

Climate Change Activities in the State of Kansas May 2008

Governor's Office

1. Governor's State of the State address (January 14, 2008) "We can and we must reduce our greenhouse gas emissions and increase our economic competitiveness by using our natural resources." More excerpts regarding climate change and energy are included in Appendix A, and the full text of the State of the State address can be viewed at <http://www.governor.ks.gov/news/sp-stateofstate2008.htm>

2. Governor Sebelius' Executive Orders - In 2008, Governor Sebelius has issued four Executive Orders addressing various aspects of climate change and energy policy. These are included in the Appendix.

March 27, 2008 Executive Order 08-04
Reformulates the composition of the Kansas Energy Council

March 21, 2008 Executive Order 08-03
Establishes the Kansas Energy and Environmental Policy Advisory Group ("KEEP")

February 7, 2008 Executive Order 08-02
Establishes the Kansas Innovation Consortium ("KIC")

January 7, 2008 Executive Order 08-01 (information below under KCC)
Establishes the Governor's Wind Working Group

All of Governor Sebelius' Executive Orders can be found at <http://www.governor.ks.gov/executive/Orders/default.htm>

3. Midwest Governor's Greenhouse Gas Accord - In November 2007, members of the Midwest Governors' Association met and developed an Energy Security and Climate Stewardship Platform. The Platform contained several agreements which were supported by slightly differing combinations of states, however, a majority of the MGA states were party to all of the agreements. One particular agreement, the Midwestern Regional Greenhouse Gas Reduction Accord, was signed by the governors of Wisconsin, Minnesota, Illinois, Indiana, Iowa, Michigan, Kansas, Ohio and South Dakota, and the premier of Manitoba on November 15, 2007. Indiana, Ohio, and South Dakota signed the agreement as observers to participate in the formation of the regional cap-and-trade system. It is a regional strategy to achieve energy security and reduce greenhouse gas emissions that cause global warming. Additional information can be found at <http://www.midwesterngovernors.org/govenergynov.htm>
<http://www.midwesterngovernors.org/resolutions/GHGAccord.pdf>
<http://www.midwesterngovernors.org/resolutions/Platform.pdf>

Kansas Department of Health and Environment

1. KDHE Denies Sunflower Electric Air Quality Permit October 18, 2007
Excerpts from the press release are included in Appendix B. The entire press release can be found here:

http://www.kdheks.gov/news/web_archives/2007/10182007a.htm

2. Greenhouse Gas Inventory - Bureau of Air and Radiation staff have worked with the Center for Climate Strategies to develop a comprehensive inventory of all greenhouse gas emissions in Kansas. This GHG Inventory and Projections (GHG IP) will be used as a starting point to assist KEEP (and others) in understanding recent actual and projected greenhouse gas emissions from 1990 to 2025. Additionally, the Bureau of Air and Radiation recently requested that about 150 large stationary sources voluntarily submit their carbon emissions inventory by June 1. This information will be very useful to update and inform the CCS greenhouse gas emissions inventory.

3. The Climate Registry - The Climate Registry is a partnership between states, tribes and provinces to develop a greenhouse gas (GHG) emissions reporting system. Thirty-nine (39) states, Canadian provinces, Mexican states and several tribes are working to establish a common set of policy-neutral, standardized emissions accounting, reporting, and verification protocols. The Climate Registry is designed to provide linkages between different state and regional programs and is flexible enough to support voluntary or mandatory reporting of GHG emissions and regulatory GHG reduction programs. The Climate Registry is different from other GHG reporting programs because the only members are states, tribes and provinces. The idea for a common governmental registry originated in the absence of a federal program, as states and regional organizations across the country began exploring the development of carbon management programs. A patchwork of different registries would hinder efforts to standardize reporting frameworks.

States and tribes that chose to become members signed a Statement of Principles and Goals and in May 2007 and designated representatives from the founding states and tribes met as board of directors in Chicago, Illinois. Workgroups have been active developing software and verification protocols, preparing The Climate Registry to officially open its doors and begin accepting emissions data in 2008. The Climate Registry is expected to be fully independent and operational by 2010. Additional information can be found at www.theclimateregistry.org

4. Western Climate Initiative - The Western Climate Initiative (WCI) is a regional collaboration which was launched in February 2007 by the Governors of Arizona, California, New Mexico, Oregon and Washington to develop regional strategies to address climate change. WCI is identifying, evaluating and implementing collective and cooperative ways to reduce greenhouse gases in the region, including a regional cap and trade system and a variety of voluntary and regulatory mechanisms. Utah, Montana and the Canadian provinces of British Columbia and Manitoba have subsequently joined WCI. Kansas and five other

US states, six Mexican states and three Canadian provinces are observers. Additional information can be found at <http://www.westernclimateinitiative.org/>

5. Electricity Generator Agreements

A. In February, 2008, Westar, Inc. and KDHE signed an agreement to voluntarily reduce greenhouse gas emissions, including carbon dioxide. Under the agreement, Westar will perform a company-wide inventory of its greenhouse gas emissions. It will also conduct a comprehensive evaluation of net greenhouse gas reduction measures, including carbon capture and sequestration as well as energy efficiency programs. Upon approval from KDHE, Westar will implement the reduction measures at each of their applicable generating units. The agreement and press release are at http://www.kdheks.gov/news/web_archives/2008/download/KDHE_and_Westar_Agreement.pdf

B. In March, 2007, Kansas City Power & Light (KCP&L), the Sierra Club, and the Concerned Citizens of Platte County (CCPC) agreed on a set of initiatives to offset carbon dioxide (CO₂), particularly with respect to KCP&L's proposed new coal-fired powerplant in Missouri. KCP&L agreed to pursue offsets for greenhouse gas emissions associated with its new plant through significant investments in energy efficiency and renewable energy. The agreement proposes other investments in clean energy and significant decreases in emissions from the LaCygne Powerplant in Kansas.

Kansas Geological Survey (KGS)

Enhanced Oil Recovery (EOR) - The use of sequestered carbon dioxide to enhance oil recovery is of great interest due to the rise in the price of crude oil. Wellfields that were once marginal may be brought back to production. Some of these efforts include:

A. An on-going project at the University of Kansas Energy Research Center which includes research by the KU Tertiary Oil Recovery Project, the Kansas Geological Survey, and the ERC for enhanced oil recovery in Kansas using miscible-CO₂ flooding. Additional information and can be obtained from the Energy Resource Center's project website: <http://www.kgs.ku.edu/ERC/CO2Pilot/index.html>

B. A partnership between Coffeyville Resources Nitrogen Fertilizers and Blue Source to develop options for the utilization of CO₂ captured from petroleum coke gasification-based ammonia and urea ammonium nitrate production. Particular focus is proposed to develop an enhanced oil recovery project.

Southwest Regional Partnership on Carbon Sequestration - The KGS is a partner in the [Southwest Regional Partnership on Carbon Sequestration](#) (SWP). SWP was developed as a part of the U.S. Department of Energy's effort to respond to global climate change. The SWP has been challenged to evaluate available technologies that capture and store CO₂ in the southwest region. The

SWP includes portions of: Arizona, Colorado, Kansas, Nevada, New Mexico, Oklahoma, Texas, Utah and Wyoming. Participants include the coal, oil and gas industries; electric utilities; the Navajo Nation; nongovernmental organizations; universities; and U.S. federal agencies.

<http://www.southwestcarbonpartnership.org/AboutSWP.aspx>

Kansas State University (KSU)

KSU professor of agronomy Chuck Rice is a well-known scientist who contributed his expertise on agricultural sequestration to the UN Intergovernmental Panel on Climate Change reports. KSU sponsors the Soil Carbon Center <http://soilcarboncenter.k-state.edu/index.html> , which disseminates information regarding agricultural carbon sequestration. KSU also participates in the Consortium for Agricultural Soils Mitigation of Greenhouse Gases, sponsored at Colorado State University <http://www.casmgs.colostate.edu/> Many Kansas farmers are involved in no-till practices that sequester carbon and provide revenue through the generation of carbon offset credits. There is intense and widespread interest in the opportunities for Kansas in this area.

Kansas Corporation Commission (KCC)

The KCC regulates natural gas, electricity, telephone and transportation vendors, and also requires oil and gas producers to protect the environmental and correlative rights. As the state's primary energy regulatory authority, KCC is involved in all aspects of the energy industry. KCC staff provide support and coordination for the Kansas Energy Council (see Executive Order 08-04), representatives to the Midwest Governor's Association climate change efforts, and is developing rules for carbon storage. The Kansas Energy Office is located at the KCC, and provides support for development of wind and alternative energy sources.

1. Wind Facilities Development - Since December of 2006 nearly 1,000 megawatts (MW) of potential new wind was announced by a number of the state's leading utilities. The new Smoky Hill Wind Project, along Interstate 70 in Lincoln and Ellsworth Counties, was developed by TradeWind Energy, LLC, a Kansas developer and will be owned by Enel North America, Inc. It features 100 MW of wind generation to be divided among Sunflower Electric, Kansas City Board of Public Utilities, and Midwest Energy. It will be fully operational in January of 2008.

The state's largest utility, Topeka-based Westar, announced on Feb. 26, 2007, a request for proposals (RFP) for 500 MW of renewable energy. This was followed by a joint announcement on Mar. 20 by Kansas City Power & Light and the Sierra Club of a commitment of another 400 MW of wind generation. Westar plans to have about 300 MW of the development installed by the end of 2008. KCPL already owns the Spearville Wind Energy Facility in Ford County that was put into operation in the fall of 2006.

These announcements will assure Kansas utilities will meet a voluntary goal of 1,050 MW of wind by 2010 as announced by Governor Kathleen Sebelius during the State of the State address on January 10, 2007. This equals about 10% of nameplate electric generation capacity for the state's utilities. The utilities agreed to a commitment of a 20% voluntary goal by 2020.

2. Wind Working Group (WWG) - The group, formed through Executive Order 08-01, will educate stakeholder groups with current information on wind energy markets, technologies, economics, policies, prospects and issues. The WWG will be supported by the Energy Programs Division of the KCC, the lieutenant governor's office and Wind Powering America (WPA). WPA is collaborating with state partners and their stakeholders through its Wind Working Group network, now operating in some 30 states. WPA will provide technical assistance, objective analysis, up-to-date information and education and seed funding for the Kansas Wind Working Group.

3. Kansas Renewable Energy Conference - The 2007 Kansas Renewable Energy & Energy Efficiency Conference was held September 25-26, at the Topeka Ramada Inn had over 500 attendees. Kansas Lieutenant Governor Mark Parkinson, also co-chair of the Kansas Energy Council, kicked-off the conference. Keynote speakers were Wes Jackson, founder and current president of The Land Institute, located near Salina, and Soren Hermansen, director of the Samsø Energy Agency of Denmark. Multiple concurrent sessions on various energy topics were facilitated by over 40 energy experts from Kansas and throughout the country. Topics included efficiency and conservation, new technologies, wind and solar energy, biofuels, public education and loan programs, and federal policy updates. Another Renewable Energy Conference will be held in September, 2008.

4. The Kansas Facility Conservation Improvement Program (FCIP) is in its second generation at the Kansas Energy Office. The new contract for the FCIP includes 10 pre-qualified Energy Service Companies (ESCOs), and a strong focus on environmental design and responsibility, integrating such factors as United States Green Building Council's LEED (Leadership for Energy Efficient Design) certification. To date, the FCIP has completed over \$138.7 million in energy efficiency improvements in nearly 30 million square feet of public building space, avoiding nearly \$11 million in utility costs annually. Using energy savings performance contracting, the FCIP has allowed many public-sector customers the opportunity to fund capital improvement projects and save millions of dollars in utility costs.

The Kansas program has been selected as a Best Practices by the Western Governors' Association; and it is being used as an exemplary program by the United States Department of Energy in a half million dollar joint effort with the Energy Services Coalition, National Association of State Energy Offices (NASEO), National Council of State Legislators (NCSL), and National Association of Energy Service Companies (NAESCO). Several other states are modeling their performance contracting program after the Kansas FCIP.

Local activities

In addition to state-level activities, numerous local governments haven taken steps to understand and address climate change issues.

1. Mayors from eleven Kansas municipalities have endorsed the U.S. Council of Mayors Climate Protection Agreement (full text and list in Appendix).

2. The City of Wichita Air Quality program staff, with assistance from retired Wichita State University engineering professors, has collected information on greenhouse gas emissions in order to calculate an energy footprint. The local Air Quality Task Force is discussing a draft energy savings/emissions reductions plan for City operations.

Appendix A. Governor's State of the State address (January 14, 2008)

Excerpts:

...We can and we must - reduce our greenhouse gas emissions and increase our economic competitiveness by using our natural resources.

...recommends the creation of a Bioenergy Research Grant Program to spur development of innovative new technologies producing the most cost-efficient renewable fuels.

...charged the Kansas Bioscience Authority with developing an aggressive plan for bio-energy technology and production, aimed at producing twenty percent of the nation's alternative fuel needs.

...one of the best states in the nation for wind power. Until recently we had not even begun to harness this resource. Five years ago only one percent of our energy came from wind. Today, we are well on our way to meeting my goal of ten percent renewable energy by 2010 and twenty percent by 2020.

To continue the momentum, I have created the Kansas Wind Working Group and appointed Lt. Governor Mark Parkinson as chair to aggressively pursue our opportunities and incentives for wind power as well as to encourage Kansas communities to invest in wind projects.

...With aggressive conservation efforts involving individuals, businesses, and government, we can reduce our need for electricity and still continue to grow. We must embrace the Kansas Energy Council's proposal to require that all new state buildings meet minimum energy efficiency standards.

Regulatory support for utility companies to educate and encourage conservation efforts for their customers is essential. I am also proposing standards that will provide for more Kansans to qualify for interest-free loans to improve the energy efficiency of their own homes.

...need to join the 36 states that have begun or completed development of a comprehensive climate change action plan. It is clear the people of Kansas welcome an informed discussion about our energy future, economic opportunities, and the protection of our environment. We can rise to the challenges we face only if we commit ourselves to moving forward.

Appendix B. KDHE Denies Sunflower Electric Air Quality Permit

(excerpted from press release) October 18, 2007

Roderick L. Bremby, Secretary of the Kansas Department of Health and Environment (KDHE), denied the air quality permit for two proposed 700-megawatt generators at the Sunflower Electric Power Corporation plant near Holcomb.

“After careful consideration of my responsibility to protect the public health and environment from actual, threatened or potential harm from air pollution, I have decided to deny the Sunflower Electric Power Corporation application for an air quality permit,” said Bremby. “I believe it would be irresponsible to ignore emerging information about the contribution of carbon dioxide and other greenhouse gases to climate change and the potential harm to our environment and health if we do nothing.”

The U.S. Supreme Court found in *Massachusetts v. EPA* that carbon dioxide meets the broad definition of an air pollutant under the Clean Air Act. The (permit denial) decision constitutes a first step in emerging policy to address existing and future carbon dioxide emissions in Kansas. KDHE will work to engage various industries and stakeholders to establish goals for reducing carbon dioxide emissions and strategies to achieve them. This is consistent with initiatives underway in states leading the effort to address climate change,” said Bremby.

“Denying the Sunflower air quality permit, combined with creating sound policy to reduce carbon dioxide emissions can facilitate the development of clean and renewable energy to protect the health and environment of Kansans,” said Bremby.

Appendix C. The U.S. Mayors Climate Protection Agreement

The participating Kansas mayors and their communities include:

John Clair, Jr.	Fairway
Kenneth Bernard	Lansing
Dennis Highberger	Lawrence
Carl Wilkes	Merriam
Laura McConwell	Mission
Ron Shaffer	Prairie Village
Steve Petrehn	Roeland Park
Jeff Meyers	Shawnee
Bill Buntin	Topeka
Karen Johnson	Westwood
Allen Roth	Westwood Hills

The US Mayor's Climate Protection Agreement

A. We urge the federal government and state governments to enact policies and programs to meet or beat the target of reducing global warming pollution levels to 7 percent below 1990 levels by 2012, including efforts to: reduce the United States' dependence on fossil fuels and accelerate the development of clean, economical energy resources and fuel-efficient technologies such as conservation, methane recovery for energy generation, waste to energy, wind and solar energy, fuel cells, efficient motor vehicles, and biofuels;

B. We urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation that 1) includes clear timetables and emissions limits and 2) a flexible, market-based system of tradable allowances among emitting industries; and

C. We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities such as:

1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan.
2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities;
3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling and public transit;
4. Increase the use of clean, alternative energy by, for example, investing in "green tags", advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology;
5. Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money;
6. Purchase only Energy Star equipment and appliances for City use;
7. Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system;
8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel;
9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production;
10. Increase recycling rates in City operations and in the community;

11. Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO₂; and
12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.