

Renewable Energy in Utah

Summary

Utah has a vast and uniquely diverse renewable energy resource potential that rivals that of most of its neighboring states. However, unlike many other states in the region, Utah does not have a mandatory renewable portfolio standard, instead having a voluntary renewable portfolio goal of 20% by 2025. To encourage renewable energy development, the state provides an array of tax incentives and programs to help residents as well as commercial and industrial entities provide clean energy to the state's grid.

Installed Renewable Energy Capacity, 2013			
Wind Power	325 MW	Marine Power	0 MW
Solar Photovoltaic	16 MW	Biomass Power	13 MW
Solar Thermal Electric	2 MW	Ethanol	0 mGy
Geothermal Power	73 MW	Biodiesel	22 mGy
Hydropower	262 MW	Totals	691 MW; 22 mGy

Sources: See User's Guide for details

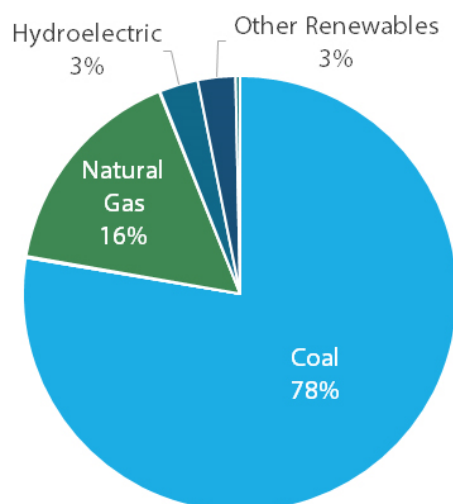
Market Spotlight

- ▶ Utah added 3 MW_{DC} of solar PV in 2013. The state's capacity is set to soar with the announcement of its first utility-scale plants, which are expected to be commissioned within the next two years. Of note, the Four Brothers projects in Beaver and Iron Counties will total 320 MW_{AC} and sell electricity to a Utah utility through 20-year power purchase agreements.
- ▶ Multiple wind power projects are reaching their financing and construction stages, with significant capacity additions expected within the next year. Projects are under development in the counties of Millard, San Juan, and Juab, as well as at the Toole Army Depot.
- ▶ The 25 MW Cove Fort project was commissioned in November 2013 and represents a third of Utah's geothermal capacity. The binary-cycle plant has the potential to expand to up to 65 MW in total capacity.

Economic Development

Employment	2011	
Green Goods & Services Jobs	27,864	
Investment (Grossed-up)	2012	2013
Asset Finance	\$12m	-
Venture Capital & Private Equity	\$14.1m	\$22.2m

Sources: Bureau of Labor Statistics (BLS); Bloomberg New Energy Finance (BNEF). See User's Guide for details.



Electricity Generation, 2013 (EIA)

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State Policy

Renewable Portfolio Goal	<ul style="list-style-type: none"> ▶ 20% by 2025 (goal); all electric utilities (to the extent that it is cost effective) ▶ Utilities must file progress reports every five years, but no interim targets ▶ No in-state system to track use of renewable energy certificates (RECs) ▶ RECs produced within the geographic boundary of the Western Electricity Coordinating Council may be used for compliance ▶ Each kWh produced using solar energy is recorded as 2.4 kWh ▶ Some clean energy and energy efficiency technologies are eligible
Net Metering	<ul style="list-style-type: none"> ▶ Investor-owned utilities and electric cooperatives ▶ System capacity limit of 2 MW for non-residential and 25 kW for residential ▶ Aggregate capacity limit: (of 2007 peak demand) 20% for IOU, 0.1% for co-ops ▶ Treatment of net excess generation (NEG) <ul style="list-style-type: none"> ○ Residential and small business IOU customers: credited to next bill at the retail rate and granted to utility at end of 12 months ○ Large commercial and industrial IOU customers with demand charges: choice to credit NEG to next bill at an avoided-cost-based rate or at an alternative rate based on utility revenue and sales ○ Co-op customers: NEG credited to next bill at the avoided-cost rate
Interconnection Standards	<ul style="list-style-type: none"> ▶ Investor-owned utilities and electric cooperatives ▶ System cap of 20 MW ▶ External disconnect switch required except inverter-based systems of ≤ 10 kW ▶ Additional liability insurance may be required for systems > 2 MW
Tax Incentives	<p>Sales Tax Exemption:</p> <ul style="list-style-type: none"> ▶ The equipment used to generate electricity at a renewable energy production facility is exempt from sales tax ▶ New facilities must be ≥ 2 MW; existing facilities must be expanded by ≥ 1 MW <p>Renewable Energy Systems Tax Credit (Personal or Corporate):</p> <ul style="list-style-type: none"> ▶ Residential systems: income tax credit for 25% of installed costs <ul style="list-style-type: none"> ○ Maximum credit of \$2,000 per residential unit ○ Unused credit may be carried forward for four years ▶ Commercial systems: refundable credit <ul style="list-style-type: none"> ○ Investment tax credit: for 10% of installed costs, up to \$50,000 for wind, geothermal, biomass systems of < 660 kW and PV systems ≤ 2 MW starting in 2015 ○ Production tax credit: 0.35¢/kWh for four years for commercial wind, geothermal, solar, and biomass systems of ≥ 660 kW <p>Alternative Energy Development Incentive (Personal or Corporate):</p> <ul style="list-style-type: none"> ▶ For installation of renewable electricity generation facilities ≥ 2 MW ▶ Post-performance, non-refundable tax credit for 75% of new state tax revenues over life of project or 20 years (whichever is less) ▶ Must generate new state revenue and new jobs <p>Alternative Energy Manufacturing Credit:</p> <ul style="list-style-type: none"> ▶ For the manufacture of equipment for renewable electricity generation ▶ Post-performance, non-refundable tax credit for up to 100% of new state tax revenues over life of project or 20 years (whichever is less) ▶ Must generate new state revenue and new jobs
More Info	<ul style="list-style-type: none"> ▶ DSIRE Database: www.dsireusa.org/incentives/index.cfm?state=UT ▶ Office of Energy Development: http://energy.utah.gov/category/renewable-energy ▶ Governor's Office of Economic Development: http://business.utah.gov/targeted-industries/energy ▶ Public Utilities Commission: www.psc.utah.gov/utilities/electric/index.html