

2018 Reflections & 2019 Predictions



FROM THE DESK OF THE CHAIRMAN

With 2019 dawning, speculation has risen about why the largest state East of the Mississippi has not supported its solar industry as proactively as some of its surrounding states.

In 2013, interest in solar surged in Georgia primarily because of support from the PSC and Georgia Power. That support provided amazing economic benefits for the state as the nation emerged from its most painful recession since the Great Depression. The investment and job creation provided by the growing solar industry brought long-needed relief to many hard-hit parts of the state, putting Georgia on the map as a viable solar market....



Since then, the market for solar has steadily "inched" forward. However, an imbalance between utility scale and distributed solar has emerged that other states have done a better job of mitigating. Over 95% of Georgia's solar resources are utility scale. Utilities have built large sites that generate for the grid and deliver their electricity through existing transmission lines for sale to the utilities' customers So, read articles linked below. They are informative and captivating. Then ask yourself and your elected officials, "Why don't we have more rooftop solar in Georgia?" **READ MORE**

2018 Reflections and 2019 Predictions



In 2002, when solar was \$9 a watt, (Adam Browning) co-founded (Vote Solar) to bring solar into the mainstream. Solar's made a lot of progress since then, and 2018 feels like a crucial year in many ways, with some key successes and pivotal developments. Here's (Browning's) list of the most important stories in solar in 2018, and predictions for 2019.

GA PWR Files IRP With GA PSC

Georgia Power doubles down on renewable power, energy efficiency: Georgia Power will

continue reducing its reliance on coal during the next two decades while stepping up its investments in renewable power and energy efficiency, according to a plan the Atlanta-based utility submitted on Thursday, Jan 31st.

The 2019 Integrated Resource Plan (IRP), would keep Georgia Power moving toward the goals the company committed to when it filed its last IRP with



the state Public Service Commission (PSC) in 2016. Georgia Power is required to submit a report every three years outlining the mix of energy sources it plans to rely on to meet the needs of its 2.5 million customers for the next 20 years. **READ MORE**

Old Solar Panels Get Second Life in Repurposing and Recycling Markets



Solar modules no longer need to simply wind up in the landfill once they're decommissioned. Is a panel cracked? Shattered? At the end of its warranty lifetime? That panel can still serve a purpose, whether run through a recycling process and fed back into the supply chain; or repurposed or reused as a replacement panel or a power source for a smaller project.

When a panel reaches its warranty lifespan, that doesn't necessarily mean it can't produce energy. despite degrading efficiency, used panels can be installed on volunteer projects where any amount of energy helps. **LEARN MORE**

GA SOLAR CONNECTIONS NETWORKING MIXER



TUESDAY, FEB. 19TH @ The Warren City Club 818 North Highland Avenue NE, ATL, GA, 30306

Come mingle with solar professionals from throughout the region and catch up on the latest news of projects, programs and job opportunities!

Entry: \$15 Members / \$25 Non-Members
Entry fee covers 2 free drinks and hors d'oeuvres

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GEORGIA SOLAR ENERGY ASSOCIATION - MISSION

To advance the sustainable economic and environmental benefits of solar energy for Georgia through education, advocacy, community and industry support.

Report: Only a Few States (incl GA) Didn't Take Policy Actions On Distributed Solar In 2018

Nearly every U.S. state took some type of policy action on distributed solar in 2018, according to new findings from the N.C. Clean Energy Technology Center (NCCETC), part of the College of Engineering at North Carolina State University.

NCCETC has released its 2018 annual review and Q4 update edition of "The 50 States of Solar." The quarterly series



provides insights on state regulatory and legislative discussions and actions on distributed solar policy, with a focus on net metering, distributed solar valuation, community solar, residential fixed charges, residential demand and solar charges, third-party ownership, and utility-led rooftop solar programs. **LEARN MORE**

New U.S. Solar Panel Manufacturing Activity Happening in 2019



The announced tariffs on foreign solar panels in early 2018 left international module manufacturers with an interesting question: If we want to sell in the United States tariff-free, should we buy one of these dormant legacy manufacturing plants or start fresh with a new facility?

With technological advances quickly outpacing the abilities of previously successful manufacturing lines (updating old lines to four or five busbars takes a lot of time, money and effort), many foreign

manufacturers announced brand new facilities for 2019 openings. Here's our latest roundup of what's new in U.S. solar panel assembly—from those actually moving material and others just blowing smoke. If plants are up and running, whether they're working at their quoted megawatt capacity is another story. **LEARN MORE**

Sneak Preview of the Future: Rolling Solar - These Roads Will be Generating Electricity

"Solar modules will provide an increasing part of our future energy demand, as they can be produced at low cost and with high energy efficiency. But for power generation of hundreds of gigawatts, they require a large area to collect the sunlight: roadmaps towards 2050 predict total solar module



areas up to 1.400 km² for the Netherlands alone. To make optimal use of the available area, and to generate power close to the location where it is needed, it is highly desirable to integrate solar modules into road construction materials as these represent a vast area of already built surfaces and power demand for transport will be increasingly electric." The Netherlands has over 1.000 km² in its road network. **LEARN MORE**



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Southeastern Installers Put up 242 MW of Distributed (Rooftop) Solar

While installers in Florida added the most distributed solar last year, South Carolina leads on a per-capita basis, and Georgia, North Carolina and Louisiana round out the leaderboard.

Solar installation crews in the Southeast put up 242 MW of small-scale (under 1 MW) solar PV systems in the year to



October 2018. Florida added 85 MW, edging out South Carolina at 78 MW. But South Carolina leads on a population-weighted basis, having widened its lead over Louisiana in second place.

This year, **3.9 GW** of distributed generation is projected to come online nationwide —nearly as much as utility-scale generation—according to the Energy Information Administration (EIA). **LEARN MORE**

Indoor Farm Will Keep Plants Growing Year-Round



A solar-powered microgrid will soon help an urban agriculture startup grow vegetable greens inside a converted New Jersey warehouse.

Bowery Farming's Kearny, New Jersey, facility will grow lettuce, kale and up to 100 varieties of plants, all indoors in a carefully controlled climate backed up by batteries, solar panels, on-site gas generators and technology that allows it to operate

independently from the electric grid in the event of an outage or other disruptions. **LEARN MORE**



Please consider making a donation to the Georgia Solar Energy Association. Your support helps to advance the solar industry in Georgia. THANK YOU!

EIA Outlook 2019: The "Extremely Conservative' Case for Renewables Growth

The U.S. Energy Information Administration last week published the federal government's annual long-term energy outlook report. Top-level items focused on the surging production of U.S. oil and natural gas, which the EIA expects will make the U.S. a net energy exporter in 2020. By comparison, EIA's clean energy growth projections were far more modest.



Additionally, while the **Annual Energy Outlook 2019** signals rapid growth in

renewable energy electricity generation in the short term, it paints an underwhelming picture of the long-term growth for renewables in the U.S. The EIA projects solar and, in particular, wind growth will level off while natural gas is expected to continue to grow as the leading source of generation in the U.S. **LEARN MORE**

The US Department Of Energy Roots For Floating Solar Panel



The idea of floating solar panels out on water seems to make sense, right? Well, maybe. Waterborne PV adds another wrinkle to the task of maintaining and repairing solar panels. Finding suitable bodies of water is a whole 'nother can of worms. Nevertheless, other countries are shaking the floating solar panel tree and now the US Department of Energy wants the US to play catch-up.

The new study — the first of its kind in the US — comes from the Energy Department's National Renewable Energy Laboratory in

Colorado. They answer the suitable site question right off the bat: ... researchers estimate that installing floating solar photovoltaics on the more than 24,000 man-made U.S. reservoirs could generate about 10 percent of the nation's annual electricity production. **READ MORE**

2019 US Renewable Generation Additions Expected to Far Outpace Gas

23.7 GW of new U.S. electric generating capacity, mostly from wind, natural gas

and solar, are expected in 2019, according to the U.S. Energy Information Administration (EIA) inventory of electric generators. In addition, EIA data shows 8 GW of primarily coal, nuclear and natural gas generation are expected to retire this year, though that number could increase as utilities continue to evaluate their generating portfolios.... The expected retirements include Exelon's 819 MW Three Mile Island nuclear power plant in Pennsylvania.... **LEARN MORE**



(New) Initiative Helps More Schools Go Solar



Solar Schools 2025, an initiative of the nonprofit **Renewable Nation**,(sought) 50 K-12 schools across the U.S. (to) "buddy up" with schools that have already gone through the process of installing solar.

Under the new initiative, **Solar Schools 2025** will do the following: 1) Target 50 schools per year to partner with schools that have gone solar; 2) Provide a step-by-step package of

materials for schools that want to go solar; and 3) Produce a weekly series of webinars about installing solar at schools.

"More than nine out of 10 solar-ready schools in the United States have not yet gone solar, and the new app-driven Renewable Nation and its 'Solar Schools 2025' program intend to do something about that. **LEARN MORE**

Florida Fighting For its Solar Power – one PPA at a time

A state senator has filed legislation to alter the definition of "public utility" to exclude those installing renewable energy devices of up to 2.5 MW on their own property and selling it to others, on their own property....



Florida law states that anyone that sells electricity to end-users is a "public utility", and thus must be governed by the complex set of rules that utilities have to follow. This has meant that power purchase agreements (PPAs) are illegal in Florida. **LEARN MORE**

2018 Solar Advocate Award Winner



Sam Kitchens, the Macon-Bibb Director of Parks and Beautification, and Vice Chairman of the Jones County Board of Commissioners, received the **2018 Solar Advocate Award** from the Georgia Solar Energy Association.

Kitchens was honored for his decade-long efforts to bring solar resources and savings to the Macon-Bibb procurement process. As a result of his initiative, four firehouses now have two solar panels each directly

connecting to their industrial-sized water heaters. When firefighters return from a fire, they must shower to remove soot and other residues. This puts heavy, daily demand on the station's hot water heaters. The two solar panels on these four firehouses provide hot water around the clock while lowering the county's utility bill for this need. (Pictured: Kari & Sam Kitchens at the GA Solar 2018 Holiday Luncheon). LEARN MORE

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Individuals, Nonprofits, Corporations, Cities, Counties, Come One Come All!

Florida Power & Light (FPL) Developing Shared (Community) Solar Program for 2019



Both utility scale and rooftop solar continue to grow in Florida. Yet, a number of customers can't directly take advantage of rooftop solar power. They may lease their homes, live in multi-tenant dwellings, have roofs that can't host a solar system or have too much shade, or experience

other mitigating factors. Shared (or community) solar programs are intended to provide access to the economic benefits of solar power to those customers. Shared solar refers to a solar facility that is shared by multiple customers who receive credit on their electricity bill for their share of the produced power. In Florida, since only a utility can sell power directly to a customer, the shared solar programs are utility-sponsored programs. **LEARN MORE**

"Solar In Your Community Challenge" Team Highlight

The Solar in Your Community Challenge (was) a \$5 million contest to support innovative and replicable community-based solar business models and programs that bring solar to underserved communities.

While we await the final judging results, (following are) some highlights from one of the teams,



Team St. Pete Evergreen, out of the St. Petersburg, Florida area.

This team, in partnership with League of Women Voters, Solar Energy Loan Fund, Solar United Neighbors, and a SUPER team of solar volunteers, created a unique solar co-op program. What made the project special, besides the high number of

kilowatts that actually got installed, was in how intentional the team was about doing information sessions in low-to-middle income areas. **LEARN MORE**

South Carolina Among Top States for Potential Growth of Solar Power



South Carolina's current solar power capacity could grow "elevenfold" if solar panels are installed in all newly-built homes across the state, according to a press release from the Go Solar Campaign....

If solar panels are installed in all newly built South Carolina homes, the state's carbon emissions could decrease 7.2 percent by 2045, according to the study.... Some states are looking into incorporating alternative energy

sources into construction after California became the first state to make solar panels a requirement in most newly built homes. **LEARN MORE**



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