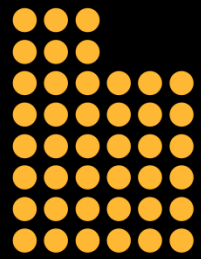


Renewable Energy Profile



Targeted Economic Clusters

The State of Utah is uniquely positioned because its low real-estate and construction costs, great access to rail/trucking for shipping renewable energy generation materials and the ability to sell electricity for a higher more profitable price to neighboring states, like California. In the realm of large-scale renewable energy development, the rapid decline in technology costs, particularly in the realm of solar photovoltaic panels, has prompted a burst of activity in southern Utah, with large firms tying up land and assessing transmission capacity.

Develop Transmission and Transportation

The State's energy advisor works closely with renewable energy developers in Utah and other western states to develop additional generation capacity and transmission to deliver renewable energy to markets throughout the western states.

The "Frontier Line"

Utah, upon partnering with the governors of California, Nevada and Wyoming, is calling for the construction of the "Frontier Line," a high-voltage electric transmission line that will run through these four states. This line will improve the connection of Utah's electric grid with neighboring states and provide new markets for Utah's renewable and conventional energy resources.

REDI (Renewable Energy Development Incentive)

A post-performance tax credit for up to 100% of new state tax revenues (including corporate, sales and withholding tax) over the life of a project (typically five to 10 years). Qualifying projects must consist of renewable energy generation or related manufacturing and create new jobs in the State of Utah paying at least 125% of the urban county average wage or 100% of the rural county average wage (depending on project site location).



City Solar Farm Project Completed on New Public Safety Building

The new solar array on the roofs of the new Public Safety Building will produce one megawatt of renewable energy from 3,000 panels covering roughly four acres. The project was financed as part of the publicly approved new Public Safety Building and will help the facility achieve a net zero energy rating. To achieve net zero, a term applied to buildings that produce as much energy as they use, the Public Safety Building utilizes energy efficient building practices and solar energy harvested both on the roof of the facility and through the new solar farm. The two sites will produce enough energy to offset the power requirements of the Public Safety Building. (Source: *Salt Lake City Government Press Release*.)

300-megawatt solar plant crosses regulatory threshold in Millard County

In February 2014, the Energy Capital Group received a go-ahead endorsement from the Millard County Commission for its 300-megawatt solar project called ECG Utah Solar 1. "Energy Capital Group is very pleased to have another project milestone achieved," said Josh Case, Energy Capital Group's chief executive officer. The project will cost \$600 million on 1,754 acres and provide 200 jobs during construction. (Source: *Desert News*)

Electric Car Charging Stations in SLC

In May 2014, Mayor Ralph Becker joined with members from the Utah Office of Economic Development and from the Utah Clean Air Partnership to unveil "new Salt Lake City infrastructure that supports electric vehicles and air quality goals in the region." The new charging stations are located in downtown Salt Lake City. (Source: *The Utah Office of Energy Development*)

Utah a Hotbed For Nation's Geothermal Growth

Enel's Cove Fort plant opened for operation late in 2012. The new facility has generated more than 25 Megawatts of renewable energy to Utah's Portfolio. A recent study report by the Geothermal Energy Association has shown "13 potential projects in varying stages of development in the state, mostly concentrated in a central Utah cluster." The same report has shown studies that 60% of Utah's resource is untapped and ripe for development, making Utah a prime location for geothermal growth. (Source: *The Utah Office of Energy Development*)

5 Ways Utah is Broadening its 'Energies'

- (1) With the amount of sunlight received in the state, Utah has built world class solar energy resources. The Utah Office of Energy development predicts that 2014 will see the construction of the state's first utility-scale solar projects.
- (2) There are currently two wind energy state projects, one in Spanish Fork and one in Milford. Other wind resources exist in Millard, Beaver, and the Iron, San Juan, and Box Elder counties.
- (3) Biofuel is making waves in Utah. Washakie Renewable Energy, the largest biofuel provider in the Intermountain West, currently works with restaurants and other businesses throughout the state to collect and recycle used cooking and other oils to create clean-burning biodiesel.
- (4) According to the Utah Office of Economic Development, the state is one of just six in the United States to be developing utility-scale geothermal resources.
- (5) The Utah Office of Energy Development hosted the third annual Governor's Energy Development Summit, encouraging the growth of energy resources in the state. (Source: *The Utah Office of Energy Development*)

Utah Renewable Energy Generation Facilities Overview

Technology	# of Facilities	Capacity (kW)
Biomass	4	12,800
Proposed	0	0
Geothermal	3	77,100
Proposed	2	44,000
Solar	135	8,176
Proposed	6	301,155
Wind	11	326,803
Proposed	3	239,500
Hydro	64	286,492
Proposed	0	0
Total	217	711,371

Source: Utah Geological Survey, Current and Proposed Commercial and Utility-scale Renewable Energy Facilities in the State of Utah, 2014.
<http://geology.utah.gov/emp/energydata/renewenergydata.htm>

Utah's Major Renewable Energy Generation Facilities

Technology	Owner/Operator	Plant Name/Location	Capacity (kW)
Biomass - landfill gas	Granger Electric Co.	Trans-Jordan Landfill	4,800
Biomass - landfill gas	Salt Lake Valley Landfill	Salt Lake Valley Landfill	3,200
Biomass - other gas	Blue Mountain Biogas	Beaver County	3,200
Biomass - MSW	Wasatch Energy Systems	Davis County Landfill	1,600
Geothermal	PacifiCorp	Blundell	38,100
Geothermal	Enel Green Power	Cove Fort	25,000
Geothermal	Thermo No. 1	Thermo Hot Springs	14,000
Geothermal - Proposed	PacifiCorp	Blundell expansion	30,000
Geothermal - Proposed	Thermo No. 1	Thermo Hot Springs Expansion	14,000
Solar - PV	Salt Palace Convention Center	Salt Lake City	1,650
Solar - C	Tooele Army Depot	Tooele County	1,500
Solar - PV	IKEA	Salt Lake County	1,014
Solar - PV	Burton Lumber	Salt Lake City	642
Solar - PV	Utah Museum of Natural History	Salt Lake City	330
Solar - PV	Artspace Solar Gardens	Salt Lake County	312
Solar - PV	SunSmart Program – Dixie Escalante Elec.	St. George	250
Solar - PV	Redmond	Sevier County	243

Source: Utah Geological Survey, Current and Proposed Commercial and Utility-scale Renewable Energy Facilities in the State of Utah, 2014.
<http://geology.utah.gov/emp/energydata/renewenergydata.htm>

Utah's Major Renewable Energy Generation Facilities

Technology	Owner/Operator	Plant Name/Location	Capacity (kW)
Solar - PV - Proposed	Energy Capital Group	Millard County	300,000
Solar - PV - Proposed	Salt Lake City	Salt Lake City	1,000
Solar - PV - Proposed	University of Utah – Marriott Library	Salt Lake City	100
Wind	First Wind	Milford Wind Corridor, northern Beaver County, Phase I: 97 2.1-MW turbines	203,500
Wind	First Wind	Milford Wind Corridor, northern Beaver County and southern Millard County, Phase II (68 1.5-MW turbines)	102,000
Wind	Edison International	Spanish Fork (9 turbines at 2.1 MW each)	18,900
Wind	Tooele Army Depot	Tooele (1 turbine)	1,500
Wind	U.S. Department of Defense	Camp Williams - two turbines - 225 kW & 665 kW	890
Wind – Proposed	First Wind	Milford Wind Corridor, northern Beaver County and southern Millard County, Phase III	100,000
Wind – Proposed	Greenbriar Capital Corp.	Blue Mountain, San Juan County	79,500
Wind – Proposed	Wasatch Wind	Latigo Wind Park, San Juan County	60,000
Hydro	U.S. Bureau of Reclamation	Flaming Gorge	151,800
Hydro	PacifiCorp	Cutler	30,000
Hydro	PacifiCorp	Olmstead	10,300
Hydro	Heber Light and Power Dept.	Jordanelle	10,000
Hydro	Logan City Mun. Light and Power	Hydro II	6,600

Source: Utah Geological Survey, Current and Proposed Commercial and Utility-scale Renewable Energy Facilities in the State of Utah, 2014.
<http://geology.utah.gov/emp/energydata/renewenergydata.htm>

Utah's Renewable Energy Industry Business Case

	Utah	Washington	Kansas	California	South Carolina	Florida
Mean Wages: Title (SOC code)						
Electrical Engineers (17-2071)	\$90,930	\$98,270	\$83,850	\$112,100	\$80,340	\$84,270
Mechanical Engineers (17-2141)	\$76,740	\$90,890	\$74,080	\$97,820	\$87,600	\$79,880
Machinists(51-4041)	\$46,160	\$48,460	\$39,690	\$41,610	\$38,450	\$37,870

Source: Loopnet

Unemployment Insurance						
New employer rate (% of salary)	Ind. Avr. %	Ind. Avr. %	4.00%	3.40%	2.01%	2.70%
Taxable wage base	\$30,300	\$39,800	\$8,000	\$7,000	\$12,000	\$8,000
Duration of new employer rate (years)	1	2	2	2	2	2
New rate after "duration" with no lay-offs	0.40%	0.17%	0.11%	1.50%	0.09%	1.02%

Source: US Dept. Of Labor

Health Insurance						
Single coverage	\$4,028	\$4,491	\$3,677	\$4,425	\$3,949	\$4,010
Family coverage	\$10,361	\$11,760	\$9,316	\$11,705	\$10,034	\$9,981

Source: Kaiser Family Foundation

Utilities						
Electricity (¢/kWh) <i>Industrial</i>	¢5.70	¢4.42	¢7.21	¢10.66	¢6.28	¢8.03
Natural Gas (\$/1000 Feet ³) <i>Industrial</i>	\$5.32	\$8.77	\$4.87	\$5.77	\$5.35	\$6.96

Source: Energy Information Administration



Name	Organization	Contact	Description
Jeff Barrett	Utah Office of Energy Development	801-739-5191	Designed to help you find the information and resources you need for energy efficiency, energy development, energy technology and energy savings
Jason Berry	Utah Department of Natural Resources	801-538-5413	The Utah Department of Natural Resources is headquartered in Salt Lake City, but many of its divisions have offices located in different areas of the state.
Theresa Foxley	Governors Office of Economic Development	801-538-8850	The Governor's Office of Economic Development charter is based on Gov. Herbert's commitment to economic development statewide.
Edwin R. Stafford	USU	435-797-3890	USU received a federal grant of \$761,385 as part of a \$23 million fund for the Joint Biomass Research and Development Initiative (BRDI).
Ivy Estabrooke	USTAR	801-538-9690	USTAR's research teams are working to help the state become less dependent on fossil fuels and create a balanced energy portfolio through clean energy technology.
Karen Gunn	SLCC	801-957-4366	SLCC now offers energy efficiency and sustainability courses. This is the first school in Utah to offer such tailored courses for the alternative energy industry.
Denise Brems	Utah's Renewable Energy Zone (UREZ) Task Force	801-538-8718	The UREZ Task Force exists to promote the development of renewable energy resources to meet the State's goal of producing 20% of Utah's adjusted retail electric sales from renewables by 2025.

ECONOMIC DEVELOPMENT CORPORATION OF UTAH

The Economic Development Corporation of Utah (EDCUtah) is a private, statewide, non-profit organization formed in 1987 to provide a unified and professionally managed economic development program promoting the state of Utah.

EDCUtah is an investor-based organization with more than 270 private sector businesses, organizations, chambers of commerce, municipalities and counties. Through these partnerships, EDCUtah facilitates an ongoing effort to develop and nurture a thriving business climate throughout Utah.

EDCUtah specializes in assisting companies considering Utah for a business relocation or expansion. The Business Development team of EDCUtah coordinates all of the information key decision makers and economic development/site consultants need as they evaluate Utah as a site location.

FOR ADDITIONAL INFORMATION

Economic Development Corporation of Utah

201 S. Main St., Suite 2150

Salt Lake City, Utah 84111

Phone (801) 328-8824

Fax (801) 531-1460

www.edcUtah.org