Renewable Energy in Kansas

Summary

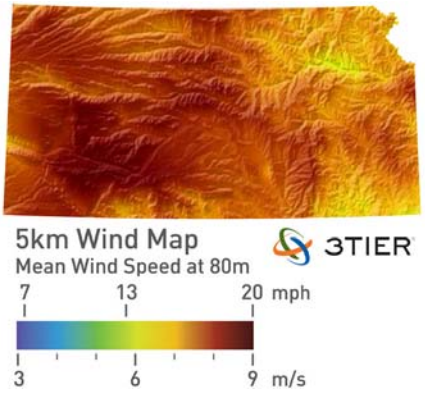
Kansas has the third most promising wind resource potential in the country and is one of the top ten states in installed wind capacity. In addition, Kansas is home to multiple bioethanol plants and is ranked eighth in the nation in bioethanol production. The state passed a renewable energy portfolio standard in May 2009 and provides numerous tax incentives and loans to promote large and small scale renewable energy generation and to attract renewable energy businesses into the state. The wind industry in Kansas is expanding, and is poised to become a center for the manufacture of turbines and generation of wind energy in the coming years.

Cumulative Renewable Energy Capacity, 2010			
Wind	1,074 MW	Ocean	-
Solar Photovoltaic	-	Biomass Power	13 MW
Concentrated Solar Thermal	-	Bioethanol	491.5 mGy
Geothermal	-	Biodiesel	-
Small Hydro	-	**Totals**	1,087 MW; 491.5 mGy

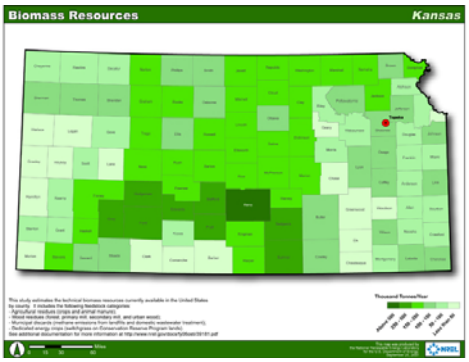
Estimated capacity as of December 31, 2010; see User's Guide for details.

Market

- The nation's first commercial-scale hybrid cellulosic ethanol facility and traditional grain ethanol plant is being developed in Hugoton, a $550 million facility which would produce 100 million gallons of ethanol annually using corn stover, wheat straw and switchgrass as feedstock. The project is currently applying for a federal loan guarantee for support, and is expected to become operational in 2013.
- In the period 2008-2009, Kansas' wind industry more than doubled, adding over 660 MW of wind energy. Growth was less aggressive in 2010.
- The Siemens wind turbine manufacturing plant in Hutchinson, which opened in late 2010, represents the first major original equipment manufacturer (OEM) facility in Kansas. The 300,000 square foot facility is expected to support more than 400 jobs at full capacity. Plans have also been announced for at least one other wind manufacturing plant in Kansas.



Wind Resources- The American Wind Energy Association (AWEA) ranks the state third in the nation in potential capacity, and has estimated that Kansas has 120 GW of potential wind resources.



Biomass Resources- Kansas ranks fifth in switchgrass resources on Conservation Reserve Program (CRP) lands resources with 6,274 thousand metric tons per year in the nation. The state also ranks sixth in crop residue with 3,556 thousand metric tons per year in the nation.

Economic Development

Employment	
Direct and Indirect Jobs, 2009	1,204
Organizations	43
Private Sector Investment (2009-2010)	
Asset Finance (Disclosed Transactions/Total)	$23.3m, 1/1 deals
Venture Capital & Private Equity (Grossed up)	$0.0m, 0 deals
Federal Funding	
Recovery Act Funding, Department of Energy	$2.4m
Competitive Grants & Tax Credits (48C & 1603)	$1.5m, 8 projects

Figures are inclusive of the solar, wind, biopower, biofuels, geothermal, waste energy, ocean, and small hydropower sectors. The "Jobs" figure also reflects large hydropower, but excludes geothermal. Sources: Navigant Consulting, Inc (Jobs), Bloomberg New Energy Finance (Investment, Organizations), Departments of Energy & Treasury (Federal Funding).

Kansas

Policies

Renewable Portfolio Standard (RPS): Kansas requires investor-owned utilities (IOUs) and some cooperative utilities to either generate or purchase 20% of their peak demand capacity by 2020 and onward from qualifying renewable energy technologies, including solar (thermal and electric), landfill gas, biomass, wind, hydroelectric and fuel cells using renewable fuels. Unlike in many other states, Kansas' standard is based on generation capacity rather than on retail electric sales. The utilities are allowed to purchase only a certain percentage of Renewable Energy Credits (RECs) in order to comply with the RPS. Utilities may also purchase capacity from other renewable energy producers for compliance.

Net Metering and Interconnection: Kansas requires IOUs to offer its customers net metering for systems up to 25 kW for residential customers and 200 kW for non-residential customers. In addition, utilities are required to provide their customers bi-directional net meters at no cost. Any net excess generation (NEG) will be rolled over to the next billing cycle at the full retail rate, with NEG remaining in the customer's account at the end of the calendar year granted to the utility. The program is offered to customers until the aggregated net metered capacity reaches 1% of the utilities peak demand as calculated from the previous year. The utilities will maintain ownership of RECs created as part of the net metering program. General interconnection standards apply to systems that generate electricity using conventional renewable energy technologies, to residential customers with net metered systems of 25 kW or less, and for non-residential customers with net metered systems of 200 kW or less.

Tax Incentives: Kansas provides a personal and corporate investment tax credit for renewable energy systems owned by commercial, industrial or agricultural entities and located on their property. Electricity produced must either be used on-site and/or utilized to displace current or future energy usage. The credit is in the amount of 10% for the first $50 million invested in the project, and 5% for expenditures thereafter. The credit is claimed in 10 equal annual installments and must be operational for all ten years. Systems must be operational by December 2011.

Companies manufacturing solar or wind components are eligible for up to $5 million in financing from the Kansas Department of Commerce. To be eligible, the project must hire at least 200 new employees within 5 years and pay them an average salary of $32,500 per employee. In addition the project must create at least $30 million of new investment in Kansas.

Kansas offers a 100 % property tax exemption for most conventional renewable energy systems that are used primarily to produce electricity. In addition, any property used to treat, refine, or transport landfill gas is eligible to this exemption.

Loans: Kansas offers a revolving loan program to homeowners for up to $20,000 and to small business for up to $30,000 to help pay for renewable energy systems issued through the customer's utility or a partner lender. Participants must pay for an energy audit to identify the best energy systems appropriate for their property and have up to 15 years to repay the loan.

ACORE Members in Kansas

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