

High renewable electricity growth continued in 2015

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The 2015 Renewable Energy Data Book shows that U.S. renewable electricity grew to 16.7 percent of total installed capacity and 13.8 percent of total electricity generation during the past year. Published annually by the National Renewable Energy Laboratory (NREL) on behalf of the Energy Department's Office of Energy Efficiency and Renewable Energy, the data book illustrates U.S. and global energy statistics, including renewable electricity generation, renewable energy development, clean energy investments, and technology-specific data and trends.

"Since it was first released in 2009, the Renewable Energy Data Book has provided useful insights for policymakers, analysts, and investors," NREL Energy Analyst Philipp Beiter said. "The 2015 version of the data book highlights the ongoing trend of growing renewable energy capacity and generation in the United States and globally."

The 2015 Renewable Energy Data Book compiles recently available statistics for the 2015 calendar year. Key insights include:

- Renewable electricity accounted for 64 percent of U.S. electricity capacity additions in 2015, compared to 52 percent in 2014.
- Renewable electricity generation increased 2.4 percent in 2015. Solar electricity generation increased by 35.8 percent (11.7 terawatt-hours), and wind electricity generation increased by 5.1 percent (9.3 terawatt-hours), while generation from hydropower



- dropped by 3.2 percent (-8.2 terawatt-hours).
- The combined share of wind and solar as a percentage of renewable generation continued to grow in the U.S. in 2015.
 Hydropower produced more than 44 percent of total renewable electricity generation, wind produced 34 percent, biomass produced 11 percent, solar (photovoltaic and concentrating solar power) produced 8 percent, and geothermal produced 3 percent.
- Wind electricity installed capacity increased by more than 12 percent (8.1 gigawatts) in a year, accounting for more than 56 percent of U.S. renewable electricity capacity installed in 2015.
- U.S. solar electricity installed capacity increased by 36 percent (5.6 gigawatts), accounting for nearly 40 percent of newly installed U.S. renewable electricity capacity in 2015.
- In 2015, California continued to have the most installed renewable electricity capacity of any U.S. state (nearly 31 gigawatts), followed by Washington (nearly 25 gigawatts) and Texas (more than 19 gigawatts). California has a diverse mix of renewables led by solar PV, hydropower, and wind. In Washington, the main contributor to renewable capacity is hydropower, while wind is the largest contributor in Texas.
- Oklahoma had the highest growth rate (30 percent) in installed renewable electricity capacity additions in 2015, followed by North Carolina (27 percent), Utah (27 percent), and Kansas (27 percent). Additions in wind capacity were the main contributor to growth in Oklahoma and Kansas, whereas additions in solar PV capacity accounted for most of the growth in North Carolina and Utah.
- Installed renewable electricity capacity increased to more than 29 percent of total electricity capacity worldwide in 2015.

 Renewables accounted for more than 24 percent of all electricity generation worldwide.

The 2015 Renewable Energy Data Book is produced by NREL's



Strategic Energy Analysis Center. For more on the data book, see the <u>EERE Blog</u>.

Provided by National Renewable Energy Laboratory

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