30% of new U.S. generating capacity over the past 5 years
Reliable Integration

10% by 2020

Source: U.S. EIA Electric Power Monthly
Cost of wind power falling with economies of scale
5-year deal to phase down tax credit ended boom-bust era

Wind farms and factories: 50 states

Wind will generate $85 billion in economic activity through 2020 – mostly in rural areas
States opt to diversify energy resources

Source: AWEA State RPS Market Assessment 2017
Trend: Major brands cutting costs & pollution with wind

Source: Non-utility purchases by year of announcement, inc. physical and virtual PPAs, direct ownership, and large-scale REC purchases from a single wind farm, AWEA U.S. Wind Industry Annual Market Report Year Ending 2016
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

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

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.
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

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."
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
Trend: Cities buying more wind energy

- Over 200 city purchases to date
- Nearly 7 percent of U.S. wind power capacity
- Renewable commitments from Chicago, Pittsburgh, Atlanta, San Diego, Washington, D.C., many others
Transmission represents a small percentage of residential customers’ utility bills (about 10%). The cost of new transmission is offset by the benefits. For instance, SPP’s analysis found that for only an additional 88¢ on a $100 monthly utility bill, seven new transmission projects totaling $700 million could be built and result in monthly benefits of $1.68 per customer.
U.S. offshore: the next frontier