



Solar Jobs for Missouri

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Supported by over two-thirds of Missourians in Proposition C, state investment in Missouri's solar industry has paid big dividends to the state's economy. By the end of 2014, the solar industry will have created over 3,700 jobs and added \$415 million to the state's economy with 120 MW of fixed cost power, at a time when the economy has stagnated and electricity prices are rising rapidly.¹

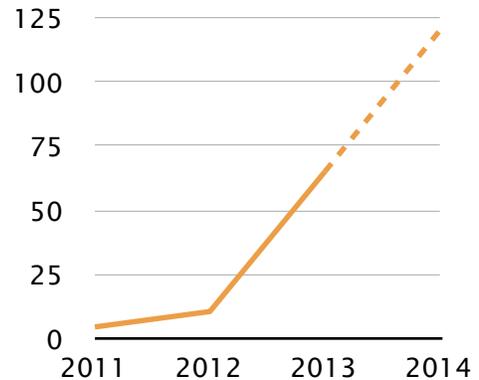
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Solar promises to remain profitable for the state's economy, but the abrupt end of the solar rebate jeopardizes the opportunity. The phase out adopted by the 2013 legislature could have leveraged over \$8.00 of private investment for every public dollar, helped utilities surpass their RPS target of 0.3% solar, and provided a hedge against rising electricity prices.

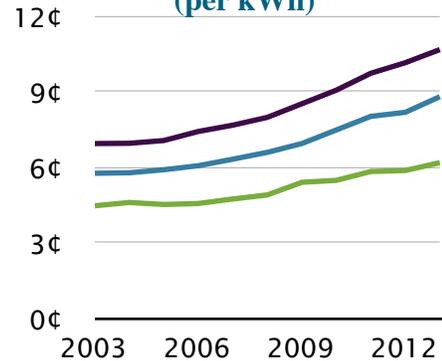
Going beyond the RPS target has significant economic benefits for the Missouri economy. The state's net metering law allows up to 940 MW of solar,² an amount which would generate a further 18,000 jobs and over \$2 billion in economic activity in the state's economy. The new solar power would also cut electricity costs for decades for hundreds of residents and businesses that put their capital into new local power generation.

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Missouri Installed Solar Capacity



Missouri Utility Electricity Prices (per kWh)

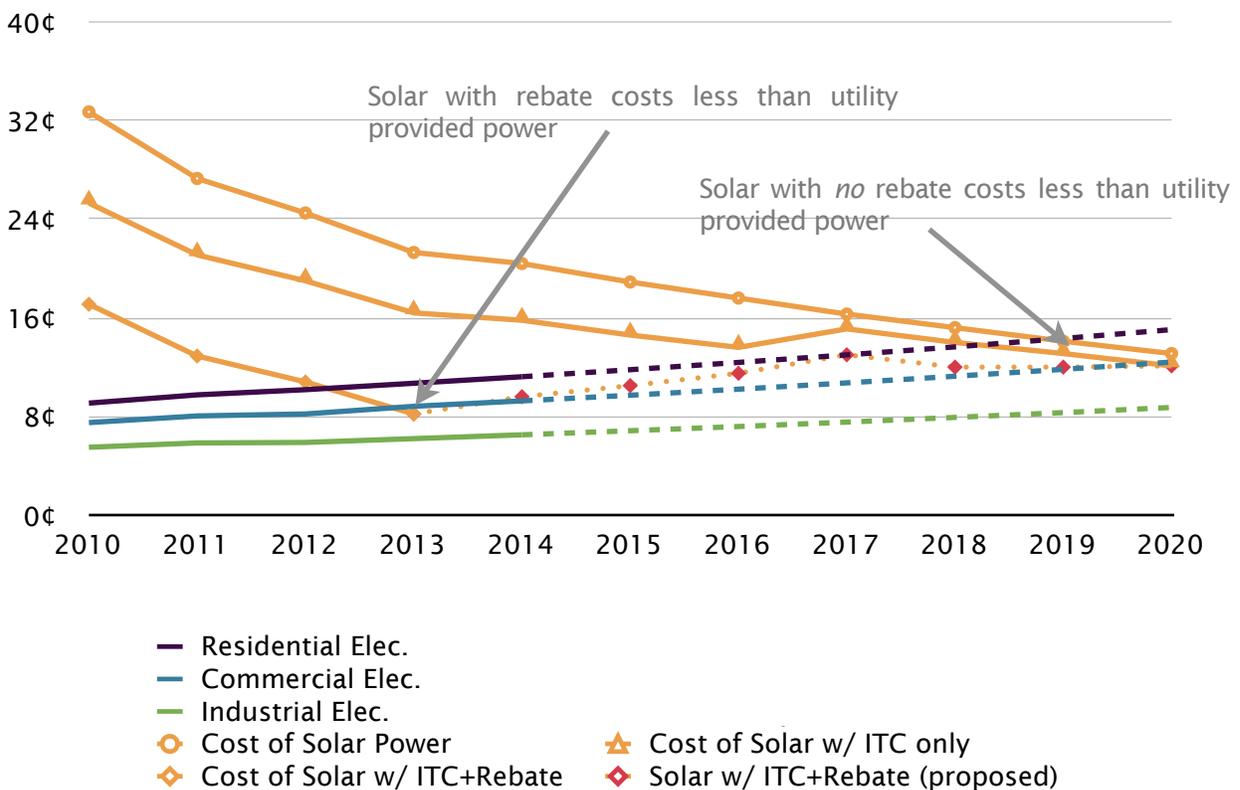


Solar Means Electricity Savings for Missouri Residents and Businesses

The cost of electricity from solar in Missouri has fallen rapidly. With the state's rebate investment program in place, residential electricity customers were already getting lower cost power from solar than from their utility, on average. Even with a rebate phase out, solar would have remained attractive. The abrupt cancellation of the rebate program affects solar's short term cost-competitiveness, but since retail electricity prices are rising 5% per year, solar remains a good long-term investment for Missouri electric customers.

The following graphic illustrates the cost of solar power (with no incentives, with the federal Investment Tax Credit [ITC] only, and with the previous and proposed state rebate) relative to (historical and forecast) retail electricity prices in Missouri.

Solar Electricity v. Utility Electricity Prices (per kWh)



Solar Rebates Leverage Private Investment

From 2011 through 2014, every \$1.00 given out in a solar rebate has leveraged \$2.23 in private capital to generate new, clean power for Missouri.³

Private Capital Leveraged

Year	Private Capital (millions)	Rebates Disbursed (millions)	Ratio of Private:Public Solar Investment
2011	\$22.5	\$9.0	2.50:1
2012	\$27.0	\$12.0	2.25:1
2013	\$212.6	\$79.0	2.69:1
2014 forecast	\$206.3	\$110.0	1.88:1

Solar Means Economic Growth

Solar for the Show Me State has also been a boon for jobs and economic growth. The following job estimates are provided by the JEDI economic model of the National Renewable Energy Laboratory, as run by ILSR.

Jobs and Economic Impact of Solar Energy in Missouri

Year	Jobs			Economic Output (millions)	Ongoing Annual Output
	Project Development & Installation	Module Mfg. and Supply Chain	Total Jobs		
2011	87	94	181	\$20.0	\$145,000
2012	105	113	218	\$23.9	\$194,000
2013	825	888	1,713	\$188.5	\$1,760,000
2014 forecast	801	862	1,663	\$182.9	\$1,776,000
			3,775	\$415.3	

Jobs and Economic Impact of Solar



References

¹ Economic output figures from NREL's JEDI economic model, model runs attached for years 2011-14. Retail electricity price data from the Energy Information Administration.

² Based on 5% of Ameren's 8300 MW peak load in 2008, and their 44% of state energy sales, scaled statewide.

³ Based on the following assumptions of installed cost and capacity installed. Historical data provided by MOSEIA members and Missouri electric utilities. Forecast installation capacity and costs provided by ILSR.

Projected Solar Growth Assuming Adoption of 2013 Rebate Phase Out

Year	Cumulative Installed Solar Capacity	Installed Cost	Rebate (\$/W)	Annual Rebate Payments	Private:Public Investment Ratio
2011	4.5 MW	\$5.00	\$2.00	\$9,000,000	2.5
2012	10.5	\$4.50	\$2.00	\$12,000,000	2.3
2013	65	\$3.90	\$2.00	\$79,000,000	2.7
2014	120	\$3.75	\$1.50	\$110,000,000	1.9
2015	190	\$3.46	\$1.00	\$70,000,000	3.5
2016	270	\$3.22	\$0.50	\$40,000,000	6.4
2017	370	\$2.99	\$0.50	\$50,000,000	6.0
2018	500	\$2.78	\$0.50	\$65,000,000	5.6
2019	700	\$2.59	\$0.25	\$50,000,000	10.4
2020	940	\$2.41	\$0.00	\$0	∞
				\$485,000,000	