

Renewables on the Rise Across the Nation!



GA SOLAR ELECTS A NEW CHAIR ...

These are exciting times in the solar industry. Ten years ago, in 2008, the cost of a solar panel installation was \$8.82 per watt.

The solar industry today looks very different: in addition to solar panel efficiency increasing dramatically, solar panel producers have significantly improved their manufacturing processes. Solar installers, too, can deploy solar PV across the United States more efficiently now than they could 10 years ago.

The result: the price of solar has fallen by over 60 percent, to just \$3.14/watt. This market has followed the pattern of Moore's Law in the computer and semi-conductor industry. Solar energy is creating more jobs than any other sector of the economy. Plus, energy storage is becoming more mainstream. **READ MORE**





Georgia's solar capacity in 2 0 1 7 <u>ranked second in the Southeast</u>. Ninety-five percent of this capacity is utility-scale solar farms, while only 5 percent is on rooftops. While Georgia has the potential to be a nationwide leader in rooftop solar power, this market has

struggled for a number of reasons. This article discusses the challenges and opportunities faced by the underserved rooftop solar market in Georgia.

... Despite the SEPA option and a 53 percent drop in the price of solar systems in Georgia over the past five years, (Georgia's) residential solar market is lagging behind the rest of the country. Georgia currently has over 1,000 homes with solar systems. By contrast, since South Carolina passed a solar leasing law in 2014, about 4,000 homeowners have signed up for rooftop solar panels under lease or financing arrangements. This is due in part because South Carolina has state and utility-level incentives that Georgia does not. LEARN MORE

Renewable Energy is Sweeping the Nation

Renewable energy is on the rise in America. But by how much? A new report by Environment America Research & Policy Center, titled "Renewables on the Rise," looked at five major elements that can give us a better idea of how renewable energy is growing in America -- and found some good news.



Solar, wind, electric vehicles, battery storage and energy efficiency -- 10 years

ago, these seemed like far-off solutions. America now produces nearly six times as much renewable electricity from the sun and wind as it did in 2008, and the average American uses nearly 8 percent less energy than a decade ago. The best part? There's a whole lot more energy potential out there. **LEARN MORE**

Solar As A Way To Reduce Our Reliance On Foreign Energy



By Major General Tom Mullikin

"... Petroleum energy for fuel will continue to be a necessity, but it does not have to be the primary and only means of fueling everything all the time, in all environs, without considering other legitimate, costeffective and infinitely safer options.

Solar solutions could change the fuel dynamics for America not only overseas but also here at home, where petroleum prices have skyrocketed over the last two decades, and far too many Americans have thrown up their hands in a sort of submissive acceptance that fuel costs will always be high – as will the various wars that play a part in those everrising fuel costs..." **READ MORE**





BILL NUSSEY, Author Freeing Energy KEYNOTE SPEAKER



THURSDAY,
OCTOBER 25, 2018
TIME: 9:00AM - 6:00PM



ANYA SCHOOLMAN
Executive Director
Solar United

Clean energy will drive the largest economic disruption in generations. Bill is working on a series of projects "Freeing Energy" to help accelerate the impact of next generation energy solutions. His primary focus in 2018 is book called Freeing Energy (@freeingenergy) but he also serves as an investor, advisor, incubator and cheerleader for several exciting companies in the renewable energy space.

@ The Carter Center,453 Freedom Pkwy NE,Atlanta, GA 30307

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Neighbors KEYNOTE SPEAKER

With 60,000 people in her database across nine states, Anya is a powerhouse for rooftop solar. She has grappled with the issue sustainable development and how make complex issues relevant to the community. Solar United Neighbors got its start when her son Walter asked, "Mom, can we go solar?"



Q&A: How a Georgia Republican Pushed His State Forward on Solar



At first glance, Lauren "Bubba" McDonald Jr. doesn't seem a likely advocate for solar power. The 77-year-old Republican, now in his third term on Georgia's Public Service Commission, is a lifelong conservative, a vocal Donald Trump supporter and a critic of the EPA's Clean Power Plan.

He's also one of the state's strongest proponents of solar energy development as part of an overall portfolio mix. In 2013, he introduced an amendment to Georgia Power's Renewable Action Plan that allowed for the construction of 525 megawatts (MW) of solar energy through a Purchased Power Agreement. In 2014 he won the Individual Achievement Award from The Solar Foundation, a Washington, D.C. based national center for solar energy research and education. **READ MORE**

Georgia "SOLARIZE" Programs on the Move!

Solarize programs are community-based group-purchasing programs that make solar more affordable and accessible to residents of a community. After successful programs in Tybee Island, Athens, Decatur-DeKalb, and Dunwoody, Solarize programs continue to proliferate across Georgia. Solarize programs account for over 50% of all residential solar installations since 2016.



Programs currently signing up residents are **Solarize Atlanta** and **Solarize Carrollton-Carroll**. Over 60% of participants in these programs are adding battery storage with solar energy systems and getting a 30% tax credit on the entire system. Battery storage systems help homeowners and businesses optimize the power of the sun well into the

evening hours, save more money off utility bills, and serve as emergency back-up systems when the grid goes down.

Upcoming Solarize programs include **Solarize Newton-Morgan** and **Solarize Middle Georgia** launching in August and September 2018 respectively. More communities are considering Solarize programs so their residents can take advantage of historic low costs of solar energy and battery storage systems before the 30% federal tax credit begins to phase out after 2019.

Solar Panels Power New Schools — and New Ways of Learning



" ... Buildings that make at least as much energy as they use are called "net-zero" (and "net positive" if they make more than they need). And nationwide, K-12 schools are leading a fledgling "net-zero" building boom that has grown from a few proof-of-concept structures a decade ago to hundreds of buildings completed or under-construction.

Dozens of these ultra-green schools are going up in every sort of district—urban and rural, affluent and lower income, blue state and red state. Much of the

advocacy for net-zero buildings has focused on environmental and economic incentives. K-12 schools run up a \$6 billion annual energy tab every year, the Department of Energy reports—more than they spend on textbooks and computers combined, and second only to the cost of teacher salaries. But the K-12 schools leading the net-zero charge are uncovering major educational benefits as well..." **LEARN MORE**

Bi-partisan Congressional coalition forms to support solar

Most of the policy decisions that impact our right to go solar are made at the state and local level. But this does not mean that the federal government can't play a role as well. A new, bi-partisan coalition of members of Congress has joined together to fight for policies that support solar by forming the Congressional Solar Caucus.



The Solar Caucus' co-founders are Illinois Democrat Congressman Raja Krishnamoorthi and South Carolina Republican Ralph Norman. Krisnamoorthi is the only member of Congress with a professional background in solar energy. He served as president of a solar technology research firm. He was also a cofounder of the research institute, InSPIRE. The organization provides solar training to inner-city students and veterans. **LEARN MORE**

Seven U.S. cities to power municipal operations with renewables



Chicago, which has committed to power its 900 municipal buildings with 100 percent renewable electricity by 2025, has joined a sevencity collaboration to request price estimates for renewable electricity. The collaboration, led by Boston Mayor Marty Walsh, also includes Los Angeles, Houston, Portland, OR, Orlando, FL, and Evanston, IL.

The cities expect to issue a single request for information (RFI) to renewable developers

later this summer. Mayor Walsh, who co-chairs the Climate Mayors network of more than 400 cities, has invited other cities to join in the RFI by submitting their "energy demand data." Most city-owned buildings are schools, and both Chicago and Boston will include schools' use of electricity in the RFI. LEARN MORE

Rural Electric Cooperatives are Becoming a Gigawatt PV Market

Less than a decade ago, solar power was a relative novelty among America's rural electric cooperatives. Despite the promise of locally generated clean power serving more sparsely populated territories, high costs and a lack of infrastructure discouraged serious investment. But only a few years later, PV is becoming a major energy source in rural cooperatives, according to a recent report by the *National Rural Electric Cooperative Association* (NRECA).



"A Solar Revolution in Rural America," describes how the U.S. rural co-op PV market has grown by an order of magnitude in seven years, aided greatly by a partnership of the U.S. Department of Energy and the NRECA called the "Solar Utility Network Deployment Acceleration," or SUNDA. SUNDA was launched in 2013 with 17 rural coops in 10 states that resulted in 30 MW of projects. The initiative helped sparked a growth of PV in rural coops from 35 MW of installed capacity in 2010 to 868 MW in 2017, with the promise of cracking the gigawatt threshold in 2018 or 2019. **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!

Schism in the South: The debate over renewables splits the GOP.



In the past few years, the United States has seen a rush of support for solar at the state level. California passed a mandate requiring all new homes to be built with rooftop solar systems as of 2020, while the Massachusetts Senate just approved a bill to remove caps on net metering and set the state on a path to 100%

renewable energy.

In the South, however, this wave of solar utilization has been underwhelming and top-heavy. While the South does feature North Carolina, the nation's 2nd largest solar market, Florida, 8th and Georgia, 10th, the rest of the region is notably lacking in development. **LEARN MORE**

The Georgia Public Service Commission: Why Your Vote Matters!

Two seats on the five-member Georgia Public Service Commission are on the ballot this (Nov). So, what is the Georgia Public Service Commission or "PSC"? The Georgia Public Service Commission (PSC) is the governing body that regulates the rates and services of "public utilities" in the state, including telecommunications, electricity (meaning our Georgia Power bills) and natural gas.

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Georgia has some of the lowest utility rates in the nation. However, electricity rates are set to resume a historic rate of increase over the next six years. " ... In 2016,

the Georgia Public Service Commission and Georgia Power agreed to freeze rates until the next rate case in 2019. A lot has happened since then. Georgia Power purchased Atlanta Gas & Light for \$12 billion and the costs to build Plant Vogtle 3 and 4 have soared to a total of \$25 billion. These two events have not been factored into rates yet but all that's about to change in 2019." **LEARN MORE**

Georgia Cattle Farm Welcomes 1.8 MW Solar Project



United Renewable Energy LLC (URE) and Constellation, an Exelon company, have announced the completion of a 1.8 MW solar project at Hunter Farms Inc., a 360-acre, family-owned cattle farm in Jakin, Ga.

The Hunter family, which established the company in 1937, will benefit from lease payments from the solar array, situated within marginal land.

"Projects like this provide-much needed income to landowners like Hunter Farms Inc.," says William Silva, CEO of URE. "In the farming economy, where diversification is increasingly vital, this project brings a nice cash crop to augment their top-quality, animal-welfare-approved beef." **READ MORE**.

Partners Bringing More Georgia Solar Online

Green Power EMC, a nonprofit cooperative in Georgia, has significantly expanded its partnership with Silicon Ranch Corp., an independent solar power producer, in support of Georgia solar.

As part of the agreement, Silicon Ranch will bring an additional 194 MW AC of solar online by 2021. The total capacity will be distributed across four locations in middle



and south Georgia and will generate enough power to help serve approximately 35,000 households annually.

The four facilities will be funded and built by Silicon Ranch. Green Power EMC will purchase all the energy and environmental attributes generated by the facilities on

behalf of its electric membership corporations (EMCs). Silicon Ranch will also own, operate and maintain the arrays throughout a 30-year agreement. **READ MORE**

How Georgia Became a Top 10 Solar State, With Lawmakers Barely Lifting a Finger



Over the past five years, Georgia has become one of the nation's leading states for solar power, but it didn't get there in the usual way.

It doesn't offer tax credits, and the legislature has never created a state renewable portfolio standard (RPS) requiring utilities to sell renewable energy. There is no net-metering law to let solar homes sell excess energy back to the grid at retail prices.

Instead, an early Trump supporter who leads the state's Public Service Commission has been pushing Georgia Power, the state's largest utility, to invest in clean energy by ensuring that solar is included in the utility's long-term power plans, updated every three years. **READ MORE**

IRS Gives Big Solar Two More Years

The IRS, via Notice 2018-59, has modified the Investment Tax Credit to allow solar projects to begin construction by the end of the 2019, and still get the 30% – versus being in service by that date.

For all practical purposes, medium- and large-scale solar power projects that expect to take a year to two (or more) for development and construction just got a two



year extension on the Investment Tax Credit (ITC). LEARN MORE

Consider Becoming a Member of GA Solar!



YOUR MEMBERSHIP & PARTICIPATION MAKES A DIFFERENCE!

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

84 Gigawatts of COMMUNITY SOLAR, and the Plan to Get There

The United States is gaining on two

million solar power systems connected to the power grid, and will get close to 65 GW of total capacity installed by the end of 2018. This is quaint compared to NREL's suggestion that we can get 39% of our electricity from our nation's rooftops – representing just over 1.1 TW of solar capacity potential. And even though 83% of our nation's small buildings have a suitable place for solar, 3/4 of all households don't have



ownership of their own roof or other suitable location to add solar power.

Currently, **community solar power** is focused in a few specific marketplaces that have developed the proper legislation. Minnesota is currently leading the country with about 41% of all volume deployed in 2018, and Massachusetts follows with a strong 25%. After that though — Colorado is over 5%, before the rest of the states and territories spread the other 27%. **LEARN MORE**

Tech's Solar Racing @ American Solar Challenge



The American Solar Challenge (started July 6th) in Hastings, Nebraska, and Tech's Solar Racing team (was) there with its solar-powered vehicle to compete against 23 other schools from across the country.

Solar Racing has been competing in the Challenge's Formula Sun Grand Prix, a track-style event, since 2014, but this (was) the team's *first year* in the American Solar Challenge, a cross-country road race.

"It's going to be new terrain for us, and we will be camping and racing across the Oregon Trail," said Tiffany Chau, a mechanical engineering major and outreach lead for the team. **READ MORE**

Why This 48-Year-Old Woman Is Building Ghana's Biggest Solar Farm

For more than a decade, one 48-year-old entrepreneur in Ghana has been quietly building up a multimillion-dollar oil and gas outfit called **UBI Group**. Salma Okonkwo is a rare woman to head up an energy company in Africa. "I don't stop when the door is being shut. I find a way to make it work," Okonkwo told *Forbes*. "That's what propelled my success."

She's now expanding her reach across Ghana's energy industry, working on an independent side project that may become the biggest in her career.



Okonkwo is building Ghana's biggest solar farm, called Blue Power Energy, slated to open in March 2019 with 100 megawatts of energy. It's set to be one of the largest in Africa. **LEARN MORE**



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Georgia Solar Energy Association admin@gasolar.org www.gasolar.org

1199 Euclid Avenue Atlanta, GA 30307 404.522.4775