

February 4, 2021

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

A Top-Rated Power Company in Oregon, Purelight is Aiding People Save on Utility Bills Through Solar Purelight Power recently established an initiative that would enable its customers to install solar panels purchased from the company without a down payment. In a move to cut the high cost of electricity, the company has turned to creating awareness of solar benefits as an alternative means of getting cheap and reliable energy. The company took a bold move to lure its customers into embracing and getting solar panels installed at their homes at \$0 down payment—*MarketWatch*, Jan. 19, 2021: https://www.marketwatch.com/press-release/a-top-rated-power-company-in-oregon-purelight-is-aiding-people-save-on-utility-bills-through-solar-2021-01-19

SOU Goes Solar with New Up-Cycled Equipment Facility

Sustainability at SOU, the college's environmentalist group, shared these images of the school's new athletic storage buildings. The buildings are made of upcycled shipping containers. This is the schools second net zero building on campus. True South Solar, the company contracted to do the work, says the project will make a major difference for the school. "The SOU athletic storage project is 49.68 kilowatts. It is about five houses worth of electricity. This is going to make tens of thousands of dollars of electricity for the university," said company CEO, Eric Hansen—Brigham Harris, NBC 52, Feb.1, 2021: https://kobi5.com/news/local-news/sou-goes-solar-with-new-up-cycled-equipment-facility-144915/

SunPower Winding Down Hillsboro Panel Assembly Plant

SunPower is to permanently close its solar panel assembly plant in Hillsboro, Oregon with the loss of around 170 jobs—Mark Osborne, *PV-Tech*, Jan. 8, 2021: https://www.pv-tech.org/news/sunpower-

winding-down-hillsboro-panel-assembly-plant

Renewables Giant NextEra Wants to Build a Massive Solar Power Plant in Oregon

An energy company that's been turning heads recently is preparing to ask Oregon regulators for clearance to build what would be the biggest solar farm in the state. NextEra Energy Resources, the renewables arm of NextEra Energy, filed a notice of intent to apply for a site certificate for a 500-megawatt solar project in Morrow County. NextEra's Wagon Trail Solar Project, with an unspecified amount of storage, would be located about 30 miles southwest of Hermiston, around and in some cases overlapping the Wheatridge projects that NextEra has been developing—Pete Danko, *Portland Business Journal*, Dec. 30, 2020: https://www.bizjournals.com/portland/news/2020/12/30/nextera-wagon-trail-solar-oregon.html

Washington

Additional Housing Relief Coming to Marysville

This spring Everett-based architectural firm Dykeman Architects will begin construction on the second and final phase of the sustainable housing project Twin Lakes Landing, designed to provide relief for those living in poverty. Centered around community, the project will include places to gather and train on top of providing 60 new apartments. Social and caseworkers will have offices on-site. Built on a foundation of sustainability, some of the green features planned are solar panels, low energy heating systems, and super-insulated building envelope—Kara Patajo, *425 Business*, Jan. 28, 2021: https://425business.com/additional-housing-relief-coming-to-marysville/

Senator: Let Washington Counties Rule on Solar Panels on Farmland

A clash in sunny Central Washington between a county and a state body has inspired legislation to let county officials decide whether solar panels will cover farmland. A clash in sunny Central Washington between a county and a state body has inspired legislation to let county officials decide whether solar panels will cover farmland. Senate Bill 5206 would bar the Energy Facility Site Evaluation Council from approving solar energy projects on agricultural land. The council OK'd one in 2018 over the objection of Kittitas County. The site council bowled over county commissioners and residents, said Moses Lake Republican Judy Warnick, who introduced the bill—Don Jenkins, *Capital Press*, Jan. 27, 2021: <a href="https://www.capitalpress.com/ag_sectors/rurallife/senator-let-washington-counties-rule-on-solar-panels-on-farmland/article_342ad1d2-60e6-11eb-b9c3-9b9b4eabdad0.html?utm_medium=social&utm_source=email&utm_campaign=user-share

Solar Upgrades Jolt Kirkland Homeport Marina

Bellevue, WA-based developer/owner PMF Investments has furthered its commitment to environmental stewardship by completing more than \$250,000 in voluntary environmental solar improvements at its Kirkland Homeport Marina. The marina is located at 135 Lake St. South in Kirkland, WA. The Kirkland Homeport Marina has been upgraded to include a new 310-panel solar energy system designed to produce more than 118,000 kWh+ of renewable energy per year. The new solar panel system at the marina will save the equivalent carbon dioxide of burning 4 million pounds of coal during a 25-year span—*Connect Seattle*, Jan. 25, 2021: https://www.connect.media/solar-upgrades-jolt-kirkland-homeport-marina/

Soft Costs of Solar

Why Rooftop Solar Costs More Than it Should

Rooftop solar is getting cheaper all the time. Twenty years ago, a typical home system in the U.S. cost upwards of \$80,000; today it is closer to \$20,000, thanks to technological improvements. And yet solar is not as cheap as it could be, because of longstanding flaws in both the business model for major installers and stringent government regulations—Tim McDonnell, *Quartz*, Jan. 25, 2021: https://qz.com/1960513/why-rooftop-solar-costs-more-than-it-should/

Cheaper Solar Power Means Low-Income Families can Also Benefit – With the Right Kind of Help

Until recently, rooftop solar panels were a clean energy technology that only wealthy Americans could afford. But prices have dropped, thanks mostly to falling costs for hardware, as well as price declines for installation and other "soft" costs. Today hundreds of thousands of middle-class households across the U.S. are turning to solar power. But households with incomes below the median for their areas remain less likely to go solar. These low- and moderate-income households face several roadblocks to solar adoption, including cash constraints, low rates of home ownership and language barriers. Our team of

researchers at the Lawrence Berkeley National Laboratory examined how various policies and business models could affect the likelihood of people at all income levels adopting solar—Galen Barbose, and others at NREL, *The Conversation*, Jan. 19, 2021: https://theconversation.com/cheaper-solar-power-means-low-income-families-can-also-benefit-with-the-right-kind-of-help-151907

SunPower and Eagleview Automate Home Survey Process for Fast More Precise Solar Installations SunPower, a solar technology and energy services provider, and EagleView, an aerial analytics technology provider, have announced a new agreement to reduce solar installation timelines and costs. SunPower has combined EagleView's high-resolution Roof Reports with the new mySunPower™ Home Survey app, enabling its solar installers and contractors to create precise, construction-ready solar designs without a home visit. The feature set is now available to the company's nationwide network of more than 600 SunPower residential dealers—GeoSpatial World, Feb. 2, 2021: https://www.geospatialworld.net/news/solar-installation-made-faster-more-precise-using-automated-home-surveys/

Agrivoltaics

Unleashing the Extraordinary Potential of Rooftop Agrivoltaics

Imagine a future where families can go to their rooftop to harvest food for their dinner. If you live and breathe green roofs like I do, this is probably a common theme in your daydreams too. The primary hurdle to realizing this dream is, essentially, financial. Even if weight loading capacity, access, or safety are the first concerns, those are essentially financial in nature. But imagine if we could establish financially affordable systems where food crops thrive on most rooftops while also harvesting energy from the sun? Rooftop agrivoltaics are one of the main research areas I focus on at Colorado State University. Rooftop agrivoltaics involve the co-location of food and energy production—Jennifer Bousselot, *Living Architecture Monitor*, Feb. 1, 2021:

https://livingarchitecturemonitor.com/news/2021/2/1/unleashing-the-extraordinary-potential-of-rooftop-agrivoltaics

Creating Sustainable Renewable Energy Projects and Solar Farms

The concept of dual-purpose solar is relatively new and although renewable companies of all sizes have been exploring the benefits of co-managing solar power and agriculture, exciting research and development is still underway. Marchus Krembs, Head of Sustainability [at] Enel Green Power—altenergymag, Feb. 2, 2021: https://www.altenergymag.com/article/2021/01/creating-sustainable-renewable-energy-projects-and-solar-farms/34424

Solar Panel Recycling

EPA Releases Briefing Paper on Renewable Energy Waste Management

Today, EPA posted a briefing paper outlining difficulties the U.S. will face recycling and safely disposing of the materials used for green energy technologies. Renewable Energy Waste Streams: Preparing for the Future examines the waste produced once solar panels, lithium-ion batteries and windmills reach the end of their useful life. This briefing paper identifies key challenges that America faces in the near future as the growing use of renewable energy technologies creates a new generation of materials that need to be recycled or properly disposed of in order to protect human health and the environment. EPA Press Office, Jan. 6, 2021. Read full press release and access briefing paper at: https://www.epa.gov/newsreleases/epa-releases-briefing-paper-renewable-energy-waste-management

Are Solar Panels Recyclable? Here's How to Dispose of Them Safely

In recent years, technological advancement has cast solar power into a much more favorable light, and solar has become one of the most cost-effective renewable sources of energy. However, as solar technology becomes more robust, older models of solar panels run the risk of becoming obsolete or otherwise damaged by time and weather. What happens when solar panels reach their end of life? Are solar panels recyclable? And are they as sustainable as we have been led to believe? –Andrew Krosofsky, *GreenMatters*, Jan. 27, 2021: https://www.greenmatters.com/p/are-solar-panels-recyclable

Reports

Overcoming Barriers to Solar+Storage in Affordable Housing: A Survey of Multifamily Affordable Housing Developers

Low-income affordable housing residents could benefit greatly from the cost savings and energy resilience of solar combined with energy storage. However, this sector faces numerous barriers to solar+storage deployment, and market penetration remains low. Clean Energy Group conducted a survey of affordable housing owners and developers, technical services providers, and other stakeholders to assess existing market barriers. This report summarizes the results of this survey and suggests actions to bring the benefits of solar+storage to the people who need it most—*Clean Energy Group*, Jan. 13, 2021: Read more and download the report at: https://www.cleanegroup.org/ceg-resource/overcoming-barriers-to-solar-storage-in-affordable-housing/

Upcoming Presentations and Webinars

Solar Washington Presentation: Feature on Remote Energy: Tuesday, February 16, 2021 12:00 PM Join Solar Washington in this presentation scheduled for Tuesday, February 16 at 12:00 noon (Pacific) where they will welcome Brad Burkhartzmeyer and Laura Walters to talk about their organization,

Remote Energy, a Tacoma-based 501 (c)(3) for-impact organization formed in 2017 comprised of electricians, educators and innovators in the PV industry who share a vision to catalyze change in the developing world. Remote Energy is dedicated to sharing their experience, skills and expertise to empower individuals, communities, technicians and instructors in marginalized and developing communities worldwide. For more information and to register see:

https://www.solarwa.org/february 2021 solar washington presentation feature on remote energy

Solar Washington Presentation: Homeowners Associations and Solar PV Installations: Thursday, March 4, 2021 12:00 PM

Join Solar Washington in this presentation scheduled for Thursday, March 4 at 12:00 noon (Pacific) and titled, *Homeowners Associations and Solar PV Installations*. Solar Washington welcomes back Kathleen Kapla, principal of Kapla Law PLLC, who will address laws, guidance, and model resolutions for HOAs in Washington. Kathleen returns from her March 2015 presentation for Solar Washington to provide a refresher and any updates that have occurred in this area since then. For more information and to register see:

https://www.solarwa.org/march 2021 solar washington presentation homeowners associations and solar pv installations

American Solar Energy Society: Community Solar Policy Adoption and Market Trends: Tuesday, February 23, 2021, 12:00 PM

This free webinar will provide attendees with an overview of community solar, an innovative program design that allows multiple consumers to share the costs and benefits of ownership in an off-site solar facility, opening market access to a wider variety of individuals. They will take a look at states that have formal community solar policies, and how that is helping spur deployment. They will also take a look at states pushing community solar legislation, debates among key stakeholders, and potential paths forward for laggard energy policy states. Finally, this webinar will cover the role of equity and justice in community solar programs—For more information and to register: https://register.gotowebinar.com/register/2003810875082691087

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

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