

January 9, 2020

Welcome to this month's 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/solarnewsbriefs.aspx

Oregon News

New Solar Battery Storage System at Portland Fire Station 1

Portland's first renewable, resilient power project installed at an emergency response facility has gone online at Fire Station 1, the result of a partner project between The Bureau of Planning and Sustainability (BPS) and Portland Fire & Rescue (PF&R). In 2016, BPS applied for and received a \$89,959 grant from the Portland General Electric's 2016 Renewable Development Fund, and an additional \$25,000 PGE Research and Development grant to collaborate with PF&R on installing Oregon's first renewable microgrid on a fire station—*Patch*, Dec 17, 2019: https://patch.com/oregon/portland/new-solar-battery-storage-system-portland-fire-station-1

On-Farm Solar Grows as Farmers See Economic Rewards—and Risks

From struggling dairy operations to massive grain operations, farms are starting to see the light as onfarm solar proves to be an important income stream—Lisa Held, *Civil Eats*, Jan 8, 2020: https://civileats.com/2020/01/08/on-farm-solar-grows-as-farmers-see-economic-rewards-and-risks/

Merkley, Wyden: \$7.4 Million+ in USDA funds will help rural Oregon save on energy costs Senators Jeff Merkley and Ron Wyden announced, Wednesday, that 17 USDA awards totaling more than \$7.4 million would be presented to Oregon agricultural producers and small businesses to invest in renewable energy infrastructure. The awards were presented through the USDA's Rural Energy for America Program. It provided 5 grants to install solar arrays, one grant to upgrade greenhouse vents and siding, and a loan to install a biomass boiler—The *Umpqua Post*, Dec 15, 2019:

https://theworldlink.com/community/reedsport/news/merkley-wyden-million-in-usda-funds-will-help-rural-oregon/article_0cac8c4b-9bf3-5b80-a349-2299de761512.html

Oregon Nears Launch of a Solid Community Solar Program

Adopted by the legislature in 2016, it has been a long wait for Oregon's community solar program to launch. Technically, it has not yet, but the program rules are final enough to show that this program scores well on the four principles for community renewable energy—John Farrell, *Clean Technica*, Dec 16, 2019: https://cleantechnica.com/2019/12/16/oregon-nears-launch-of-a-solid-community-solar-program/

Seven Research Teams get Resilience Initiative Seed Funding

Seven interdisciplinary research teams addressing major areas around sustainability, resilience and climate change have received seed grants through the Resilience Initiative seed funding program. Sponsored by the Office of the Vice President of Research and Innovation, the Resilience Initiative supports existing collaborations and fosters the development of new, diverse interdisciplinary teams. University of Oregon's *Mirage News*, Dec 17, 2019:

https://www.miragenews.com/seven-research-teams-get-resilience-initiative-seed-funding/

Clackamas County Approves 10-Acre Solar Farm at Existing Tree Farm on South Spangler Road

A 10-acre photovoltaic solar power generation facility — more commonly known as a "solar farm" or "solar park" — has been approved on South Spangler Road between Canby and Oregon City. The farm, operated by Buckner Creek Solar LLC, will consist of photovoltaic modules supported by stationary piles driven 6 to 10 feet into the ground—Tyler Francke, *Canby Now*, Dec 27, 2019:

https://canbynowpod.com/business/clackamas-county-approves-10-acre-solar-farm-at-existing-tree-farm-on-south-spangler-road/

Washington News

Manufacturer Plan Guidance for the Photovoltaic Module Stewardship Program

The management and disposal of PV modules is a growing concern. WA State Department of Ecology has prepared this guidance for PV module manufacturers to follow when creating a stewardship plan and implementing a stewardship program—Christine Haun, WA State Dept. of Ecology, Rev. Jan 2020: https://fortress.wa.gov/ecy/publications/documents/1907014.pdf

Homestead Pioneers a Carbon Neutral Model for Affordable Housing

With Willowcrest Townhomes, Homestead Community Land Trust is striving to create "a replicable model" for permanently affordable net zero energy housing. Since the 1960s, community land trusts have been among the most successful affordable housing models in the United States, and in the wake of the current nationwide housing affordability crisis, they have gained renewed attention. Since community land trusts create permanently affordable community-owned housing, they are seen as a particularly effective tool in the fight against gentrification and displacement of low-income residents—Natalie Bicknell, *The Urbanist*, Dec 30, 2019:

https://www.theurbanist.org/2019/12/30/homestead-pioneers-a-carbon-neutral-model-for-affordable-housing/

HopeWorks Station in Everett Installs Solar as part of its Phase II Project

Everett-based HopeWorks, an organization launched in January 2011 with the goal of helping families gain skills and training for in-demand jobs in the path to a living wage career, recently installed 532 solar panels on its rooftop as well as a canopy for the parking lot generating 199 kWh as part of its Phase II

project which opened October 11, 2019. This is part of HopeWorks' participation in the Living Building Challenge by the International Living Future Institute—Patrick Nugent, *Solar Washington*, Jan 3, 2020: https://www.solarwa.org/hopeworks station in everett installs solar as part of its phase ii project

Clean Energy Economy Integral to Evergreen State

Clean energy is increasingly integral to Washington's economic growth, as more than five out of every ten jobs in the Evergreen State's energy economy are now in clean energy industries. Led by energy efficiency (63K) and renewable energy (11K), Washington's clean energy economy—now ranked 14th among all 50 states with nearly 84,000 workers—is providing new job opportunities in every metro area, county, and legislative district—*E2*, Dec 18, 2019: https://www.e2.org/reports/clean-jobs-washington-2019/

Study finds Bellingham has Strong Base of Clean Energy Jobs Compared to Rest of State

When it comes to clean energy jobs, Whatcom County ranks high compared to much of Washington. A study put together by E2 estimates the Bellingham metro area has 3,360 clean energy jobs in 2019. That is fourth highest in the region among metro areas, trailing Seattle (46,804 jobs), Spokane (6,154) and Vancouver/Portland (5,643). Washington state ranked 14th highest in the U.S. with an estimated 84,000 workers—Dave Gallagher, *The Bellingham Herald*, Dec 31, 2019:

https://www.msn.com/en-us/finance/realestate/study-finds-bellingham-has-strong-base-of-clean-energy-jobs-compared-to-rest-of-state/ar-BBYsTjW

Clean Energy Transformation Act (CETA)

On May 7, 2019, Governor Jay Inslee signed into law the Clean Energy Transformation Act (CETA) (E2SSB 5116), which commits Washington to an electricity supply free of greenhouse gas emissions by 2045. The Washington Department of Commerce is a key leader in implementing this law. Working with utilities, other state agencies and multiple stakeholders, Commerce will develop rules, reporting procedures and regular assessments to ensure success. Three workshops are scheduled for January and early February:

- Methodologies for incorporating social cost of greenhouse gas emissions in utility planning, evaluation, and acquisition. 9:30 a.m. to 12:30 p.m., Thursday, Jan. 16
- Joint UTC and Commerce CETA Workshop: Energy assistance. 9:30 a.m. to 12:30 p.m., Thursday, Jan. 16
- Joint UTC and Commerce CETA Workshop: Equity and the Utility Planning Process. 9:00 a.m. to 12 pm, Wednesday, Feb. 5

For more information and to register see the WA State Department of Commerce CETA website: https://www.commerce.wa.gov/growing-the-economy/energy/ceta/

National News

Trump Administration Says it will Approve Largest U.S. Solar Farm

Federal officials plan to approve a massive solar farm with energy storage in the desert outside Las Vegas, paving the way for a \$1-billion project that will provide electricity to Nevada residents served by billionaire Warren Buffett's NV Energy. At 690 megawatts across 7,100 acres the facility would generate

more power than the largest solar farm currently operating in the United States – a 579 megawatt plant in Southern California—Sammy Roth, *Los Angeles Times*, Jan 1, 2020:

https://www.latimes.com/environment/story/2020-01-01/trump-to-approve-largest-solar-farm-lasvegas

Behind the Buzzword: A Brief History of Energy 'Resiliency'

There's no shortage of "resilience" talk in the energy industry, but it has not always been that way. Over the last 30 years, the transition away from centralized energy infrastructure, global climate events like the devastating hurricanes of 2017, extreme volatility in the cost of fossil fuels, and a growing demand for renewable energy have shaped an unfamiliar theoretical term into not only a buzzword but a cornerstone of infrastructure planning—Bruce Levy, gtm, Jan 2, 2020:

https://www.greentechmedia.com/articles/read/behind-the-buzzword-a-brief-history-of-resiliency-in-the-energy-industry

Local Solar Installers Embrace Big New Opportunity: Home Battery Add-Ons

Local solar installers across the country have seen increased interest in batteries after California's blackouts. Local solar installation companies have faced a number of challenges in recent years, from the decline of state net metering policies to the Trump administration's import tariffs. Now, a potentially significant opportunity is coming into focus for them: home battery systems—Emma Foehringer Merchange, *gtm*, Jan 6, 2020: https://www.greentechmedia.com/articles/read/local-solar-installers-embrace-big-new-opportunity-home-batteries

Reports

Getting Solar Power to the Rural Communities That Need It Most

Families that could benefit the most from lower energy bills are also the least able to afford the upfront cost of installing solar-power systems that could reduce their monthly electricity bill. Policy changes could allow innovative rural organizations to help low- and moderate-income communities participate in the expanding market for solar energy, a new Clean Energy States Alliance (CESA) report says—Bryce Oates, *Daily Yonder*, Dec 26, 2019:

Link to article: https://www.dailyyonder.com/getting-solar-power-to-the-rural-communities-that-need-it-most/2019/12/26/

Link to CESA's summary and the report: https://cesa.org/projects/low-income-clean-energy/solar-with-justice/

Breakthrough Batteries, Powering the Era of Clean Electrification

Ryan Shea and Madeline Tyson of Rocky Mountain Institute show why commercial customers paying demand charges and time-of-use rates should seriously consider an investment in solar plus storage, a common technology used in microgrids. As shown in the recent RMI report, <u>Breakthrough Batteries:</u>

<u>Powering the Era of Clean Electrification</u> (Oct 2019), battery energy storage costs are less than a fifth of what they were a decade ago. Elisa Wood, <u>Microgrid Knowledge</u>, Jan 8, 2020: https://microgridknowledge.com/solar-plus-storage-costs/

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 whitneya@energy.wsu.edu

While every URL in Solar Newsbriefs is checked for accuracy prior to distribution, URLs may change, and servers may temporarily fail to connect to working URLs.

If any of your colleagues would like to be added to the distribution list to receive Solar Newsbriefs, or you would like to be omitted from this distribution list, please email your request and contact information to solarnewsbriefs@energy.wsu.edu.

This material is based upon work supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under the Solar Plus Strategies for Oregon and Washington award number DE-EE0007665.

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.