



# CLEVELAND SOLAR COOPERATIVE

A Case Study on the  
Founding of the Cleveland Solar Cooperative

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On behalf of Cleveland Owns  
and in partnership with the Climate Advocacy Lab



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*Cleveland Solar Cooperative is working to build a world where communities can come together to meet their own energy needs and to have fun doing it. Our thanks to People Power Solar Cooperative for sharing this beautiful image with CSC.*



# INTRODUCTION

In June 2019, the nonprofit Cleveland Owns convened The Lakewood Community Solar Fellowship, a free leadership development program focused on bringing resident-owned community solar to Lakewood, Ohio. A group of 7 residents took part, meeting for a few hours every Sunday in the basement of the local public library. The goal? Form a solar cooperative to fight climate change and build toward climate justice.

When the Fellowship started, most of these residents were strangers, but together they would go on to form the Cleveland Solar Cooperative (CSC), Ohio's first community-owned cooperative solar developer. How did this happen?

## **This case study has 3 main aims:**

1. Explore how the Lakewood Community Solar Fellowship laid the foundation for residents to take collective action for climate justice by forming CSC.
2. Outline key moments, challenges, and successes residents encountered as they formed the cooperative.
3. With wisdom and resources acquired in the formation of CSC, provide a sample toolkit for other communities aiming to take collective action against climate injustice.

This document was written by Will Cuneo, a member of the Lakewood Community Solar Fellowship, along with Jonathan Welle, the Executive Director of Cleveland Owns. Both Will and Jonathan went on to be founding members of the Cleveland Solar Cooperative. Most case studies are written from an “objective” third-person stance, but we decided to tell this story from the first-person for two main reasons. First, writing from the “I” (Will) and “We” (Will + Jonathan + and other founding members) perspective helps us reflect sincerely on the challenges and successes we’ve had together. Second, we want to share not only what we did, but what it felt like to do it.

Whether you're a curious newcomer, an experienced activist, or somewhere in between, we hope this case study will inform and inspire you.

*Let's get started!*



*Members of the Cleveland Solar Cooperative and friends meet to discuss energy policy and strategies to address the climate crisis.*



*Joyful Cleveland Solar Cooperative members celebrate the official approval of CSC's bylaws in summer 2020.*

## I. The Lakewood Community Solar Fellowship

### Overview

When Cleveland Owns issued an announcement for the Lakewood Community Solar Fellowship, they described it this way:

“As a Community Solar Fellow, you’ll learn and practice two types of skills. The first are tools to feel confident organizing your neighbors to build a clean, green economy for the 21st century, ‘turning what we have into what we need to get what we want,’ as Marshall Ganz, organizer and professor, says. The second is your knowledge around the economics and policy of community solar, and the practical steps for implementing community solar.”

Put simply, the Fellowship was a 4-week crash course in two skill sets: community organizing and solar economics and policy. Crucially, the discussions and activities were also designed to help us build relationships with one another.

### Framing: Rabbi Hillel’s 3 Questions

Each of us came to the Fellowship because we felt the urgency of the climate crisis. Heat is surging, extreme weather is intensifying, crops are failing, ecosystems are dying, and lack of resources is spurring conflict, unrest, and migration throughout the globe. What’s more, climate change affects everyone differently; the most vulnerable communities are hit hardest. We saw that our government and institutions weren’t (and aren’t) acting to save the planet, and we felt a responsibility to take action ourselves. But how?

This question isn’t just practical; it’s spiritual and existential. Because the causes of the climate crisis are complex and deeply rooted, meaningful climate action can’t be superficial. Real climate action must be transformative. That means looking critically at our commitments, our habits, and our perceptions.

In this spirit, the Fellowship opened with Rabbi Hillel's 3 Questions on how to live:

- If I am not for myself, who will be for me?
- If I am for myself alone, what am I?
- If not now, when?

A little confusing, right? What do you make of these questions? Take a few minutes to think, and then read on.

Rabbi Hillel's questions are enigmatic, and there's no "correct" answer to any of them, but they move us to reflect on ourselves. Ideally, they spark conversation about community, the interconnectedness of humans and nature, and the urgent need to create a more just world.

The first two questions made us ask, "who is my community?" and "what am I without my community?" They serve as a reminder that we live in relationship to others and to the environment. Even our individual identities are formed in this context of interdependence. The last question amounts to a challenge: why aren't you acting on your values right now?

These questions are useful for organizing because they acknowledge that 1) relationships define our world, 2) there is power in relationships, and 3) we can leverage this relational power to act on our values right now.

Inspired by Marshall Ganz, a Harvard professor who teaches community organizing, we used the Rabbi's questions to develop three similar questions that address modern organizing concerns:



*Members of the Cleveland Solar Cooperative at a solar conference in Cleveland.*

## A WORD ABOUT GROUP NORMS

It's important for any group to agree on a set of norms. Norms are the rules we agree to abide by when we're together. They can include general expectations like, "Be open and honest," or more specific rules like "Don't interrupt others." Norms help to maintain a positive group dynamic while working toward a shared goal.

It's smart to choose norms right away, before group dynamics begin to take shape. This way, you can be intentional about how your group grows and develops. We didn't keep a record of our norms after the Fellowship ended, but interviews with members indicate that we chose things like:

- Respect different points of view
- Contribute actively
- Call people in, not out
- Leave space for others to speak
- What's said here stays here
- Be mindful of time constraints

Our norms also included having a set of roles at each session. There would be a facilitator, who would help direct the flow of the conversation and work to include everyone; a note-taker; and a timekeeper. These roles were rotated among all group members.

We'd typically end meetings and by reflecting on how well we followed our norms. We'd then choose roles for the following meeting.

- Who are my people?
- What is our power?
- What change can organizing make?

As I said, we came to the Fellowship because we felt a responsibility to act on climate change. Whether we knew it or not, this feeling could be described as a call to leadership. The Fellowship curriculum defines leadership as "accepting the responsibility for enabling others to achieve shared purpose under conditions of uncertainty."

In the Fellowship, we would learn to understand and express this call to leadership through personal narrative. We would each also begin to seed and nurture that call to leadership in others through coaching and relationship building. This



relational skill set is the foundation for our collective climate action; it's what we use to build power with our friends and neighbors.

The following section will describe three activities we used to practice our organizing and coaching skills: the resonance exercise, the story of self, the 1-1 meeting.



*The final session of the Lakewood Community Solar Fellowship.*

### **Organizing Exercises: Resonance, Story of Self, One-to-One Meetings**

To do a **resonance exercise** (inspired by an activity practiced in [Relational Uprising](#), a training cohort), attendees got into pairs. Partner A's role was to tell a story from their life—it could be any story, as long as it had some personal significance. Partner B's job was simply to listen, refraining from asking questions, sharing opinions, or making interjections. At the end of a 5-minute period, Partner A wrapped up their story. Partner B then had 2 minutes to highlight a part of the story that resonated with them, saying "I heard you when you said..." or "I felt it when you said...". Partner B's goal was to reflect this part of the story using the same language partner A used (or as close to it as possible) and to avoid changing the story, sharing opinions, or judging it in any way.

When you have the role of Partner A (the storyteller), you get to tell your story without being interrupted. You also get to hear what parts of your story resonated with your listener. That's powerful stuff! As a storyteller, it can help you gain confidence, as well as awareness of the most resonant moments in your story.

When you have the role of Partner B (the listener) your goal is to practice active listening, centering your partner's viewpoint, not your own. Attendees found Partner B's job pretty challenging! Sometimes it's hard to be mindful and deliberate about our reactions to others.

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Before we left the first session of the Fellowship, we were given a homework assignment: construct a **story of self**, a short narrative about an important story moment in our lives. The story would express what brought us to the fight against climate change and should take no more than 2 minutes to tell. It should also include three elements: a challenge, a choice, and an outcome. This approach to story of self comes from Marshall Ganz's teachings.

In the next meeting, we shared our stories of self. After one attendee shared their story, the others would respond to it. What stood out? What were strong images or moments? What questions came up?

Kim told us about how she spoke at the Ohio Statehouse, urging the lawmakers to reduce greenhouse gasses and end fossil fuel extraction. Public speaking makes her uncomfortable, but here she was in front of lawmakers, fellow residents, and the media, using her voice. “I want my daughter to have a future,” she said. “So I had to speak up. That’s when I became a climate activist.”

Will shared about his youth playing on competitive soccer teams. He had been in love with the sport since he was little, but as a young teen, the pressure became too much: he was berated by coaches and didn’t fit in with his teammates. He felt like a failure. But then—against his parents’ protests—he quit the team. It was like being reborn. “In soccer, it felt like I was stuck in this culture that was toxic to me. I think capitalism is kind of similar: it’s hurting all of us, yet we’ve invested so much in it that we feel we can’t get out. I think together we can learn how to quit this system.”

For the Fellowship’s attendees, creating and sharing these stories of self was challenging. It required us to be vulnerable but controlled, emotional but succinct. Some of us shared more readily than others.

Our next task was to share this story of self with three people outside the program. By doing this, we’d get to practice refining our stories and gauging peoples’ reactions. We’d also get the chance to ask ourselves questions like, “What parts of my story drew people in? Did my story move someone to act or think differently?”

This stage was yet another hurdle for group members. How could we bring up climate change without feeling awkward and anxious? The climate crisis is hard to talk about; it’s serious and vulnerable, but it also feels too big to wrap our heads around. What’s more, we were afraid our stories might be dismissed or rejected, or that we’d make our friends and family feel uncomfortable. Yet these are the moments we need to foster: conversations that highlight the human side of the climate crisis, and call on others to reflect and act with us.

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The skills we practiced in the resonance exercise (sharing openly about a personal experience, listening without judging, and highlighting key moments) and in developing our stories of self (forming and expressing a personal narrative about a turning point that moved us

## CHALLENGES AND SUCCESSES

**Sharing intimate stories was a challenge.** At first, fellows were hesitant to get vulnerable with each other. We live in a culture where many of us don’t know our neighbors and vulnerability is often seen as weakness. It’s hard to let your guard down in front of a group of strangers! We overcame this through patience, encouragement, and acknowledgment of shared concerns: fairness, collective action, and social justice. We were willing to push through our discomfort because we trusted it would bring us closer to these values. We also recognized that solidarity can’t flourish in a culture that sees vulnerability as weakness.

Even when we succeed in creating space for intimacy, our work isn’t done. We have to maintain an environment that honors and protects that intimacy. Here’s an example: as we practiced sharing stories of self with the group, the policy was to cut someone off after two minutes, emphasizing the need to be concise. In one instance, though, this rule caused tension. A fellow began to share a story of self about his struggle with depression, but because he hadn’t had the chance to practice, he went over time. Because of his story’s vulnerability, he felt hurt and dismissed by being cut off.

By cutting the story short, the facilitator prioritized structure over vulnerability. Sometimes a decision like that is necessary, but if it’s not carried out carefully, it can risk alienating a group member. In retrospect, it might have been helpful to let that participant finish their story, thank them for it, and transition to a conversation about how its power could be harnessed in an organizing context.



**Overall, the organizing skills activities were a success.** Each activity introduced and cultivated practical organizing skills, but they also helped us get to know each other, identify common experiences and values, and build sturdy relationships.

We spent memorable moments sprawled on the library’s lawn in the summer sun, discussing ideas, plans, questions, and hopes. The library didn’t allow snacks in the basement, but we smuggled in some chips and homemade hummus (please forgive us, Lakewood Library). By coming together, we turned our fear of climate change into a source of collective strength. Even though we weren’t sure of the details yet, we were forming a plan to make change. We were in on something—we felt like co-conspirators.

From these early conversations, relationships between Fellows grew organically. We all went out to dinner together after several of the meetings, and many of us continued hanging out in our spare time.

to act against climate change) both came into play in the next organizing activity: the **one-to-one meeting**.

On its face, the one-to-one meeting is simple: it's a conversation between two people. Unlike a typical conversation, however, the one-to-one meeting has a concrete goal: to reach a commitment for shared action. What that commitment looks like will vary in each one-to-one and will be reached through the following steps: sharing attention, finding common interests, exploring strengths and values, and identifying an exchange.

The meeting rests on the idea that with shared attention, two people will find shared *interests*, which they'll begin to explore together. As they explore these shared interests, each person will learn about the other's *values and strengths*. Recognizing their interdependence, they'll begin to identify an exchange—that is, what each can offer to the other in service of their shared values. They'll end with a concrete commitment. An effective one-to-one typically takes anywhere from 15 to 45 minutes. Again, this approach to one-to-ones comes for Ganz's trainings.

The basic idea behind the one-to-one is that movements are built on shared commitments. A movement is only as good as its members' commitments to one another: my commitment to Jonathan to help him table at an event; Kim's promise to Ralph that she'll help him write a letter to his councilperson. Without these individual commitments, the movement crumbles.

For homework, each of us was asked to meet for one-to-ones with 3 other Fellows and report back on how our meetings felt, using questions like:

- Did we share our stories of self?
- Did we feel heard and understood by our partner?
- What were our common values?
- What strengths does each of us bring?
- How can we use those strengths to act on our shared values?
- Did we reach a commitment?

This one-to-one assignment helped us practice our relational organizing skills. What's more, it felt exciting to take these skills out of our library conference room and into the real world, meeting each other at coffee shops and parks to talk about climate action. As a group, we also began to reap the benefits of that work: by spending time together, exploring our values and strengths, and forming commitments, we were deepening our relationships in real time.



## Cooperative Economics, Energy Policy, and Energy Democracy in Practice

The relational organizing skills outlined in the section above can be leveraged for collective action on any cause. But the Lakewood Community Solar Fellowship was convened to address a specific and dire crisis: climate injustice. The Fellowship's big idea was that residents could use their burgeoning leadership skills to build climate justice by forming a solar cooperative together. This cooperative would democratize access to solar energy, contribute green energy to the grid, bring low-cost equity to the community, and build local solidarity around climate action.

**Why use the cooperative model for solar?** The cooperative model presents a powerful alternative to the large-scale monopoly system used by utilities. In the large utility model, only a few politicians, executives, and shareholders have control over decisions about what energy sources are used, who owns the assets, and how prices are set. These decision makers may live hundreds or thousands of miles away from the neighborhoods affected by their choices (e.g., where to put a new polluting coal plant). They also profit from the system. Most residents, on the other hand, pay rising energy bills at the same time that they suffer from the devastating effects of climate change.

Can you spot the problem? You got it: the residents don't have a say in how the energy system works, even though it affects them deeply. They also don't have a chance to profit from it. That's where the cooperative model comes in. In the cooperative model, energy assets are controlled locally by the people who use them. This is an example of **Energy Democracy**. Energy Democracy flips the script by putting decision-making power in the hands of the people most affected by the climate crisis.

As an Energy Democracy strategy, solar cooperatives are especially powerful because of their inclusivity. They can open a path to participation for residents who are excluded from the solar energy market: people with low or modest incomes, renters, and people with roofs unsuitable for solar. They also turn investment in solar into an act of solidarity, rather than an individual act of consumption.

### WHAT IS A COOPERATIVE?

A cooperative is a business that is owned and governed by its members for the benefit of those members. Traditionally, a cooperative adheres to a set of [guiding principles](#):

- voluntary and open membership
- democratic control by members (1 person, 1 vote)
- members' economic participation
- autonomy and independence
- education, training and information
- cooperation among cooperatives
- concern for community
- diversity, equity, and inclusion

There are many different kinds of cooperatives: worker cooperatives, producer cooperatives, consumer cooperatives are three of the main types.

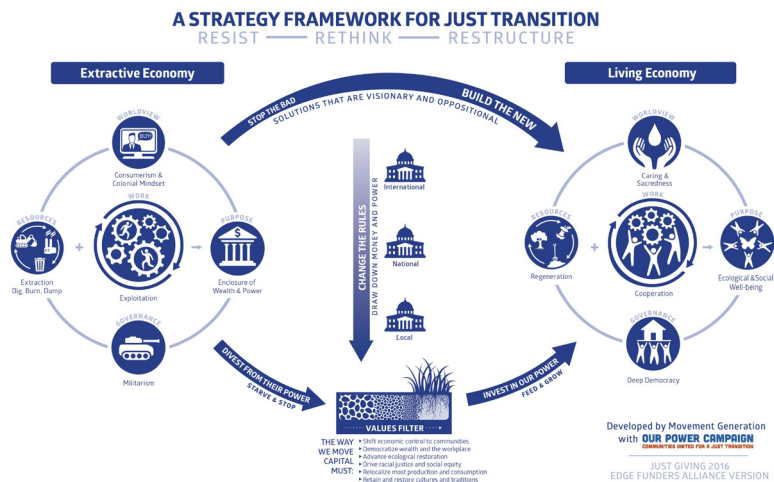
Cooperatives differ from traditional businesses in that they offer all stakeholders ownership equity and a voice in decision making. In practice, this means cooperatives are usually geared toward the interests of their membership as a whole rather than the interests of a select group of managers or shareholders.

**How does it work?** In a solar cooperative, people pool their money to buy energy assets like solar panels. Through their cooperative, they can then make democratic decisions about what to do with profits from those assets. They could start more renewable energy projects, like building more solar panels, for example; or they could distribute the profits among themselves to help pay their bills. By investing in renewable energy together, residents reduce their neighborhood's carbon footprint and build wealth in their community.

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When we began the Fellowship, we didn't know any of this. We had to learn it along the way. To start, we read the introduction to the book *Energy Democracy* (Island Press, 2017) and a short [article](#) about [Sunset Park Solar](#) in Brooklyn. These served as an introduction to solar cooperatives and the concept of Energy Democracy.

We also researched a few cooperatives from around the country that were already doing work applying the commons model to solar. Among them were [Cooperative Energy Futures](#) and People [Power Solar Cooperative](#) (People Power), solar cooperatives based in Minneapolis and Oakland, respectively.



The [Just Transition Framework](#) from Movement Generation is a compelling, holistic approach to understanding the climate crisis and how to craft a response equal to it.

The case studies we looked at were powerful because they gave us proof of concept: this model for action really works! Empowered by this knowledge, we moved from thinking abstractly about climate change to asking concrete questions about how we could start our solar cooperative: how much energy could be generated per panel? Who could become a co-op member? How would energy savings be distributed to co-op members? These questions soon led to a discussion about Ohio energy policy—specifically, the distinctions between traditional metering, net metering, and virtual net metering. To start a solar cooperative, you’ll need to determine what kind of metering your electrical utility offers. Here’s a rundown:

With **traditional metering**, a household’s energy usage is tracked on a meter. The household is billed at the end of the month for that usage.

But when someone owns solar panels, they aren’t just using energy—they’re generating it, too. With **net metering**, solar energy generated from the panels is channeled to the local electrical grid. In exchange for contributing that solar energy to the grid, the owner receives financial credit from the utility, which lowers their overall electricity bill. Nowadays, many utilities in most states allow for some form of net metering.

With net metering, the financial credit for any solar generation is tied to a single meter. But what if I wanted to share those credits with a friend who helped me pay for my solar panels? **Virtual net metering (VNM)** is the solution: it lets users share solar credits across multiple meters.

Importantly, VNM “allows the generation to be located off-site, often anywhere within the utility’s service territory, but still treated as though it is on-site for the purposes of off-setting electricity consumption,” according to the [Institute for Local Self-Reliance](#). You could build the array on an empty lot, for example, send all the energy to the grid, and distribute the resulting bill credits to 50 different households that helped finance the array. All 50 households would see a reduction in their electricity bills. That means even if I can’t put solar panels on my home because I’m a renter, I could buy shares in a solar array across town. That investment would make the local energy mix more sustainable and lower my electricity bill each month!

Virtual net metering is a key policy for solar cooperatives looking to do community solar projects. It allows members to pay for solar panels together and share the financial benefits of the energy they generate.

Unfortunately, not all electrical utilities allow VNM. We found this out the hard way: FirstEnergy, our notoriously corrupt electrical company in Lakewood, OH, doesn't allow VNM. Without VNM, only one meter can reap the benefits of a solar array. We could pool our money to buy a solar array, but how would we share the financial benefits?

At the close of the 4-week Fellowship, we didn't have a clear answer to that question. It would take more time for us to build out the business plan and financial model for our cooperative.

## II. Building the Cooperative

We spent the last day of the Lakewood Community Solar Fellowship deciding what to do next. In just 4 weeks, we had learned organizing techniques, studied the principles of the cooperative model, and become familiar with how that model could apply to solar energy. What's more, we had made relationships with each other along the way. How could we use our new skills and relationships to fight climate change together?

We had come together to explore the possibility of starting a solar cooperative, but at this key moment, there was still hesitation in the group. Starting a cooperative is a major task; understandably, some of us still didn't feel like we had the time or the know-how. We kicked around a few alternative ideas for action. We could create a local awareness campaign around co-ops and climate change, said one person. Another suggested we lobby for virtual net metering in Ohio.

Remember how we decided on group norms during our first meeting? One of the values we agreed on was that we should make decisions democratically—so of course, we'd need to hold a vote. In the end, we overcame our hesitation: we unanimously voted to continue meeting each week with the goal of starting our own solar cooperative. We felt the stakes were too high to stop now.

### Merging Lakewood and Detroit Shoreway

At this time, Jonathan, the director of Cleveland Owns and the organizer behind the Lakewood Community Solar Fellowship, was also meeting regularly with another small group of neighbors to start a separate solar cooperative. This group was based in the Detroit Shoreway neighborhood of Cleveland—only a mile or two east of Lakewood.

To those of us from Lakewood, the Detroit Shoreway group looked organized and professional. A few of them worked in business and entrepreneurship, and they had technical skills we felt we lacked. On the other hand, we had done a lot of work establishing our norms, setting our values, and forming our relationships with one another—building the kind of personal investment needed for the long-haul. Seeing that, the folks in Detroit Shoreway felt they could learn from us, too. Julia, a member of the Detroit Shoreway group who went on to

## THE LAKEWOOD COMMUNITY SOLAR FELLOWSHIP: CHALLENGES AND SUCCESSES

**Lack of technical knowledge (and confidence) was a real challenge for us.** Even though we had self-selected for this leadership development program—which suggests some level of motivation, drive, and self-esteem—we often felt we weren't qualified to propose solutions to climate problems. The fossil fuel complex, a dense web of law, custom, politics, capital, and technical information, can seem impenetrable. How were regular folks like us supposed to decode the practices of utility regulators, much less propose alternatives?

When we started to feel discouraged, it was helpful to remind ourselves that 1) we don't have to know everything, 2) we are the experts on our own experiences and our own stories, and 3) we'll learn as we go.



**We also should remember our successes:** in a short span of time, we gained considerable knowledge of a complex topic connected to our goals. We also did our learning together—as we'll see in the coming pages, shared knowledge is much more powerful than isolated knowledge; shared knowledge can spark collective action.



**Another challenge concerned the investment model:** the idea of pooling investments felt suspicious to some members—especially those critical of capitalism. Some of us were wary of trying to sell an investment to our neighbors. Was this just more “green capitalism?”

To address that question, it's helpful to look again at the cooperative model. The cooperative model works within capitalism, but it offers a different way of structuring incentives and relationships. Decisions are made from the bottom up, not the top down. By design, cooperatives are focused on mutual benefit, not growth and profit at all costs. You can see these principles at work in our bylaws, which we discuss in the next section.



become CSC's first Finance Director, put it this way: "It was obvious we could learn a lot from each other. So why were we building two versions of the same thing?" she remembers asking. "We could benefit from more commitment, more people on board."

We invited the Detroit Shoreway group to our home base, the Lakewood Public Library, where we met in a basement auditorium. Julia, a participant in the Detroit Shoreway group, recalls the energy in the room at that meeting, saying "In Cleveland, it's rare that there are two groups working on the same thing who haven't met before."



*Members of the Detroit Shoreway Solar Investment Cooperative, a group that eventually merged with the Lakewood crew to form Cleveland Solar Cooperative*

This meeting was a crucial moment in the formation of Cleveland Solar Cooperative. When the Lakewood Community Solar Fellowship ended, we knew that we wanted to fight climate change together, but we were still unsure if we had the skills to form a cooperative. All we needed to do was return to a couple of the framing questions from the beginning of the Fellowship, derived from Rabbi Hillel's spiritual teachings:

- Who are my people?
- What is our power?

Because they were neighbors who shared our goals and values around Energy Democracy, the members of Detroit Shoreway could be our people. By merging our groups, we'd doubled our members, skills, and connections: we grew our power. The momentum was growing.

Buoyed by our new allies, we turned to practical matters. To start our cooperative, we would need to create two key documents: a set of bylaws and a business plan.

## Writing the Bylaws

Any cooperative needs bylaws, a set of rules to spell out how members work together to achieve their shared goals. At first, writing our bylaws seemed a tall order; they are usually dense legalistic documents. We didn't know what they needed to include, so how would we even begin to write ours?

Yet again, when we felt uncertain, we looked for others who could help us. We contacted one of the cooperatives we studied during the Fellowship, People Power Solar Cooperative in Oakland, CA. They sent us an editable version of their bylaws so that we could use it as a template for our own. We can't thank People Power enough for this: getting our hands on an approachable bylaws template was indispensable.

This template was especially helpful because People Power was deliberate about making their bylaws easy to understand. Instead of creating a dense word document, People Power made their bylaws as a powerpoint in Google Slides and used cartoons to illustrate each slide. Using their slides and illustrations as a starting point, we were able to plug in language that suited our own mission and context. This kind of collaboration is a transformative aspect of the cooperative model, which stresses the importance of shared knowledge; the vision is that through shared knowledge, we can build an ecosystem of mutually supportive co-op businesses.

Since a set of bylaws is a legal document, we wanted legal help as we drafted ours. We got this help from the Cleveland branch of the Legal Aid Society. Through their community lawyering program, Legal Aid connected us with an attorney to help us define and meet our goals. They also allowed us to use one of their conference rooms for bylaws drafting sessions.

Members of the Lakewood group and the Detroit Shoreway group worked together to write CSC's bylaws, discussing them slide by slide. It was an open committee, meaning anyone who wanted a say could participate. This was nitty gritty work—it took a lot of patience, a lot of coffee, and around 20 hours of group time to create them—but it was a demonstration of our shared commitment. The process also forced us to refine our vision of the cooperative. As we drafted, we were confronted with questions like:

- Who can be a member of the cooperative, and how can they participate (slides 9-14)?
- How many members will be on the Board of Directors, and how will they work together (slides 19-20)?
- How will we strive for diversity in leadership (slide 22)?
- When will member meetings happen, and how will they work (slides 30-31)?
- Will CSC be a centralized group pursuing a single project, or will it be a decentralized vehicle that empowers various community groups to achieve their unique sustainability goals (we chose the latter; see slides 16-17)?
- How can we balance benefits between multiple stakeholders (slide 48)?

In their current version, the CSC bylaws are a 65-slide powerpoint. Bylaws are important because they establish the co-op's mission and spell out the nuts-and-bolts of how it'll go about achieving that mission. But it's also worth noting that a set of bylaws is a living document: the rules won't be perfect, and there should always be mechanisms for changing them.

[Read our bylaws here!](#) We hope that by sharing them we'll be able to help your cooperative get its start—much the way People Power helped us. If you'd like an editable version of these bylaws, get in touch with us through our [website](#).

## Governance

As we wrote the bylaws, we had to make decisions about how our cooperative would be governed. Who would have the power to make decisions, and how would they exercise that power?

Remember that cooperatives are guided by a set of principles, and that one of those principles is democratic decision making. Co-ops use the “one person, one vote” rule: when a decision is put to the membership, each co-op member gets one vote. A new member gets the same voting power as any other member—even one who holds a title, spends more time volunteering, or has invested more money in the cooperative. The “one-person, one vote” rule is meant to keep decision making power from becoming concentrated in the hands of a few, powerful members who have more time, money, or expertise than the others.

Key to the discussion of governance, then, is the question of membership. Who could become a member of our cooperative, and what would they have to do to join? We decided to set a low bar for membership, with the goal of being as inclusive as possible. To become a **Member Owner**, a person would have to meet three criteria: pay a one-time membership fee of \$20, be an Ohio resident 12 years or older, and sign a document agreeing to the bylaws and rules of membership (see slides 64-65 of the bylaws).

**What can a Member Owner do?** A Member Owner can do two main things: they can 1) lend money towards a specific solar project or 2) subscribe to a solar project, meaning that they can agree to host a new solar project on their roof or property. A Member Owner can also vote in matters that affect the cooperative and run for a position on the Board of Directors.

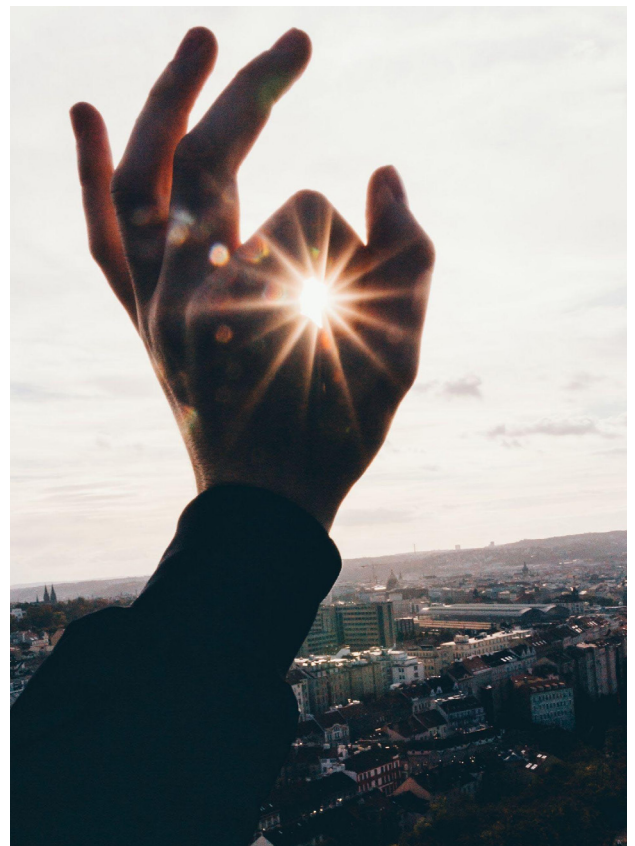
**CSC’s Board of Directors** has five members. Each member has a different role:

- The Governance Director
- The Finance Director
- The Communications Director
- The Politics and Policy Director
- The Membership Director

The responsibilities that come with each role are flexible and can be shared. Together, the Directors work together to make important day-to-day decisions for the co-op.

To strive for leadership that represents Cleveland in race and gender, we included a section about diversity on the Board of Directors (slide 22). This section says, “We aim for at least half of the Board members to identify as women or gender non-conforming and at least half of the Board members to identify as people of color.” To make CSC’s leadership more diverse, the Board has the power to appoint another seat.

Our bylaws also envision a different type of member called a Worker Owner. A Worker Owner is a member who is paid to do full-time or part-time work for the cooperative. Right now, CSC doesn’t have any Worker Owners; all of our members volunteer their time to the cooperative. Relying solely on volunteers has been a major challenge, though; when it comes time to build our first solar array, we may have to raise money to hire a **Worker Owner** who will help lead a membership campaign for the cooperative.





## THE BUSINESS PLAN IN PRACTICE:

To make this business model work, we need to find hosts that want to pay nothing up front, lease their roof, and see cost savings in month 1. Not a bad deal, right? Well, it's been harder than we expected.

As of September 2022 we are still working to complete our first project based on this business model. We are in extended negotiation with a local nonprofit that has a community-controlled board. In 2019 this nonprofit built an apartment building with affordable units, and it has a roof that's perfect for solar. We hope to build a 78-kilowatt array on that roof as our first project.

The leadership team at the nonprofit believes in our vision wholeheartedly. God, of course, is in the details. Their lawyers have been reviewing the PPA for months, and have raised some specific, challenging questions around liability and long-term risk. We are hopeful that with the support we've received from our legal representation we'll be able to address those concerns and complete the legal arrangement that anchors our business strategy. Then we'll be in a position to start growing our membership and raising funds, locking down plans to hire a solar installer, and generating clean, community-owned clean energy.

## Business Plan

Because of local energy policy, CSC doesn't have the benefit of virtual net metering. This means any array CSC builds has to be attached to a physical meter. Bill credits for solar energy generated from the panels will apply to that meter only. In other words, only one person or business can get direct financial benefits from the solar array.

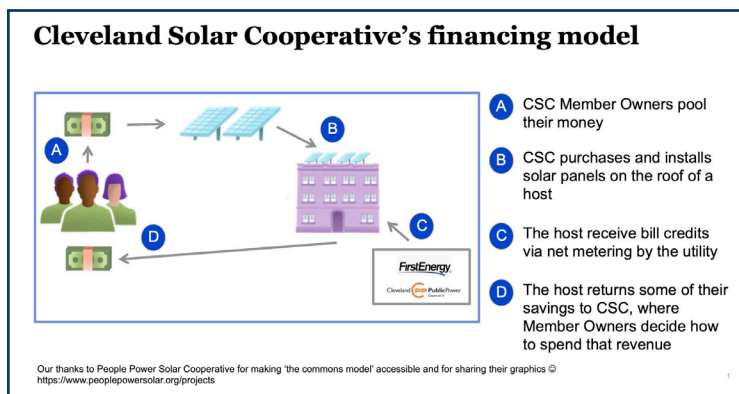
As a result, the incentive for members to invest is less clear. While they won't receive direct savings on their energy bills, they'll own equity in the solar array and have the potential to earn dividends from the cooperative at the end of each year—if those dividends exist, and if the cooperative chooses to distribute them. The graphic below gives an overview of CSC's financial model, which is an adaptation of the commons model pioneered by People Power Solar Cooperative and others.

The "host" is the building owner (be it a house, apartment complex, commercial building, or

nonprofit building) who would lease their rooftop to the cooperative, allowing CSC to build a solar array there and connect it to their meter. The host would receive two bills each month. Together, the total amount the host pays per month would be lower than what they're paying now by 5 - 30%.

The first bill would be from their utility. It would be substantially lower than without the array due to the benefits of net metering. The second bill would be from Cleveland Solar Cooperative. That bill would include every kilowatt hour produced by the array multiplied by a per kilowatt hour rate agreed upon ahead of time in a power purchase agreement, or PPA.

The image below represents this arrangement.



*A graphic depiction of Cleveland Solar Cooperative's model for financing solar arrays*

## Planning the First Election

With bylaws and a business plan in place, we needed to elect a Board of Directors. We were a relatively small group at this point (about 20 residents of Cleveland and the nearby suburbs were active in our meetings), and we'd have to recruit from among ourselves to decide who'd run for seats on the Board.

A few of us took responsibility for this recruitment. We created a short list of folks we thought would be good candidates, then called each of them to tell them why we thought they'd make great Directors. This was basic organizing; we used the one-to-one meeting skills we learned during the Community Solar Fellowship. Eventually, five of us committed to run for the Board, filling the leadership structure outlined in our bylaws: Kim, Ralph, Julia, Will, and Jonathan.

Everyone would be running unopposed, but we knew that the election was more than just a formality. Democratic decision-making is a fundamental cooperative principle; this first election would set the standard for future elections, so we needed to get the procedure right. Each candidate wrote a short bio and a statement about what skills and perspectives they'd bring to the Board. We collected these bios and sent them out to our email list several weeks before the election.

### First Formal Meeting: Ratifying the Bylaws, Electing Board Leadership

We still needed to:

1. Ratify our bylaws
2. Elect our Board of Directors
3. Submit our paperwork to incorporate as an Ohio cooperative corporation

Item 3 was simple: it took 15 minutes to submit documents online and pay a \$99 registration with the Ohio Secretary of State. Before submitting, we just needed to work with our lawyer to write a one-page article of incorporation describing our cooperative's purpose. It's worth noting that we didn't have to submit bylaws to officially incorporate with the state, but we did need them to get on the same page about how we would make decisions as a cooperative.

Internal democratic processes are tougher. Now we had to ratify the bylaws, but there were no official rules about how we should do that. Who could vote? How many votes would be needed? We encountered moments like these all throughout the formation of the cooperative, and they were telling. We'd look around, waiting for someone to tell us what to do, and then it would sink in: we're making this up as we go—as long as we're open and fair, we can do whatever we want. What matters most is that we work together to solve problems in a way that supports and empowers everyone. After some discussion, we settled on the following:

- **Who can vote?** We decided that anyone who'd been to 2 CSC meetings in the last 6 months would be eligible to vote on the bylaws and on the Board candidates.
- **How many votes do we need to pass a decision?** For the bylaws, we opted to seek unanimous approval: with a small group (16 people ended up voting), we thought full consensus was possible, and that building such a consensus would represent a strong start for the co-op.

We decided to ratify the bylaws and have our election during the same meeting, held via Zoom on May 24, 2020. To give all of our members plenty of time to read and consider the bylaws, we sent them out weeks in advance, inviting folks to read them carefully, ask questions, and bring up topics for debate during the meeting.

## BUILDING THE COOPERATIVE: CHALLENGES AND SUCCESSES

**Writing the bylaws represented a major success for us.** We shared responsibility by having 4 drafting sessions where folks could drop in and give input according to their interest and availability. This made the bylaws process feel inclusive and collaborative.



But as we moved into the final stages of our cooperative's formation, **the COVID-19 pandemic was upon us.** After months of meeting in person, sharing food, telling stories—becoming good friends, really—we were forced to adapt our organizing and strategizing to an online space. We faced a crossroads. Should we leverage our group's time and organizing power to help people most deeply affected by the pandemic? Or should we continue to focus on collective ownership of solar?

Knowing that the climate crisis isn't going anywhere, we decided to focus on solar.

Thankfully, we had enough momentum to ratify our bylaws and elect our leadership. But there's no way to quantify just how much COVID-19 may have affected our progress. The soul of organizing is interpersonal, and there's no question that our relationships were distanced, strained, and tested as the pandemic surged.

Our decision to stay the course toward cooperative solar highlights a challenge that has dogged us through the entire process, and that we continue to face now: **how do we continue to take action in the face of uncertainty?**

A core group of us planned each moment of the meeting out in detail: we would have time to recap some of our successes, discuss provisions of the bylaws, ratify the bylaws, hold our election, and celebrate. We had two dedicated meeting facilitators, a note taker, and a timekeeper. Still, when the day of the meeting came, we were nervous! What if things didn't go according to plan? What if our members didn't agree on the bylaws?

Thankfully, everything did go according to plan: by the end of the meeting, a group of 16 meeting attendees had adopted a set of bylaws and elected a leadership team for the co-op. Cleveland Solar Cooperative was born!

### III. Next Steps

The next section will outline steps taken by the CSC Member Owners and the Board of Directors to bring the co-op closer to building its first collectively owned solar array.

**Website and Email:** One key task was to create a simple but appealing website we could use to inform others about our group and attract new members. We also needed to find a way to manage our email communications. But because all we had were a few hundred dollars in membership fees, we'd need to do it all on the cheap.

There are a lot of options for web and email services, and they vary in price and ease-of-use. Right now, we use Mailchimp's free basic account to manage our listserv, send emails, and design our website. It's not the flashiest option, and the website builder can be frustrating, but it gets the job done. We purchase our web address and email addresses through Namecheap.

**Branding:** We developed our branding together and had fun doing it! To create a logo, we sourced ideas from our members by holding a logo design contest: anyone who was interested could put their design skills to the test for the benefit of the co-op (and bragging rights). The contest also gave us another opportunity to practice voting on decisions as a group. Three people submitted multiple designs, and co-op members voted on them. The winning design (which graces the title page of this document) was by Matt Li, an intern at Cleveland Owns.

**Financial Model:** To get the co-op moving, we had to translate what we learned about rates and policy and financing options into concrete numbers. That took a lot of work. Jonathan, the organizer with Cleveland Owns, took an online class in solar finance at the [Midwest Renewable Energy Association](#). It included a template financial model in Excel format that has served as the backbone for subsequent financial analyses for CSC projects. Jonathan and others at CSC have been modifying the financial model in Excel for several years, adding a project income statement, balance sheet, and cash flow analysis; an investment projections tab; and options to toggle certain scenarios on and off based on the details of the project. This has taken a lot of work, even for a team that has a background in financial analysis and business planning. There are dozens of details that affect the profitability of the project, and they all need to feed into the model so CSC has the best possible understanding of the financial implications of a given project.

For grassroots groups, there are two ways to address the challenge of building a financial model for a collectively owned solar project. The first is to get outside support. Competent solar developers have the tools to investigate the financial feasibility of a project. National groups like the [People's Solar Energy Fund](#) do too, especially as they scale up their technical assistance capacity. The second option is to put in the dozens of hours necessary to learn the finances yourself. For people with time and interest, there are great learning programs like [this one](#) from the University of New Hampshire, or the one Jonathan took with the Midwest Renewable Energy Association.



Capitalism is a beast. For those of us looking to build a more democratic economy, using the tools of capitalism walks a fine line. On the one hand, those tools are helpful because they're widely practiced and can offer modest returns to investors. On the other, those same tools can perpetuate the process of enclosure and exclusion that enables the rich to get richer. In this case, the overly complicated finance structure of solar projects can make it more difficult for Black, brown, and low-income communities and those with limited access to formal education to access the tools necessary to complete a community-owned solar array. Testing the limits of community capacity to develop solar is one of the things that has motivated Cleveland Solar Cooperative. Hopefully, each community group that succeeds will pass on the knowledge and skills to others, democratizing the solar development knowledge and skill set.

**Pitch Decks:** Another key task was looming: how would we recruit a building owner to host our first solar project? With the help of a few dedicated residents, we created a "pitch deck" template that we could use for conversations with prospective hosts. We use this template to construct a unique presentation for each prospective host, describing the solar array we believe we could build on their roof and the cost savings and other benefits they'd reap from the partnership.

First, we get a sense of the host's energy use and costs by requesting that they provide us with at least one recent energy bill. Then we use a free online software called [Open Solar](#) to map out a hypothetical solar array on their rooftop. Using information from the prospective host's energy bill and the software-modelled solar array, we can estimate how much money the host would save over the expected 25-year life of the panels.

Each pitch deck covers the following:

- About CSC
- Deal structure and timeline
- Installation design
- Production and cost savings estimates
- Construction process
- How we can market this project
- Highlighted elements of important documents (i.e., Power Purchase Agreement and Construction Agreement)

If you'd like to see a sample version of one of these pitch decks, get in touch with us through [our website](#).

## NEXT STEPS: CHALLENGES AND SUCCESSES

**We've successfully held multiple elections**, including some with contested Board positions. In our minds, friendly competition for co-op leadership signals that we're building excitement, motivation, and commitment among our members. We're also solidifying our group's democratic norms, which we hope will continue to make us a fair, open, and equitable cooperative driven by members' voices.

In collaboration with the Sierra Club's Ready for 100 campaign, Sunrise Cleveland, and the BC Block Club in Hough, **members of CSC organized and held Northeast Ohio's first regional Energy Democracy Summit on Zoom**. We worked with our partners to design a week-end-long, interactive [curriculum](#) that brought together more than 60 participants to learn about Energy Democracy concepts and practices.



**Many of our challenges come in the form of questions.** That's because we're still working on the answers today.

**We've had to stay patient as we search for a host for our first solar array.** We've had to ask ourselves, "How can we keep our members interested when our first project is caught up in legal negotiations? What steps will we take to re-energize our movement when it comes time to organize a membership drive to fund the array?"

**We continue to do this work in a country gripped by racial oppression.** We formed our cooperative as cities across the nation erupted in protest against the murder of George Floyd, Brianna Taylor, and so many other innocent people of color. We face an overwhelming question: what does it mean to be an antiracist organization—especially if your group is mostly white?

We included discussion of antiracism in our co-op's meetings as a recurring agenda item, and we brainstormed antiracist actions we could take on individual, interpersonal, organizational, and system-wide levels. But the proof is in the pudding: we haven't yet met our goals for racial and gender diversity on CSC's Board of Directors. In the long run, we won't build true equity in the solar energy space unless our leadership is representative of our city.

**We came together to fight the systemic oppression and exploitation of a crony-capitalist energy sector.** Yet, to move our group forward, we've had to emphasize entrepreneurship and technical expertise, sometimes at the expense of political education. It's crucial that we continue to consider how we can organize for radical change—especially when we finally begin our first big membership drive. This means reflecting critically how we use participatory democracy, share knowledge and resources, create coalitions, and build equity and power across lines of race, identity, and income.

We didn't start Cleveland Solar Cooperative just to build solar or to green the grid. We started CSC to democratize ownership of solar energy. If we succeed, we'll bring to life a model for an energy system with a bright future: one that prizes and promotes the well-being of everyone.

## The Work Continues

From humble beginnings as a 7-person study group in a library basement, Cleveland Solar Cooperative became the first community-owned solar co-op in Ohio. We've worked hard to get here; with more hard work and a little bit of luck, we believe we'll soon begin building our first solar array. We're on the path, guided by these truths:

- Big things start small.
- Relationships can spark change.
- Our community is our strength.

We hope that after reading about our organizing philosophy, the steps we've taken, and the challenges we've faced, you and your neighbors feel emboldened to start your own journey toward collective ownership and solidarity.

So if you like what you've found in these pages, make yourself a promise: tell a friend, neighbor, or loved one about it. Then ask them: what can we do to build a better future together?

Who are our people?

What is our power?

If not now, when?

## IV. Acknowledgements

Our special thanks to the Climate Advocacy Lab for sponsoring this case study. We're thankful for their trust and support through this process. People Power Solar Cooperative has supported this work for years in many forms, most recently for allowing us to use the colorful image of a world full of energy democracy. Thank you.



# Energy Democracy Tool Kit

## Organizing Resources

- Marshall Ganz's 'engagement organizing' tools
  - [Full online class on organizing](#)
  - Profile on [Grist.com](#)
  - [The Leading Change Network](#), an online community of organizing practicing the style of Ganz
- [Relational Uprising](#)
- [Listen, Organize, Act](#), a podcast with detailed discussions of organizing tactics and stories

## Energy Policy and Solar Development Resources

- [Midwest Renewable Energy Association](#)
- [Open Solar](#)
- [Solar Developer Learning Lab](#) by University of New Hampshire

## Energy Democracy - Learning Material

- [Energy Democracy Summit Curriculum](#), by Cleveland Solar Cooperative and Cleveland Owns
- [Institute for Local Self-Reliance](#) definitions
  - [Local Energy Rules Podcast](#)
- [Movement Generation Just Transition Framework](#)
- [Energy Democracy](#), Island Press (2017)
- [7 Cooperative Principles](#)

## Energy Democracy - Groups

- [Cleveland Solar Cooperative](#)
  - [Cleveland Solar Cooperative Bylaws](#)
- [Cleveland Owns](#)
- [Energy Democracy Project](#)
- [People's Solar Energy Fund](#)
- [People Power Solar Cooperative](#)
- [Cooperative Energy Futures](#)
- [Sunset Park Solar](#)



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