

#### **December 14, 2017**

Welcome to the third issue of **Solar Newsbriefs**, brought to you by the Washington State University Energy Program. Please feel free to forward this issue to those of your colleagues interested in solar energy. For archives of past **Solar Newsbriefs**, visit

http://www.energy.wsu.edu/EnergyLibrary/Newsbriefs.aspx/solarnewsbriefsarchive.aspx

### **Oregon News**

### **City of Corvallis Airport Solar Array**

The City of Corvallis installed a new 100 kW solar array at the Corvallis Municipal Airport. The new array produces enough energy to power nearly all of the City of Corvallis's daily electricity needs at the airport. It was installed on a former superfund site that is in the final stages of environmental remediation. To avoid disturbing the site's soil, the 378 individual solar panels that comprise the array were installed above-ground in a series of concrete-filled troughs. For more information see *Ecologue's Blog* for, August 24, 2017.

http://blogs.oregonstate.edu/ecologue/2017/08/24/city-corvallis-airport-solar-array/

# **Washington News**

## Going beyond carbon neutral: New Solar Panels Installed in Our Parks

Two King County parks, Marymoor Park and Steve Cox Memorial Park, became a little more sparkly with the welcome addition of more than 300 solar panels — *King County Parks*, October 27, 2017. <a href="https://kingcountyparks.org/2017/10/27/going-beyond-carbon-neutral-new-solar-panels-installed-in-our-parks/">https://kingcountyparks.org/2017/10/27/going-beyond-carbon-neutral-new-solar-panels-installed-in-our-parks/</a>

# **Solar Swimming Pools**

### **Solar Energy Systems for Pools**

If you have a pool, you know how much warming can mount your electricity bill. Solar systems for swimming pools offer an alternative method that does not devastate your bank account. For more information see *Latest Solar News*, December 13, 2017:

https://latestsolarnews.com/solar-energy-systems-for-pools/

#### **Disaster Relief**

### Rethinking Electric Power, Prompted by Politics and Disaster

Lilo Danielle Pozzo, who teaches chemical engineering at the University of Washington, grew up in Puerto Rico. So when Hurricane Maria devastated the island in September, it felt, she said, like a perfect alignment of needs and expertise. Professor Pozzo studies batteries and electrical storage systems at the university's Clean Energy Institute, and Puerto Rico, a place she loves, had just seen its power grid destroyed. With others from the Institute and financial contributions collected in Seattle, they hope to create a new solar powered microgrid system, that is clean and less carbon intensive than the fossil fuel-dependent one the storm wrecked. The island is becoming an important proving ground for ideas about how low-carbon energy can be practical, both technically and financially – Read the full article in *New York Times*, December 12, 2017: <a href="https://www.nytimes.com/2017/12/11/us/rethinking-electric-power-prompted-by-politics-and-disaster.html">https://www.nytimes.com/2017/12/11/us/rethinking-electric-power-prompted-by-politics-and-disaster.html</a>

#### **Future Trends**

### The Future of Solar Now Depends on More than Just Technology

In May 2015, the MIT Energy Initiative released a study on "The Future of Solar Energy" to assess how solar energy could grow efficiently and robustly in the U.S., as a key enabling technology for addressing climate change. Only two and half years have passed, but in the fast-moving world of renewable energy, that's enough time for major changes. While the Future of Solar study did not try to predict the cost or deployment levels of solar power, we did observe a general trend: the cost of solar power tends to be lower than expected, and the deployment of solar power tends to be higher than expected – Read the update to the report *R* & *D* Magazine, November 30, 3017: <a href="https://www.rdmag.com/article/2017/11/future-solar-now-depends-more-just-technology?utm">https://www.rdmag.com/article/2017/11/future-solar-now-depends-more-just-technology?utm</a> source=MIT+Energy+Initiative&utm campaign=ff2ff2d20c-

#### 3 Questions: The Future of Solar: U.S.

Becca Jones-Albertus, acting deputy director for the U.S. Department of Energy Solar Energy Technologies Office, recently gave a talk hosted by the MIT Energy Initiative in which she discussed how energy storage advances and grid integration can boost the growth rate for solar energy. Jones-Albertus provided data on cost reductions, storage options, and grid modernization – Read the article in the December 1, 2017 *MIT Energy Initiative*:

http://energy.mit.edu/news/3-questions-future-solar%E2%80%AF/?utm\_source=MIT+Energy+Initiative&utm\_campaign=ff2ff2d20c-weekly\_news\_2017\_12\_07&utm\_medium=email&utm\_term=0\_eb3c6d9c51-ff2ff2d20c-75775417&mc\_cid=ff2ff2d20c&mc\_eid=db861d30a1

#### **Environmental**

### More states use solar plants to protect bumble bee populations

"To combat "colony collapse", two solar developers – Cypress Creek Renewables and Florida Power & Light (FPL) – have built three utility-scale solar farms that are landscaped with native plants and

flowers to provide rich habitats to support the bees' flagging populations" – PV-Magazine, November 16, 2017.

https://pv-magazine-usa.com/2017/11/16/more-states-use-solar-plants-to-protect-bumble-bee-populations/

### Reports

### Updated "50 States of Grid Modernization" report available

"The Department of Energy recently concluded that electric system reliability and resiliency are at risk due to the loss of what it calls "baseload" power resources — primarily coal-fired and nuclear. That claim has been largely debunked, but it raises the question of how must the electric system evolve in order to remain reliable and resilient as it transitions to new renewable resources such as wind and solar? This updated report from the NC Clean Energy Technology Center describes how different states are going about it" — Read the blog and access the report from the Northwest Energy Coalition blog:

http://nwenergy.org/resources-publications/updated-50-states-of-grid-modernization-report-available/

# **Technological Innovations**

### **Less Guesswork with New Analysis Tool for PV + Storage**

Using NREL's new REopt Lite web tool, commercial building owners can evaluate the economic feasibility of grid-connected solar photovoltaics (PV) on their buildings. The web tool identifies both the optimal PV and battery system sizes as well as the dispatch strategy to minimize the life-cycle cost of energy. REopt Lite also estimates the amount of time that a PV and battery system can sustain the site's critical load during a grid outage. REopt Lite is based on the more comprehensive (and complicated) REopt model that NREL uses to conduct project feasibility analysis for federal agencies, military installations, businesses, and communities. In 2018, NREL plans to expand REopt Lite, adding additional capabilities for resiliency analysis and providing access to the model via an application programming interface. See NREL at: https://reopt.nrel.gov/tool

# SolarWindow: Year-End 2017 Update

SolarWindow Technologies, Inc., the leading developer of transparent electricity-generating coatings for glass windows on tall towers and skyscrapers, today issued its year-end 2017 update. Check out first-of-their-kind transparent coatings that convert ordinary windows into electricity-generating windows, which could turn entire buildings into vertical power generators. See *Solar Quarter*:

http://solarquarter.com/index.php?option=com\_content&view=article&id=6990:solarwindow-year-end-2017-update&catid=17:technlogy-business

### **Conferences**

**Solar Washington General Meeting** 

Just scheduled – Solar Washington's General Meeting is set for January 10, 2018 at the Phinney Center in Seattle. Scott Gibson from the Snohomish PUD will speak on energy storage. For more information see:

http://www.solarwa.org/january 2018 gen I meeting

### **Oregon Solar Energy Conference**

Mark your calendars for the Oregon Solar Energy Conference to be held in Portland May 1-3, 2018 at Crowne Plaza Portland-Downtown Conference Center. For more information see: <a href="http://oregonsolarenergyconference.com">http://oregonsolarenergyconference.com</a>

**Want to Contribute?** If you have information on events, publications or other solar topics that you would like mentioned in an upcoming issue of *Solar Newsbriefs*, please contact Anne Whitney at <a href="https://www.edu">whitneya@energy.wsu.edu</a>

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