Katie Kienbaum (00:00:28):
Hi to everyone that's joining. Welcome. We'll be starting shortly. Just going to give folks a minute or two to get signed on to the webinar, so just hold tight. Feel free to get a glass of water, do whatever else you need to stay comfy.

(00:00:59):
Welcome to anyone who just joined. We are going to be starting the webinar shortly. In the meantime, please just hold tight, do anything you need to do, get a glass of water, mess with your audio settings, anything like that.

(00:01:57):
Ok, I think we're going to get started now. Kate, if we can move the slide forward one, please. Oh, back one, sorry. Too far. Welcome all. Thank you for joining the webinar today. The title of today's webinar is Advantage Local, how Communities Are Taking Control of Clean Energy to Maximize Benefits for All, and it is hosted by the Energy Democracy Initiative at the Institute for Local Self-Reliance. We'll move it forward one please.

(00:02:33):
So before we get started today, and before I introduce myself, let's go over some quick attendee logistics for y'all. So all participants today are going to be in listen only mode. That means you cannot unmute yourself, you cannot raise your hand and you cannot add comments in the chat. However, you can submit questions for our panelists and view all questions that other attendees have submitted using the q and a tool, which you can access using the q and a button at the bottom of your zoom window. And in that toolbar, you'll also find the option to turn on automated closed captions if you want to follow along that way during the webinar too. And one final note, we are recording this webinar today and we'll be posting a copy online and emailing a copy to everyone who signed up for the webinar along with the slides and links to any of the resources that we mentioned today. So keep an eye out for that.

(00:03:25):
Now that we have done that information, I can take the opportunity to introduce myself. My name is Katie Kienbaum. I use she/her pronouns, and I'm a senior researcher with the Energy Democracy Initiative at the Institute for Local Self-Reliance. And a big focus of my research here at the Institute has been around this topic of local ownership and community decision making for clean energy, but I've also spent a lot of time on federal and state level policy research and advocacy, especially here in Minnesota where I'm based including on issues like permitting, interconnection and utility accountability. For the purposes of today's webinar though, I will be our moderator as well as our presenter, and I'll quickly shout out my colleague at ILSR, Kate Taylor Mighty, who is on slide duty

today and who was really instrumental in organizing this webinar. So thank you Kate. We can move forward to the next slide please.

(00:04:26):
Our agenda today is going to be pretty straightforward. We're going to start with a brief introduction to ILSR'S 2023 Report Advantage Local: Why Local Energy Ownership Matters, and I'll go over some general concepts and definitions of local clean energy ownership. That's going to set us up for the panelist discussion where we're really going to spend the most of our time today and where we're going to dig into what local ownership looks like on the ground. And I'm so excited to introduce you to our amazing panelists and to hear more about what they're all working on. We will have time for audience questions during that portion, but please try to submit those as soon as they come up just to maximize the chance that we'll have an opportunity to either answer that live in our conversation or in the text in writing in the Q&A feature that I mentioned earlier.

(00:05:17):
Next slide. I will be starting though, like I mentioned with the quick background presentation before getting to that panelists discussion and Q&A. Next slide. Thank you. So as I mentioned, we published the most recent version of the Advantage Local report back in 2023, and you can see some excerpts here on the slide from that report. And the report aims to lay out the many benefits of locally owned clean energy and break down how monopoly utilities and systemic inequalities are blocking communities from accessing local energy ownership. It draws on past research from us, well as others into local ownership and community ownership, and it also presents a new financial analysis of different solar ownership models. The report also includes short case studies of, excuse me, successful projects and a list of public policy recommendations that we make. And I'll go over some key takeaways from this report to ground us before the panelist discussion, but I'm going to be moving pretty quickly through them and through the slides. So if you want more details, I'd definitely encourage that you go check out this report later and we're going to share a link to it at the end of the webinar and in an email following the webinar as well.

(00:06:36):
Next slide. So now that I've been talking of course for a few minutes about local energy ownership, local clean energy ownership, you might be wondering what we actually mean by that. In the report we defined it as when local people and groups have meaningful decision-making power over key aspects of clean energy projects, including construction operations and distribution of benefits. There are other terms you might hear that are pretty related, like community ownership, community-owned energy projects. We can definitely make distinctions between these terms, but I think for the purposes of our conversation and the webinar today, they're going to be pretty interchangeable. So I wouldn't try to get too caught up in thinking between those distinctions and just kind of assume they mean

basically the same thing for the purposes of our conversation. That all being said, you will notice that our definition of ownership is pretty open-ended.

(00:07:45):
Next slide please. And that is because we believe there are many different ways that locally owned clean energy projects can exist and be structured. So I have some examples in the pictures here on the slide, but some things we would consider to be a locally owned clean energy project include a community solar cooperative, a geothermal project developed by a neighborhood group, a wind farm that local farmers have built and invested in, or even a solar and storage project built on a community center that's serving as a resilience hub for the community and for the neighborhood. So there are a lot of different technologies, organizational structures that could really fit in our definition of local clean energy ownership. And that's really important because what works for one community might not work for another community. Every community is really different in that way and we like having a somewhat flexible definition to really account for that. Even just the idea of ownership might not resonate with some folks who believe that something so essential like energy can't be owned and can't be commodified in that way. And that's okay. What it really comes down to I think is just whether people and communities have that meaningful decision-making power that I highlighted on the previous slide.

(00:09:08):
So with all of that open-endedness in our definition, that of course means that there aren't necessarily always really clear cut divisions sometimes between what's a local and an non-local project. In the report to help with that, we identified three main dimensions across which a project can be more or less locally owned. And that is who the owners are. Is it residents or a local community group or is it owned by an outside company? Two, who gets to make decisions and have input on the project. Are community members, the ones who are driving those decisions, are they just consulted or maybe they're just informed about what's happening with a project. And then three, who is benefiting from the project including financially. Are those benefits flowing to the local community or are they being extracted from the community? So we would consider projects that fall more on the local side of those three dimensions to be locally owned, but really again, it just comes down to having that meaningful local control and decision making power.

(00:10:12):
For projects that do have those high levels of local ownership, there are a lot of benefits to the community that we found in our research. I have some examples here on the slide, but again, so much more detail in the report and I'm just going to highlight a few here now, but you can definitely go to the report for more. First. We found in our research that locally owned projects were associated with greater economic impacts including local jobs and energy bill savings. I think this is usually pretty obvious to folks and understandable when a community builds and owns its own project, they get to

keep more of the money for themselves instead of when a outside owner or outside investor is trying to maybe turn a profit off that project. We also found that there's a lot of research showing that people tend to favor local or community ownership of projects and that it is associated with more positive attitudes towards other clean energy development and it can even boost perceptions of a fair development process.

(00:11:21):
And I think that's really essential when we think about all the new clean energy that we need to build to transition to a cleaner and more just energy system. So that's a important facet in how we're going to actually move forward to our new energy system, a cleaner, more democratic energy system. But perhaps most importantly, we also found that local ownership puts power in the hands of people and communities to make decisions about their energy future and takes it out of the hands of these big investor owned utility monopolies that are really answering ultimately to their shareholders and not to the communities and not to us.

(00:12:04):
You'll see on the slide here I have pulled out some charts and report just to help illustrate some of the financial benefits of ownership. On the left I have a comparison of a household's earnings from two hypothetical projects, a traditional community solar project where they subscribe to a project, a community solar project owned by a third party company. And that's compared to a community solar cooperative where they are also a member, they subscribe to that project, but they're also a member owner of the cooperative. And you can see there's a pretty big difference over the lifetime of the project, over $14,000 in this example in terms of the money that the household is actually taking home at the end of the day. But on the right you can see I have a chart that lays out some of the broader economic differences from the same set of hypothetical projects, a community solar cooperative and then a more traditional third party owned community solar project. Again, notable differences there in terms of the value that's returning to the local community versus being extracted from the community.

(00:13:10):
And I'll take this moment to note that we do include individual ownership of clean energy in the Advantage Local report. And by that I mean something like a household deciding to put solar panels on its roof or a business deciding to install solar panels on its roof. This individual ownership does still create some benefits, especially for that household or the business who is owning the project, especially financial benefits for them. But it isn't really going to create all of the same community scale impacts as a project that is collectively owned or shared or owned by the community. The impact of local clean energy ownership is really maximized when there is some form of collective or shared ownership. And that's when we really see these benefits of community decision-making and community democratic and economic power realized. And that angle is where we're really going to be

focusing during our panel discussion more on these shared and collective forms of local clean energy ownership and not so much on the individual forms of local clean energy ownership just because that is where we see all these great benefits.

(00:14:32):
Speaking of benefits of course, if there are all these benefits, why isn't locally owned clean energy everywhere? Unfortunately, we do know that there are a number of barriers holding local ownership back. For instance, there are historical disparities in terms of clean energy access across both race and class. And some of the reasons for this are related to some big complicated interlocking structural barriers that we face. Things like wealth inequalities and discriminatory financing practices and differences in home ownership rates in part stemming from a very long history of redlining and housing discrimination in our country. So all of these big, big sticky structural challenges do impact energy as well as a lot of other aspects of our lives and our communities. But there are also problems very specifically related to the energy system and then looking at that energy system, one big barrier we see is that monopoly utilities are working off this a hundred year old business model of centralized control where they own everything, they own the wires, they own the power plants, they are typically very opposed to letting communities meet their own energy needs with local clean energy and they will lobby politicians to keep things the way that they are.

(00:15:59):
That's of course a barrier on its own right, but it really influences the next two points I have here on the slide as well, which is the lack of state enabling policies that let communities build clean energy projects and receive compensation for the energy they produce as well as the inadequate financing opportunities that are available for communities that want to build their own projects. Next slide please. Thank you. So I hate to end on a bit of a bummer note in terms of the barriers, but we are going to be moving on to our panel conversation now where we'll hopefully have a chance to talk about ways that communities have been overcoming these barriers and making these impacts of reality for their communities and their residents. And again, that was a very quick overview of the report, but if you want more, you can always go check out the full report and you're going to be able to see more there. We're also going to dig into the details here during our conversation. So with that, it would be great if I could get all three of our panelists to join me on camera now so I can introduce you and everyone can see your faces.

(00:17:10):
While they're doing that, I want to say that I am so honored to introduce this group of panelists today. They are wonderful people and very inspiring energy democracy practitioners all around. I am going to start with Crystal Huang, who is the co-founder and CEO of people Power Solar Cooperative. She's a grassroots community builder and a 2020 broad and bury fellow. With more than 15 years of experience deploying climate solutions technology, crystal has played a crucial role in coordinating

the Energy Democracy project, which brings together dozens of groups across the country to advance the national movement to democratize energy. Welcome Crystal. And next up we have Sachiko Graber, who is the national partnerships lead at Cooperative Energy Futures, which is a cooperative solar developer here in Minnesota, which is where I'm based too. Sachi is also the founder of Wax Wind Consulting, LLC, which provides climate and equity support to mission aligned organizations and they have formally worked with the Nature Conservancy, RMI, and the US Peace Corps.

(00:18:20):
Sachi recently authored a report for CEF on community economic Development through Distributed Solar, which we will share a link to later as well. And our final panel member today is Yesenia Rivera, who is the vice president of Solar Access and Affordability at Solar United Neighbors. In her current role, she leads SUN's team of energy advocates and expanding access to solar. Yesenia has been a community organizer her whole career working alongside climate impacted communities with a passion for energy justice. She previously worked as a tenant organizer, a housing counselor, and led SUN's Solar for all work in DC. Welcome all. I think we can actually turn off the slides now so we can see everyone's faces a little easier and have a little bit more of a conversation feel here. And I'm going to kick off the discussion by asking everyone, how are you and your organization's growing and advancing locally owned clean energy in your communities? And I'm going to start with Crystal please.

Crystal Huang (00:19:24):
Yeah, thank you Katie. Thank you so much for that really helpful grounding presentation for us to think about local ownership of energy and for people Power Solar Cooperative, we advance locally owned clean energy in our communities with the mission. Everything we do within People Power Solar Cooperative is to create a just and inclusive transition to renewable energy by enabling everyone to own and shape our energy future. And I'll just reiterate the part about enabling everyone to own and shape our energy future and it's about owning and shaping our future because change is always happening and especially in this critical moment of our society, how do we make sure that it's happening in the way that we get to be in the driver's seat to shape the future that works for us, not just for the few people. And I say that to also really highlight the fact that right now any most forms of energy participation is around participating in the energy transition based on the energy future by the wealthy people like Elon Musk buying their products instead of actually trying to figure out what do we do within our community that can shape the future the way that we want.

(00:20:39):
So energy, I mean I think everyone's here because we all understand how important energy is in terms of the role it plays in our lives. It moves us, feed us, connect us, and so much more energy is our power and how do we do it cooperatively so we don't have to rely on the very system that is killing ourselves and our future generation. And at People Power, we have about 160 members and the way we do it is we deepen connections with energy and with each other because we recognize very quickly that you

cannot own and shape anything that you don't understand. So we have to understand what energy truly is and the longer the more we keep thinking about energy as something that we just have to pay bills for and just keep using mindlessly, we'll never break out of the cycle and take back control.

(00:21:29):
So we have to really deepen that connection. Then from there, we need to learn and expand our imagination together to see what we could do within our community, what power we already have, and then build tangible alternatives to what we have today. I mean people Power Solar Cooperative exists in California, which as many people might know is especially in Northern California as PG&E, the very company that murdered more than 80 people from mismanagement of the energy infrastructure. So we need to figure out how to break away. And also we happens to be in the state where people who are not in California might not know our solar is under threat. The rights to get solar on our own roof in our own community has been under threat because investor owned utilities see this as a competition. So it makes it really hard for people as community to come together and build locally owned projects.

(00:22:28):
So at People Power Solar Cooperative, we've been exploring this new idea of, well, instead of just looking at electricity and having to do policy advocacy, how do we actually create a place where our members can practice understanding of energy and understanding how to coover it work together? So we've been looking at heating as a way to create that environment. So instead of geothermal, we're looking at solar thermal because it's a lot cheaper to build and build it within our own neighborhood. The initiative we call is called Oak TREE, which stands for Oakland Thermal Renewable Energy and Electrification, and folks can look it up. oaktree.eco is one thing and I'm happy to say more, but for that, that would be my little opening remarks.

Katie Kienbaum (00:23:16):
Thank you. And we can also, yeah, we can add the link to that in the chat as well. Now, thank you Crystal for that overview and I think that was very helpful to start with you and have that grounding too. So I appreciate that and I'll hand it to Sachi next, how are you and Cooperative Energy Futures working to advance locally owned clean energy?

Sachiko Graber (00:23:39):
Yeah, thank you Katie, and thank you so much for the opportunity to join for this webinar. This is, as Crystal was saying, such an important topic and one that feels daily more important as we think about how our energy systems and all of our systems are unfolding around us in the country. As Katie mentioned, I work with Cooperative Energy Futures, which is a Minnesota based clean energy cooperative. So we're a member owned entity. We have about 1200 members and growing right now and we develop own and manage clean energy resources. We have about 12 community solar gardens

across Minnesota, and those are specific solar resources that we are enabling people to access for folks who can't afford to put solar on their roof for folks who maybe live in an apartment and don't control the roof of the building. And for people who simply can't, can't access, can't access these types of resources because they're renters or there are other barriers, we are really focused on making sure that these types of communities are able to access the benefits of the renewable energy.

(00:24:52):
In addition to community solar, we also have an affordable solar program where we're working directly with affordable housing units to make sure that again, we're not leaving populations out of the transition and we're in the process of developing some other tools as well, including a district geothermal project in the city of Minneapolis and some energy efficiency financing programs. So why does all of that matter? Because those are all things that the utility can do. I think to Crystal's point, the utility, the electric utility, the gas utility, the utilities that serve us are monopolies that are guaranteed to make a profit off of our backs. And through Cooperative Energy Futures model, every one of our members is a co-owner of the resources that we develop as the co-op profits. Those profits are redistributed to the members and we take off that margin of profit that usually would be skimmed off by the utility and that we would never see again. We also, again, because we're co-op, our board of directors is composed of members and so every member has the right to vote in the board elections and every member has the right to run to be a director. And this means that the decisions that are made at the co-op level are made by the people that it is serving and for the membership. So we see those as the financial benefits and the ability to really, as Katie said in the presentation, to govern the system as critical components to local ownership of our energy assets.

Katie Kienbaum (00:26:23):
Thank you. I pass it to Yesenia.

Yesenia Rivera (00:26:27):
Thank you Katie. I now get to go behind Crystal and Sachi. That's a tall task, but I'm just with Solar United Neighbors, we are a national 501C3 and we help people go solar, join together, and more importantly fight for their energy rights. We believe everybody should have a say on where their energy comes from and what their energy source is. We fight for a just transition because we think that this transition to clean energy is happening no matter what the bottom line is, who gets to control it, who gets to benefit from it? And we think that local communities should have a say in what this transition looks like and where our energy comes from. And we do this through several ways, one of which is advocating to remove barriers and policy barriers to solar adoption like Sachi and Crystal said, not everybody is able to install solar in their own homes, but there are things that we could do that would still help folks regardless of their home ownership status, regardless of their income levels have access to clean, affordable energy.

(00:27:32):
And so we're fighting for expansion of community solar across the country. Not every state unfortunately has access to community solar. We have several different projects where we'll help communities organize advisory boards and make decisions on whether or not they want to develop their own projects or maybe they want to work with a developer. It's up to the community. There's no one size fits all. Every community knows what works best for them and our mission is to work along them, listen to them and help them move along in whatever direction they chose to. We develop microgrids in Puerto Rico. We are doing resiliency projects as well across the country because again, not everybody has access to solar in their own rooftop, but that doesn't mean they can't access the benefits of clean energy, whether it is building a resiliency center in a neighborhood where even if folks don't have the space on their rooftop or their house is not in good enough condition to install solar or they just do not have the finances to do so, if there's a resiliency center in that community, they still have access to clean energy If something happens, we are seeing the number of climate disasters just increase every day and we have to make sure that the frontline communities, the communities are bearing the brunt of our energy system have access to lifesaving resources.

Katie Kienbaum (00:28:59):
That's so true. Thank you Yesneia. And you had to go last on that question, but I'm actually going to hand it to you first for this next question. So get ready. So I briefly in the presentation covered some of the benefits of locally owned clean energy, but I want to hear from y'all what are the most meaningful or maybe even the most overlooked benefits that you see in your work and with the communities you partner with. And I'll pass it to you, Yesenia.

Yesenia Rivera (00:29:26):
Thank you, Katie. So I think we underestimate the importance of locally owned and locally developing systems. I'm going to use for example, one of the pilots that we ran in Boston. We worked with communities of Dorchester, Roxbury, Mattapan and Boston, Massachusetts, and we organized a community advisory board. This was composed out of residents of those three neighborhoods and we helped educate them on what it meant to develop community solar. And they organized in a way that they decided that beyond just cutting their bills by installing solar, they wanted to do it in a way that would actually bring in benefits to the community and that meant controlling where the projects are cited. So in order to do that, they had to develop their own projects. Developers have their own ideas of which sites are more profitable, they wanted to control that. So they incorporated as a solar cooperative in Boston in order to control how they cite the projects. And for them, it was very important to cite the projects in those three neighborhoods because that meant infrastructure investment, that meant access to workforce development. And beyond just cutting down their energy bills, they were able to generate wealth for the community and for their members.

Katie Kienbaum (00:30:52):

Amazing. And I'll share it, we actually, Yesenia connected us to someone at the Boston Community Solar Cooperative recently, and we have a webinar that I'm going to share a link to that we just recently published too. If you want to hear more about that project. Sachi, did you want to jump in here too?

Sachiko Graber (00:31:10):
Yeah, thanks Katie. I'd love to build on Yesenia just shared Cooperative Energy Futures recently had a collaboration with the Department of Energy to research and write a report around how distributed solar can lead to community-led economic development, which I'd love to share the link with folks, but everything that you just said, Yesenia is really resonating with me. We heard a ton from communities and from community-based organizations and especially disadvantaged community members about those workforce benefits and about the ability to save. I think the component that I hear the least about, but that I heard the most from community members that they wanted to see as a benefit from solar was actually around generational wealth building.

(00:32:00):
In my day to day before really diving into these topics, I hadn't really thought about generational wealth as something that I would use clean energy as a path to get to. But what we heard from a lot of folks was those bill savings, if you're saving 20 bucks a month, that's money that you can be putting into the college fund for your kid. That's money that you can be using to put towards the family compound or the family house. And importantly with cooperatives or organizations like People Power Solar co-op or Cooperative Energy features, if we're able to redistribute the profits from clean energy projects back to the members, that to look a little bit more than monthly silt savings, that starts to look more like maybe a couple hundred dollars a year. And if you're able to take that kind of money and again, put it into a savings account, put it into your property, put it into your kids' college fund, that has really meaningful impacts on how families perceive of wealth and how they're able to benefit in our current economic system.

Katie Kienbaum (00:33:05):
Definitely. And I think just even having the actual asset and having community ownership over that, that can't be understated too. So definitely just plus one to everything you said, Sachi. I think I in the presentation and then I think all of you in your introductions did point to some of the barriers that communities face when they're trying to develop their own locally owned projects. What are some of the biggest barriers to locally greater local ownership of clean energy projects that you see in the communities that you work with? And Sachi, I'm going to bounce it right back to you to start.

Sachiko Graber (00:33:53):
Absolutely. If I can figure out how to unmute myself, I think about these barriers is coming in and sort of tiers based on who we're talking about. So when we think about individual barriers to accessing

these resources, I often think about kind of fear of clean energy systems, especially when we're working in communities of color and lower income communities. There are lots of solar scams out there and so many folks have learned, anytime somebody comes and knocks on my door and tries to talk to me about solar, I just know that's going to be a no. And many people also know anytime the deal sounds too good, that's something that you should look away from. And so if somebody says you don't have to put any money down and you're going to save money every month, how can that be true? Because why would our utilities not already be implementing these models?

(00:34:46):
And so at the individual level, I think there can be a lot of barriers just to engaging with the concept of solar or local clean energy ownership in general, scaling up from the individual level, I think about the community and as we know, there are all kinds of systemic barriers that are discriminatory and can be racist and can be exclusionary. Access to affordable financing is one of those barriers where if you don't have the right relationships, if you don't have the right cashflow model, if you don't have the right history of financial transactions, it can be extremely difficult to access the type of financing that you need in order to build one of these projects. And then finally, going from the individual to the community to the structural level, especially here in the us, there are a lot of structural pieces that can prevent folks from seeing the types of benefits of clean energy that we would want to see.

(00:35:42):
And I think the investment tax credit, the ITC coming from the federal level is one of those, the ITC is set up as a tax credit because we know that big corporations have high taxes and can benefit from tax credits. Although there have been some tweaks under the Biden administration to try to increase the accessibility of this benefit, it really, it is inherently set up to benefit wealthy corporations and inherently set up to disadvantage smaller and community-based institutions. And so thinking about how our whole system is working to create access, I think is really critical when we're thinking about the barriers to these things.

Katie Kienbaum (00:36:23):
Absolutely. Crystal, do you want to add to that?

Crystal Huang (00:36:27):
Yeah, adding to then from what Sachi had mentioned from the individual level, community level, structural level, I'll add on to a cultural level as well because we do live in a society where for more than 100 years now we've been told that just pay your bills and don't worry about what's happening at the backend. And it's in a nutshell, a summary of our relationship with energy. We don't even think about, I remember reading this report more than 10 years ago now that I forgot who did it, but it was basically a research of the number of the length of time that an average Americans think about energy. And the answer is seven minutes is the number of, it's the length of time that people think

about energy and probably now is much longer now because of a lot of natural disaster power shutoff happens a lot more frequently.

(00:37:19):
So people, they think about energy more often now, but how are you going to take control of energy, gain benefits from it and build wealth around it if you don't even think about something like that, like energy. So to me, I really feel like the biggest barrier to local ownership is around our relationship with energy, our relationship with power, our relationship with ownership and our relationship with governance. I think everything shared so far. Of course these are really real barriers, but until we can really change our relationship with energy, we're not going to change how we live in our society and be able to start building community wealth. There's a reason why we're just a consumer. If we just keep consuming, they can start to accumulate all of the benefit when we are just a consumer working many, sometimes two or three jobs just to pay our bills. So that's the biggest one and I don't want to keep going on and on about that, but that's that. And I'll pass it over to Yesenia.

Yesenia Rivera (00:38:28):
Thanks Crystal. I have to agree with everything. As and Crystal have mentioned, I think one of the biggest barriers is infrastructure beyond whether or not people own their home, whether their roof is good enough, we are working in communities that have been ignored and relegated for decades sometimes. So when you're bringing in these, especially when you're bringing in large community solar systems, it requires a ton of infrastructure investment and there's always a fight on who gets to pay for that, who needs to pay for the transformer upgrades, who needs to pay for any upgrades needed in order to plug in those systems into the grid. And like I said, these are communities that have been disengaged, that have been ignored for decades, and it's kind of unfair that while they've been paying for infrastructure upgrades everywhere else in their states and their cities, now they're asked to pay for infrastructure investments that they need.

(00:39:28):
So that is definitely something that we need to work on and in order to level the playing field, and even if we address the infrastructure, you still have the barrier of knowledge. You don't even know where to begin with when you're trying to think about how do I develop a community solar project? How do I bring solar into my community? And that's where organizations like ours and many of those that are here actually work on making sure that people understand what's involved in the process and knocking down that barrier because knowledge is power and having that knowledge really does move a lot. It moves the community forward, but at the end of the day, without the incentives, it's going to be extremely hard for disadvantaged communities, for frontline communities to actually develop their own projects if they wanted to. I know that we're all looking at the federal incentives. They came through the IRA and the ITC, but the states and cities can do a lot. They can do a lot to address and if you want an example of that, just look at dc, look at what DC did with their own local sulfur all, which

is the model that the feds use to develop theirs. They are finding the polluters and they're using those fines to help low and moderate income families across the district have access to clean, affordable energy. So there are things that we can do at a state and local level,

Katie Kienbaum (00:40:54):
And I'm going to actually thank you for that example of how to overcome some of these barriers. I'm going to actually then ask you again, how are you and the communities you're working with overcoming these barriers that we've mentioned? And before I have you answer that, I'm just going to remind folks that if you have questions for our amazing panelists, please drop them in that q and a feature. I'll be getting that to that very soon. So if your questions aren't there, we won't get to, we won't be able to see them, we won't be able to answer them. But back to my question, how are the communities that we work with overcoming these barriers that y'all have laid out? And I'll start with Crystal for this one.

Crystal Huang (00:41:39):
Yeah, the barrier I mentioned is cultural. It's not easy to just change culture overnight, but at the same time we are breathing culture all the time, so how do we actually change? Well put in some more awareness about what energy is, what our relationship with energy is right now and how we can change that, and also changing our relationship with power ownership governance. I think one example that we'll start with is people Power Solar cooperative. Our bylaws is in cartoons and we'll have things like, oh man, right there, the cartoon that talks about all the details of how to be part of the cooperative. It's all written in a way that's a lot easier to understand so you're not just part of this thing that you bought shares with and you sit back and don't think about it. Ultimately, a cooperative is only a cooperative, you can work cooperatively with each other and how do you actually lower that barrier for people to figure out how to work with each other when we're working with each other on something that people are not used to even talking about, let alone understanding it.

(00:42:43):
So understanding how to be with each other in an assessable way. It's one key way we do it. We of course have a lot of popular education materials around what energy is, what our energy system is doing today on our website, we've done a lot of workshops and different games and activities that get people thinking about energy. I'm really literally talking about right now a lot of people's relationship with energy is something like people want to make sure they're protected during power outage, but if you ask them what do you need power to do? A lot of people they just go blank and they have no idea. And they'd be like, I need a generator. Okay, well generator generators, it generates power. What do you need the power to do? So we know how to size your generator. They wouldn't know how to answer that question.

(00:43:26):

And that is the reality of most of us because we just don't think about energy very much. So at People Power Solar Cooperative, we do a lot of popular education, create resources to get people thinking about energy more proactively so we can start designing what that will look like. And I mentioned earlier, briefly about the Oak Tree initiative that we've been working into looking into. We are now expanding into building out things like how do you actually do workforce development program and education programs so people can actually start thinking about how to not only be a consumer, a smart consumer, but also building it, maintaining it, and understanding how to own it and understand the economics around it is something that we're working on. So then the energy infrastructure is not just about the electricity or the heat that you're getting, but it's about, as Sachi mentioned, how do you build generational wealth in your community and build legacy and you actually have systems that people will not only create jobs for but also get local their own identity pride around as they shape the future of their own community.

Katie Kienbaum (00:44:37):
That's great. And I feel I'm just struck by listening to all of you how each of your organizations and each of the projects you're working on are really taking multiple approaches to addressing the challenges that communities face and looking to really lean into all of these multiple benefits of building these locally owned clean energy systems. It's not just about lowering bills, it's not just about building something that folks can get local jobs at. It's really about doing all of this and you're tackling that mindset change. You're tackling all the technical issues as well to really make that happen. And I think I'll pass it on to Justia next to answer that question of how you and the communities you work with are overcoming these barriers.

Yesenia Rivera (00:45:23):
Sure. I'll tackle the infrastructure one since again, not everybody has access to their own roof or a roof in good enough conditions to install solar. That's why we're building several resiliency centers in Puerto Rico. Again, you have communities that desperately need access to solar and storage because you have a grid that is constantly failing, but at the same time, the housing stock ownership, the finances isn't there for everybody to actually install solar plus storage, which can be expensive. So we're working with different community centers and installing solar and storage in these community centers. So they form sort of an oasis in the middle of these communities. When there's no power, there's a place for seniors to go to charge their phone, take a little breather, store their medicines, and for the community in general to have a place to come to when the power is off. And I said when, because it's Puerto Rico and the power is always going out, especially during hurricane season, and unfortunately the grid hasn't recovered since Hurricane Maria, so it's a reality that millions of Puerto Ricans every year. So one of the ways we're doing this said is building resiliency centers on the island to help folks have at least a little spot where they can get a breather from the madness when the grid goes down.

Katie Kienbaum (00:46:56):
So important. And Sachi, would you also like to answer this question?

Sachiko Graber (00:47:04):
Yeah, thanks Katie. Just listening to you talk Yesenia about the need to build out some of this infrastructure and to provide the resilience, my mind for better or worse, automatically thinks about the economics of that and thinks about, as I was mentioning, the community level barriers to accessing affordable finance to build out those projects and to be able to have local ownership over one resource that I'm thinking of that Cooperative Energy Futures was actually one of the co-founders of is the People Solar Energy Fund. PSEF is basically a co-op of co-ops and Crystal's organization is a member of PSEF. Cooperative Energy Futures is a member of PSEF. And so it brings together all of these great co-ops that are working on local ownership in their local areas and it provides a mechanism to aggregate. One of the challenges working at the community scale, like I said, can be that we can't access affordable finance.

(00:48:05):
One of the problems with affordable finance can be that you don't have the balance sheet or you don't have the experience or you don't have the project partner, you don't. You can have all of these different reasons that a traditional lender will look at you and say, no, this isn't the type of lending that we do. PSEF not only works to provide certain types of debt to cooperatives who are building new projects, they also have an insurance pool. So again, if you're trying to ensure one project, you could perceive a pretty high risk, but once you start to aggregate, you spread the risk over a high number of projects, that risk comes down and insurance becomes more affordable. So they're managing an insurance pool and they also provide training to a whole number of folks who are trying to enter the community solar space. So that type of collectivism, I love all of these local examples and that it's happening locally, but there are also ways for us to stack to overcome those barriers by working together even across the country, even as we're still rooting ourselves in our local communities.

Katie Kienbaum (00:49:09):
PSEF is great. Y'all definitely check their work out or if you are a community that is working to develop these projects, maybe become a member. I am going to now answer I think, or at least have y'all answer a couple audience questions that we have. So one question from Wendy. Wendy lives in PA and says that they fall under PJM, their regional transmission organization. There's a huge interconnection backlog for new energy projects there, and they wanted to know if local clean energy, like community solar has to go through the interconnection process or is it exempt? And I guess how that maybe can, this is me editorializing now, how that can also be another barrier for communities that are looking to develop projects. I have some answers to this, but I'm happy if any of you want to jump in on this,

Yesenia Rivera (00:50:07):
Go ahead and start and I can jump in after.

Katie Kienbaum (00:50:10):
Okay, I'll say so generally yes, projects do have to go to through interconnection processes. Usually they are not connecting to the bigger transmission grid that the regional transmission organizations like PJM are organizing or managing. Usually they are doing it connecting to more local grids because they're smaller scale and they're trying to locate near the community. But those also can face interconnection barriers and it can be particularly challenging for groups, projects that are led by community groups to manage this. It's a very complicated process, so that can definitely be a barrier, but they're smaller projects, they're located close to where the energy is being used usually. So there are a lot of ways that it can also be helped around and I'll maybe leave it at that, but yeah, I don't know if anyone wants to jump in on that.

Sachiko Graber (00:51:10):
Maybe just to add to overcoming those barriers at a structural level. There are two ways in the state of Minnesota that I've heard being discussed as to how to shrink that interconnection process for small projects. One is anytime a distributed resource gets added to the queue, they get put in line and normally whoever got there first is going to be the first one to go through the interconnection process for small projects. Some states have a mechanism that say, for community solar, you can jump to the front of the line so we know that it's going to be easier to connect a hundred kilowatt system to the grid versus a 10 megawatt project that the utility is building. And so there's mechanisms for thinking about how do we manage the queue in an equitable way. Another topic of conversation that's been happening in Minnesota, and I'm pretty sure in several other states around the country, is thinking about who pays the interconnection process can be really expensive.

(00:52:10):
If you think that there's a mega, no, that's a terrible example. If there's a hundred megawatts of capacity on this substation and I'm going to be the hundred and first megawatt, what happens right now is my project is now responsible for paying the entire cost to upgrade the entire system, which then everybody behind me in line gets to benefit from. But because I was the hundred and first, that cost all comes to me. There are a lot of mechanisms that are being discussed right now that consider what would it look like to actually spread that out to say everybody from the hundred first to hundred 50th megawatt in line are going to share the cost of upgrading the system so that all of that upgrade cost doesn't just fall to one customer. I don't know that that's been enacted anywhere. So that might be something that I need to dig into more because now I'm curious, but certainly there are policy and regulatory mechanisms for thinking about addressing some of those interconnection challenges when we think about small distributed systems.

Katie Kienbaum (00:53:13):
Yeah, there's definitely a lot of stuff happening at the state level and Yesenia, if you have something you really want to say, we can do it. But I was also going to maybe jump onto the next question, so up to you.

Yesenia Rivera (00:53:23):
Just real quick, going back to interconnection, yes, PJM is one of the worst offenders. Unfortunately, there are some that are even worse when it comes to the backlog and how long it takes. And again, when we're working on local smaller projects, interconnection even at the local level can be an enormous barrier because IHI said the cost. And if there are delays in approving those permits, which again surprise, it's the utility company that controls that process and any delay in those can actually cost a project money and make it harder for them to pass on savings to smaller people. So yes, there's definitely a lot of work that we need to do around interconnection.

Katie Kienbaum (00:54:10):
Absolutely. And we are not going to be able to get up to all of these questions today, but I'm going to flag some of 'em that I think we might be able to answer offline afterwards. Just FYI to folks, we did get a late question here that I actually really like, so I'm going to skip ahead to it. Apologies to other folks who submitted questions earlier, but what's your dream lineup of collaborators for a one megawatt community solar owned project look like to you, and what's the core team that you would think about just to get the ball rolling? I guess more broadly, how do you make this happen? How do you start this project in your own community or how did you get started in your own community? How did you all get these projects off the ground to start with?

Yesenia Rivera (00:55:00):
I could say what we did in Boston and we actually started with a community needs assessment and surveyed the three neighborhoods we talked about because when we looked at the energy burden, those were the highest energy burdens in Boston. We surveyed them and from there we just put out a call for the neighbors or even smaller NGOs that were interested in being part of this experiment and started having weekly advisory board meetings at the fundraise. We want to make sure that people are paid for their time. So yeah, just talking to neighbors and having people referred to the program and wanting to be part of the process and learning more about what it meant to develop solar and try to figure it out as neighbors and as a group.

Sachiko Graber (00:55:55):
Yeah, I guess one other stakeholder that I think about having at the table is just a site owner. If you're trying to develop a project, you need a place to put it. And often the collective cooperative or community doesn't collectively own a physical piece of land, and so you need someone who's really

willing to lease you a field to put the solar on or somebody who has a building where you can install the geothermal pumps.

Katie Kienbaum (00:56:32):
Sorry, I'm like, can I get one more question in there? Should we skip ahead? We have one final question we want everyone to answer, so I think I'm going to jump to that, but if the panelists want to answer any of these, type out an answer you're welcome to. I'll also try and save some of 'em to see if we can answer them offline afterwards too. But I am, I'm sorry to cut it off, but I'm going to jump to our final question for the panelists today. And that is considering that now that the federal government is now much more opposed to many clean energy projects in general, but especially those that center equity, like a lot of the projects that folks have mentioned here today, what's one opportunity that you see for either states, local governments and or community organizations to take action and support local and community ownership at the local level now that we aren't going to be getting that support from the federal government as clearly? And I'm actually, I'm going to start with Crystal on this if that's all right, Crystal?

Crystal Huang (00:57:39):
Yeah, sure. I'm going to attempt to try to answer some of the questions that are also in here as part of my answer to this final question.

Katie Kienbaum (00:57:49):
Amazing.

Crystal Huang (00:57:51):
So I'm thinking, well first, there's always an endless amount of demands we can make for decision makers out there on what they need to do and all that. But a lot of times, I mean personally, I'm being raised in a culture of how can we find the power within ourselves and each other and do something with it this moment, especially with what's going on, a federal level calls onto more of that culture and how we can call into our relationship with each other, how we can build more trust and find more of a common thread among all of us instead of finding ways to divide ourselves. So how do we actually build up relationships across different stakeholders, especially with local government and building things like I see a lot of questions around smart cities, and I feel like what folks are asking around smart cities, probably closest I can think of is virtual power plant and things like virtual power plant, and obviously I don't have time to go through all of it what it is, but the idea of how do we use technology as a way to create more efficiency and also more equity justice and democracy in energy ultimately is around how you design it.

(00:59:06):

And there's actually a lot of conversation in the backend between People Power Solar Cooperative and Cooperative Energy Futures, as well as some other groups really thinking about how do we build a virtual power plant that is based off of democracy, civic build out, and we are using the Oak Tree project I mentioned through building relationship with local governments and different philanthropy to really build out this infrastructure that we can have communities build, own, maintain, all coming together and of course using technology to then make everything more efficient.

Katie Kienbaum (00:59:45):
Thank you. Crystal. Yesenia, we have limited time, so folks might have to be snappy.

Yesenia Rivera (00:59:52):
Yeah, say focus on education advocacy at the local and state level to tear down barriers in push for incentives.

Sachiko Graber (01:00:03):
I'll echo incentives. I think not to be a one story, I don't know what the saying is, not to get the same point, but I think it's all about funding. Incentives are changing at the federal level. The investment tax credit is changing at the federal level, and so how can we provide incentives to replace some of those things? How can we provide financing that's affordable? I think addressing the economic barriers can go a really long way in helping with accessibility.

Katie Kienbaum (01:00:33):
Amazing. Thank you so much. And sorry we are so short on time today. It's just so hard when everyone has such incredible insights and information to share and projects, but we will be sharing out links to all of their work and their organization's websites, and we can get that one last slide up, please. Kate, just want to thank everyone for their time today. Again, we have a link to that Advantage Local report to the report that Saachi mentioned about Community Economic Development through Distributed Solar. And we just really appreciate all of your time today. We will try to share some more information and links out in our email after this, and we will share a recording of the webinar as well. We've also gotten a request for a transcript, which we can do, and we will share slides, all those links, everything else. With that, thank you everyone for your time. Thank you so much to all of the amazing panelists. I wish we could have had 17 hours to just really dive deep into all of your different stories, but we don't. So we do what we had and I think we covered some great ground today. So thank you everyone.

Yesenia Rivera (01:01:52):
Thank you and thank you.

Sachiko Graber (01:01:57):
Thanks everyone.