportation

- increase improvements to mass transit system infrastructure
- implement an inspection/maintenance program for state registered vehicles

In July of 2002 the Attorney General of New Jersey joined the Chief Legal Officers of Alaska, Connecticut, California, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island and Vermont in a letter to President George W. Bush, asking the current administration to address the issue of climate change through comprehensive national policies on GHG emissions.

On September 29, 2003, New Jersey also joined the Regional Greenhouse Gas Initiative ([RGGI](#)), an effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions through a cap and trade program. The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO₂ (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10 percent below Phase 1 levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four CO₂ allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow VMT growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures

- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

On January 14, 2004, Gov. James McGreevey signed legislation that adopted [California’s vehicle emissions standards](#) to automobiles sold in New Jersey. EPA denied California’s request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

In February 2007, the New Jersey Green Homes Office (GHO) moved to the offices of the New Jersey Housing and Mortgage Finance Agency. HMFA and Green Homes have several programs that provide financial and technical assistance with sub-metering, solar photovoltaic, healthy interior and other energy saving materials and practices - for the rehabilitation and new construction of affordable, market rate and special needs housing.

On July 6, 2007, the governor signed the [Global Warming Response Act](#) which calls for reducing greenhouse gas emissions to 1990 levels by 2020, followed by a further reduction of emissions to 80 percent below 2006 levels by 2050. In December 2008, New Jersey released a Draft Global Warming Response Act [Recommendation Report](#). Some of the recommendations include:

Buildings

- Green building guidelines incorporated into periodic buildings codes revision process
- Tax policies and other financial incentives to encourage green buildings
- Providing New Jersey municipalities greater flexibility to establish “green” standards

Land Use

- Complete streets policy to guide sound planning, engineering, operating and maintenance practices for all roadway projects
- Planning assistance to local government to review new corridors for integrating transportation and land use planning, as well as continue in transit oriented development
- Expanded Transit Oriented Development (TOD) planning, land use regulatory actions and implementation by NJ Transit with at least five communities each year

Transportation

- Carbon footprint impact analysis of transportation capital programs using a lifecycle assessment
- Feasibility of pay-as-you-drive insurance
- Revisions to the State Highway Access Management Code that would promote smart growth
- Limit vehicle miles traveled (VMT) growth rate to no more than 1 percent per year through 2020
- Truck anti-idling policies
- Promotion of Zero Emission Vehicles (ZEV)

New Jersey is required to create an Energy Master Plan (EMP) every 10 years and to provide an update every three years. Gov. Corzine launched the current EMP process with the aim of planning for New Jersey’s energy needs through 2020. The [final EMP](#) was released on October 22, 2008.

Resource: <http://www.state.nj.us/globalwarming/index.shtml>

[Table](#)

NEW MEXICO

On June 5, 2005, Gov. Richardson signed [Executive Order 05-033](#), which established the New Mexico Climate Change Advisory Group (CCAG) to provide specific, measurable proposals to the Action Council to reduce greenhouse gas emissions in New Mexico. In December of 2006, the CCAG released its [final report](#), which will become the state's climate plan. The report calls for greenhouse gas reductions to 2000 levels by the year 2012, 10 percent below 2000 levels by 2020 and 75 percent by 2050. Similar to other newly minted state climate plans (presumably organized under the ICLEI model of climate plan development), focal areas of the plan include:

Buildings

- Demand side management (DSM) programs, energy efficiency funds, and/or energy efficiency requirements for electricity, natural gas and other fuels
- Regional market transformation alliance
- State appliance standards
- Green power purchasing
- Rate design (including time of use rates, increasing block rates, and seasonal use rates)
- Improved building codes

Land Use

- Infill and brownfield redevelopment
- Transit-oriented development
- Smart growth planning
- A multi-modal transportation bundle
- Promotion of LEED-ND
- Anti-idling programs
- Intermodal freight initiatives
- Reduced speed limit for commercial trucks

Transportation

- State clean car program
- Low-rolling resistance tires
- Low-GHG operation of state fleet vehicles
- Pay-as-you-drive insurance
- Incentive/disincentive options bundle (feebates, changes in vehicle excise taxes, consumer labeling programs to promote GHG emission of new vehicles awareness, incentives for retrofitting vehicles)

In February 2006, New Mexico joined with the state of Arizona to form the [Southwest Climate Change Initiative](#) to address GHG issues and form an action plan. Additionally, in 2006 Gov. Richardson signed on as a Partner to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration among Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce greenhouse gas emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

New Mexico is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

On December 28, 2006, Gov. Richardson issued [Executive Order 2006-69](#), seeking regulations through the State Environmental Improvement Board to reduce GHG emissions of new cars and trucks sold in New Mexico by approximately 22 percent by 2012 and 30 percent by 2016. On November 28, 2007, the Environmental Improvement Board approved New Mexico's participation in the [Clean Car Program](#), which adopts [California's vehicle emission standards](#). EPA denied California's request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto

manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

Resource: <http://www.nmenv.state.nm.us/cc/index.html>

Table

NEW YORK

On May 15, 2000, the [Green Building Tax Credit](#) (GBTC) program was signed into law and provides \$25 million in tax credits to owners and tenants of eligible buildings and tenant spaces which meet certain "green" standards from 2001-2004. In 2005, legislation was passed to amend the Green Building Tax Credit (GBTC) Program and provides an additional \$25 million in credits with the aggregate amount of credit components permitted for each such building being \$2 million. Under the new legislation, the Department of Environmental Conservation (DEC) has through 2009 to accept applications for and issue initial credit component certificates for the additional \$25 million. The DEC is currently updating the [regulations](#) for the program before applications can be accepted for the \$25 million.

In June 2002, the Governor's office announced the [New York State Energy Plan](#). For the first time, the plan included a greenhouse gas reduction target of five percent below 1990 levels by 2010, and 10 percent below 1990 levels by 2020. The plan also planned to support efforts to reduce traffic congestion and delays and increase energy efficiency in transportation through a complement of actions that include supporting public transit, transportation management, intelligent transportation systems, and capital construction.

In July 2002, the Attorney General of New York joined the Chief Legal Officers of Alaska, Connecticut, California, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, Rhode Island and Vermont in a letter to President George W. Bush, asking the current administration to address the issue of climate change through comprehensive national policies on GHG emissions.

In April 2003, the Center for Clean Air Policy prepared a report for the state titled, "Recommendations to Governor Pataki for reducing New York State Greenhouse Gas Emissions."

In May 2003, Governor Pataki invited the northeastern states to join the state of New York in a regional market for greenhouse gas reductions titled the [Regional Greenhouse Gas Initiative](#) (RGGI). The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO₂ (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10% below Phase 1 levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four CO₂ allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow VMT growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures
- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

On November 9, 2005, the New York State Environmental Board approved State regulations that require significant reductions in greenhouse gas emissions from motor vehicles by adhering to [California's vehicle emissions standards](#). EPA

denied California's request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

In 2007, the legislature created the [Sea Level Rise Task Force](#) to assess impacts to the state's coastlines from rising seas and recommend protective and adaptive measures. The task force held its first meeting on June 27, 2008; its report is due to the legislature by December 31, 2009.

On August 6, 2009, Gov. Paterson signed [Executive Order No. 24](#), setting a goal to reduce GHG emissions by 80 percent below the levels emitted in 1990 by the year 2050. The Executive Order also creates a Climate Action Council with a directive to prepare a draft Climate Action Plan by September 30, 2010. The Climate Action Plan will assess how all economic sectors can reduce greenhouse gas emissions and adapt to climate change

Resource: <http://www.dec.ny.gov/60.html>

[Table](#)

NORTH CAROLINA

On February 3, 2006, the North Carolina [Climate Action Plan Advisory Group](#) (CAPAG) held its first meeting to focus on whether North Carolina should set a goal for reducing greenhouse gas emissions. CAPAG was meant to complement the Legislative Commission on Global Climate Change that the General Assembly established in 2005. North Carolina considered capping CO₂ emissions during its last legislative session but ultimately opted for further study of the issue. In October 2007, a [comprehensive plan](#) from CAPAG was released with recommendations that include:

Buildings

- Improved appliance and equipment efficiency standards
- Improved building energy codes
- “Beyond code” building design incentives and targets, incorporating local building materials and advanced construction
- Green power purchasing (required for state facilities) and bulk purchasing programs for energy efficiency or other equipment

Land Use

- Land use and development legislation to require adoption of a growth plan

Transportation

- Reduce projected increase in VMT by 10 percent statewide by 2020
- Multi-modal transportation and promotion
- Surcharges to raise revenue
- Rebates/ “feebates” to change fleet mix
- Truckstop electrification
- Tailpipe GHG standards
- Biofuels bundle
- Procure efficient fleets, including buses
- Reduction/elimination policies
- Diesel retrofits
- Pay-as-you drive insurance
- Advanced technology incentives

Resource: <http://www.ncclimatechange.us/>

[Table](#)

NORTH DAKOTA

The state of North Dakota holds no climate change action plan. However, North Dakota is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

On November 15, 2007, the state of North Dakota as well as Iowa, Indiana, Illinois, Minnesota, Michigan, Kansas, Ohio, South Dakota, Nebraska, and Wisconsin signed the [Midwestern Energy Security and Climate Stewardship Platform](#), which laid out the following goals:

- CO₂ management to create a regional transportation and storage infrastructure
- A bioproduct procurement program to support the growth of the region's bioeconomy
- Electricity transmission adequacy to support thousands of new megawatts of wind energy
- Renewable fuels corridors and coordinated signage to promote renewable fuel usage across the Midwest
- Advanced bioenergy permitting to assist states with the latest technologies
- Low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy

[Table](#)

OHIO

The bill [SB 128](#) was introduced in March 2007 to create an Ohio Climate Commission to look at the effects of climate change and make recommendations for state policy. It was been referred to the Senate Environment and Natural Resources Committee, but no further action was taken.

On November 15, 2007, Gov. Strickland signed Ohio on as an Observer to the [Midwestern Regional Greenhouse Gas Reduction Accord](#), which includes the states of Wisconsin, Minnesota, Illinois, Iowa, Michigan, Kansas, Indiana, South Dakota, and the province of Manitoba. The agreement will serve as a regional strategy to achieve energy security and reduce greenhouse gas emissions that cause global warming. The Accord will 1) establish greenhouse gas reduction targets; 2) develop a cap and trade mechanism to help achieve those reduction targets; 3) establish a system tracking and management of credits; and 4) develop and implement additional steps as needed to achieve the reduction targets, such as a low-carbon fuel standards and regional incentives and funding mechanisms. Ohio signed on as an observer to the regional cap and trade program, along with Indiana and South Dakota.

Also on November 15, 2007, the state of Ohio as well as Iowa, Indiana, Illinois, Minnesota, Michigan, Kansas, Nebraska, South Dakota, North Dakota, and Wisconsin signed the [Midwestern Energy Security and Climate Stewardship Platform](#), which laid out the following goals:

- CO₂ management to create a regional transportation and storage infrastructure
- A bioproduct procurement program to support the growth of the region's bioeconomy
- Electricity transmission adequacy to support thousands of new megawatts of wind energy
- Renewable fuels corridors and coordinated signage to promote renewable fuel usage across the Midwest
- Advanced bioenergy permitting to assist states with the latest technologies; and
- Low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy

Resource: <http://www.epa.state.oh.us/dapc/climatechange/climatechange.html>

[Table](#)

OKLAHOMA

The state of Oklahoma holds no climate change action plan. However, Oklahoma is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

The Oklahoma Climatological Survey (OCS) was mandated by the Oklahoma legislature to provide climate information and expertise that could be of value to the public, as well as to state policy- and decision-makers. In accordance with that directive, OCS conducted a review of the current assessments of climate change research and on October 29, 2007, issued a [Statement on Climate Change](#). No further action has been taken.

[Table](#)

OREGON

The state of Oregon first published a [climate change action plan](#) in August 2001 in coordination with The Committee on the Environment and the Northeast International Committee on Energy of the Conference of New England Governors and Eastern Canadian Premiers.

In December 2004, the Governor's Advisory Group released the [Oregon Strategy for Greenhouse Gas Reductions](#), which calls for a reduction of greenhouse gases to 1990 levels by 2010, 10 percent below 1990 levels by 2020, and at least 75 percent below 1990 levels by 2050. Some of the aspects of the plan include:

Buildings

- Amend building codes to set minimum space and water heating/cooling standards
- Adopt state appliance efficiency standards
- Upgrade Oregon building codes to reduce energy use by at least 15 percent by 2015

Transportation

- Adopt low emission vehicle (LEV II) standards
- Promote biofuel use and production
- Adopt state standards for high efficiency/low rolling resistance tires
- Reduce GHG emissions from government fleet purchase and vehicle use
- Set and meet goals for reduced truck idling at truck and safety stops
- Improve mass transit and inter-city transit links

In December 2005, the Oregon Environmental Quality Commission (EQC) adopted temporary rules requiring Oregon to meet [California's vehicle emissions standards](#). On June 22, 2006, the EQC permanently adopted rules requiring all new motor vehicles sold in Oregon to meet California's vehicle emissions standards. EPA denied California's request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

In 2006, Gov. Ted Kulongoski signed on as a Partner to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration between Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce greenhouse gas emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

Oregon is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

In May 2006, Gov. Kulongoski established the Governor's Climate Change Integration Group ([CCIG](#)). The governor established the Integration Group to continue and expand on the work of the Governor's Advisory Group on Global Warming, which prepared the Oregon Strategy for Greenhouse Gas Reductions in 2004. In January 2008 the Governor's Climate Change Integration Group issued their [final report](#). Some of the recommendations include:

Transportation

- Increase use of low-carbon fuels
- Infrastructure for electric vehicles (e.g. charging facilities)
- Feebate system for vehicle fuel efficiency
- Congestion pricing or cordon pricing for central area of city
- Emissions/VMT taxes

Land Use

- Transit-oriented development
- Inclusion of VMT in development plans
- Best-practice sharing between land-use planners around the state

On August 7, 2007, Gov. Kulongoski signed the state's first climate change legislation ([House Bill 3543](#)). In addition to the caps on emissions, the legislation establishes both an Oregon Climate Change Research Institute within the Department of Higher Education and an Oregon Global Warming Commission.

On July 22, 2008, Gov. Kulongoski signed into law a [series of bills](#) comprising an aggressive climate change package to reduce greenhouse gas emissions, ensure low carbon fuel, invest in green technology and jobs and increase energy efficiency in homes and businesses. Some of the elements of the package include [Senate Bill 79](#), which increased energy efficiency in building codes by 10 to 15 percent for residential and by 15 to 25 percent for commercial structures and creates a new "reach code" system to highlight best practices for builders and developers. [House Bill 2186](#) authorized the Environmental Quality Commission (EQC) to develop a low carbon fuel standard that would sunset in 2015. It also authorized EQC to require inflation of tires as part of servicing vehicles, a reduction in emissions from ships at port, directed the DEQ to study measures to reduce aerodynamic drag on long haul trucks and idling, and to provide recommendations to legislature by October of 2010.

Resource: <http://www.lcd.state.or.us/ENERGY/GBLWRM/index.shtml>

[Table](#)

PENNSYLVANIA

On September 29, 2003, Pennsylvania joined the Regional Greenhouse Gas Initiative ([RGGI](#)) as an Observer, an effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions through a cap and trade program. The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO₂ (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10 percent below Phase 1 levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four CO₂ allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow VMT growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures
- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

From 2004-2006, Pennsylvania adopted several policies aimed at reducing GHG emissions from the transportation and land use sectors. These include: The Clean Vehicles program, an Alternative Fuels Incentive Grant program, Keystone Principles & Criteria for Growth, Investment & Resource Conservation, Rail Freight Assistance program, Government Lead-By-Example, Growing Greener II and the Home Town Streets and Safe Routes to School program, reactivation of the Pennsylvania State Planning Board, and the Pennsylvania Brownfields program.

On September 19, 2006, Pennsylvania's Environmental Quality Board approved the Clean Vehicles Program, a plan to meet [California's vehicle emissions standards](#). On November 2, 2006, the state's Independent Regulatory Review Commission approved the implementation of the plan. EPA denied California's request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

On June 11, 2007 the Pennsylvania Environmental Council released the [Climate Change Roadmap for Pennsylvania](#). The Roadmap, developed with the help of academic, agriculture, capital investment, energy generation, environmental, and government stakeholders, presents a series of policy and action item recommendations to reduce greenhouse gas emissions in Pennsylvania. Some of the features of the plan include:

Buildings

- Create incentives for efficient building design
- Encourage upgrades/retrofits of existing residential and commercial buildings

Land Use

- Implement smart growth and smart transportation initiatives of the Pennsylvania transportation funding and reform commission
- Promote smart growth development of communities

Transportation

- Expand renewable fuel standard of 25 percent by 2025
- Adopt fuel efficiency standards for replacement tires
- Encourage pay-as-you-drive insurance
- Ban idling by heavy-duty vehicles
- Expand incentives for alternatives to single-occupancy vehicles

On July 10, 2008 Gov. Ed Rendell signed the [Pennsylvania Climate Change Act](#), which requires the Department of Environmental Protection, in consultation with a Climate Change Advisory Committee, to submit a climate change action plan to the governor within 15 months. Moreover, a new plan must be developed every 3 years thereafter.

Resource: <http://www.depweb.state.pa.us/energy/cwp/view.asp?a=1532&q=539829>

[Table](#)

RHODE ISLAND

Rhode Island is one of the states that agreed, under the auspices of the New England Governors and Eastern Canadian Premiers (NEG/ECP), to a voluntary short-term goal of reducing regional greenhouse gas emissions to 1990 levels by 2010 and by 10 percent below 1990 levels by 2020. The NEG/ECP long-term goal is to reduce emissions to a level that eliminates any dangerous threats to the climate - a goal scientists suggest will require reductions 75 to 85 percent below current levels. These goals were announced in August 2001. Some of the activities implemented to achieve these goals are:

Buildings

- Commercial and industrial fossil fuel retrofit initiative
- ENERGY STAR home construction program
- Public facilities efficiency initiative
- Retrofit program for electrically heated residences

Land Use

- Transit oriented development and enhancing transit options and operations initiative
- Bicycle and pedestrian infrastructure improvements
- Urban/suburban forestry program
- Open space protection program

Transportation

- Local fuel economy improvements (feebate) initiative
- Commuting efficiency program
- Commuting trip reduction initiative
- Government owned and private fleet vehicle efficiency initiative
- California emission standards (LEV II)
- Adopt greenhouse gas tailpipe emissions standards per California AB 1493 Pavley Standards

In July 2002, the Attorney General of Rhode Island joined the Chief Legal Officers of Alaska, Connecticut, California, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York and Vermont in a letter to President George W. Bush, asking the current administration to address the issue of climate change through comprehensive national policies on GHG emissions.

Also in July 2002, the state released the [Rhode Island Greenhouse Gas Action Plan](#), which pledges to reduce greenhouse gas emissions to 1990 levels by 2010 and 10 percent below 1990 by 2020. Some of the features of the plan include:

Buildings

- Commercial/industrial fossil fuel retrofit initiative
- Compact residential appliances initiative
- Energy efficiency targeting initiative (industrial)
- Combined heat and power (CHP) initiative
- Electric energy efficiency retrofit in non-residential buildings and facilities
- Tax credits for energy efficiency
- Efficient residential electric cooling initiative

Transportation

- Local fuel economy improvements (feebate) initiative
- Transit-oriented development and enhancing transit options and operations initiative
- Bicycle and pedestrian infrastructures initiative
- Commuting efficiency program
- Commuting trip reduction initiative
- Government owned and private fleet-vehicle efficiency

On August 22, 2005, Gov. Donald Carcieri signed [Executive Order 05-14](#), which declared that the design, construction, operation and maintenance of any new, substantially expanded, or renovated public building must incorporate and meet at least LEED Silver standards. New or renovated public buildings must also evaluate feasible energy-efficiency measures on the basis of their total life-cycle costs of installation, operation, and maintenance.

On October 13, 2005, Gov. Carcieri announced Rhode Island's intention to adopt California's vehicle emissions standards. On December 22, 2005, Rhode Island officially adopted [California's vehicle emissions standards](#) as part of [Air Pollution Control Regulation No. 37](#). EPA denied California's request on March 6, 2008, but reversed its decision on June

30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

On January 30, 2007, Rhode Island joined the Regional Greenhouse Gas Initiative ([RGGI](#)), an effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions through a cap and trade program. The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO₂ (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10 percent below Phase I levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four CO₂ allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow VMT growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures
- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

Resource: <http://www.dem.ri.gov/climate/index.htm>

Table

SOUTH CAROLINA

In February 2007, South Carolina Gov. Mark Sanford issued Executive Order 2007-04, establishing the [South Carolina Climate, Energy and Commerce Advisory Committee](#) (CECAC). On June 6, 2008, the CECAC released its [final report](#). Some of the measures include:

Buildings

- Energy efficiency programs, funds, or goals for electricity
- Demand-side management/energy efficiency programs, funds, or goals for natural gas, propane, and fuel oil
- Regulatory reform to promote implementation of renewable energy systems, including solar hot water
- Energy management training/training of building operators
- Promotion of energy recycling, including combined heat and power
- Improved building efficiency, including building energy codes
- Participation in voluntary industry–government partnerships (including incentives)
- Incentives and policies for improving appliance efficiency, including appliance standards

Land Use

- Improve development patterns
- Expand transit and bike infrastructure

Transportation

- Transportation system management
- Tax credits for efficient vehicles
- Expand alternative-fuel infrastructure
- Efficiency improvements
- Diesel engine emission reductions and fuel efficiency improvements

- Stricter enforcement of speed limits
- Make full use of CMAQ funds
- Commuter choice and commuter benefits programs
- Low-GHG fuel standard
- Expand rail infrastructure

Resource: <http://www.scclimatechange.us/>

[Table](#)

SOUTH DAKOTA

The state of South Dakota holds no climate action plan. However, South Dakota is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

On November 15, 2007, Gov. Michael Rounds signed South Dakota on as an Observer to the [Midwestern Regional Greenhouse Gas Reduction Accord](#), which includes the states of Wisconsin, Minnesota, Illinois, Iowa, Michigan, Kansas, Indiana, Ohio, and the province of Manitoba. The agreement will serve as a regional strategy to achieve energy security and reduce greenhouse gas emissions that cause global warming. The Accord will 1) establish greenhouse gas reduction targets; 2) develop a cap and trade mechanism to help achieve those reduction targets; 3) establish a system tracking and management of credits; and 4) develop and implement additional steps as needed to achieve the reduction targets, such as a low-carbon fuel standards and regional incentives and funding mechanisms. South Dakota signed on as an observer to the regional cap and trade program, along with Ohio and Indiana.

Also on November 15, 2007, the state of South Dakota as well as Iowa, Indiana, Illinois, Minnesota, Michigan, Kansas, Ohio, Nebraska, North Dakota, and Wisconsin signed the [Midwestern Energy Security and Climate Stewardship Platform](#), which laid out the following goals:

- CO₂ management to create a regional transportation and storage infrastructure
- A bioproduct procurement program to support the growth of the region's bioeconomy
- Electricity transmission adequacy to support thousands of new megawatts of wind energy
- Renewable fuels corridors and coordinated signage to promote renewable fuel usage across the Midwest
- Advanced bioenergy permitting to assist states with the latest technologies
- Low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy

[Table](#)

TENNESSEE

The Department of Economic and Community Development in collaboration with other State of Tennessee agencies completed a report, entitled [Tennessee Greenhouse Gas Emissions Mitigation Strategies](#) in April 1999. This document suggests a variety of initiatives that make progress toward economic, energy and environmental goals. Some of the features of the plan include:

Buildings

- Promote new efficiency levels for residential and apartment construction
- Promote and encourage lighting retrofit projects to increase the efficiency of lighting systems
- Encourage participation by the commercial sector in the U.S. EPA's greenlights and ENERGY STAR buildings programs
- Consider adoption of a commercial new construction energy efficiency code

Transportation

- Promote commuter rail alternative
- Promote telecommuting
- High occupancy vehicle lanes
- Incentives to live near place of work

[Table](#)

TEXAS

The state of Texas holds no climate action plan. The Texas Natural Resource Conservation Commission (TNRCC) issued a docket regarding a greenhouse gas inventory and monitoring in 2000. The TNRCC Commissioners instructed the agency to conduct an inventory of GHG emissions in Texas and establish a registry for GHG emissions reductions. The findings of the report were due in 2001.

In 2002, the Texas Natural Resources Conservation Commission delivered a statewide report urging that the state reduce greenhouse gas emissions where possible.

Texas acted to require that 1280 MW of electric generation come from renewable sources by 2003, increasing to 2880 MW in 2009 (above the existing 880 MW).

Texas is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

Resource: <http://www.tceq.state.tx.us/>

[Table](#)

UTAH

Utah is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

In the state of Utah, a [Blue Ribbon Advisory Council on Climate Change](#) was organized by Gov. Jon Huntsman on August 25, 2006. The purpose of the BRAC is to provide a forum where representatives from government, industry, environment and the community can have a productive dialogue regarding the options available in Utah to address climate change. Some of the features of the [plan](#), released July 10, 2007 include:

Buildings

- State appliance efficiency standards
- Solar hot water and photovoltaic codes for new buildings
- State promotion and tax or other incentives for efficient products (e.g. ENERGY STAR)

Transportation

- Develop and implement aggressive mass transit strategy
- Quality growth programs
- Trip education, rideshare, vanpool, telecommuting
- Clean car program
- Idle reduction program

- Vehicle speed reduction
- State fleet lead by example
- Promote low-carbon fuels and vehicle technologies
- Education programs
- Explore funding options for suite of transportation and land use options

In March 2007, the Governor signed [HB 110](#), which calls for the state to:

- Continue to use fuel-efficient vehicles, such as compressed natural gas and hybrids, within the state fleet and look to identify other efficient supply alternatives
- Encourage the legislature to continue to help subsidize state employee use of public transportation
- Give priority to locating new state facilities near light rail and commuter rails lines to provide better access for state employees to public transportation

In spring 2007, Gov. Huntsman signed on as a Partner to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration among Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce greenhouse gas emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

On October 18, 2007, [Utah's Energy Efficiency Strategy](#) included a recommendation to adopt California's vehicle standards.

Resource: http://www.deq.utah.gov/Climate_Change/index.htm

[Table](#)

VERMONT

Vermont is one of the states that agreed, under the auspices of the New England Governors and Eastern Canadian Premiers (NEG/ECP), to a voluntary short-term goal of reducing regional greenhouse gas emissions to 1990 levels by 2010 and by 10 percent below 1990 levels by 2020. The NEG/ECP long-term goal is to reduce emissions to a level that eliminates any dangerous threats to the climate—a goal scientists suggest will require reductions 75 to 85 percent below current levels. These goals were announced in August 2001. Some of the activities implemented to achieve these goals are:

Buildings

- Commercial and industrial fossil fuel retrofit initiative
- ENERGY STAR home construction program
- Public facilities efficiency initiative
- Retrofit program for electrically heated residences

Land Use

- Transit oriented development and enhancing transit options and operations initiative
- Bicycle and pedestrian infrastructure improvements
- Urban/suburban forestry program
- Open space protection program

Transportation

- Local fuel economy improvements (feebate) initiative
- Commuting efficiency program
- Commuting trip reduction initiative
- Government owned and private fleet vehicle efficiency initiative
- California emission standards (LEV II)

- Adopt greenhouse gas tailpipe emissions standards per California AB 1493 Pavley Standards

In July 2002, the Attorney General of Vermont joined the Chief Legal Officers of Alaska, Connecticut, California, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York and Rhode Island in a letter to President George W. Bush, asking the current administration to address the issue of climate change through comprehensive national policies on GHG emissions.

On September 29, 2003, Vermont joined the Regional Greenhouse Gas Initiative ([RGGI](#)), an effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions through a cap and trade program. The members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont, along with Pennsylvania as an observer. Phase I (2009-2015) will stabilize emissions at 121.3 million short tons of CO₂ (this is a little above 2000-2004 levels). Phase II (2015-2020) will reduce emissions by 10 percent below Phase 1 levels (roughly equivalent to 1990 levels). Participating states of RGGI have participated in four CO₂ allowance auctions since September 2008 as part of a cap and trade program that took effect January 1, 2009. Some of the activities implemented include:

Buildings

- Appliance standards

Land Use

- Slow VMT growth 3.5 percent by 2010 and another 6 percent by 2020
 - Engage in passenger VMT reduction measures
- Integrated land use and transportation planning

Transportation

- Light-duty vehicle GHG standards (GHG-based feebates)
- Vehicle emissions and maintenance standards to reduce vehicle emissions

On November 7, 2005, the Vermont Air Pollution Control Division adopted a rule amending its [Air Pollution Control Regulations](#) to be identical to that of [California's vehicle emissions standards](#). EPA denied California's request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

On December 5, 2005, Gov. Jim Douglas signed [Executive Order 07-05](#), which established the Vermont Climate Change Commission to examine the climate threats to the state and to develop recommendations to the Governor to reduce greenhouse gas emissions in Vermont, consistent with Vermont's need for continued economic growth and energy security. In October 2008, the Commission released its [final report](#). The recommendations include:

Buildings

- Improve energy building codes for the residential and commercial building sectors
- Building efficiency codes, training and tracking

Transportation

- Pay-as-you-drive insurance
- Increase market penetration of low-carbon fuels in VT via a low-carbon fuel standard
- Employee commuter programs and other programs aimed at reducing trips from certain sectors
- Conduct research on the feasibility and impacts of plug-in hybrid vehicles

On July 1, 2006, the governor signed [Act 168](#), which sets a goal to reduce state GHG emissions from 1990 levels 25 percent by 2012; 50 percent by 2028; and, if practicable using reasonable efforts, 75 percent by 2050.

Resources: <http://www.vtclimatechange.us/>
<http://www.anr.state.vt.us/air/Planning/htm/ClimateChange.htm>

[Table](#)

VIRGINIA

The state of Virginia released its state [Energy Report](#) in 2007 with the recommended goal of reducing its greenhouse gas emissions to 2000 levels by 2025. Some of the specific policy recommendations include:

Buildings

- More stringent energy codes
- Adopt LEED, ENERGY STAR and “earthhome” practices

Land Use

- Implement more congestion-mitigating practices
- Modify land-development practices
- Encourage infill and brownfield development

Transportation

- Improved public transit service
- Move long-distance freight from truck to rail
- Encourage transportation demand-management activities such as telecommuting, ride-sharing and car-sharing

In December 2007, Gov. Tim Kaine established the [Governor's Commission on Climate Change](#). The commission was instructed to create plan for Virginia that identifies ways to reduce greenhouse gas emissions. During the development of the plan, the commission took the following steps: 1) inventory the amount of and contributors to Virginia’s greenhouse gas emissions, including emissions projections through 2025; 2) evaluate the expected impacts of climate change on Virginia’s citizens, natural resources and economy; 3) identify climate change approaches being pursued by other states, regions and the federal government; 4) identify what Virginia needs to do to prepare for the likely consequences of climate change; and 5) identify any actions (beyond those identified in the Virginia Energy Plan) that need to be taken to achieve the 30 percent greenhouse gas reduction goal. The [final report](#), which identified additional steps that need to be taken to achieve the emissions reduction goal, was issued on December 15, 2008. Some of the recommendations include:

Land Use

- Target funds towards existing communities and designated urban development areas and promote compact, walkable, transit-oriented development areas

Transportation

- Increased funding for public transportation
- Pay-as-you-drive insurance
- Increased electronic transactions with government offices to reduce driving
- Study and evaluate the impact of high occupancy toll (HOT) lane networks on greenhouse gas emissions

Resource: <http://www.deq.virginia.gov/info/climatechange.html>

[Table](#)

WASHINGTON

Washington State has contemplated several initiatives on global warming, but has had the most progress at the city and local levels. Seattle City Light and the City of Seattle have been demonstrated public enthusiasm for greenhouse gas reductions. Seattle City Light is looking to offset 100 percent of its greenhouse gas emissions, and the City of Seattle has promulgated several initiatives designed to foster carbon sequestration within the city. These are in accordance with Seattle's voluntary commitment to beat the Kyoto target of 7 percent below 1990 levels, trying to cut three times that many tons by 2010.

The state of Washington created a climate action plan in 2005. A copy is unavailable online; however a [policy brief](#) outlining the goals of the plan include:

- Requiring certain automobiles to meet California's [emissions standards](#), beginning with 2009 models
- Retrofitting school buses and local government vehicles to reduce highly toxic diesel emissions
- Ensuring that fuel suppliers sell at least 2 percent biodiesel and ethanol
- Designing and building high-performance green buildings
- Developing and enforcing energy-efficient building codes and appliance efficiency standards that are among the highest in the country

On May 6, 2005, Gov. Christine Gregoire signed [HB 1397](#), adopting [California's vehicle emissions standards](#) for Washington, conditional on Oregon's adoption of the standard. EPA denied California's request on March 6, 2008, but reversed its decision on June 30, 2009. These rules apply beginning with the sale of 2009 model year cars and can be implemented through 2012. At that time, auto manufacturers may comply with the national fuel-economy standard which orders vehicle makers to increase mileage standards to 35.5 miles per gallon by 2016.

In 2006, Gov. Gregoire signed on as a Partner to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration among Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce greenhouse gas emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

Washington is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

In February 2007, Gov. Gregoire issued [Executive Order 07-02](#), which established a series of measurable goals intended to reduce Washington's contribution to global climate pollution, grow Washington's clean energy economy, and move Washington towards energy independence. One of the goals required that by 2020, greenhouse gas emissions be reduced to 1990 levels; by 2035, reduce greenhouse gas emissions to levels 25 percent below 1990 levels; and by 2050, reduce greenhouse gas emissions to levels 50 percent below 1990 levels. The executive order also established a Climate Action Team consisting of business, state and local government, labor, tribal, environmental and religious leaders to provide policy recommendations that could be implemented to achieve the goals. In February 2008, the Washington Climate Action Team published its [final report](#). Some measures of the plan include:

Buildings

- Demand-side management, energy efficiency programs, funds or goals for natural gas, propane and fuel oil
- Targeted financial incentives to encourage energy efficiency
- Consumer education programs

Transportation

- Promotion of compact and transit oriented development
- Transportation pricing
- Promotion and incentives for improved community planning
- Low carbon fuel standard
- Diesel engine emission reductions and fuel efficiency improvements
- In-state production of biofuels and biofuels feedstocks

In May 2009, Gov. Gregoire signed [Executive Order 09-05](#) to reduce climate-changing greenhouse gas emissions, to increase transportation and fuel-conservation options for Washington residents, and to protect the state's water supplies and vulnerable coastal areas. The Executive Order included orders directing state agencies to:

- Assessment for whether the California low-carbon fuel standard or modified standards to reduce carbon in transportation fuels would be best to meet Washington's GHG reduction targets

- Joining with other West Coast states and the private sector to develop and implement a West Coast highway accessible to electric and alternative-fuel vehicles
- An increase transit options, such as buses, light rail, and ride-share programs, and give Washington residents more choices for reducing the effect of transportation emissions

Resource: <http://www.ecy.wa.gov/climatechange/index.htm>

[Table](#)

WEST VIRGINIA

The state of West Virginia holds no climate change action plan. On March 10, 2007, the state passed [Senate Bill No. 337](#) creating a program to inventory emissions, reductions and carbon sequestrations of greenhouse gases; creating a voluntary registry for the reporting of voluntary reductions of greenhouse gas emissions if the reductions are made before they are required by law; and providing consideration of the reductions under future federal greenhouse gas emission reduction programs.

In July 2007, West Virginia energy officials said they were beginning to work on a five-year state energy plan that will focus on developing both coal resources and renewable energy options.

[Table](#)

WISCONSIN

In May 1998, the state of Wisconsin released the [Wisconsin Climate Change Action Plan](#), which included general recommendations for supporting energy efficiency improvements, increased renewable energy sources, and a reduction in greenhouse gas emissions.

On March 1, 2006, the governor signed [Executive Order 141](#), calling for the reduction of petroleum-based gasoline in state-owned vehicles by 20 percent by 2010 and by 50 percent by 2015, and the reduction of petroleum-based diesel fuel by those vehicles 10 percent by 2010 and 25 percent by 2015.

On March 20, 2006, the governor signed [Wisconsin Act 141](#), directing the facilities of the six state agencies that use the largest amounts of electricity to develop energy cost reduction plans that identify opportunities to increase the energy efficiency in their facilities. The Act also directs the Department of Administration to create special energy standards for state building projects and requires the Department of Commerce to review its energy efficiency code every 3 years. Also, the act set a goal of 10 percent renewable energy for state government by 2008 and 20 percent by 2012.

On April 12, 2006, the governor signed [Executive Order 145](#) which called for the Public Utilities Commission to set energy efficiency goals for state facilities, office buildings, and campuses that would reduce actual energy usage per square foot by at least 10 percent by 2008 from the 2005 state energy report baseline adjusted for weather, and 20 percent by 2010. The order also called for new state facilities to be constructed to be 30 percent more energy efficient than commercial code.

On April 5, 2007, Gov. Doyle signed [Executive Order 191](#) creating a Task Force on Global Warming that brings together a prominent and diverse group of key Wisconsin business, industry, government, energy and environment leaders to examine the effects of, and solutions to, global warming in Wisconsin. On July 24, 2008, the Governor's Task Force issued its final report for a [Global Warming Strategy](#). Some of the recommendations include:

Buildings

- Energy efficiency standards for certain appliances and for lighting in rental properties
- Study looking into whether mandatory efficiency upgrades should be required for existing buildings at time of sale

- Adoption and maintenance of state-of-the-art residential and commercial building codes

Transportation

- Adoption of California’s vehicle emissions standards
- Decrease in carbon content of fuels
- Increased mass transit
- Promotion of hybrid vehicles, plug-in hybrid electric vehicles, and electric vehicles

On November 15, 2007, the governor of Wisconsin, along with the governors of Indiana, Minnesota, Illinois, Iowa, Michigan, Kansas, Ohio, South Dakota, and the province of Manitoba signed the [Midwestern Regional Greenhouse Gas Reduction Accord](#). The agreement will serve as a regional strategy to achieve energy security and reduce greenhouse gas emissions that cause global warming. The Accord will 1) establish greenhouse gas reduction targets; 2) develop a cap and trade mechanism to help achieve those reduction targets; 3) establish a system tracking and management of credits; and 4) develop and implement additional steps as needed to achieve the reduction targets, such as a low-carbon fuel standards and regional incentives and funding mechanisms.

Resource: <http://dnr.wi.gov/environmentprotect/gtfgw/>

[Table](#)

WYOMING

The state of Wyoming holds no climate change action plan. However, Wyoming is part of the Western Governor's Association (WGA), which in June 2006 signed resolutions to meet or exceed goals of 30,000 MW of clean energy by 2015 and a 20 percent increase in energy efficiency by 2020, to encourage adequate funding for state energy efficiency and renewable generation programs, and to facilitate development of regional energy markets.

In 2007, Gov. Freudenthal signed on as an observer to the [Western Climate Initiative](#) (WCI). The WCI is a collaboration among Arizona, California, Montana, New Mexico, Oregon, Washington, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec to meet regional challenges raised by climate change. Through WCI, the partners set an overall regional goal to reduce greenhouse gas emissions 5 percent below 2005 levels by 2020. In August 2008, the Partners completed the design of a market-based mechanism to help achieve that reduction goal.

Resource: <http://deg.state.wy.us/>

[Table](#)

SUMMARY TABLE

The following table briefly summarizes those initiatives taken by states to address climate change, with those actions related to transportation, land use and green buildings highlighted individually. States that are categorized as having a plan that is public are further classified as having formed an advisory group, an action plan, key legislation, or some combination of the three. In cases where states have established multiple advisory groups or action plans through the years, the most recent information is highlighted in the table. It should be noted that for the purposes of this summary table, the classification is extremely basic (i.e. public plan versus no action taken), with some key measurements provided. To get a better understanding of the detail and extent of each program and to compare states with each other, please click on the states’ names for more information.

Table: State Climate Change Action Programs (information current as of 7/2009)

State	Plan Status	Date Released	GHG Reduction Targets	Trans/ Land Use Element?	Includes VMT/TOD?	Includes Infill?	Includes MU/GB?	Regional Plan?	Highlights
PUBLIC									
AK	Recommended actions	April 2008	None given	No	No	No	No	WCI Observer	Focus is on acquiring knowledge of effects, adaptation strategies
AL	Recommended actions	Dec 1997	None given	Yes	No	No	No	None	Suggestions for increased efficiency standards, more public transportation
AR	Action Plan	Oct 2008	None given	Yes	VMT,TOD	Yes	MU,GB	None	Energy efficiency, building codes, R & D, development of biofuels, better farming practices
AZ	Advisory Group; Action Plan	Feb 2005; Aug 2006	2000 levels by 2020; 50% below 2000 levels by 2040	Yes	TOD	Yes	MU,GB	WCI	Alternative fuel standards, promote smart growth planning, increased efficiency standards
CA	Includes: Public Law AB 32; EO S 1-07; SB 375	Aug 2006; Jan 2007; Oct 2008	2000 levels by 2010; 1990 levels by 2020; 80% below 1990 levels by 2050	Yes (see highlights)	VMT,TOD	Yes	MU,GB	WCI	E.O. S 1-07 created Low-carbon Fuel Std (10% less carbon intensity by 2020); SB 375 incorporates greenhouse emissions into urban planning
CO	Action Plan; Advisory Group	Nov 2007; April 2008	20% below 2005 levels by 2020	No	No	No	No	WCI Observer	No dedicated land use element yet
CT	Action Plan	Feb 2005	1990 levels by 2010; 10% below 1990 levels by 2020	Yes	VMT,TOD	No	GB	RGGI, NEG-ECP	Plan to increase transit development, VMT reduction incentives, smart growth to penetrate 25% of future development, *HB 7432 expanded green building standards
DE	Action Plan	Jan 2000	7% below 1990 levels by 2010	Yes	VMT,TOD	No	GB	RGGI	Raise energy efficiency standards, CAFE standards, develop land use policies
FL	Action Plan	Oct 2008	2000 levels by 2017; 1990 levels by 2025; 80% below 1990 levels by 2050	Yes	VMT,TOD	No	MU,GB	None	Low-carbon fuel standard, adoption of LEED standards, incentives for mixed-use development
HI	Action Plan; Advisory Group	Nov 1998; June 2007	1990 levels by 2020	Yes	TOD	No	GB	None	Encourage alternative-fuel vehicles, land use policies to reduce congestion, more mass transit, task force created in 2007
IA	Advisory Group; Action Plan	April 2007; Dec 2008	None given	Yes	No	No	No	MRGGRA	Improve fleet efficiency through feebate program, promote mass transit use
IL	Advisory Group; Action Plan	Oct 2006; Sept 2007	1990 levels by 2020; 60% below 1990 levels by 2050	Yes	TOD	No	No	MRGGRA	Expansion of mass transit, implement smart growth, adopt CA emissions standards

KS	Advisory Group; Action Plan	Mar 2008; Jan 2009	None given	Yes	No	No	GB	MRGGRA, WCI Observer	Improved building codes and training for enforcement, expanded and improved transit service, smart growth practices
KY	Recommended actions	June 1998	None given	No	No	No	GB	None	Feebates to encourage fuel-efficient vehicles, improve residential and industrial energy efficiency
MD	Action Plan; SB 278	August 2008; May 2009	25% below 2006 levels by 2025	Yes	VMT,TOD	No	MU,GB	RGGI	Action plan includes smart growth, integrated resource planning, technology focused initiatives, and land conservation; SB 278 created GHG target
ME	Public Law 237; Action Plan	June 2003; Dec 2004 (updates Jan 2006 and 2008)	1990 levels by 2010; 10% below 1990 levels by 2020; 75-80% below 2003 levels long-term	Yes	VMT,TOD	No	GB	NEG-ECP, RGGI	Public law created GHG reduction targets, action plan includes energy-efficient land development, financial incentives for conservation
MA	Action Plan; Public Law (Ch. 298 of Acts of 2008)	May 2004; Aug 2008	Up to 25% below 1990 levels by 2020; 80% below 1990 levels by 2050	Yes	VMT,TOD	No	MU,GB	NEG-ECP RGGI	Action plan includes stronger vehicle emission standards, maintain and upgrade public transit infrastructure, promote sustainable design in land use, transit, buildings; public law set GHG targets
MI	Action Plan	Mar 2009	20% below 2005 levels by 2020; 80% below 2005 by 2050	Yes	VMT,TOD	Yes	MU,GB	MRGGRA	Enhanced public transit options, increased rail and marine freight options, stronger building codes
MN	Advisory Group; Action Plan	April 2007; April 2008	15% below 2005 levels by 2015; 30% below 2005 levels by 2025; 80% below 2005 levels by 2050	Yes	VMT	No	MU,GB	MRGGRA	Improved building codes, climate-friendly transportation pricing, improved land use and development practices
MO	Recommended actions	July 2002	None given	Yes	No	No	GB	None	Improve energy efficiency in government buildings, promote alternative fuels
MT	Advisory Group; Action Plan	July 2006; Nov 2007	None given	Yes	TOD	Yes	MU,GB	WCI	Induce portion of new and existing buildings to reduce electricity consumption, smart growth planning
NC	Advisory Group; Action Plan	Feb 2006; Oct 2007	None given	Yes	VMT	No	GB	None	Improved appliance and building codes
NH	Advisory Group; Action plan	Dec 2007; Mar 2009	20% below 1990 levels by 2025; 80% below 1990 levels by 2050	Yes	VMT,TOD	No	MU,GB	NEG-ECP, RGGI	Revise energy efficiency codes, expand mass transit infrastructure, pursue integrated transportation planning

NJ	Public law A3301; Draft Action Plan	July 2007; Oct 2008	1990 levels by 2020; 80% below 2006 levels by 2050	Yes	VMT,TOD	No	MU,GB	RGGI	Action plan includes improved mass transit system, complete streets planning, green building codes; law sets GHG reduction targets
NM	Advisory Group; Action Plan	June 2005; Dec 2006	2000 levels by 2012; 10% below 2000 levels by 2020; 75% below by 2050	Yes	TOD	Yes	MU,GB	WCI	State clean-car program, low-GHG operation of state fleet vehicles, infill and brownfield development
NV	Advisory Group; Action Plan	April 2007; July 2008	None given	Yes	No	No	GB	WCI Observer	Improved efficiency and building standards, incentives for alternative fuels
NY	Action Plan; EO No. 24; Advisory Group	June 2002; Aug 2009	80% below 1990 levels by 2050	Yes	VMT,TOD	No	GB	RGGI	Early action plan includes support for public transit, transportation management, intelligent transportation systems; EO 24 sets GHG target and Advisory Group
OR	Advisory Group; HB 3543; Action Plan	May 2006; Aug 2007; Jan 2008	1990 levels by 2010; 10% below 1990 levels by 2020; 75% below 1990 levels by 2050	Yes	VMT,TOD	No	GB	WCI	HB 3543 set GHG targets; action plan includes infrastructure for electric vehicles (charge stations), emission/VMT fees, improve mass transit
PA	Action Plan; SB 266	June 2007; July 2008	None given	Yes	No	No	MU,GB	RGGI Observer	Action plan includes RFS of 25% by 2025, implement smart growth development, incentives for energy efficient buildings; SB 266 requires action plan every 3 years
RI	Action Plan	July 2002	1990 levels by 2010; 10% below 1990 by 2020	Yes	TOD	No	GB	NEG-ECP, RGGI	Enhancing transit options, vehicle feebate initiatives, energy efficiency target initiative
SC	Advisory Group, Action Plan	Feb 2007; June 2008	None given	Yes	TOD	No	GB	None	Demand-side management/energy efficiency programs
TN	Recommended actions	April 1999	None given	Yes	No	No	GB	None	Promote higher efficiency levels in new construction, encourage participation in ENERGY STAR programs
UT	Advisory Group; Action Plan	Aug 2006; Oct 2007	15% below 2007 levels by 2020	Yes	TOD	No	GB	WCI	State promotion and incentives for efficient products, develop aggressive mass transit strategy, Clean Car programs
VA	Advisory Group; Action Plan	Dec 2007; Dec 2008	2000 levels by 2025	Yes	VMT,TOD	Yes	MU,GB	None	Increased funding for public transportation, high-occupancy toll lanes, walkable community planning

VT	Advisory Group; Act 168; Action Plan	Dec 2005; July 2006; Oct 2008	25% below 1990 levels by 2012; 50% below 1990 by 2025; 75% below 1990 by 2050	Yes	VMT	No	GB	NEG-ECP, RGGI	Act 168 set GHG targets; action plan includes improved residential and commercial building codes, low-carbon fuel standard
WA	Advisory Group; Action Plan	Feb 2007; Feb 2008	1990 levels by 2020; 25% below 1990 levels by 2035; 50% below 1990 levels by 2050	Yes	TOD	No	GB	WCI	Low carbon fuel standard, in- state production of biofuels, developing and enforcing energy-efficient building codes
WI	Advisory Group; Action Plan	April 2007; July 2008	2005 levels by 2014; 22% below 2005 levels by 2022; 75% below 2005 by 2050	Yes	VMT,TOD	No	GB	MRGGRA	State efficiency standards for appliances; increased funding for public transit; low-carbon fuel standard
State	Plan Status	Date Released	GHG Reduction Targets	Trans/ Land Use Element?	Includes VMT/TOD?	Includes Infill?	Includes MU/GB?	Regional Plan?	Highlights
NO ACTION									
GA	No Action	--	--		--			None	--
ID	No Action	--	--		--			WCI Observer	--
IN	No Action	--	--		--			MRGGRA Observer	--
LA	No Action	--	--		--			None	--
MS	No Action	--	--		--			None	--
ND	No Action	--	--		--			None	--
NE	No Action	--	--		--			None	--
OH	No Action	--	--		--			MRGGRA Observer	--
OK	No Action	--	--		--			None	--
SD	No Action	--	--		--			MRGGRA Observer	--
TX	No Action	--	--		--			None	--
WV	No Action	--	--		--			None	--
WY	No Action	--	--		--			WCI Observer	--

Abbreviation key: GHG(Greenhouse Gas), VMT(Vehicle Miles Traveled), TOD(Transportation-Oriented Development) Infill(Infill Development), MU/GB(Mixed-Use Development/Green Building), WCI(Western Climate Initiative), RGGI(Regional Greenhouse Gas Initiative), NEG/ECP(New England Governors and Eastern Canadian Premiers), MRGGRA(Midwestern Regional Greenhouse Gas Reduction Accord)

Authors: Amy Sauer and Matt Johnston
Editor: Carol Werner

Environmental and Energy Study Institute
1112 16th Street, NW, Suite 300
Washington, DC 20036
(202) 628-1400
www.eesi.org

The Environmental and Energy Study Institute (EESI) is a non-profit organization founded in 1984 by a bipartisan Congressional caucus dedicated to finding innovative environmental and energy solutions. EESI works to protect the climate and ensure a healthy, secure, and sustainable future for America through policymaker education, coalition building, and policy development in the areas of energy efficiency, renewable energy, agriculture, forestry, transportation, and urban planning.
