Week in Energy Newsletter

Welcome to the Ninth Edition of the ‘Week in Energy’ Newsletter (10/24 – 10/30)!

Please do not forget to send your energy news and ESTP updates plus any comments to the Editor at saakshig@andrew.cmu.edu

In this Edition…

- Energy Market
- Renewables
- Technology
- CMU News
- Energy job postings

Energy Market

OPEC countries failed to agree to a cut in oil production

After 6 hours of negotiations in Vienna this Thursday, OPEC officials resisted cutting oil production in response to the fall in oil prices in June. After 3 years of holding steady around $110 a barrel, oil had dropped $80. The cartel however has decided to keep its oil production target a ceiling of 30 million barrels per day. OPEC’s decision is coming at a time when the US, one of its largest consumer no longer needs as much of its oil.


Oil prices crash below $70

After OPEC announced that it was leaving oil production levels unchanged, Oil Prices plunged further down to trade below $70 per barrel. In the US, WTI crude trading fell by roughly 7% to just below $69 (lowest since May 2010). In Europe, Brent crude prices also fell by about 7% to trade just below $73.

Follow the prices here: http://www.bloomberg.com/energy/


Venezuela’s President vows to get oil prices back to $100 per barrel
In a passionate speech on Thursday, Venezuelan President Nicolas Maduro vowed that he would not rest until oil prices were back to “where they should be”. Since, oil makes 95% of the exports in Venezuela, a decrease in oil prices means that its most valuable commodity is not bringing in enough cash to support investments ranging from education to social welfare. Moreover, Venezuela’s inflation rate is the highest in the Americas, at 65%.

http://www.voanews.com/content/reu-venezuela-says-will-push-opec-until-oil-reaches-100/2537786.html

SunEdison is the best solar stock of 2014

Solar stocks such as Trina Solar, Canadian Solar, SunPower and SolarCity have are either gone down or remained flat this year. The one outlier is SunEdison which is up 75% this year. SunEdison has quickly become one of the largest renewable energy developers in the world this year, buying First Wind for $2.4 billion, signing a 5GW memo with India, and agreeing to build 1.7GW of projects in China. SunEdison does not make its own panels, but instead has third parties process poly-silicon and wafers that it makes into solar modules. Since solar panel costs and financing costs are low, the business strategy has been resulted in SunEdison being the top stock in the solar industry.

Read about the First Wind Deal here:

Renewables

Renewable energy overtakes nuclear as Scotland’s top power source

Industry figures reported that clean energy produced more power in Scotland in the first half of 2014, than nuclear, coal or gas for the very first time. The renewable energy, which comes mainly from wind farms and hydro power plants, produced nearly 1/3rd more power than non-renewables setting the record at 10.4TWh.


India to cut energy use by linking savings to output
Through their Perform, Achieve and Trade Program, India plans to encourage hundreds of the nation’s largest industrial plants to keep their energy use in check. The program sets a goal of cutting energy use an average of about 4% per unit of output at the factories. Any extra energy can be sold to plants that did not reach their goals. This helps India reduce the intensity of energy use but still increase production to meet its needs as a developing nation.


**Iowa expects action on clean and renewable energy from the Congress**

Iowa is the nation’s largest producer of ethanol, and one of the leading states utilizing wind power, with more than 30,000 jobs in the state’s clean energy sector. When the new Congress is sworn into Office in January, voters will be expecting congressional action on renewable energy. According to a recent poll, upto 73% voters were more likely to support a candidate who wanted to increase the use of renewable energy. It also found that 7 in 10 voters want Iowa’s Senator elect to support efforts to address the effects of climate change.


**Technology**

**The energy efficient modular wheelchair made from carbon fiber**

A British kickstarter company introduces the Carbon Black wheelchair that is made entirely out of super resistant F1 grade carbon fiber. The carbon fiber gives the wheelchair energy efficiency due to its low weight – it is light enough to pick up with one hand – and also allows the device to better absorb bumps and vibrations. In addition, integrated LED front lights make navigation easier for the user.

CMU News

CMU receives Affiliate Status with DOE’s Joint Center for Energy Storage Research

The JCESR is an energy innovation hub sponsored by the US Department of Energy. It’s goal is to produce energy storage units over the next five years that have 5 times the storage capacity of current units at 1/5th the cost. Through the affiliation, researchers will participate in workshops where they will collaborate with partners, other affiliates and the JCESR hub to find cheaper and more efficient systems for energy storage.

Read the full story here:

Unlikely that carbon emission cuts will lead to coal’s demise

Edward S. Rubin, professor of Engineering and Public Policy and Mechanical Engineering at CMU, outlines how the energy industry can develop new technologies that are economically viable, while also successful in achieving long-term cuts in carbon emissions.

Read his article here:

Webinar: Innovating for Competitive Advantage: Edible Electronics

On December 5th, watch the CMU Scott Institute for Energy Innovation and Catalyst’s monthly webinar as Materials Science and Biomedical Engineering Professor Christopher Bettinger discusses his award winning Edible Electronics. Edible Electronics are ingestible electronically active medical devices powered by edible batteries made from materials and minerals present in the body.

Register for the free event here:

Event: Successfully Moving Energy Breakthrough’s from Lab to Market
This December 10th, join the Center for Clean Energy Innovation and CMU’s Scott Institute for Energy Innovation to learn about tech transfer efforts by leading universities and labs. A panel of CMU-borne startups, technology transfer experts and CMU professors will discuss their successes and challenges in scaling up energy breakthroughs.

Register for the free Live Event or Online Video here: https://www.eventbrite.com/e/bridging-the-valley-of-death-successfully-moving-energy-breakthroughs-from-lab-to-market-tickets-14043535593

Energy job postings for ESTP students

The following are the Energy jobs with deadlines coming up in the next two weeks. For application deadlines and requirements, please refer to Tartantrak.

National Fuel Gas Company – Field Operations Supervisor
Praxair, Inc – Research and Development Engineer
Institute for Defense Analyses – Science Policy Fellowship Program
Pacific Gas and Electric Company – Senior Business Analyst
Avant Energy, Inc – Energy Management Consulting
Urban Green Energy – Communications Internship

To learn more about the Energy, Science, Technology and Policy Department please visit the website at http://www.cmu.edu/engineering/estp