



## Embrace Solar!



### FROM THE DESK OF THE CHAIRMAN



#### Utilities Need to Embrace Rooftop Solar or Perish

Solar! Residential solar! Rooftop solar! Behind the meter solar! Solar and energy storage! These are all terms that utilities didn't like to hear 25 to 30 years ago. Back then, it was not perceived as a potential threat to their industry. The technology was still in its infancy. Over the last 15 years though, these words have gained traction as more installations came online. Utility executives took note and wondered what to make of this evolving technology. Was it a passing fad, a status symbol for wealthy individuals? They recognized its potential to reduce the ever-growing revenue stream on which their business model depends, making them uneasy. **READ MORE**

#### Cedar Creek Solar Panels Part of Push for a Greener Athens

Athens-Clarke County is slowly but surely adopting greener standards. Mayor Kelly Girtz signed the Sierra Club's "Mayors For 100% Clean Energy initiative" on Feb. 4, pledging to adopt only clean energy for Athens by 2035. On March 1, a ribbon cutting celebrated 1,824 solar panels installed at the Cedar Creek Water Reclamation Facility. The solar array will produce more than 1 million kilowatt hours per year. According to data collected by the U.S. Energy Information Administration, (EIA) in 2017 an average "residential utility customer" used about 10,400-kilowatt hours annually. **READ MORE**



#### Georgia Solar Power on Rise as Coal Plants Shuttered

A hundred miles southeast of Atlanta, some 2,000 acres of sawed-over timberland is about to be planted with what may be Georgia's hottest crop: row upon row of solar energy panels.



Juice from the nearly 600,000 panels in Twiggs County will flow in every direction, including north to energize metro Atlanta cellphone chargers, refrigerators and anything else that wants for electricity.

A decade ago, coal was king in Georgia. Solar energy was written off as virtually meaningless in the eyes of Georgia Power, the state's dominant electric company, and many other utilities. But a power shift is undeniably underway, and with it comes

upsides for metro Atlanta consumers: A cheap source of energy ... [READ MORE](#)

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## GA SOLAR PRESENTS IRP Educational Forum & Networking

Every three (3) years Georgia Power's Integrated Resource Planning Process (IRP) has a huge impact on the solar industry in Georgia. In the past, policies enacted by the Public Service Commission in the IRP process have resulted in most of Georgia's 1.5 GWs of installed solar. The process launched again in early 2019 and Georgia Solar plans to be the voice for solar in the 2019 IRP more than ever before.



**Ohio River South, Inc.**  
**115 Martin Luther King Jr. SW, Suite 225A**  
**Atlanta, GA 30303**  
**DATE: Thursday, April 25; 2pm - 4pm**

JOIN US as we demystify the IRP, talk about why it is so important to the future of solar in Georgia, and share Georgia Solar's *Solar Priorities for the 2019 IRP*. We'll leave plenty of time for questions, networking and happy hour!

**REGISTER** 

### Former Savannah Landfill Gets New Solar Farm

Four thousand solar panels face south at the site of an old city landfill on East President Street, poised to produce energy.

The new solar farm sits atop the Deptford Landfill, disused for more than 50 years, at the entrance to Dulany Industries' new multi-use industrial complex called SeaPoint. Georgia Power personnel were readying the solar panels' connections to the grid Thursday.



With landfill debris underground and heavy scrub growing over it, the five acres required expensive preparation, including a blanket of enough clean soil to fill

about four Olympic-sized swimming pools. [READ MORE](#)

## Construction Underway on Solar Panel Facility in Dougherty County



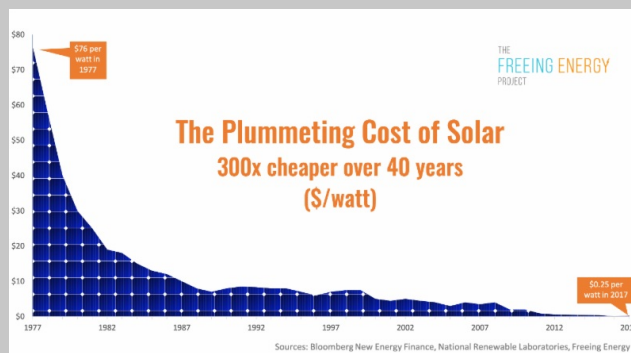
Construction on (a) new solar panel farm, a \$300 million project, in Dougherty County is underway. The plant on Moultrie Road was approved in August despite some homeowners' complaints. WALB spoke with neighbors out on Moultrie Road, on and off camera.... While some are hesitant the plant may still be an eye sore

in the end, one homeowner said he's excited to see the county's future with the new industry. "We need more industry to come here. And, I mean, this could be a start," said resident Larry Hall. The start Hall is hoping for is a new solar panel farm being built on more than one thousand acres of land on Moultrie Road. [READ MORE](#)

## 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.

## Why Does the Cost of Renewable Energy Continue to Get Cheaper and Cheaper?



For most of the last century, energy prices have been on a roller coaster. The fates of nations have risen and fallen as oil has bounced between \$10 and \$150 a barrel. Over just 10 years, natural gas hit a high of \$16, dropped to \$1.75, and bounced back above \$4.

So, how is it that the cost of solar power has managed to consistently and continuously decline over the last 40 years, becoming a staggering 300 times cheaper? The answer is as simple as it is profound... [LEARN MORE](#)

## Help GA Solar Intervene in the IRP Planning Process - [DONATE TODAY!](#)

Every three years an Integrated Resource Plan (IRP) is filed with Georgia's Public Service Commission (PSC), which has a huge impact on the solar industry in Georgia. The IRP outlines how utilities plan to deliver energy to millions of customers over a 20-year time frame, and lays out a vision for the mix of power sources that comprise our grid.

In the past, policies enacted by the Public Service Commission in the IRP process have resulted in most of Georgia's 1.5 GWs of installed solar. The process launched again in early 2019 and GA Solar is working to be the voice for solar in the 2019 IRP process more than ever before.



**GA PWR IRP UPDATE:** This week GA Power presented their direct testimony to the Public Service Commission and GA Solar / GA-SEIA provided cross-examination of GA Power witnesses via our counsel. We are also preparing our shared testimony for submittal later this month. GA Solar will continue to provide monthly updates to our members on the IRP's progress. Please join us at our April 25th event for more information on our IRP efforts and how you can get involved. [LEARN MORE](#)

### As 100% Renewables Goals Proliferate, What Role For Utilities?



Utilities and state regulators take note: As of April 1, 114 U.S. cities have officially declared they want 100% renewables for their electric power needs in the next one to two decades. That will be a big change in electricity use.

And it doesn't stop there. Over 300 U.S. localities have committed to a renewables or climate change goal, according to the World Resources Institute (WRI), part of a group awarded \$70 million from Bloomberg Philanthropies to help localities address climate change. And, led by local efforts, three states have committed to 100% carbon-free. Another dozen are moving that way. But while the goals are simple, the paths to achieving them are not. [LEARN MORE](#)

### More Bad News For Coal: Wind and Solar are Getting Cheaper

A new report says solar will be cheaper than coal by 2025 - that's just six years away!

The simple laws of economics threaten to doom America's remaining coal power plants. Wind and solar costs have plunged so rapidly that 74% of the US coal fleet could be phased out for renewable energy -- and still save customers money, according to



a report released on Monday by Energy Innovation, a nonpartisan think tank. That figure of at-risk coal plants in the United States rises to 86% by 2025 as solar and wind costs continue to plunge.

The research demonstrates how it's increasingly more expensive to operate

## Consider Becoming a Member of GA Solar!



**YOUR MEMBERSHIP  
& PARTICIPATION  
MAKES  
A DIFFERENCE!**

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

## Why Are Some Big Utilities Embracing Small-Scale Solar?

A handful of U.S. utilities have discovered they can save money by encouraging small rooftop solar projects—the same projects utility industry leaders have insisted were too expensive and unreliable to be practical.



The Long Island Power Authority (LIPA) in New York, for instance, is paying developers to build solar panels on top of buildings in tiny towns that are experiencing population booms but don't have enough electric grid infrastructure to bring in the electricity they need. The pilot initiative will allow the utility to avoid spending more than \$80 million to build new transmission lines and grid equipment.

**Many of the nation's 3,200 utilities have resisted distributed generation (rooftop solar), partly because they believe the small projects (will) cut into their profits. Private utilities make their money by investing in *infrastructure*—mainly massive centralized power plants and high-voltage transmission lines—and then charging customers enough to earn that money back with a guaranteed return. Distributed generation shakes up this century-old model by shifting control of electricity from utilities to smaller developers, communities or individuals, who produce power onsite and rely less on traditional grid infrastructure to keep the lights on. This, in turn, reduces the returns that utilities collect. [LEARN MORE](#)**

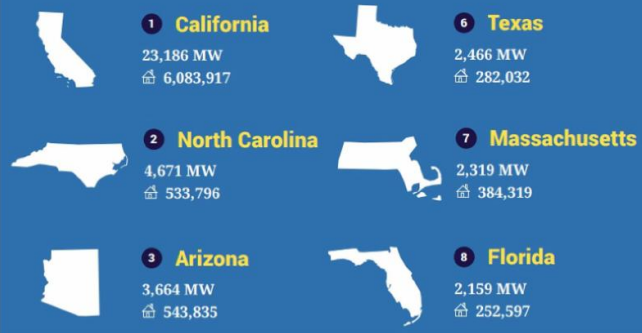
## GEORGIA DROPS OUT OF TOP TEN STATES FOR SOLAR

Georgia is now ranked 11th in the nation for solar. Georgia was #8 back in 2016, then #9 in 2017, #10 last year (2018) and now New York has inched us out for the #10 solar spot. North Carolina is #2 after California, Texas is #6 and Florida is now #8. Arizona is #3 and Nevada is #4.

Germany is the leading country in the world for solar and it gets 80

# Top 10 Solar States

State ranking based on the cumulative amount of solar electric capacity installed through Q3 2018



days of sun a year according to the National Oceanic and Atmospheric Administration (NOAA). Also according to NOAA, the state of Georgia gets 240 days of sun a year on average, three times as many as Germany! We have plenty of sun!

[LEARN MORE.](#)

## Solar Grew 48x Over the Last 11 years. What Will the Next 11 Bring?

Ten years ago it was easy to think that solar and wind weren't going to be a major part of our electricity system. With less than 1 gigawatt (GW) installed nationally – and not much outside of California – solar was a mere drop in the 1 terawatt ocean of U.S. electricity capacity, and met 0.1% of electricity demand in 2008. Wind was further along, but the 25 GW of wind that had been installed still met less than 1.5% of U.S. electricity demand.



However, in the past 11 years everything has changed. The volume of solar deployed climbed each year to reach more than 64 GW, and the electricity generated from solar grew 48x from less than 2 terawatt-hours (TWh) in 2008 to 96 TWh in 2018. Wind grew more slowly, but output still increased 5x to reach 275 TWh. In 2018, solar and wind together met 8.9% of U.S. power demand, with solar alone contributing 2.4%. While this has been exciting, it is only the beginning, and the real question is what will happen from here. [LEARN MORE](#)

## Large-Scale Solar Power Set for Double-Digit Growth: Goldman Sachs



Utility-scale solar power capacity is expected to grow by double digits globally in 2019 and 2020, driven by expansions in the United States, Europe, Middle East and China, according to U.S. bank Goldman Sachs..

Solar power is the fastest growing source of electricity generation, taking market share from fossil fuels like thermal coal and natural gas as governments and companies increasingly introduce clean energy targets.

Goldman said it expected utility-scale solar installations globally to reach to 108 gigawatts (GW) in 2019, up 12 percent on the previous year, and then grow by another 10 percent in 2020 to 119 GW. For 2021 and 2022 the bank expected capacity to reach 129 GW and 135 GW.... Including residential installations, most analysts expect global solar power capacity to soon hit 600 GW. [LEARN MORE](#)

## Florida Power and Light to Double Nation's Community Solar Capacity

Florida Power and Light (FPL) announced that the company plans to create the country's largest community solar program at 1490 MW, over the next two years.



We have never seen community solar development of this scale in the United States as a country, let alone in a single state. According to SEIA's most recent data, the United States as a whole has a total installed community solar capacity of 1,298 MW. FPL is planning on more than doubling the nation's installed community solar capacity.

This program comes as a part of the utility's '30-by-30' plan, the most ambitious utility-led solar buildout in the country, aimed at adding 30 million solar panels by 2030. That figure represents somewhere from 10-13 GW in capacity, which means that this one program, which is expected to be completed within the next two years, will represent somewhere from 11-15% of that already ... unprecedented development. [LEARN MORE](#)

### First Ever Large Scale Solar Project for SWVA



The long-sought goal to transition from coal to solar power in southwestern Virginia is being met, thanks to federal funding to build the first solar power plant in the region.

Ten Southwestern Virginia Economic Development Projects are getting pilot grants from the Department of Mines, Minerals and Energy. They're all aimed at remediating land damaged by coal mining, as part of DMME's Abandoned Mine Lands Project. One of them is a

half million dollar grant to build the first solar electricity array in southwestern Virginia.

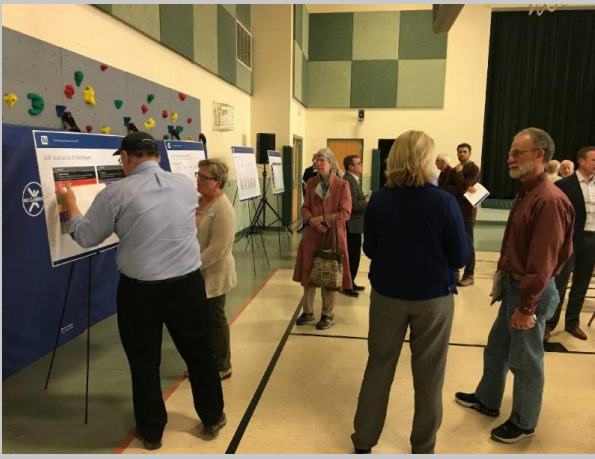
The huge data center in Wise County, known as Mineral Gap, handles a lot of vital government and high security information and draws a lot of power from the grid. That's why it's long been interested in the added security of a solar back-up for the 65,000-square-foot facility on 22 acres in Wise County, land that was once a coal mine. [LEARN MORE](#)

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We post articles daily on solar in Georgia, the southeast, around the United States and the world!

The Facebook logo, consisting of the word 'facebook' in a white, lowercase, sans-serif font on a blue rectangular background.

### TVA Shapes Long-Range Power Plan to Boost Solar, Cut Coal in Next 20 Years



The Tennessee Valley Authority (TVA) and its customers will get a bigger share of power in the future from the sky than from underground, according to proposals included in a new long-range power plan being prepared by the federal utility.

TVA expects to boost the electricity it gets from the sun anywhere from 4 to 9 gigawatts of power over the next two decades while cutting the share of power generated by burning coal mined

from underground sources.... In all 30 of the different approaches analyzed by TVA for the future .... solar is expected to gain favor from businesses interested in using more renewable power, individual homeowners installing rooftop solar panels, community groups sharing ownership in solar installations, and from utility-scale solar farms. [READ MORE](#)

## World's Biggest Battery to Boost Solar in Texas Oil Country

The world's largest battery could soon be storing solar energy deep in the heart of Texas oil country. The 495-megawatt storage system would be built in tandem with a solar farm of the same size in Borden County, Texas. The Electric Reliability Council of Texas Inc., which operates most of the state's grid, posted the details in a chart that shows the state's battery storage will surge more than sixfold to 584 megawatts when the projects are completed in 2021.



Bigger batteries are being developed to help make the electricity produced through solar and wind power more efficient, even when the sun goes down and it gets less breezy. Recent battery-backed solar projects have, at most, 100 megawatts of panels and 30 megawatts of storage, said Yayoi Sekine, an analyst at Bloomberg New Energy Finance (BNEF). "This would be about five times that." [READ MORE](#)

## Shell Oil Buys German Solar Battery Maker Sonnen



Royal Dutch Shell has agreed to buy German residential solar battery maker Sonnen, as the oil and gas major expands its electricity business in its bid for a bigger role in the global transition to low-carbon energy. Sonnen, which has 40,000 battery systems worldwide and in 2017 had sales of \$73 million, is the German market leader in home

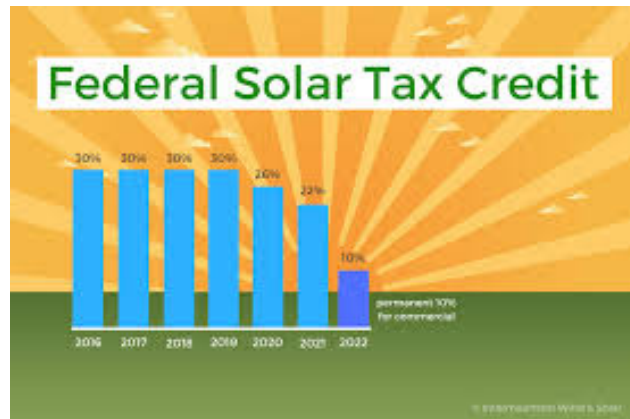
storage batteries and has expanded into electric vehicle charging systems.

Germany has 1.5 million solar systems whose subsidized sales tariffs are due to be phased out in coming years. By acquiring batteries, householders can store home-produced power and use it for themselves or sell it to the grid. Shell is the world's second largest listed oil and gas producer. [READ MORE](#)



## Bill to Extend Federal Solar Tax Credits to Energy Storage Introduced

U.S. Representative Mike Doyle (D-PA) introduced HR 2096, a bill that would extend the federal Investment Tax Credit (ITC) to energy storage installations, anywhere from the home to grid level. This means that energy storage installations would be subject to the current drop-down schedule of the ITC, with the 30% rate expiring at the end of 2019 and the credit falling in steps to 10% in 2022 for businesses and expiring altogether for individuals.



Solar-paired energy storage systems are already eligible for the ITC; however this only applies if these systems are charged by PV systems, meaning that any system which also draws power from the grid might end up not being eligible for the credit at the end of the year. HR 2096 would remove any such provisions, and enable the ITC for energy storage whether these systems are charged by the grid, renewable energy, or both.

[READ MORE](#)

### The Next Money Crop for Farmers: Solar Panels



Randy DeBaillie pointed to the power meter on his snow-covered farm in Illinois: Even on a foggy, monochromatic day, with the sun barely piercing the clouds, the flat black panels planted nearby in two long rows were generating electricity.

“There’s enough energy produced to run the whole complex,” said DeBaillie, 50, who farms 6,500 acres with his

brother and cousin. They typically grow corn and soybeans each spring, but this year they want to put more solar panels on 15 acres — and sell the energy. The earnings would be about three times what an average harvest would yield there.

Across the flatlands of Illinois, a new crop is rising among the traditional waves of grain as farmers increasingly make the same calculation as DeBaillie. Hundreds have applied to host acres of solar panels on their property, a move encouraged by a state law requiring that renewable resources provide 25 percent of Illinois power by 2025. [READ MORE](#)

### EIB & PIF To Provide \$18 Million For Palestinian School Rooftop Solar Projects

The European Investment Bank (EIB) and the Palestine Investment Fund (PIF) announced on Friday a loan agreement worth \$18 million to finance the installation of rooftop solar PV systems on 500 public schools in the West Bank.

The electricity generated by the installations throughout the West Bank and East Jerusalem will go first towards powering the 500 schools at no cost (as offset against using the rooftops) and the excess will be sold at a competitive tariff to four electricity distribution companies operating in the West Bank and East Jerusalem. The 35 MW of solar will generate the equivalent electricity to power over 16,000 West Bank homes. [READ MORE](#)



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