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Inducing impurities

Low-pressure diffusion addresses all major concerns in the diffusion segment

Market developments
Previously dormant solar markets are now showing signs of life

Monopoly status
EVA still retains its dominance in the encapsulation foil segment

History repeating?
Tedlar looks like it's making a comeback, according to our market survey on backsheets

Stock prices rising
Shares prices of two-thirds of the companies in the PPVX show an upward trend

Wind and solar power ready to help states meet EPA rule

With the US Environmental Protection Agency (EPA) recently issuing its first-ever rule limiting carbon pollution from existing power plants, many policymakers in Congress and state capitals are wondering: How can states meet the proposed standards most cost effectively?

Republicans, Democrats and Independents can get behind two affordable, reliable and business-friendly solutions that are ready today – American wind and solar power.

These sources of carbon-free electricity already foster economic development in all 50 states, creating jobs and benefiting rural and state economies by attracting new investment.

In just three heartland states, Iowa, Kansas and Colorado, wind power has grown to support 12,000 good-paying jobs and attracted nearly $20 billion in capital investment. In total, American wind power attracts up to $25 billion a year in private investment into our economy and supports over 50,000 jobs. More than 560 factories in 43 states make wind energy components.

Last year, $13.7 billion was invested in solar nationwide – making it the fastest-growing source of renewable energy in the US, accounting for nearly 30 percent of all new electric generation capacity installed in 2013. And across the US, 143,000 Americans are at work every day at more than 6,100 solar businesses.

Both technologies are experiencing rapid price declines, and those savings are passed onto consumers. The American-made taller towers, longer blades and improved gearboxes, and over 30 years of experience in the field, have helped drive down wind costs. According to the Department of Energy, the cost of energy generated by wind has dropped 43 percent in just 4 years.

When the Midwest utility system operator (MISO) recently reached the milestone of supplying more than 25 percent of its momentary electricity demand from wind, it noted that it's »one of the fuel choices that helps us manage congestion on the system and ultimately helps keep prices low for our customers and the end-use consumer.«

The cost of solar has plummeted, as well. The average price of a residential PV installation has also fallen 43 percent, by watt, since 2010. Utility-scale PV prices fell 61 percent in that same time period. That's an incredible decline that has helped solar to consecutive record-breaking years.

Utilities in states as diverse as Colorado, Minnesota and Texas have all recently chosen solar as a cost-competitive source of new generating capacity, diversifying their energy mix – as demonstrated on Mar. 8, 2014, when solar provided a record 18 percent of California's 22,700 MW demand.

Unlike many traditional sources of energy, wind and solar emit no air or water pollution and create no hazardous waste.

Electricity generation is the largest industrial source of carbon emissions in the US. The EPA's proposed rule is an opportunity for the US to again be the leader that the rest of the world can follow. We're already on our way.

Zero-emission wind power avoids enough carbon pollution every year to take the equivalent of 20 million cars off the road. More than 10 states are already reducing carbon emissions by 10 percent or more from wind energy alone (California, Colorado, Idaho, Iowa, Kansas, Minnesota, Nebraska, Oregon, South Dakota, Vermont and Washington state). And, according to the National Renewable Energy Laboratory, obtaining 30 percent of the US electricity needs with wind power will cut US power sector emissions 37 percent.

Solar currently installed in the US is already generating enough pollution-free electricity to displace 18 billion pounds of coal or 1.8 billion gallons of gasoline. That's the equivalent of removing 3.5 million cars off our roads and highways. Regulators looking to meet their states' changing needs find solar energy to be reliable, cost-competitive, environmentally friendly and easily scalable, fitting the needs of the state implementation plans soon to be necessary for meeting the EPA's Section 111(d) carbon pollution standard.

Some members of Congress worry we could hurt our economy by working to meet the EPA's proposed standards. They may not have heard the good news about these newly affordable solutions at hand.

While there's no single solution to meeting the much-needed goal of reducing carbon emissions, wind and solar power are two of the biggest, fastest and most cost-effective ways to meet the EPA's proposed rule. Governors all across the country already know how they grow economies and create jobs – and a strong majority of Americans support scaling up these clean, homegrown energy sources.

That's why we urge all members of Congress to look to wind and solar power as leading solutions to help meet America's future energy needs. ● rr, tok


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