2018 ANNUAL REPORT



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RIGHTS

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2018 ANNUAL REPORT

SOLAR!

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MESSAGE FROM Executive Director Anya Schoolman



The transition to clean energy is happening. The price of solar, batteries, electric vehicles, and "smart home" technology continues to drop. Options and opportunities to take advantage of these technologies are everywhere.

Homeowners are asking for an organization that is on their side, helping them take part in the clean energy revolution. People want to make and manage their own clean, local, energy — which is increasingly cheaper and more reliable than what they can buy from the utility.

As the churn in these new markets intensifies, there is an emerging

scramble between utilities, thousands of new independent product and service providers, and communities. At the core is the conflict over who is going to own, manage, and benefit from these new clean energy systems.

Solar United Neighbors is here with a single purpose: ensure our energy system is designed for real people, their families, and their communities. Whether we are helping people get rooftop solar, supporting their integration of an electric vehicle charger into their new solar "smart" inverter, or organizing people to protest new, punitive "fixed charges" at the public utility commission, we are representing the needs of the individual.

We are doing more and more every year to meet those needs, and 2018 was our most active yet. We are adding new states, new capacity, and new partnerships, as well as expanding our network of members, donors and other supporters — together, we are rising to meet the challenge. I can't wait to see what we can do together in 2019.

Onwards,

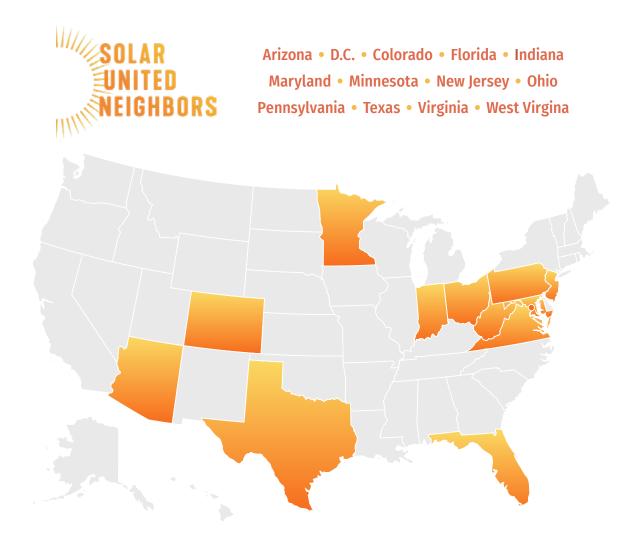
Anya Schoolman

Executive Director | anya@solarunitedneighbors.org

Introduction

Solar United Neighbors in 2018

In 2018, we built our national profile and began several national-scale programs. We also continued our on-the-ground work in states across the country, connecting with thousands of Americans who are ready for a new energy system. Our solar co-op program surpassed its 3,500th installation — bringing the total solar capacity we've facilitated to more than 28 MW. We also expanded solar co-ops to include electric vehicle charging and battery storage — the first such bulk purchase programs of which we're aware! Our advocacy program expanded in breadth and depth and made big progress in improving state policies from Florida to West Virginia. Our engagement program launched big and creative new national programs and expanded to new audiences.



New national policy and advocacy program

A central part of Solar United Neighbors' mission is to educate and mobilize solar homeowners and supporters to fight for their energy rights, bringing their unique, compelling voices to advocate for solar and other clean energy policies.

While most of our advocacy work focuses on state legislatures, public service commissions, rural electric cooperatives, and municipal utilities, we are also engaging our supporters to exercise their power on strategic national issues.

In 2018 we reached out to our supporters to take the following national actions:

- Successfully urged Congressional representatives to fully fund the Rural Energy for America Program (REAP) in the Farm Bill.
- Asked U.S. House members to join the bipartisan Congressional Solar Caucus, which now has 20 members including 12 Democrats and eight Republicans.
- Opposed the proposed federal bailout of coal and nuclear power plants.
- Opposed anti-solar nominee Bernard McNamee to lead the Federal Energy Regulatory Commission.
- Encouraged candidates for state and federal office to take a pledge to refuse campaign donations from electric utilities and their lobbying arms.



Engagement

National Solar Tour

In 2018, Solar United Neighbors partnered with the American Solar Energy Society (ASES) to coordinate the National Solar Tour, the largest grassroots renewable energy event in the nation. On October 6 & 7, 680 solar owners across the nation opened their homes and businesses to engage their communities around the power of solar energy. Solar homes, businesses, nonprofit organizations, municipal buildings, places of worship, schools, and community solar gardens from 48



states participated — engaging 10,000 people in their solar open houses.

We coordinated outreach to solar owners across the nation, and partnered with hundreds of supporting organizations and solar installation companies to spread the word about the tour. With the help of ASES, we supported 52 locally organized, multisite solar tours across the country.

Open house hosts and guests alike shared glowing reviews of their experience with the National Solar Tour, highlighting informative and friendly hosts, valuable conversations, and connections with fellow community members. Many participants said that attending the National Solar Tour bolstered their interest in going solar.

In 2018, the National Solar Tour engaged more solar owners and communities than ever before. As the primary coordinator, we were thrilled to see the event be so successful. We believe this was due in part to the one-on-one guidance, resources, tips, promotional support, materials, and communication that we provided to each solar open house host. Looking to 2019, we will be coordinating the National Solar Tour with ASES again. We hope to bring on more partners, more solar owners, and reach more communities to make the Tour even bigger and better!

Brews from the Sun

In an effort to engage new constituencies, Solar United Neighbors launched a new program in 2018 to highlight craft breweries across the country that have gone solar. Our inaugural Brews from the Sun competition called on craft beer enthusiasts to help us crown America's Favorite Solar Craft Brewery. The competition featured 41 craft breweries across the United States that had gone solar. These breweries had solar system sizes ranging from 4 kW to 2 MW, including flat roof warehouse systems and ground mount arrays — and even a brewery whose solar panels serve as the roof of their beer garden!



We identified 117 craft breweries that had gone solar, and successfully recruited 41 to compete in the 2018 Brews from the Sun competition. Combined, they represented 27 different states. We launched the competition in June, holding public voting for eight weeks. During this period, competing breweries across the country raised awareness about their commitment to solar energy. Breweries took the initiative to get votes by using social media, emailing their lists, putting signs in their breweries, and even collecting votes on brewery tours.

Brews from the Sun attracted local and national news attention, including regional TV news spots and a feature article on Forbes.com. By the end of the voting period, 9,230 solar supporters and craft beer lovers cast their ballots for their favorite solar-powered craft brewery. While many breweries fought hard to collect votes in a variety of creative ways, the top three breweries were Mudshark Brewery in Lake Havasu, AZ (winner); Legal Remedy Brewing in Rock Hill, SC (1st runner up); and Flathead Lake Brewing in Big Fork, MT (2nd runner up).

• Girl Scouts and Boy Scouts SUN Patch programs

In early 2018, Solar United Neighbors launched the SUN Patch Program for Girl Scouts and Boy Scouts to help younger generations discover the power of solar energy. The SUN Patch Program initially grew out of a partnership with the Girl Scouts of the Black Diamond Council, who were seeking a way to provide Girl Scouts an opportunity to learn about solar energy. We developed the SUN Patch Program — an activity-based curriculum for Girl Scout troop leaders — to implement with their troops and produced official Girl-Scoutembroidered SUN patches. These patches are provided for free to every Girl Scout who completes the program. We began a national outreach effort to all 112 regional Girl Scout councils across the country and formed partnerships with 25 councils to help spread the word about the program to troop leaders.



To date, more than 500 Girl Scouts from 50 troops in 20 different states have earned their SUN patches. Girl Scouts from Kentucky to New Mexico to Connecticut, ranging from ages 5 to 15, have discovered the power of solar energy through hands-on activities. The patch curriculum includes learning about how solar works, going on a neighborhood solar scavenger hunt, and making solar s'mores. Feedback on the SUN Patch Program from troop leaders and Girl Scout councils has been overwhelmingly positive. We're told there are no other tools out there to educate and engage Girl Scouts around solar energy.



In late 2018, we expanded our youth engagement initiatives by connecting with Boy Scout troops. Using the Girl Scouts SUN Patch Program as a model, we adjusted the curriculum to meet Boy Scouts of America requirements for patch programs. Along with this effort, we created additional resources for troop leaders, including solar cooking activities and guidance for high school Girl Scouts and Boy Scouts to develop award projects focused on solar energy. The Boy Scouts SUN Patch Program launched in late 2018, and the initial troop of second and third graders completed the program in Bismarck, North Dakota.

New projects

Solar United Neighbors has helped homeowners across the country put solar on their properties for years through our solar co-op program and, more recently, with our solar helpdesk membership offering. In recent years, we've seen growing interest in building electric vehicles (EVs), battery storage, and community-shared solar. Part of our mission is to connect as many people to the solar economy as possible, and each of these areas is one more way to do that. We jumped at the chance to test out some new project types and offerings.

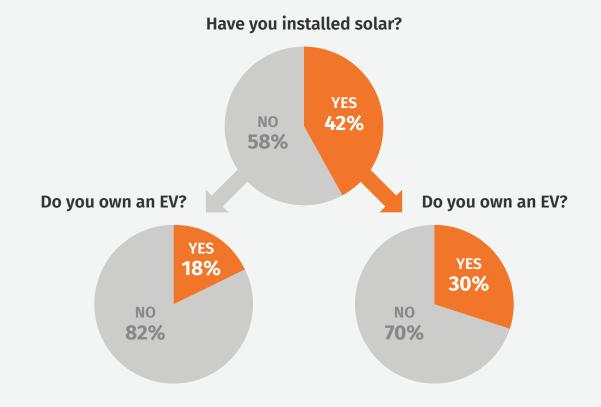
Electric vehicle charging

After seeing the crossover between solar owners and electric vehicle (EV) owners in a survey we conducted, we piloted a new type of co-op that combined solar with Level 2 EV chargers and EV information. In April we launched the Arlington (Virginia) Solar and EV Charger Co-op. Co-op members could choose to get proposals for a solar array for their home, an EV charger, or both from the installer selected by the group. Adding EV technology education and an option for installing a faster home charger

into the mix generated additional excitement and interest in the co-op. At least one member used the opportunity to have a Level 2 charger installed as a way of planning ahead for a future EV purchase. In two other cases, we saw that people who were only interested in EV chargers ended up also going solar. Plans are in the works to improve and expand on our initial efforts by conducting several more Solar and EV Charger coops in other states in 2019.

It was a no-brainer to add the charger while we were already going solar.

Andrew Bridges, Arlington, Virginia



Battery storage

Our network is energized by the idea of pairing solar and battery storage. Whether it's because they want to power their homes in the event of an electrical grid outage or because they want to consume as much of their solar energy onsite as possible, more and more solar owners want to couple their renewable energy production with a way to store it onsite. With the advent of the first-of-its-kind state income tax credit for storage in Maryland, we tested out this interest.

We launched the Maryland Storage Co-op pilot in February for solar homeowners who wanted to retrofit their existing solar arrays with a battery storage system. With minimal advertising effort, 46 homeowners signed up to participate. Guiding these homeowners through a co-op process targeted at storage instead of solar provided us with excellent learning opportunities on the questions to consider when selecting storage equipment, adding it to an existing solar array, and choosing a storage installer. It also strengthened our staff's organizational knowledge of storage, which allowed us to help 28 homeowners install battery systems in Florida.

The coupling of solar and storage is one of the critical building blocks of an electrical grid that's transitioning the country toward widespread, distributed, renewable energy production. That's why we're continuing this work in 2019 and beyond.

Community solar

We look at a lot of roofs to assess their fitness for a solar installation, and while some meet the qualifications, some don't. This is why we've pushed for states to enable people to go take part in community solar, which allows anyone to enjoy the benefits of solar energy.

Community solar lets a group of people or businesses subscribe to part of a shared array and get a portion of the credits from that array's solar energy output applied to their local utility bill. As a consumer advocate for solar, we wanted to help people understand how community solar



worked and also help them compare different offerings in their area. With that in mind, we launched our <u>Community Solar Subscription Platform</u> in 2018 in Maryland and Minnesota. Visitors to the platform select their state, their utility, set their average electricity bill, and then look at available subscriptions in their area. Details about each project show the cost of the subscription and other important details such as applicable fees, contract length, community impacts such as job creation, and whether the project has special offerings for low- to moderate-income residents. In 2019 we'll expand our platform to new states and shine a light on how valuable a tool community-shared solar can be in making solar accessible to everyone.

Educational guides

Our website has tons of tips, FAQs, and timely information about solar. We deliver practical, useful, and timely content to our network of solar supporters. In 2018, we also made a commitment to provide deeper-level content on important topics.

> Selling your solar home

As solar installations proliferate across the country, more and more homes are sold with solar on the roof. A solar array can add value to a home; but because it's relatively new for many real estate agents, appraisers, and home buyers, selling a solar home can also generate lots of questions. In February, we released our "Selling Your Solar Home" guide. The guide covers important steps for homeowners to take when selling their solar home, including special considerations for selling a home that has a solar array owned by a third party. These solar leases and power purchase agreements can complicate a sale if the seller and buyer are unprepared. Our guide helps sellers avoid unexpected hurdles along the way.

> Battery storage

We get lots of questions about battery storage. In 2018, we provided our network with more guidance on storage and how it works with solar. We took this practical information and created online materials, a battery-focused information session, and an in-depth storage guide: Battery Storage for Homeowners. Battery storage can be a complex topic, so we explained the practical details of battery storage, covering the different types of batteries, how they're sized for homes, different configurations for coupling battery storage with solar, economics, financing, and more. With several thousand downloads of the guide since its release, it's clear we're providing important information that people want and need.

SELLING YOUR SOLAR HOME



They are saving money on their electric folls and investing in energy freedom with a clean power source. Solar's growing popularity also means that more homeowners are looking to sell their solar homes. If you are one of those homeowners, this guide is for you.

SOLAR UNITED NEIGHBORS

This is wonderful. You guys rock. We are now at Cape Cod, with a new solar array in place. Will likely get a battery this winter or in the spring. Your guide is a big help.

- Steve Waller, Centreville, Massachusetts

Great battery guide and the first I've seen on the topic. Thanks. I saved it!

- Jim Vandiver, Smithfield, Washington

I wanted to compliment you on the best summary of battery information for solar that I have seen! There were many points made that I was not yet aware of, despite considering batteries for a while. I loved the common sense analogies made to explain things. Anyone should be able to understand it better after reading this.

– Paul Romanoski, Edgewater, Florida

Membership

We launched our membership program in 2018 and have more than 500 paying members in 25 states, the District of Columbia, and Puerto Rico. Membership gives people more choices to get our help going solar. Together, we are a powerful force fighting for policies that promote rooftop solar.

Membership includes the following benefits:

- > Solar education. Our events, guides, and online resources make it easy to learn the basics on solar and stay abreast of advancing technology, battery storage, EVs, and more.
- > Access to solar experts. Our members-only solar helpdesk is here to answer questions – including solar basics, the installation process, issues with performance, and opportunities to expand or augment an existing system.
- > Installation proposal review. Our experts work with members one-on-one to evaluate and compare up to three installation proposals to ensure members are getting the right package for their needs.
- > Opportunities to save. Members get special discounts from businesses that have gone solar, and we make sure they are the first to know about new programs, rebates, and incentives.
- > Advocating for solar. We explain the effects of changing policies or regulations and provide opportunities to fight to protect and expand rooftop solar.

Because I can't protect my investment on my own, and it takes a large group to fend off these constant attempts to make solar less affordable.

- Monty Fowler, West Virginia

I will renew my membership because it's the best way to stay informed about solar policy and changes in policy that may affect my situation.

– Jay Labonte, Virginia

I view the rapid growth of solar as an imperative protection for life on earth. Pretty important!

- Lise Nau, Maryland

Promote sustainable energy, eliminate fossil fuel consumption, provide local jobs, protect the environment, stop climate change.

– Glenn Freeman, West Virginia

I believe in the effort and hope to go solar soon. – Mike Weaver, West Virginia

I like what you do to advance solar power in Ohio!

– Marty Zinn, Ohio

To ensure I have the information I need to maintain my system.

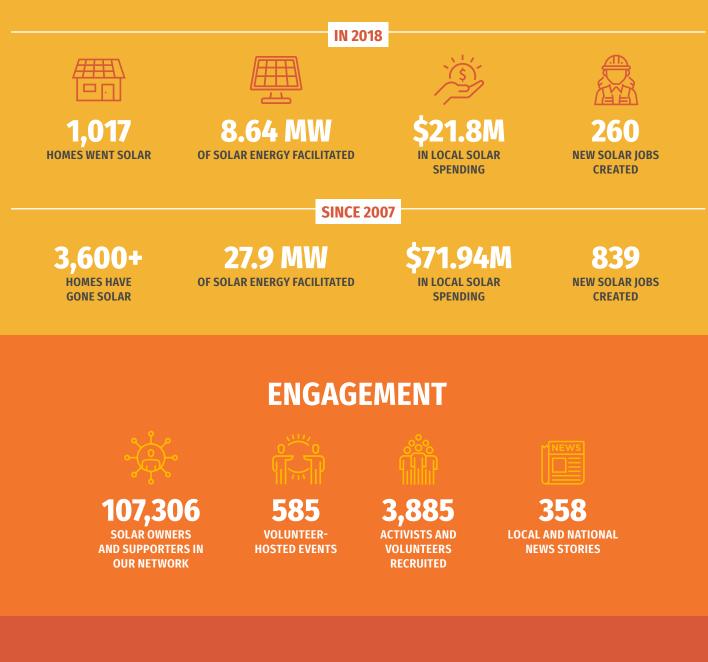
- Laara Manler, Maryland

I wanted to stay informed about battery storage and maintenance of our solar system.

- Richard Lefebvre, Florida

2018 by the numbers

GO SOLAR



ACTIVISM



21,988 EMAILS SENT TO ELECTED OFFICIALS

342 ACTIVISTS LOBBIED THEIR LEGISLATORS B B NEW STATES ADDED WITH ON-THE-GROUND STAFF

SUPPORTER SPOTLIGHT Interview with Robert Fernatt

When there are so many things that divide us, it feels good to be part of an organization that unites a diverse group of people under the same banner.

What do West Virginia, solar energy, cats, and the future have in common? We spoke with Solar United Neighbors supporter Robert Fernatt to find out.

SOLAR UNITED NEIGHBORS: What compelled you to first become involved in the solar energy issue?

ROBERT FERNATT: I had purchased my first electric vehicle, and I really wanted to control the energy source for it. I had kind of dabbled a little bit in solar to begin with, but once I had my electric vehicle I was really motivated and interested in solar. And you know, I work in technology — that's my background and experience — so I'm always interested in new tech.

When I was a teenager, the computing revolution, the PC industry, and what we now know as the Internet were just starting to come about in the 1980s. And, you know, when



you lived through that time and were a part of that, you felt like you were helping to shape the future. You were building something that was going to change the world. I hadn't had that feeling again until I became involved with solar and electric vehicles. You can now be involved in something that is going to change the world. You have an opportunity to participate in the future today. That's a big thing for me.

What was it about Solar United Neighbors specifically that first attracted you to supporting the organization financially and as a volunteer?

So, when I started looking into solar more seriously after I had my electric vehicle, I had run across the Solar United Neighbors West Virginia web page when Google searching. And at the time, I was considering a career change and maybe getting even more involved in solar and electric vehicles. So, I

was researching from a few different angles. And I ultimately thought that, well, even if I don't work in the industry, there are little things I can do to help out — including donating my time and money as a way to participate in helping to spread the word about solar, electric vehicles, and all the things I'm interested in.

When did you get your first electric vehicle?

It was 2015 — end of the year. A LEAF. I also have a Tesla.

In what ways have you transitioned to using cleaner energy in your life?

Well, in addition to solar and electric vehicles, I've always been a big fan of efficiency. I used to live almost an hour from work, so it was a two-hour commute every day. We spent a lot on gas; so, smaller, more efficient vehicles were always kind of a theme for us. When I'm looking at the house or the cars, I'm always looking at things I can do to be more efficient. So, the easy stuff like using LED lights everywhere and wrapping your hot



water heater are examples. I also use a lot of smart home tech, including logic that trips off different things when certain things happen. In addition, I've got some pretty interesting tech as far as monitoring my actual energy usage goes. For example, I can see in real time how much solar is being generated in relationship to how much energy is being used in total and by individual appliances.

Late September of 2017 is when my solar array went online on my home. In March of 2018, I had my first \$5 electric bill because I had built up enough credit to wipe out my bill, and it's been \$5 ever since. I actually ran the numbers recently, and basically I'd saved \$1,500 in 12 months.

What might someone be surprised to know about you?

Well, I'm a big cat person. I love cats. We like to go to cat cafes — where you have a cappuccino, read a book, and have a cat crawl up on your lap. One of my life goals is to open my own cat cafe at some point. We're also big Lord of the Rings and New Zealand fans. One thing about New Zealand that I absolutely loved was how pristine it was. Sitting at the Queenstown harbor, you could see all the way to the bottom. The water was just that clear and clean and free of trash. It really struck me how they cared for their environment.

Also, people think that when you're from West Virginia, you live and breathe, "Go Mountaineers, WVU, and coal country and all that." They may be a little surprised that you do support solar and electric vehicles, and actively engage in and use them.

What has surprised you most about being involved with Solar United Neighbors?

Well, in going to a lot of the events I think it's interesting to see the diverse mix of folks. Solar attracts people from all kinds of different backgrounds and different viewpoints — some people who may not agree on a lot of issues. But this seems to be one issue where a lot of people can really get behind it, come together, and agree.

What's the best thing to happen to you or your family as a result of becoming involved with Solar United Neighbors?

There's usually an introverted stereotype applied to being in technology. And, you know, it's true to a large extent. My wife and I are a little bit like that ourselves. But in getting involved with Solar United Neighbors, I find that I love talking to people about solar and electric vehicles. Some of my new co-workers are probably like, "Would you please shut up about solar energy and how low your power bill is!" [Robert laughs.] That is one area in which I don't mind being more outgoing — the solar open houses, giving people test rides in my electric vehicles, or going to an electric vehicle event and sharing with other people.

What are the one or two things you wish other people knew about going solar?

The stereotypes about solar are alive and well, and I've got an anecdote for you. Even well educated, experienced people believe that solar still costs a fortune. And the one thing that I ran across recently with a new co-worker is the statement that she and her husband believe that solar panels have to be replaced every five years because they supposedly don't last very long. That was their honest belief, so they thought the investment wasn't worth it. She has a master's degree. They were simply uninformed on this particular topic. She said they'd do some more research. Without solar, they're spending close to \$500/month on their power bill in the winter.

Tell me about some of the people you've met while being involved in the solar issue?

I've always enjoyed working with some of the folks I work with a lot as a volunteer — like [West Virginia Program Director] Autumn and [Engagement Director] Carra. I've also enjoyed interacting with other folks outside of the Solar United Neighbors' staff such as John Christensen at Mountain View Solar. He's also into electric vehicles. And of course, there are the folks you run into repeatedly at electric vehicle or solar events. Also, on kind of a different but somewhat related topic, I also want to highlight that I appreciate how easy Solar United Neighbors makes it for people to contact their legislators by email on solar policy issues.

When you last made a financial contribution to Solar United Neighbors, how did that make you feel?

Really, it's a sense of pride that you can support Solar United Neighbors financially and/or through volunteering. And it goes back to the theme that when there are so many things that divide us, it feels good to be part of an organization that unites a diverse group of people under the same banner. I also feel proud to support an organization that is moving us away from fossil fuels and especially foreign oil, which I feel strongly about for national security reasons. The sooner we can do that, the better off we'll all be.

What would you tell someone who is thinking about supporting Solar United Neighbors?

Join the future! Join the people who are helping to shape the future of energy.

2018 state program highlights

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D.C.

Our District of Columbia program is our oldest and where we've had the deepest impact over the years. Since 2007, we've educated thousands of District residents about solar. In that time, 584 homeowners have gone solar through a solar co-op. With neighborhood partners, we've launched solar co-ops covering every neighborhood and community in the District. A decade ago there really wasn't much of a solar market here. Now we have one of the strongest markets for distributed solar in the country and, as of 2018, a commitment to provide 100% of its electricity from renewable sources by 2032. By that year, the law calls for 5% of the District's electricity to come from locally generated solar energy on residential and commercial rooftops.

Solar United Neighbors has made a deep impact through persistent and long-term attention to improving solar policy, strong partnership with other local solar stakeholders, and widespread advocacy by our network of solar supporters. We've come a long way in a short period of time, but we've still got real work ahead of us. Solar still isn't accessible to everyone in the District. Addressing this equity of access will take sustained, long-term focus. With the 2016 passage of Solar for All, a program of the Department of Energy and Environment (DOEE), the Government of the District of Columbia made a commitment to do just that. In 2018, as a grantee of the District Government's Solar for All program, we rolled up our sleeves, joined with other organizations across the District, and got to the challenging work of making Solar for All a reality - one rooftop at a time.

2018 BY THE NUMBERS



103 Homes went solar





\$2.2M In local solar spending



13 New Solar Jobs Created



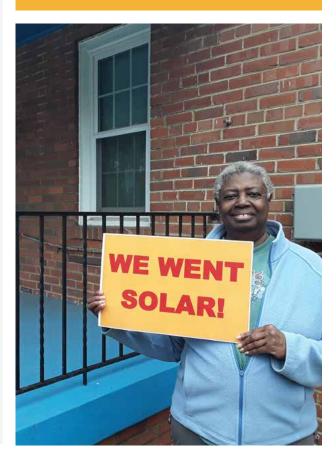
9,152 SOLAR OWNERS AND SUPPORTERS IN OUR NETWORK



1113 ACTIVISTS AND VOLUNTEERS RECRUITED



2,449 EMAILS TO ELECTED OFFICIALS



Solar for All

> What is Solar for All?

Solar for All (SFA), a program of the Department of Energy and Environment, seeks to provide the benefits of solar electricity to 100,000 low-income households and reduce their energy bills by 50% by 2032. The program, which was established by the Renewable Portfolio Standard (RPS) Expansion Amendment Act of 2016, is funded by the Renewable Energy Development Fund (REDF). For more information about Solar for All visit: <u>http://doee.dc.gov/</u> <u>solarforall</u>. In this round of SFA, low-to-moderate-income District residents have the opportunity to access the benefits of solar power through multiple models including community solar, solar system ownership, and third-party lease models.

> Our model

Our program focuses on low-to-moderate-income (LMI) homeowners and is designed so they will own their solar system from day one, at no cost to them. When we proposed our model for an SFA program, it was important for us to be able to build on our existing solar co-op structure to help guide homeowners through the grant application process and installation. Participants interested in SFA sign up for our 51st State Solar Co-op and go solar alongside other interested homeowners. To accomplish this, our model pays part of the system cost with SFA grant funds. The remainder of the cost is covered by the upfront sale of five years' worth of Solar Renewable Energy Credits (SRECs) generated by the system. The homeowner will regain ownership and receive income benefits from their SRECs in year six.

> Getting started

In 2018, we were among 10 organizations selected as a grantee for the groundbreaking SFA program. Eager to jump into this program and deliver on the goal to help up to 180 low-tomoderate-income homeowners go solar, we immediately launched into establishing our processes to efficiently and effectively reach low-to-moderate-income communities and guide interested homeowners through the process.

Our outreach efforts included conducting monthly information sessions, presenting at Advisory Neighborhood Commission meetings, multiple canvassing efforts around the District, and implementing a referral program.



SOLAR FOR ALL SUCCESS STORIES



Jacqueline Brown

Jacqueline was the first person to sign up for SFA; she was also waitlisted under a previous program before it ran out of funds. Due to that, she waited close to three years to get panels installed. As a member of the 51st State Solar Co-op, her patience paid off.



LaToya Smith

A single mom and new homeowner, LaToya started a chain reaction in her neighborhood; now, several of her neighbors are signing up for the program. Her solar panels have inspired her to become more conscious of her energy footprint, and she has replaced her car with an electric vehicle.

> By the numbers

- SFA program scheduled to be completed by the end of September 2019
- Estimated savings per homeowner over 15 years (including energy savings and SREC income): \$23,000
- Average age of participants: 56
- Median income of all SFA participants in the program in 2018: \$35,000
- Signed contracts & solar installations to date under the SFA program: 51
- Average system size to date: 4.22 kW



Engagement

In May, Solar United Neighbors hosted the fifth annual D.C. Solar Congress. The event brought together nearly 100 local solar supporters to discuss the state and future of solar in the District. The event took place at the University of the District of Columbia Clarke School of Law. Topics discussed included solar energy, equity, and health, as well as the SFA Program, residential battery storage, and grid modernization.

Our D.C. program also established a partnership with Right Proper Brewing Company, a local, solar-powered craft brewery in the District. Two solar celebrations and a solar open house were hosted at and in collaboration with Right Proper, connecting solar supporters and craft beer enthusiasts and raising awareness about a prominent local business that has made a significant commitment to solar energy. Right Proper also competed in our inaugural Brews from the Sun competition to crown America's Favorite Solar Craft Brewery — coming in sixth place overall.

We joined dozens of community groups, nonprofits, elected officials, and District residents in celebrating the life and legacy of Dr. Martin Luther King, Jr. by marching in the 37th Annual Dr. Martin Luther King, Jr. Parade. Despite the frigid weather, the parade route was filled with solar supporters shouting encouragement. Dozens more community members stayed to learn about the 51st State Solar Co-op at the Health & Community Fair.

Policy and advocacy action

The community of solar supporters we created helped pass the historic Clean Energy DC Omnibus Bill. The legislation includes a 100% renewable portfolio standard, a 10% solar carve out, and stable funding for Solar For All and other low-income clean energy programs. Other notable accomplishments were successfully advocating against Pepco's proposed demand charge; for net metered customers to be eligible for time-of-use rates for Pepco's electric vehicle pilot project; for the Solar Cooperative Association Expansion Amendment Act to prohibit homeowners' associations from arbitrarily restricting solar installations; and for requiring the District

Department of Transportation to conduct a clean vehicle transition plan to include that at least 25% of vehicle registrations be zero emissions vehicles by 2025 and that 100% of public bus replacements be electric by 2021. We also participated in the ongoing "Grid of Future" Modernizing the Energy Delivery Structure for Increasing Sustainability (MEDSIS) process and working groups.







Florida

Thanks to our supporters, Solar United Neighbors had another incredible year in the Sunshine State. We doubled the number of solar co-ops we launched through our continued statewide partnership with the League of Women Voters of Florida – expanding program offerings to Florida counties and municipalities, and adding a Gulf Coast Coordinator. Developing programs as far west as the Florida Panhandle and as far south as the Florida Keys, our work reached some of the state's most politically diverse areas. Along the way, we took on a number of policy and advocacy fights from easing solar permitting restrictions to supporting Floridians who were denied their right to go solar.

2018 BY THE NUMBERS



585 HOMES WENT SOLAR





\$13.08M In local solar spending



160 NEW SOLAR JOBS CREATED



22,278 SOLAR OWNERS AND SUPPORTERS IN OUR NETWORK



410 ACTIVISTS AND VOLUNTEERS RECRUITED



7,158 EMAILS TO ELECTED OFFICIALS



Projects

> A big year for solar co-ops in the Sunshine State

We partnered with counties, municipalities, and elected officials to launch 19 co-ops across the state — as far west as Okaloosa and Walton counties in the Panhandle all the way south to the Upper Keys. We took 500 homes solar through these groups. Our presence and reputation across the state grew tremendously just as national attention begins to focus more on Florida as a hot solar market with enormous potential.

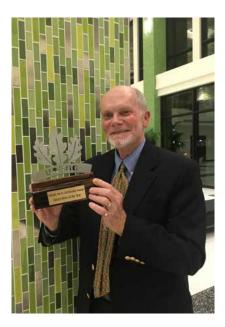
> Storage interest rising

We began to incorporate battery storage into our solar co-op model to meet the increasing demand for resiliency in the face of extreme weather events and power outages. We helped 28 homeowners install a combined total of 179 kW of battery storage through co-ops this year and hope to see more in 2019 as economics improve.

> Solar co-ops leveraged to go the extra mile for communities

In addition to the 5.5 MW of clean energy that our solar co-ops brought online in 2018, some of our co-op installers went the extra mile for their communities:

- In Franklin and Bay Counties, the Compass Solar offered assistance to the many homes that suffered roof damage or complete devastation as a result of Hurricane Michael.
- In St. Johns County, co-op installer A1A Solar donated \$150 per installation (\$7,350 total) to Compassionate St. Augustine and *tag!* Children's Museum of St. Augustine. Solar co-op members chose these two local organizations to receive the donations.
- In Orange County, Wayfare Energy donated 10 native trees for each installation, committing to planting 2,760 trees in total.





Engagement

Solar United Neighbors hosted the second annual Florida Solar Congress in November. The event brought 160

solar supporters together from across the state to discuss the current status and future of solar in Florida. The event took place at the Little Haiti Cultural Complex in Miami. Topics discussed included residential battery storage, resilient communities, and a solar homeowner panel discussion. The Solar Congress also served as the launch of our solar action team, which will engage solar supporters in fighting for our solar rights.

As part of the National Solar Tour, we helped nearly 100 solar owners across Florida host solar open houses. Solar open houses were spread out to reach many corners of the state — from Tallahassee to St. Petersburg to the Keys. They took place at solar homes, breweries, universities, and restaurants.

We helped younger Floridians discover the power of solar energy through our SUN Patch Program for Girl Scouts. Partnering with the Girl Scouts of West Central Florida, 62 Girl Scouts from six different troops earned their SUN patches in 2018. The scouts ranged from kindergarteners to sixth graders and





hailed from St. Petersburg, Davie, Brandon, Tampa, and Largo.

We held 13 solar celebrations across the state of Florida during the year. These gatherings celebrated all of the people who have gone solar through our solar co-ops. At these events, solar supporters learn about exciting new ways to get involved with us and connect with fellow co-op members, solar homeowners, and residents who are interested in solar.

In February, the U.S. Green Building Council of Florida honored Warren Clark with its Green Hero LEEDership Award. Clark originally connected with us to take the lead in organizing a solar co-op in his home county of St. Johns. Since then, Clark has outreached, organized, illustrated, and

participated in every aspect of the co-op process and continues to help his neighbors go solar.

Policy and advocacy action

Our advocacy work in the Sunshine State focused on protecting net metering, streamlining solar permitting, and increasing energy resiliency through solar and storage.

Our high-profile campaign to oppose Jacksonville's municipal utility, JEA, from eliminating its net metering policy is ongoing. We are awaiting the outcome of our lawsuit against the utility for violating the state's net metering law.

We were successful in persuading the Miami-Dade County Commission to adopt the highest level of solar permitting standards as defined by the U.S. Department of Energy's SolSmart Program. We also supported solar homeowners in the city of Coral Gables to allow street-facing rooftop solar installations.

We advocated for a bill (HB 1133) to fund a pilot program in the Florida Keys for onsite solar plus storage for critical emergency infrastructure such as emergency shelters, hospitals, police and fire departments, and airports. This bill stalled in committee, but we are planning to pursue this concept in upcoming legislative sessions.





Maryland

Maryland was Solar United Neighbors' first statewide program. Since its launch, the Maryland program has advocated for and educated more than 6,000 people in the state about solar. We continue to organize solar co-ops throughout Maryland, and we have been on the front lines of community solar legislation, advocacy, and education. Our program continued to expand in 2018, and we are looking forward to keeping up the fight for solar throughout the state.

2018 BY THE NUMBERS



63 Homes went solar





\$1.33M n local solar spending



19 NEW SOLAR JOBS CREATED



5,722 SOLAR OWNERS AND SUPPORTERS N OUR NETWORK



124 ACTIVISTS AND VOLUNTEERS RECRUITED



1,259 EMAILS TO ELECTED OFFICIALS

Projects

> Battery storage co-op

Spurred on by our community's interest in battery storage and the availability of a unique state tax credit, we decided to implement our first-ever Battery Storage Co-op. For the pilot co-op, we decided to focus only on homeowners who already owned solar systems and who wanted to pair

batteries with their existing system. This allowed us to focus singularly on facilitating the battery installation process. By sending just a few emails to past co-op members who went solar and by posting about the co-op on our listserv, the co-op quickly grew to 46 members.

> Community solar technical assistance and education

Solar United Neighbors has been involved in Maryland's community solar pilot program since its beginning. Along the way, we've had the opportunity to work with organizations, landholders, and community members committed to engaging with the program. We provide them with technical support and public education. In 2018, we helped John Mariani's rooftop array in Baltimore become the first community solar project to come online in Maryland.

We also provided technical support to Cedar Ridge Community Church as they pursued their interest in hosting a community solar array on their property. Part of our core mission is consumer education and community solar is no exception. This year we continued to educate the public about community solar. Whether it was at a public information session at a library, school, or apartment complex or at our annual Solar Congress, we took the time to make sure people know how it works and how they can participate.

> Community solar platform launch

As part of our consumer education and advocate role, we launched an online community solar subscription platform in Maryland in 2018. Consumers interested in community solar can select their electric utility and see what community solar offerings are in their area. Each subscription offering is summarized with consumer-focused information in a consistent and clear manner, including factors such as cost, contract length, and applicable fees.



Engagement

Solar United Neighbors hosted the third annual Maryland Solar Congress in September. The event brought together more than 50 solar supporters from across the state to discuss the current status and future of solar in Maryland. The event took place at the University of Maryland, Baltimore County. Topics discussed included residential battery storage, community solar, and Maryland's Renewable Portfolio Standard. Our new Maryland solar action team was also launched at the Solar Congress to engage solar supporters in citizen advocacy.

On the National Solar Tour, we empowered 33 solar owners across Maryland to host solar open houses, reaching many corners of the state — from Jefferson to Mt. Airy to Annapolis to Rockville. Earlier in the year we coordinated several solar open houses in Montgomery County — hosted by solar co-op members who had recently gone solar — in order to help generate interest in our 2018 Montgomery County Solar Co-op.

Over the course of 2018, we held three solar celebrations across Maryland to celebrate all of the people who have gone solar through our co-op processes. At these events, solar supporters learned about exciting new ways to get involved with us and connect with fellow co-op members, solar homeowners, and residents who are interested in solar.

Policy and advocacy action

Our top advocacy objective in Maryland was the passage of the Green Jobs Bill to establish a 50% state renewable energy standard. The bill included a nation-highest 14.5% solar carve-out.

On the first day of the 2018 Maryland General Assembly session, more than 50 supporters of the Clean Energy Jobs Campaign rallied on a chilly Wednesday morning on Lawyers' Mall outside the Statehouse in Annapolis to demand action. Campaign supporters demanded an increase in renewable energy generation in Maryland,

including rooftop and community solar, and the good jobs that come with the expanding clean energy economy. The rally brought together Marylanders from around the state, including a diverse cross-section of the 600 state and local organizations that support the campaign. The rally included a parade of vehicles decorated with clean energy flare and rousing speeches from advocates representing a broad slice of the campaign coalition, including the NAACP, Chesapeake Climate Action Network, Civic Works, and others. Legislators including Del. Cheryl Glenn and Sen. Brian Feldman provided a roadmap for victory, and the energized crowd demonstrated the power of grassroots support. The bill didn't move forward in 2018, but we are well positioned to facilitate the bill's passage in 2019.

We were successful in opposing a Public Service Commission rule that would allow utilities to charge higher fees for the interconnection of solar systems. We also successfully advocated for the passage of reasonable zoning rules to allow community solar projects in Montgomery County, including a provision to allow a limited amount of Agricultural Reserve land to be used for community solar projects.

We were also successful in advocating for the state Volkswagen settlement plan to include expanding EV infrastructure and reducing pollution in disproportionately impacted communities. Our ongoing work included petitioning the Public Service Commission to eliminate the subscription cap, particularly for low- and middle-income community solar subscriptions; participating in the "Grid of the Future" working groups to ensure that solar homeowners' rights and access are protected; and facilitating low-income and Spanish-language participation in the Transforming Neighborhoods Initiative in Prince George's County.







Minnesota

Solar United Neighbors launched in the Gopher State in October 2017 to grow the community of solar supporters in the state, help people go solar, and advocate for strong solar policy. Our program has reached Minnesotans from Rochester up to the Iron Range.

Projects

> A first year of solar co-ops

In 2018, we followed up our first Minneapolis Solar Co-op by expanding across the state — from Mahtomedi, to Kandiyohi County, Bemidji, and the Iron Range. In its first full year of operation, our Minnesota program reached more than 500 Minnesotans — educating them about solar technology, installations, and economics. About 60 of these homeowners ultimately went solar through our co-ops in 2018.

> Community solar subscription platform

We complemented our solar co-op work by developing and launching an online community solar platform. This system helps people who can't install solar to learn about and shop for community solar subscriptions here in the nation's most developed community solar market.

Engagement

With Minnesota being a new state program in 2018, we built a robust community of solar supporters from across the state. We engaged solar owners, partner organizations, solar advocates, and homeowners considering going solar in events, education, and volunteer opportunities.

In July, we hosted the first annual Minnesota Solar Congress in Morris. The event brought together more than 40 solar supporters from across the state to discuss the current status and future of solar in Minnesota. The event took place at the University of Minnesota West Central Research & Outreach Center. Topics discussed included residential battery storage, pollinator-friendly solar, financing for solar, and a solar farmer panel discussion.

2018 BY THE NUMBERS



58 HOMES WENT SOLAR



378 kW of solar energy facilitated



\$1.31M In local solar spending



16 NEW SOLAR JOBS CREATED



2,457 SOLAR OWNERS AND SUPPORTERS IN OUR NETWORK



ACTIVISTS AND VOLUNTEERS RECRUITED



482 EMAILS TO ELECTED OFFICIALS



A Solar United Neighbors volunteer, Rob Davis of Fresh Energy, delivered a presentation about the cohabitation of solar and pollinators at the Minnesota Solar Congress. Davis argued that these two energy producers make a perfect pair. Bees and other animals, known as pollinators, move pollen between plants as they use the plants as a food source. This pollination process fertilizes the plant, helping it to grow fruits. We rely on pollination to ensure good food harvests. This relationship is threatened by our use of pesticides; while they protect crops from being eaten, they also harm those animals that help crops grow in the first place. Davis posits that solar installations are perfect locations for native plants, and the pollinators that come along with them, to grow.

On the National Solar Tour, we empowered 43 solar owners across Minnesota to host solar open houses. We partnered with the Minnesota Renewable Energy Society. Solar open houses reached many corners of the state — from Rochester to Pelican Rapids to Minneapolis to Pine River.

We also helped younger Minnesotans discover the power of solar energy through our SUN Patch Program for Girl Scouts. A total of 38 Girl Scouts from four different troops earned their SUN patches in 2018. The scouts ranged from kindergarteners to sixth graders and hailed from Duluth, White Bear Lake, Dodge Center, and Forest Lake.

In September, more than 2,000,000 people attended the Minnesota state fair, setting a new record. This year, fairgoers had plenty of opportunity to learn about solar, thanks to Solar United Neighbors and our partners at the Minnesota Renewable Energy Society (MRES), at the Eco Experience booth. The Eco Experience has existed

for 12 years, and it is organized by the Minnesota Pollution Control Agency. It is one of the agency's major outreach outlets for educating Minnesotans and others who attend the fair on ways we can impact our environment. More than 270,000 people stopped by this year. There were lots of amazing displays covering topics such as how to recycle and compost; how to repair all kinds of things; and bike and pedestrian safety for kids. Our volunteers helped out at the solar section, which is coordinated by MRES. The solar section included an impressive display, highlighting solar in many different forms, including a tiny model home that showed solar thermal, solar PV, and solar-powered skylights.





Policy and advocacy action

We successfully urged Governor Dayton to veto a bill that would have prevented individuals from participating in community solar projects. We also advocated for municipalities to adopt the U.S. Department of Energy's SolSmart permitting standards to facilitate residential solar installations. We also supported a bill (SF 3132/HF 3966) to allow utilities to set up on-bill financing programs for solar installations, battery storage, and other clean energy and energy efficiency projects. While this bill stalled in committee, we hope to support similar legislation next year.

Ohio

Since our 2016 launch in the Buckeye State, the program has helped nearly 200 homes and businesses go solar. Co-op members in the state have invested nearly \$4 million into the solar economy and have created 55 solar jobs in the process. From the shores of Lake Erie to the banks of the Ohio River, Ohioans are connected through the movement. In 2018 we held the second annual Solar Congress at the Wilderness Center in Stark County and saw double the number of attendees from the prior year.

This year we also worked together to advance solar policy in communities across the state. We facilitated the approval of permits in a historic Dayton neighborhood and are working elsewhere to ensure homeowners have the right to install solar. We helped to hold the line against bad bills in the legislature and successfully got the Public Utilities Commission of Ohio to improve net metering rules in their proposed update.

Solar now represents more than 7,000 jobs in Ohio and is a continuation of Ohio's longstanding energy leadership role. Ohioans are investing in solar for their homes, businesses, public buildings, and houses of worship. The diversity of solar installations in Ohio is one of the most exciting stories of the year. Ohioans are realizing what a smart financial decision solar is, as many markets in the state are beginning to see parity between the payment cost for a solar system and the avoided cost of the energy they no longer need to buy.

2018 BY THE NUMBERS



54 Homes went solar





\$878,415 In local solar spending



15 NEW SOLAR JOBS CREATED



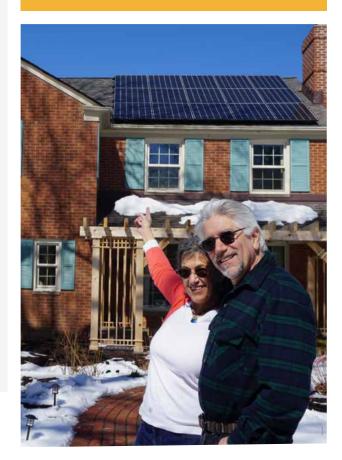
7,565 SOLAR OWNERS AND SUPPORTERS N OUR NETWORK



197 ACTIVISTS AND JOLUNTEERS RECRUITED



1,937 EMAILS TO ELECTED OFFICIALS



Projects

> Solar and EV charger co-op

Solar United Neighbors first asked Ohio installers for the option for co-op members to install an EV charger two years ago through our Appalachian Ohio Solar Co-op. This year, a relaunch of the co-op took the concept a step further and offered members the opportunity to go solar or add an EV charger. Athens County, where the co-op is based, has the highest amount of solar per capita in the state and had an EV low-interest finance program. The overlap of EV owners and solar participants has been strong and has spurred new lines of business for solar installers. It has also made the process of upgrading homes for Level 2 EV chargers simpler for the consumer.

> Cuyahoga County government and nonprofit cooperative purchase

We partnered with the Cuyahoga County Office of Sustainability to issue an RFP for three county properties that will exceed 1 MW of deployed solar in total. The properties include the county medical examiner's office, the county animal shelter, and a vehicle service garage. An additional 12 nonprofit and government facilities are also taking advantage of a piggy back provision that allows for usage of the county's procurement process.

Engagement

Solar United Neighbors hosted the second annual Ohio Solar Congress in March. The event brought 110 solar supporters together from across the state to discuss the current status and future of solar in Ohio. The event took place at the Wilderness Center in Wilmot. Topics discussed included electric vehicles, overcoming local barriers to solar, residential battery storage, and state solar policy. It also featured a solar installer panel discussion.

On the National Solar Tour, we empowered 29 solar owners across the state to host solar open houses — from Cleveland to Dayton to Cincinnati. Earlier in the year, we coordinated several solar open houses in the Cleveland area. Solar co-op members who had recently gone solar hosted them in order to help generate interest in our 2018 Cuyahoga County Solar Co-op.

We also helped younger Ohioans discover the power of solar energy through our SUN Patch Program for Girl Scouts. Partnering with the Girl Scouts of North East Ohio, 46 girls from four different troops earned their SUN patches in 2018. The scouts ranged from second graders to eighth graders and hailed from North Olmsted, Hicksville, and Toledo.

Ohio also had a strong presence in our first annual Brews from the Sun competition to crown America's Favorite Solar Craft Brewery. Two solar-powered craft breweries from Athens—Jackie O's Brewery and Devil's Kettle Brewing signed on to participate in the competition, sharing their

FIGHTING FOR THE RIGHT TO GO SOLAR

Brecksville residents Fred and Annette Pedersen joined the Cuyahoga County Solar Co-op earlier this year to have a solar system installed on their family home. They ran into barriers when the co-op installer pursued a permit for the system. Local permitting rules limited solar to roofs that weren't visible from the street. It further limited even those non-visible roofs to less than 25% coverage. The Pedersens were able to work with fellow solar-interested homeowners to persuade Brecksville's planning commission to change its restrictive rules. The commission decided the 25% restriction is antiquated. It is now considering additional changes to allow system needs, rather than visibility, to inform design.

This is a great example of neighbors working with local government to advance solar in their community. The Cuyahoga County Solar Co-op was formed in partnership with the Cuyahoga County Office of Sustainability. commitment to solar energy with their supporters over eight weeks of public voting. Our volunteers teamed up with Jackie O's, signing up brewery-goers to vote during a solar happy hour event.

Over the course of 2018, we held a solar celebration to celebrate everyone who went solar through the Cuyahoga County Solar Co-op. At the event, solar supporters learned about exciting new ways to get involved with us and connect with fellow co-op members, solar homeowners, and residents who are interested in solar. A few members even drove new EVs that they purchased after going solar in the co-op.



Policy and advocacy action

Our advocacy focus in Ohio was successfully defending the state's renewable energy portfolio against a bill (HB 114) that would have weakened or eliminated the state's renewable portfolio standards. Secondarily, we supported a bill (HB 54) to extend the period for local government power purchase agreements from 10 to 20 years, and we hope this policy measure passes in 2019. At the local level, we successfully advocated to defeat fixed charges requested by utilities Duke and Dayton Power and Light; worked with the local landmarks commission to establish guidelines to allow solar in McPherson Town Historic District in Dayton; supported a ballot initiative to fund solar installations for municipal buildings in Athens; and helped Brecksville residents work with local government to improve solar permitting rules. Ongoing advocacy efforts included opposing the request by First Energy to raise "fixed charges" on electricity consumers, and ensuring solar access and rights in the Public Utilities Commission of Ohio's "PowerForward" plan.



Pennsylvania

By the time we launched in the Keystone State in 2018, Pennsylvania had long since lost its place as a solar leader. The solar growth that had occurred had not reached all parts of the state equally, with much of rural Pennsylvania (especially in the west) not sharing equally in the benefits of the technology. Our Pennsylvania program is dedicated to building a broad, geographically diverse solar movement that ensures that both urban and rural areas see robust growth in distributed solar.

In pursuit of this goal, we launched solar coops in rural areas, including Cambria County, Crawford and Mercer Counties, and Washington and Greene Counties. We also dispelled myths about solar energy and helped Pennsylvanians of all stripes see distributed solar as a means of creating true energy independence and directing economic benefits back to local communities.

2018 BY THE NUMBERS



10 Homes went solar



72 KW of solar energy facilitated



\$188,648 IN LOCAL SOLAR SPENDING



SNEW SOLAR JOBS CREATED



6,814 SOLAR OWNERS AND SUPPORTERS N OUR NETWORK



25 ACTIVISTS AND OLUNTEERS RECRUITED



1,465 EMAILS TO ELECTED OFFICIALS





Projects

> Five solar co-ops launched

Our work on the ground in Pennsylvania this year focused on building a strong base of solar co-ops. We launched co-ops in Allegheny County, Washington and Greene Counties, Indiana County, Cambria County, and Crawford and Mercer Counties.

Engagement

As a new state program in 2018, Solar United Neighbors of Pennsylvania built a robust community of solar supporters from across the state. We engaged solar owners, partner organizations, solar advocates, and homeowners considering going solar in events, education, and volunteer opportunities. On the National Solar Tour, we empowered 45 solar owners across Pennsylvania to host solar open houses. Partnerships with PennFuture's local solar tour in Pittsburgh and Solarize Philly's local solar tour in Philadelphia helped make this possible.

We also helped younger Pennsylvanians discover the power of solar energy through our SUN Patch Program for Girl Scouts. A total of 28 Girl Scouts from two different troops earned their SUN patches in 2018. The scouts ranged from second graders to eighth graders and hailed from Gettysburg and Willow Grove. We also partnered with Girl Scouts of Eastern PA to spread the word about solar to troop leaders in the region.



Policy and advocacy action

Our central policy actions in the Keystone State in 2018 were supporting a bill (SB 1039) to ensure that homeowners' associations cannot prohibit homeowners from putting solar panels on their roofs, as well as supporting a bill (SB 1140/HB 2132) to study powering the state with 100% clean energy by 2050. Although these efforts didn't move forward, we engaged and educated our supporters to be ready to take on these issues and an anticipated community solar bill in 2019.

On the local level, we mobilized our grassroots network and joined other energy advocates and Duquesne Light Company (DLC) customers to successfully oppose DLC's proposed increase in fixed-rate charges. This resulted in the Public Utility Commission (PUC) limiting the proposed bill increase from 9% to 4.4% and reducing the fixed residential customer charge from over \$14 per month to \$12.50 per month, rejecting DLC's request to raise the charge to over \$16/month. With this ruling, customers who want to lower their electricity bills can do so by going solar because DLC won't be able to use a higher fixed rate as a deterrent. This surprising reversal is a testament to the power of mobilized concerned people.



Virginia

Our Virginia program advanced with new and impactful projects, as well as a growing base of energized solar supporters. We focused on engaging grassroots support for a democratic energy system with rooftop solar as the cornerstone. We piloted a successful solar and electric vehicle (EV) program, launched a campaign to democratize Virginia's largest rural electric cooperative, and helped shift the narrative for solar as part of a modern grid in the governor's energy plan.

We have a lot to highlight in our work in the Commonwealth. We mobilized over 200 comments on Virginia's energy plan and trained our activists for our first-ever solar lobby day in the state. We also launched the <u>Repower REC</u> (Rappahannock Electric Cooperative) campaign to democratize energy distribution in Central Virginia. Finally, we launched our first Solar and EV Charger co-op in Arlington and engaged thousands of Virginians through vehicles including our <u>Homeowners Association toolkit</u>, the 2018 Solar Congress, and the 2018 National Solar Tour.

2018 BY THE NUMBERS



109 HOMES WENT SOLAR





\$2.13M In local solar spending



28 NEW SOLAR JOBS CREATED



8,971 SOLAR OWNERS AND SUPPORTERS IN OUR NETWORK



143 ACTIVISTS AND VOLUNTEERS RECRUITED



3,401 MAILS TO ELECTED OFFICIALS



Projects

> Electric vehicle charger co-op

Given the clear crossover of interest between rooftop solar and electric vehicles, we decided to incorporate electric vehicles into our existing solar co-op model. We determined that a cost-effective way to begin EV work would be to require that bidding solar installers offer co-op members the option to install Level 2 chargers at their homes at the same time as solar panel installation, or even to install a charger independent of going solar. After adapting our process and information products to reflect this new offering, we rolled out the Arlington Solar and EV Charger Co-op pilot in the spring of 2018. The co-op is still in the process of winding down, but early results indicate that about 1 in 5 signed contracts included a Level 2 EV charger. The pilot taught us several lessons along the way, all of which we will apply to future solar and EV co-ops in Charlottesville, Virginia, and other states.



Engagement

Solar United Neighbors hosted our third annual Virginia Solar Congress in October. The event brought together more than 100 solar supporters from across the state to discuss the current status and future of solar in Virginia. The event took place at George Mason University and topics discussed included residential battery storage, overcoming local barriers to solar, electric vehicles, and rural electric co-op organizing. It also featured a solar policy round table.

On the National Solar Tour, we empowered 69 solar owners across Virginia to host solar open houses. Solar open houses reached many corners of the state — from Harrisonburg to Virginia Beach to Blacksburg. This included a solar tour in Richmond organized by our volunteers. Earlier in the year, we coordinated several solar open houses hosted by solar co-op members who had recently gone solar. This helped generate interest in our 2018 Greater Arlington, Hampton Roads, and Greater Richmond solar co-ops.

Over the course of 2018 we held four solar celebrations across Virginia to celebrate everyone who had gone solar through our co-ops. At these events, solar supporters learned about exciting new ways to get involved with us and connected with fellow co-op members, solar homeowners, and residents who are interested in solar.





As 2018 came to a close, we brought together our community of solar supporters for two Solar Celebrations in early December. The Hampton Roads Solar Celebration gathered nearly 40 solar supporters at Kiskiack Golf Club, which went solar in spring 2018 as part of the Hampton Roads Solar Co-op. The Richmond Solar Celebration brought together dozens more at Triple Crossing Brewing Company to celebrate the Richmond Solar Co-op. Together, the two co-ops helped nearly 40 homes and small businesses go solar this year.

Policy and advocacy action

Our 2018 goals in Virginia included defending against attempts to undermine net metering policies; fighting for improvements in transparency and accountability in community solar programs at Dominion and rural electric cooperatives; and advocating that rooftop and community solar play a major role in the proposed state energy plan. We also launched the grassroots "Repower REC" campaign to reform and democratize the governance and solar policies of the Rappahannock Electric Cooperative. We also are representing solar homeowners in the state's "Grid of the Future" proceeding.





West Virginia

After four years in operation, our West Virginia program continues to lead the charge for an equitable, democratic, and locally controlled energy system in the Mountain State. The success of our local solar co-op model means that Solar United Neighbors co-op members now account for one out of every six solar installations in West Virginia. Rising demand for solar is bringing job opportunities to local residents as homegrown solar companies hire, expand, and invest in their communities.

Our programmatic field work goes hand in hand with grassroots advocacy, and we have taken the lead in defending West Virginians' right to affordable, locally generated renewable energy. Our broad, bipartisan network of solar champions reaches every corner of the Mountain State. We worked together over the past year to defend West Virginia's strong net metering law, urge state elected officials to refuse campaign donations from monopoly electric utilities, and develop an ambitious policy campaign to advance the state's renewable energy market and expand solar access for all West Virginians. Looking forward, we are excited to build on this strong foundation as we continue to give voice to the energy rights of Mountaineers.

2018 BY THE NUMBERS



35 Homes went solar





\$676,031 IN LOCAL SOLAR SPENDING



10 NEW SOLAR JOBS CREATED



4,618 SOLAR OWNERS AND SUPPORTERS N OUR NETWORK



ACTIVISTS AND ACTIVISTS AND OLUNTEERS RECRUITED



908 Emails to elected officials

350 SUPPORTER TESTIMONIES



> Five solar co-ops throughout the state

- Working with local solar champions and community partner organizations, we launched solar co-ops for the first time in the state's populous and diverse Eastern Panhandle. The Jefferson County, Berkeley & Morgan Counties, and Potomac Highlands solar co-ops were highly successful undertakings through which we educated more than 140 people about solar and helped 18 Eastern Panhandle residents go solar on their homes and businesses.
- We collaborated with diverse local partners and our sister programs in Ohio and Pennsylvania to develop the crossborder Upper Ohio Valley Solar Co-op. This co-op was open to residents of West Virginia's Northern Panhandle as well as of adjacent counties of Ohio and Pennsylvania. We educated 96 people about solar at public events in all three states and helped eight Upper Ohio Valley residents go solar through the co-op, including the first completed installation for our new Pennsylvania program.
- Four years after organizing a successful solar co-op in Fayette County, we returned to the beautiful New River Gorge region to launch the New & Gauley Rivers Solar Co-op. Residents of Nicholas, Webster, Fayette, and Raleigh counties were able to go solar through this coop. Meaningful partnerships with local businesses and nonprofits helped drive attendance at public info sessions throughout the region and a Fayetteville solar happy hour hosted by a local partner business.
- Our final co-op launched in 2018 was another return visit. The Mountaineer Country Solar Co-op marked the third time we organized such a group in West Virginia's northcentral region. Our ability to attract significant local support for second- and third-round co-ops confirmed that West Virginians' interest in solar is strong and growing.

> Grant assistance for farms and small businesses

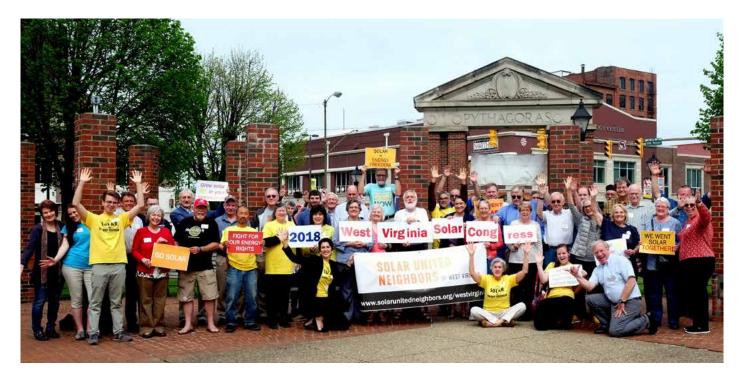
In addition to our geographically based solar co-ops, we broadened our capacity to help farmers and rural small business owners go solar statewide with federal grant funding from the USDA Rural Energy for America Program (REAP). With a 100%







application success rate, we helped five West Virginia farmers and small business owners secure grant funding for solar in 2018. Helping farmers go solar fortified our advocacy efforts to ensure that mandatory funding for the REAP program was included in Congress' reauthorization of the Farm Bill.



Engagement

Solar United Neighbors hosted our third annual West Virginia Solar Congress in May. The event brought together more than 40 solar supporters from across the state to discuss the current status and future of solar in West Virginia. The event took place at Wheeling's West Virginia Northern Community College. Presentation topics included solar 101, electric vehicles, residential battery storage, lessons learned from West Virginians for Energy Freedom's successful campaign to block FirstEnergy's attempt to transfer the costs of an unprofitable coal-fired power plant onto the backs of West Virginia ratepayers, and a panel discussion on spreading solar in our local communities.

During the National Solar Tour in October, we empowered 20 West Virginia solar owners to host solar open houses across the state, from Summersville to Morgantown to Martinsburg. Earlier in the year, we coordinated a double solar open house featuring two solar homes with battery storage systems located next door to each other. This event was very well attended and helped generate interest in our Eastern Panhandle solar co-ops.

We developed the SUN Patch Program for Girl Scouts and Boy Scouts in 2018. These youth education resources grew out of a budding partnership between our West Virginia program and the Girl Scouts of Black Diamond Council, West Virginia's regional Girl Scout council. Black Diamond Council staff reviewed early drafts of our SUN Patch Program and connected us with resources to help Girl Scouts discover the power of solar energy.

We also developed a set of resources to help educate real estate professionals about the benefits and value of solar. Our "<u>Selling Your Solar Home</u>" guide informs realtors, homeowners, and prospective buyers about what to expect when selling or buying a solar home, and helps homeowners and realtors convey the value of solar to potential buyers. Our West Virginia program staff created an hour-long presentation and accompanying downloadable handout aimed at real estate professionals. The handout succinctly explains how solar works and offsets electricity costs, describes current cost estimates and available incentives for residential solar, gives specific examples of how solar increases home values, and provides a resource list for further information.

We were also a proud sponsor of the fifth annual Solar Music Fest in July 2018 — the state's first and only music festival entirely powered by the sun! This event brought people together in Fayetteville to support local music,

learn about solar energy, and inspire sustainability. The 2018 Solar Music Fest served as a local launch event for our New & Gauley Rivers Solar Co-op.

Policy and advocacy action

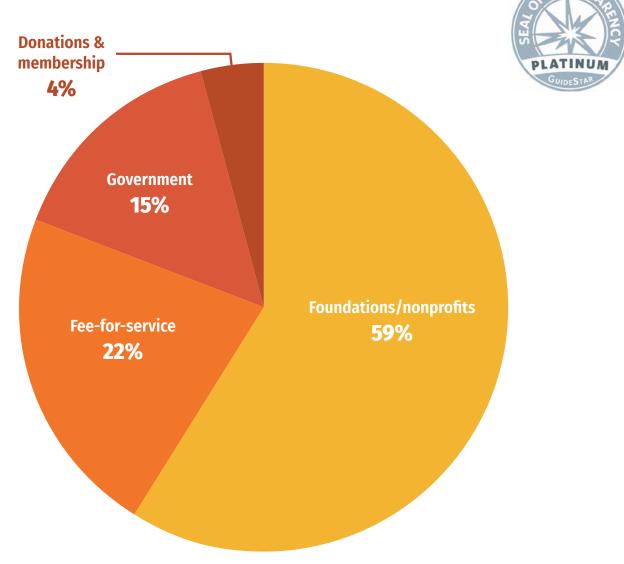
Our West Virginia program continues to play a leading role in advocating for the rights of solar owners and for pro-solar policies in the Mountain State. In our ongoing efforts to defend fair net metering rules for solar owners, we mobilized hundreds of West Virginia residents to submit comments to the state's Public Service Commission opposing changes proposed by monopoly electric utilities to weaken West Virginia's net metering law. We also successfully rallied West Virginia solar supporters to advocate for full mandatory funding of the USDA's Rural Energy for America Program as the U.S. Congress considered renewing the Farm Bill in 2018.

Our nonpartisan "Represent Us, Not Utilities" pledge campaign mobilized West Virginians to urge their state candidates for public office to refuse campaign donations from monopoly electric utilities. Eighteen West Virginia legislative candidates signed the pledge promising to refuse such donations, and the campaign attracted state and national media attention. Furthermore, as a founding member of the West Virginians for Energy Freedom coalition, we launched an ambitious campaign to legalize power purchase agreements — a powerful and widely available financing method for solar projects. Our efforts laid strong groundwork for future success and expanded the <u>West Virginians for Energy Freedom</u> coalition to 39 different member organizations, municipalities, and businesses.

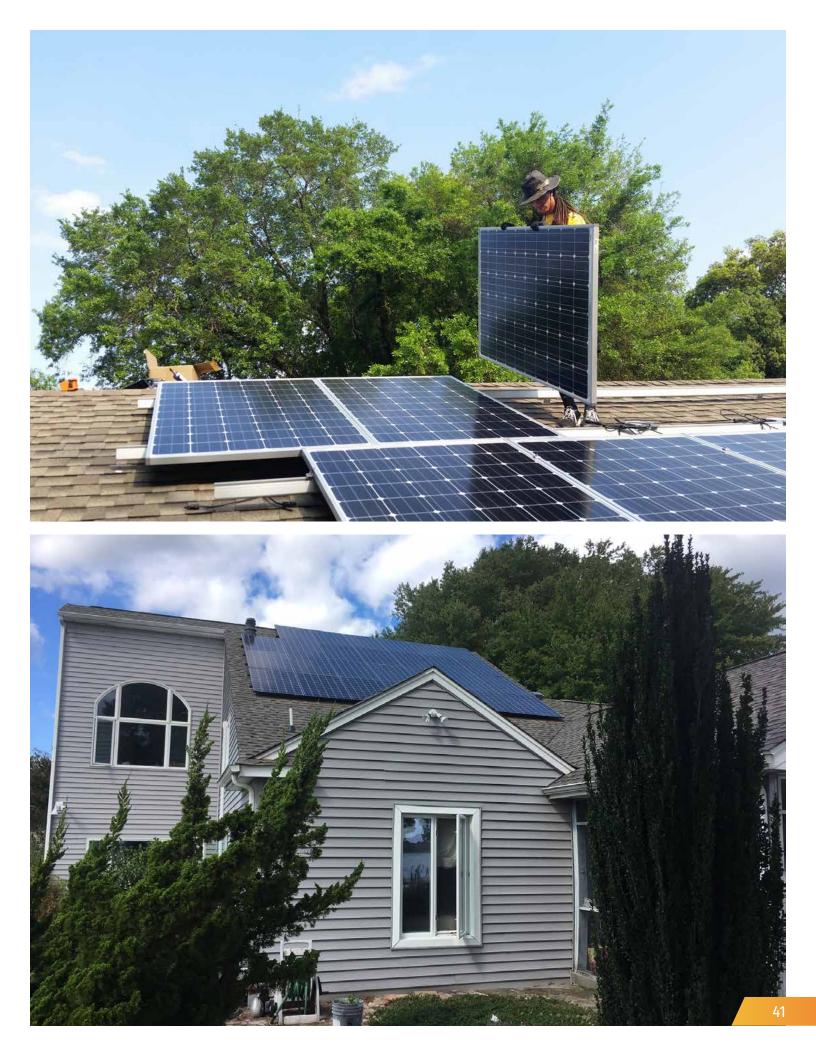


Financial resources and commitment to transparency

Solar United Neighbors receives financial support from private foundations, donations, membership, local governments, and earned income from solar co-ops. These diverse revenue sources help us grow our programs and ensure we continue to be financially secure. In particular, our solar co-op work generates a reliable, scalable earned-income stream that helps us narrow funding gaps, invest in organizational capacity needs, and keep our programs strong. Solar United Neighbors is a proud earner of the Platinum Seal of Transparency — GuideStar's newest and highest level of recognition.



Solar United Neighbors 2018 revenue





www.solarunitedneighbors.org