

Sanders Moore Director

New Mexico Electricity Generation, first half of 2015



2nd sunniest state –

<3% of electricity from sun

New Mexico could produce >1400x energy consumed in state with solar





Sources: NREL 2012 report on potential electricity generation; EIA 2012 report on energy consumption





Get solar data from the SEIA/GTM Solar Market Insight Report. Learn more at SEIA.org/smi

(1) SEIA/GTM Research U.S. Solar Market Insight 2014 Year in Review sela.org/smi

(2) SEIA, "What's In a Megawatt?" seia.org/whats-megawatt

(3) The Solar Foundation, State Solar Jobs 2014 solarstates.org

(4) SEIA/GTM Research U.S. Solar Market Insight 2014 Year in Review; U.S. Census Bureau

(5) EIA Electric Power Monthly, March 2015



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U.S. Deployment and Cost for Solar PV Modules 2008-2013



Source: Department of Energy, Revolution Now: The Future Arrives for Four Clean Energy Technologies, October 2014, http://energy.gov/sites/prod/files/2014/10/f18/revolution_now_updated_charts_and_text_october_2014_1.pdf

Median Installed Prices of Residential and Commercial PV Systems Over Time



- Since 1998, reported PV system prices have fallen 6-8% per year on average
- From 2012 to 2013, reported prices fell by \$.065/W (12%) for systems ≤10kW
- and by \$.070/W (15%) for systems >100kW





Recent examples

- Austin Energy got 1.2 MW RFP for >\$.04/kWh in June 2015
- NV Energy agreed to pay \$0.0387/kWh from a 100-MW project in July 2015 – declared "the cheapest electricity in the U.S."

Sources:

- 1. Austin Monitor: <u>http://www.austinmonitor.com/stories/2015/06/solar-prices-keep-dropping-says-austin-energy/</u>
- 2. Bloomberg: <u>http://www.bloomberg.com/news/articles/2015-07-07/buffett-scores-cheapest-electricity-rate-with-nevada-solar-farms</u>

New Mexico Solar Jobs

- > 60 solar businesses in New Mexico
- 1,600 jobs in solar industry in New Mexico
- 45% increase in solar jobs between 2012-2014



Source: Solar Foundation: 2014 Solar Jobs report, http://pre.thesolarfoundation.org/solarstates#nm

12th windiest state – 6.5% of electricity from wind



Wind Potential



New Mexico is 18th in wind production



U.S. Deployment & Cost for Land-Based Wind 1980-2013



Source: Department of Energy, Revolution Now: The Future Arrives for Four Clean Energy Technologies, October 2014, http://energy.gov/sites/prod/files/2014/10/f18/revolution_now_updated_charts_and_text_october_2014_1.pdf

New Mexico Wind

- 1000 total wind jobs in New Mexico
- The <u>New Mexico Wind</u> <u>Energy Center</u> will bring more than \$40 million into rural De Baca and Quay counties over 25

Years: including \$450,000/yr in payments in lieu of taxes to be made to the county governments and school districts; ~\$550,000/yr in lease payments to landowners; and an estimated \$500,000 in salaries for the permanent jobs to be created.

Sources: American Wind Energy Association; EMNRD: http://www.emnrd.state.nm.us/ECMD/Re newableEnergy/wind.html



Summary

- Prices of solar and wind continue to decrease over time
- 2,600 New Mexicans employed in wind and solar
- New Mexico could generate >1500x energy than used in state
- New Mexico could be a national leader in renewable energy



Sanders Moore

Director Environment New Mexico P.O. Box 40173 Albuquerque, NM 87196 505-254-4819

sanders@environmentnewmexico.org