Susan Williams Sloan

Vice President, State Policy
American Wind Energy Association
December 20, 2016

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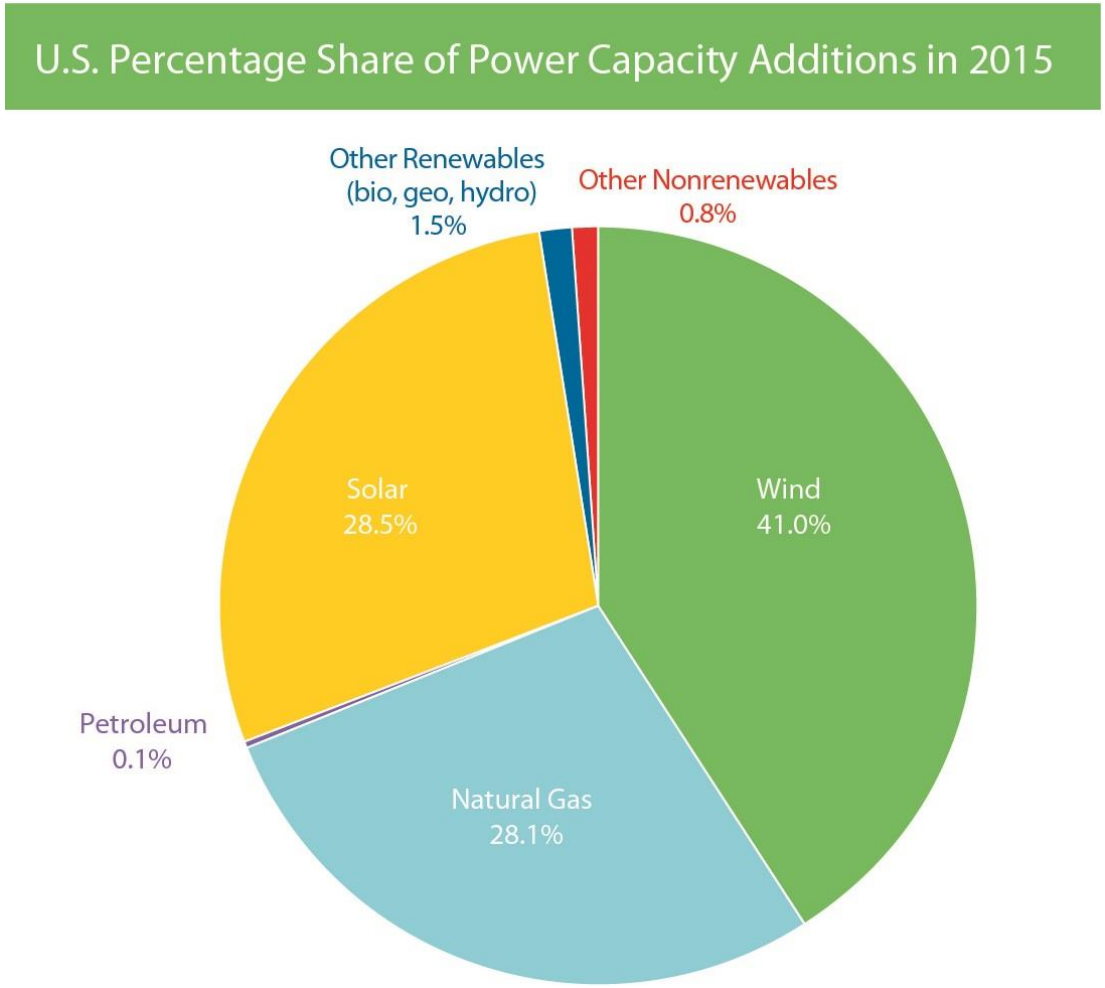
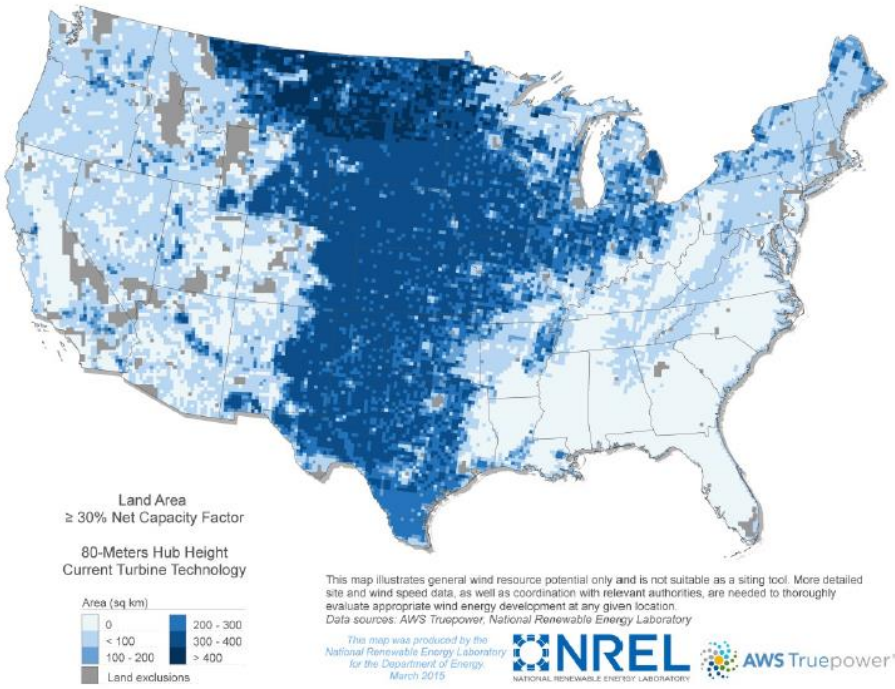
Wind was biggest source of new U.S. electric power in 2015

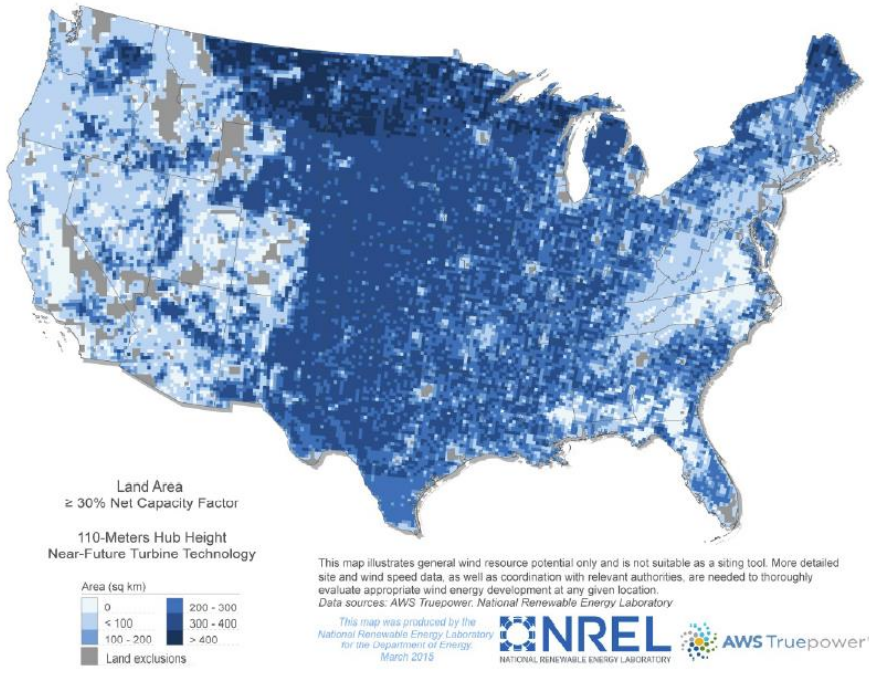


Source: *AWEA U.S. Wind Industry Annual Market Report Year Ending 2015*

New technology means more development in more regions



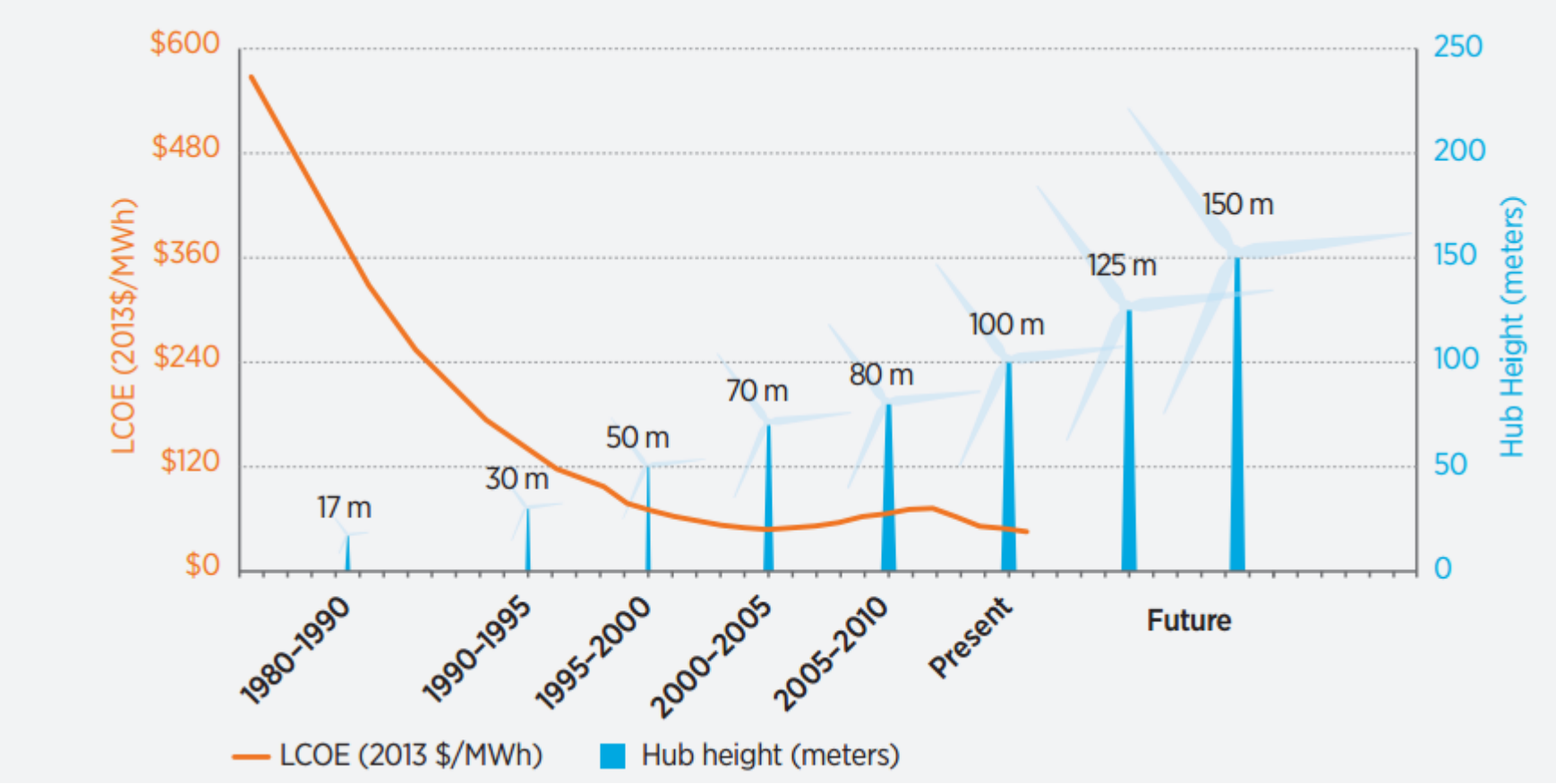
Wind resource at *80-meter* turbine hub height



Wind resource at *110 meters*

- New technology can reach higher and steadier winds, making wind energy development possible in new regions of the country
- Longer blades can capture more wind energy

Cost falling with economies of scale



Source: LBNL

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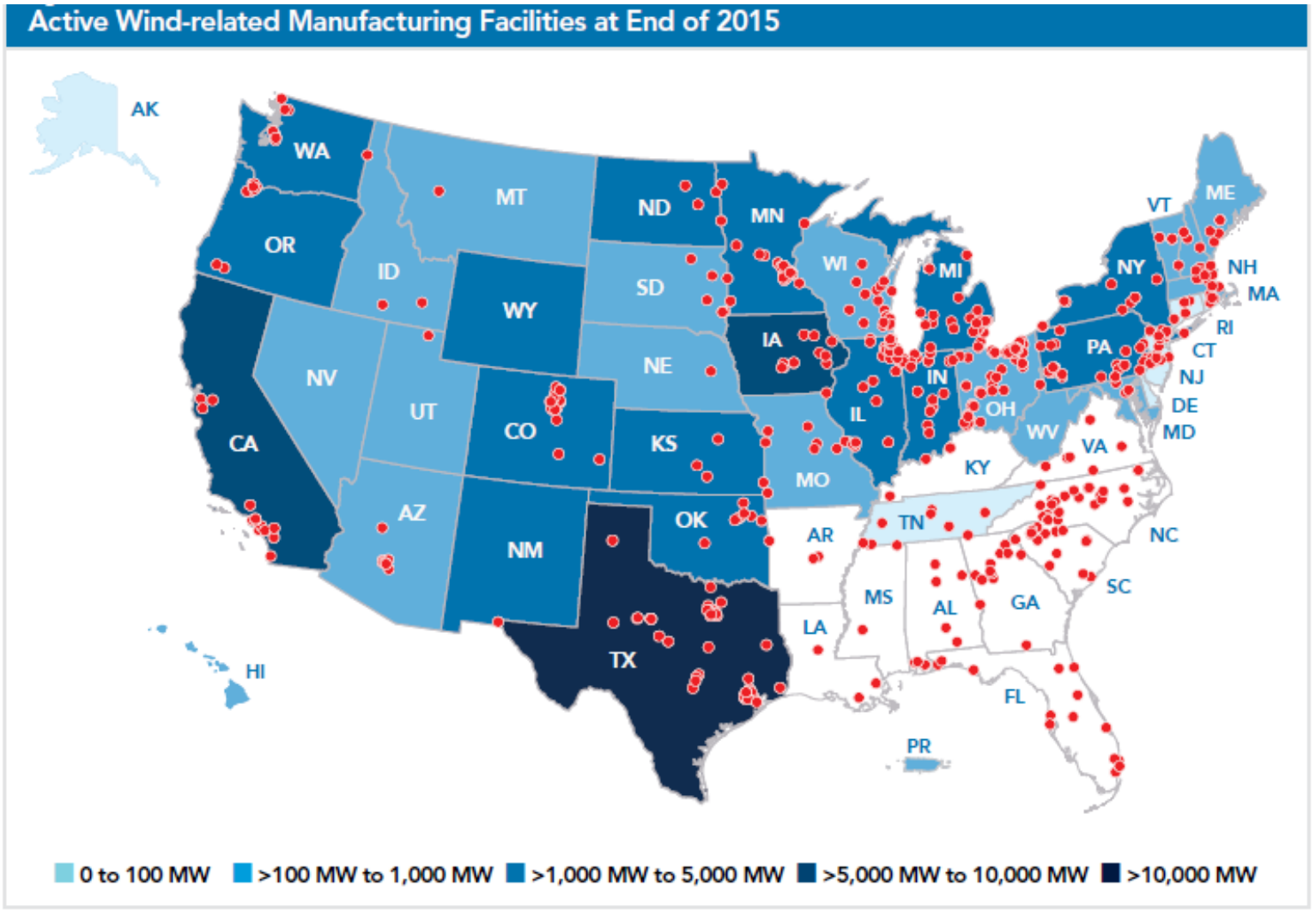
Over 500 Active Wind-related Manufacturing Facilities



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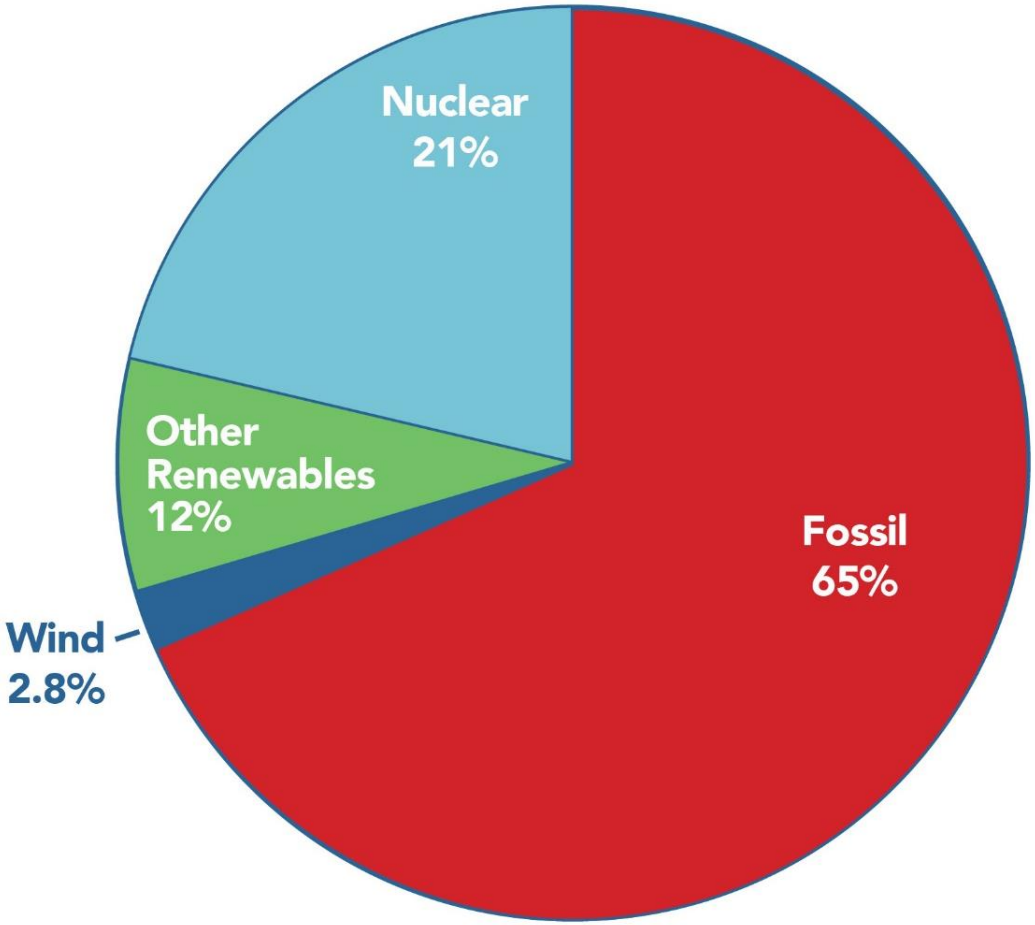
Energy is a Policy-Driven Industry

Federal
Regional
State

Federal energy incentives since WWII



Federal incentives for all energy sectors, 1947-2015, totaling $957 billion. Sources: JCT, US Treasury, OMB, DBL Investors, NEI, DOE

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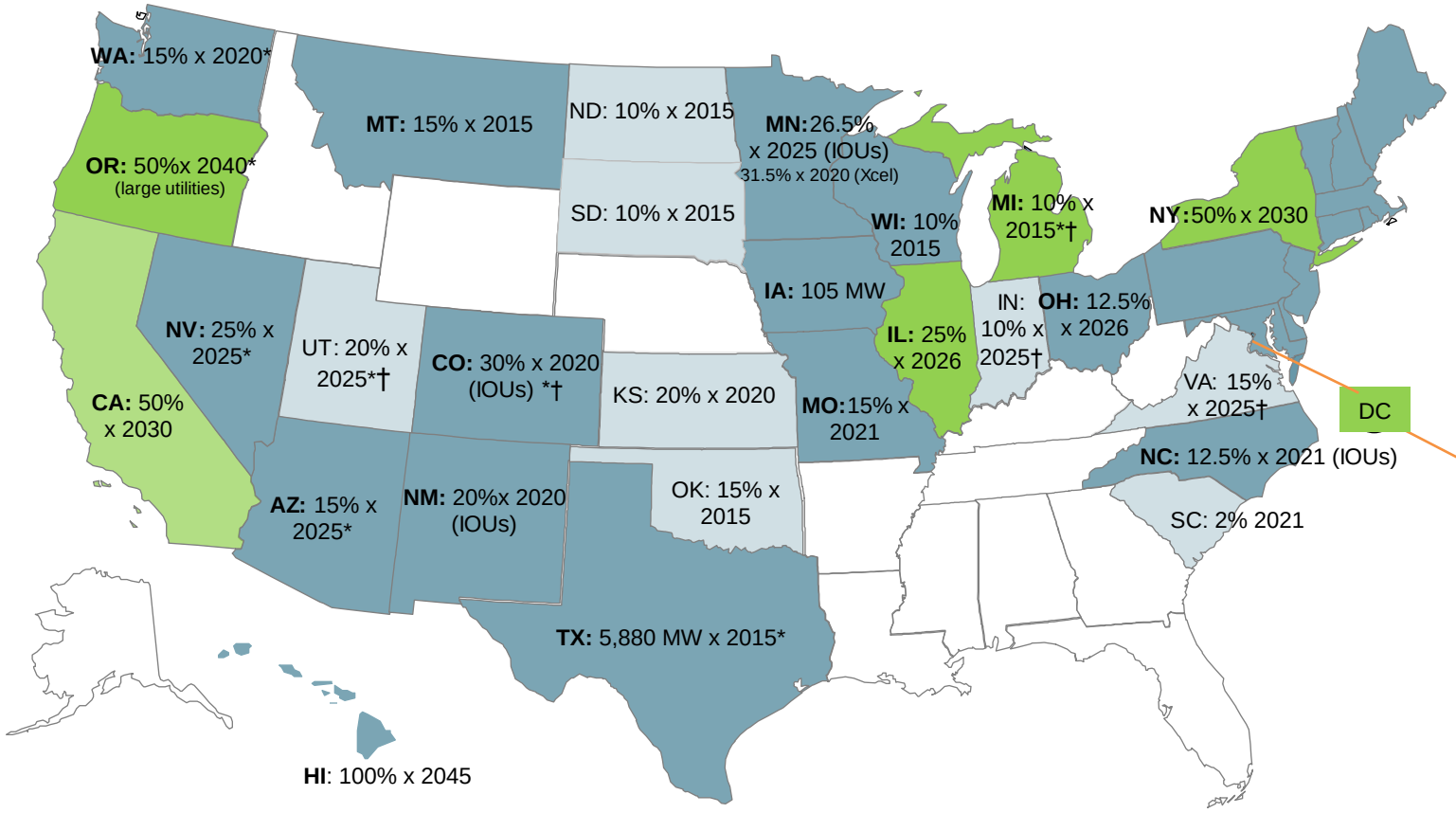
29 States + Washington DC Ask for Renewable Energy



ME: 40% x 2017
NH: 24.8%x 2025
VT: 75% x 2032
MA: 15% x 2020(new resources) 6.03% x 2016 (existing resources)
RI: 38.5% x 2035
CT: 27% x 2020
NJ: 20.38% RE x 2020 + 4.1% solar by 2027
PA: 18% x 2021†
DE: 25% x 2026*
MD: 20% x 2022
DC: 20% x 2020

Renewable portfolio standard
Renewable portfolio goal

* Extra credit for solar or customer-sited renewables
† Includes non-renewable alternative resources

www.dsireusa.org / August 2016

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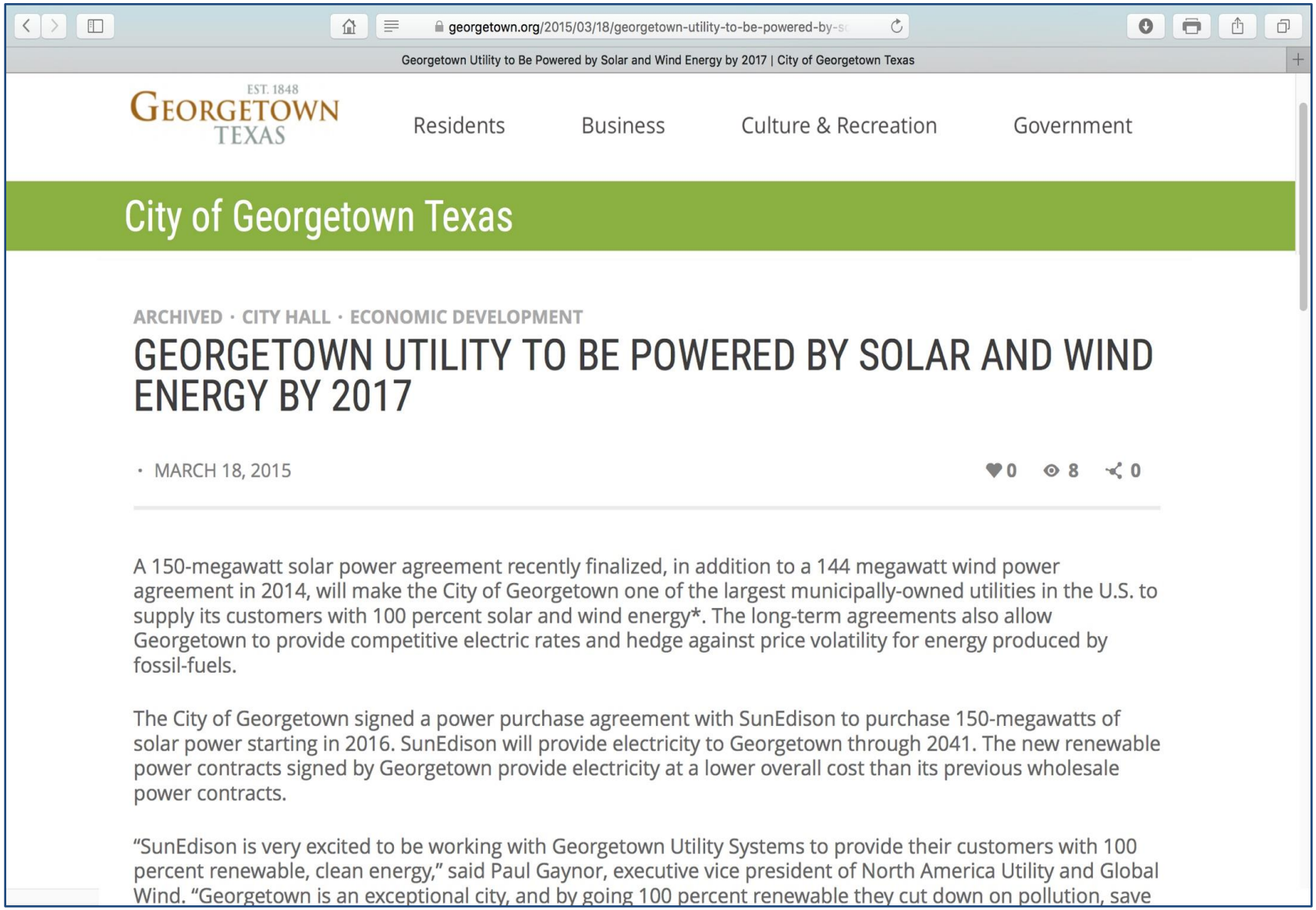
Transmission – done right, it saves more than it costs

CREZ worked



georgetown.org/2015/03/18/georgetown-utility-to-be-powered-by-s

Georgetown Utility to Be Powered by Solar and Wind Energy by 2017 | City of Georgetown Texas

EST. 1848 GEORGETOWN TEXAS

Residents Business Culture & Recreation Government

City of Georgetown Texas

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GEORGETOWN UTILITY TO BE POWERED BY SOLAR AND WIND ENERGY BY 2017

· MARCH 18, 2015

0 8 0

A 150-megawatt solar power agreement recently finalized, in addition to a 144 megawatt wind power agreement in 2014, will make the City of Georgetown one of the largest municipally-owned utilities in the U.S. to supply its customers with 100 percent solar and wind energy*. The long-term agreements also allow Georgetown to provide competitive electric rates and hedge against price volatility for energy produced by fossil-fuels.

The City of Georgetown signed a power purchase agreement with SunEdison to purchase 150-megawatts of solar power starting in 2016. SunEdison will provide electricity to Georgetown through 2041. The new renewable power contracts signed by Georgetown provide electricity at a lower overall cost than its previous wholesale power contracts.

"SunEdison is very excited to be working with Georgetown Utility Systems to provide their customers with 100 percent renewable, clean energy," said Paul Gaynor, executive vice president of North America Utility and Global Wind. "Georgetown is an exceptional city, and by going 100 percent renewable they cut down on pollution, save


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INDUSTRY NEWS › COMMERCIAL REAL ESTATE

Massive wind farm to power Facebook's $1B data center campus in Fort Worth

Jul 7, 2015, 11:30am CDT

INDUSTRIES & TAGS Commercial Real Estate, Social Media, Construction

Candace Carlisle
Staff Writer
Dallas Business Journal

Social media giant Facebook will invest up to $1 billion to build a massive global data campus in north Fort Worth, which will draw renewable power from a wind farm about a two hour drive northwest of downtown Dallas.

It marks the fifth data center for the world's largest social network, which searched the planet for a suitable location before landing on a tract of Ross Perot Jr.'s massive AllianceTexas development in north Fort Worth.

Hillwood's AllianceTexas is... more

COURTESY OF HILLWOOD PROPERTIES

Facebook's data center campus could total up to 1.25 million square feet in three data... more

COURTESY OF FACEBOOK

Beyond looking for a shovel ready site with good access to fiber and

Dow to Become One of the Largest Industrial Buyers of Renewable Energy

Dow Accelerates Sustainability with New Wind Farm Agreement for Texas Facility

MIDLAND, Mich. - 03/13/2015

(BUSINESS WIRE)--As a part of *Dow's Energy Plan* and its Sustainability Goals, The Dow Chemical Company (NYSE:DOW) has taken another step towards reducing its own carbon "footprint." Marking milestone progress, Dow's Energy business has signed a long-term agreement with a new wind farm, currently under development in South Texas by a subsidiary of Bordas Wind Energy, LLC, a joint venture between MAP® and Enerverse, LLC. The wind farm, to be complete in first quarter 2016, will span nearly 35,000 acres, and will supply Dow's Freeport Texas Manufacturing facility with 200 MW of wind power annually, equivalent to the amount of electricity needed to power more than 55,000 homes. As a direct result, Dow is the first company in the U.S. to power a manufacturing site with renewable energy at this scale, and will become the third largest corporate purchaser of wind energy in the United States. As one of the largest industrial energy consumers in the world, Dow has consistently been on the forefront of new energy technology

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Wind Energy to Power GM's Texas Assembly Plant

Renewable power will be used to build up to 125,000 trucks a year

2015-12-10

Print Email Word Add This

ARLINGTON, Texas – General Motors' Arlington Assembly plant will soon be able to build up to 125,000 trucks a year using wind power from turbines whose blades span the length of a football field in diameter.

Arlington Assembly produces more than 1,200 vehicles daily, including the Chevrolet Suburban and Tahoe; GMC Yukon and Yukon XL; and Cadillac Escalade and Escalade ESV. The 115 million kilowatt hours of renewable energy will be enough to manufacture more than half of the plant's annual vehicle output.

GM signed a power purchase agreement with EDP Renewables North America, a fully owned subsidiary of EDP Renovaveis, for its first U.S. wind power – 30 MW of energy from the planned 250 MW Hidalgo Wind Farm in Edinburg, Texas. Fifteen of the wind farm's 261-foot-tall turbines will generate the energy GM will use.

Arlington Assembly expects to start using the clean power during the fourth quarter of 2016, avoiding about $2.8 million in energy costs annually. Over the course of the 14-year deal, GM will avoid more than 1 million metric tons of carbon dioxide emissions – equivalent to the emissions of 112 million gallons of gasoline consumed.

"Our investment is helping accelerate the proliferation of clean energy in Texas and the use of wind as a reliable, renewable source of energy," said Jim DeLuca, GM executive vice president of Global Manufacturing. "Our sustainable manufacturing mindset benefits the communities in which we operate across the globe."

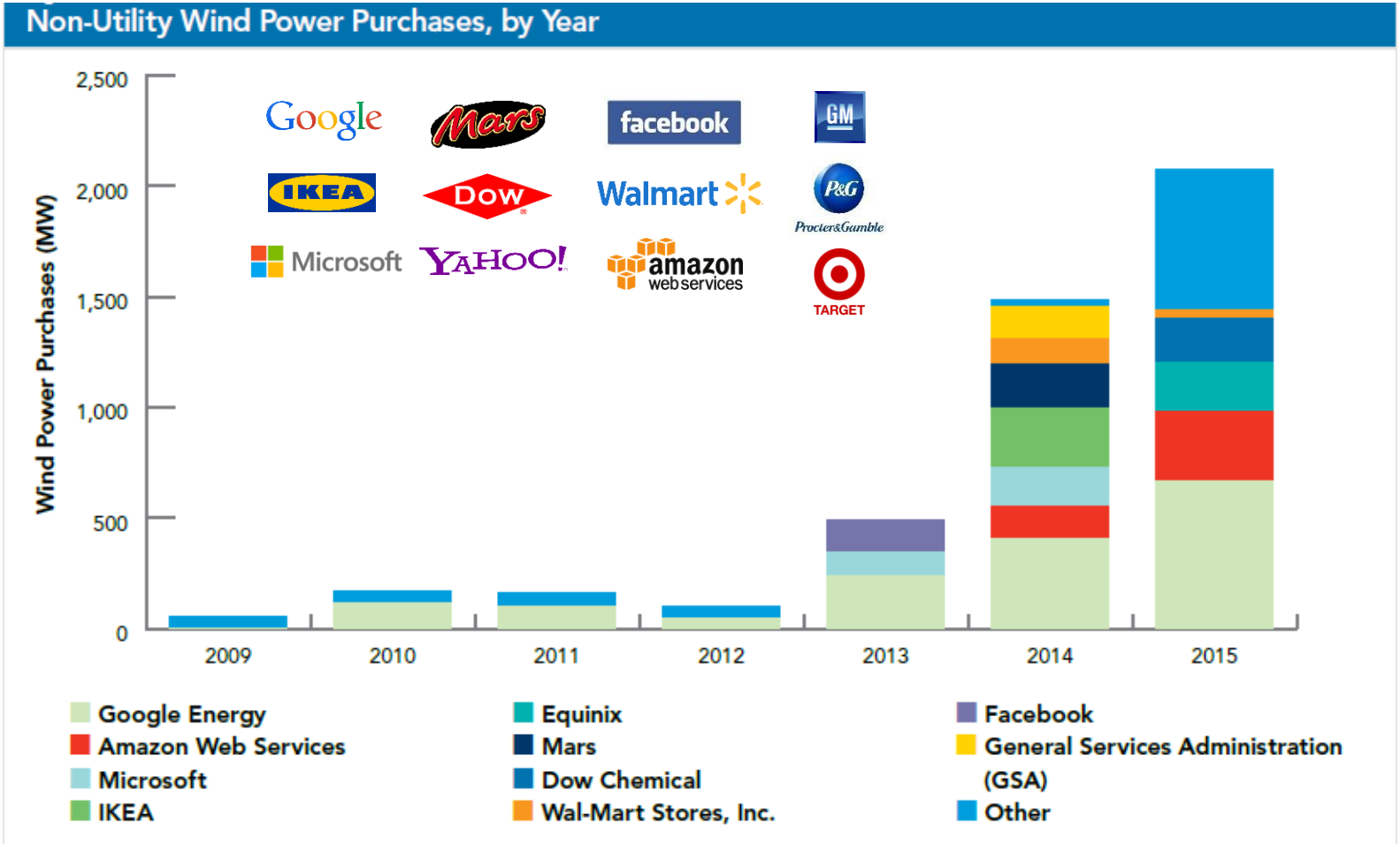
Toyota Motor North America Commits to 100% Renewable Energy Contract with MP2 Energy

Five-year electricity supply deal includes 7.75 MW from on-site solar generation

NEWS PROVIDED BY
MP2 Energy →
Jun 09, 2016, 08:00 ET

HOUSTON and DALLAS, June 9, 2016 /PRNewswire/ -- MP2 Energy, a full-service power company based in The Woodlands, Texas, has been awarded a five-year retail electricity contract with Toyota Motor North America to provide 100 percent renewable energy solutions to Toyota's new North American headquarters in Plano, Texas.

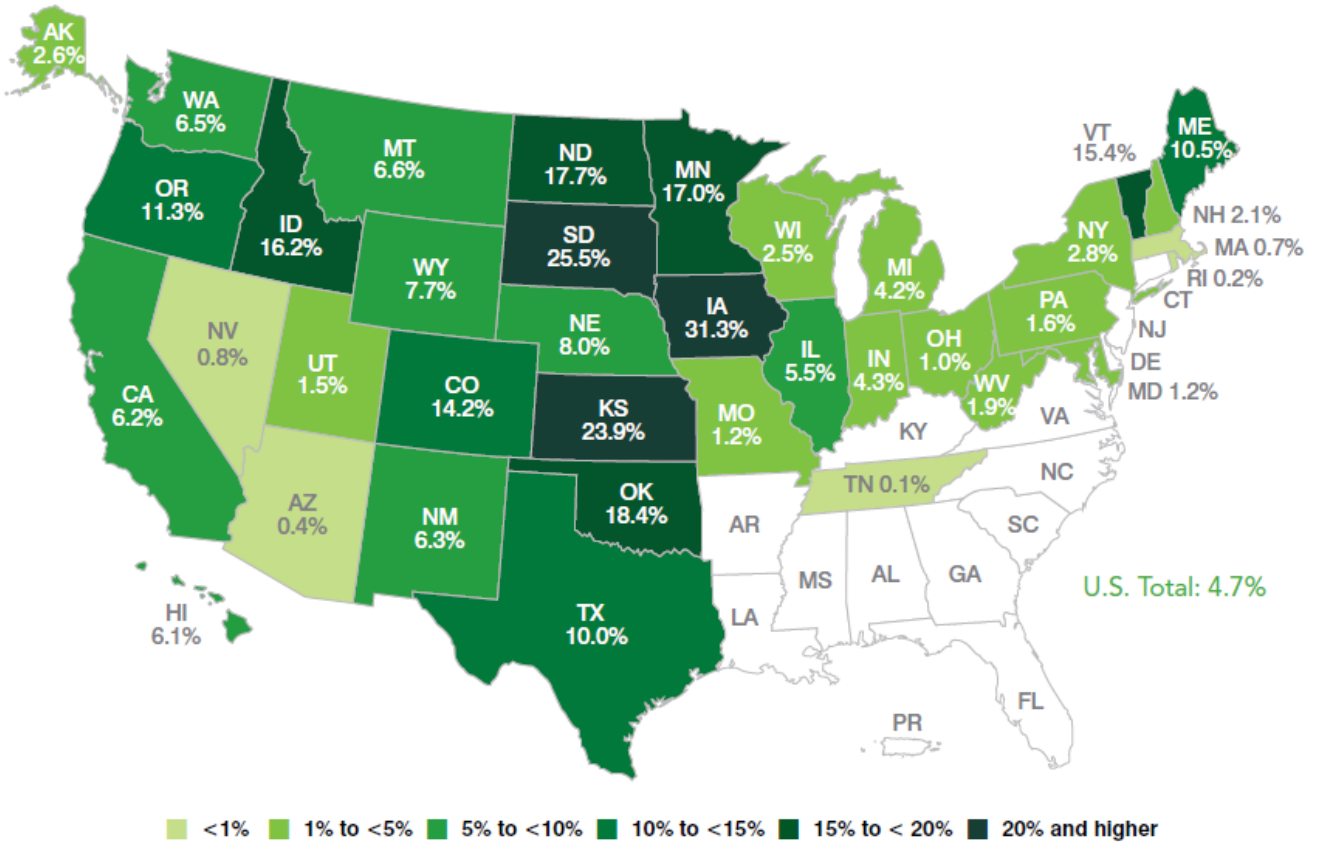
Trend: Major brands cutting costs & pollution with wind



Source: *AWEA U.S. Wind Industry Annual Market Report Year Ending 2015*. MW counted as of public announcement of contract

Increasing contribution to the grid, *reliably* integrated

- Iowa now generates over 35% of its electricity produced in-state from wind
- 12 states produced over 10% of their in-state electricity from wind



Source: *AWEA U.S. Wind Industry Annual Market Report Year Ending 2015; AWEA U.S. Wind Industry Third Quarter 2016 Market Report*

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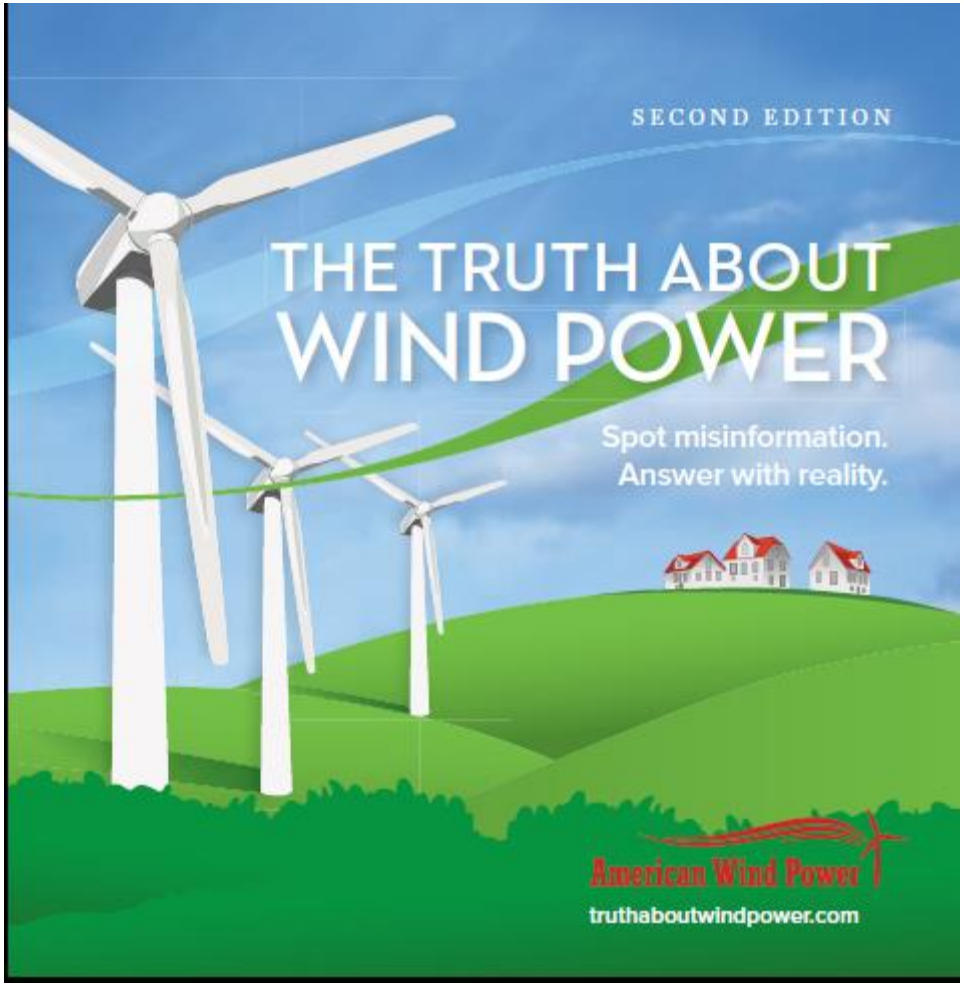

www.truthaboutwindpower.com