

DIRECTION

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The Wintering Hills wind farm in Alberta, Canada. (Courtesy: Teck)

Apex Clean Energy to Operate IKEA Canada Wind Farm

Apex Clean Energy (Apex) recently announced a multi-year contract with IKEA Canada to manage and provide remote operations for the Wintering Hills wind farm in Alberta, Canada. The 88 MW facility produces enough power to supply about 26,000 Canadian homes.

IKEA US purchased two U.S. wind farms from Apex: the 165 MW Cameron Wind facility in Cameron County, Texas, in November 2014; and the 98 MW Hoopeston Wind facility in Hoopeston, Illinois, in April 2014. Apex operates and maintains both facilities.

“This expansion of our asset man-

agement business sends a strong signal to the market,” said Mark Goodwin, president and CEO of Apex.

Apex put more wind energy on the U.S. grid than any other company in 2015. Looking ahead, Apex also has the industry’s largest and most diverse pipeline of projects in active development. The Wintering Hills facility is the 11th project in the Apex asset management fleet, bringing the total generation under management up to 1,729 MW.

“Wind asset management is a science, and we’re able to use the science to safely and reliably push the boundaries of performance,” said

Andrea Miller, vice president of asset management for Apex. “When it comes to getting maximum power and profit from a wind farm, we measure and analyze the data that others aren’t, so we can take action on opportunities and realize gains that others don’t.”

The Wintering Hills project consists of 55 General Electric 1.6 MW turbines, each with a hub height of 80 meters and a nominal speed of 16.8 rpm. ↵

Source: Apex Clean Energy

For more information, go to www.apexcleanenergy.com

Hybrid Solar Wind Market Size Worth \$1.47 Billion by 2024

Hybrid Solar Wind Market size is expected to reach \$1.47 billion by 2024, according to a new research report by Global Market Insights, Inc.

Decreasing wind and solar component cost associated with increasing clean fuel energy demand will drive the global hybrid solar wind market

size. The component manufacturing cost has witnessed a significant price drop since 2012, owing to technological advancement.

Growing demand for reliable electricity coupled with strict government norms to reduce carbon footprints will further compliment the

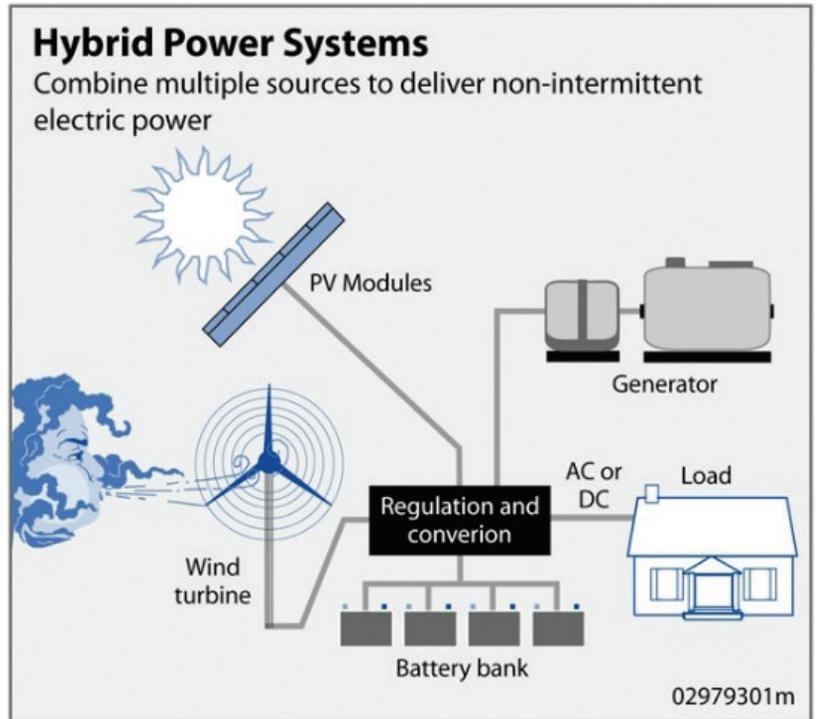
industry outlook. Developed nations led by the U.S. have introduced various initiatives to promote energy conservation and reduce greenhouse emissions.

High initial costs and lack of awareness may restrain industry demand over the next few years. Grid

connected hybrid solar wind market size was valued at more than \$190 million in 2015 and is predicted to grow at more than 10 percent by 2024. Low installation cost, feed in tariff and net metering are some of the advantages offered by a grid-connected system.

Key insights from the report include:

- U.S. hybrid solar wind market size is estimated to reach more than \$300 million by 2024. Government incentives such as tax rebate and increasing emphasis on renewable energy have encouraged regional industry growth.
- India is set to exceed 30 MW in installation by 2024 and is estimated to grow at more than 20 percent CAGR during forecast period. Government initiatives toward rural electrification and initiatives to promote sustainable energy will drive the hybrid solar wind market size.
- South Africa hybrid solar wind market share was valued at 6 MW, which will translate to more than \$12 million in revenue through to the forecast timeline. Nigeria hybrid solar wind market size was 0.17 MW in 2015 and in terms of revenue, is estimated to witness gains of



Because the peak operating times for wind and solar systems occur at different times of the day and year, hybrid systems are more likely to produce power when you need it. (Courtesy: energy.gov)

- more than 16 percent from 2016 to 2024. Increasing off-grid electricity demand will stimulate industry growth in future.
- Australia hybrid solar wind market size was more than 1 MW in 2015 and is expected to reach more than 40 MW by 2024. Increasing investment trend in renewable ener-

gy may favor the industry growth. In March 2016, Australian government funded \$1 billion, which will provide equity and debt for clean energy technology. ↘

Source: Global Market Insights, Inc. For more information, go to www.gminsights.com

Heidenhain Introduces Lighthouse Global Energy as a New Texas Distributor

With close proximity to the largest wind farms and oil fields in Texas, Lighthouse Global Energy partnered with Heidenhain Corporation earlier this year to become an official distributor of Heidenhain equipment components. Specializing in the offering of the Leine & Linde brand of rugged encoders, Lighthouse Global Energy has quickly become an important go-to source for the area.

With an in-house engineering department, as well as a full line of manufacturing and machining capabilities, Lighthouse Global Energy in Abilene, Texas, specializes in repair and manufacturing solutions for wind energy and oil and gas components. The heavy, severe duty Leine & Linde encoders used in these applications are well suited for drive and measurement applications. They are well known as high quality,

heavy-duty encoders of both the incremental and absolute types and are noted for their product robustness designed to cope with the harshest of environments, such as those with high vibration, dirt, and cold temperatures.

“We are thrilled to partner with Lighthouse Global Energy in order to quickly meet the needs of important energy customers in the U.S.,” said Tom Wyatt, Heidenhain’s product management and marketing manager in North America. Lighthouse Global Energy and its affiliates have more than 50 years of repair and manufacturing experience in their area. ↘

Source: Heidenhain Corporation

For more information, go to www.heidenhain.us

Maryland Economy Wins Big with Clean Energy Jobs Act

The Maryland General Assembly recently voted to override Gov. Larry Hogan's veto to restore the Clean Energy Jobs Act, action lauded by the American Wind Energy Association (AWEA).

"Making the Clean Energy Jobs Act law is the right decision for Maryland," said AWEA CEO Tom Kieran. "Renewable energy legislation is pro-growth, pro-business, and means access to more jobs in Maryland. From the Free State's population-hubs to majestic shores, this ensures more low-cost, homegrown American wind power reaches homeowners and businesses."

In April 2016, the Maryland General Assembly passed the Clean Energy Jobs Act, legislation to increase the state's renewable energy standard by 5 percent so that a quarter of its energy comes from renewable sources by 2020. In May 2016, Gov. Hogan vetoed the bill. The



Wind energy has provided \$380 million of capital investment in Maryland. (Courtesy: Maryland Energy Administration)

Maryland House of Delegates voted to override that veto and later the Senate joined the lower chamber in restoring this important legislation.

Wind power employs just more than 100,000 Americans according to the

Department of Energy. Wind power also relies on a robust American supply chain of 500 factories across 43 states.

Wind energy has already provided \$380 million of capital investment in Maryland, and wind-turbine lease payments have generated up to \$1 million a year in Maryland.

States representing roughly a quarter of the U.S. population (California, Oregon, New York, Massachusetts, Michigan, Rhode Island, and the District of Columbia) have chosen to raise their renewable energy goals over the past year while adding jobs and investment. California, Oregon, New York, and Hawaii have standards aiming for 50 percent renewable energy and beyond. ♪

Source: AWEA

For more information, go to www.awea.gov

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