

Becca Jones-Albertus:

Okay, good morning everyone. We will get started in just about one more minute. Thank you.

Hello everyone and welcome to the U. S. Department of Energy Solar Energy Technologies Office Webinar on Justice, Equity, Diversity and Inclusion in the Solar Industry. I'm Becca Jones-Albertus, Director of the Solar Energy Technologies Office and really excited to be here with you today. First off we're recording this webinar and we will be posting it to our website. And as we always enjoy the lively chat that we have in our webinars, we do you want to say that we won't have time to take questions live today, but we do have a few members of our team who will be answering questions in the chat. So please do feel free to share questions there and we'll get as many of them as we can answered.

I'm really excited to be here today to discuss 2 Energy Department priorities that are really close to my heart, building a well supported workforce and increasing access to clean energy. And as we build our workforce and expand access to clean energy, we must take into account justice, equity, diversity and inclusion or JEDI for short. So as we're speaking of JEDI, it's very fitting that today is May the fourth or Star Wars Day and in the Star Wars orders it's the JEDI order who as so many of you know, are the guardians of peace and justice in the galaxy. They can tap into the power of the Force, a source of unlimited energy that binds the galaxy together. Today we're tapping into another unlimited source of energy that is solar power. So may the solar Force be with you. And now I want to introduce our very special guest. Today we have the U. S. Department of Energy Secretary, Jennifer Granholm. Secretary Granholm was governor of Michigan from 2003 - 2011. So she knows a lot about creating jobs and careers. She successfully led efforts to diversify Michigan's economy, strengthened its auto industry, preserve the manufacturing sector and add emerging sectors such as clean energy to Michigan's economic portfolio. Today, nearly... or I think... fully 1\3 of all North American large vehicle battery production takes place in Michigan and we couldn't be more thrilled to have her now heading up the Department of Energy where she is leading the effort to achieve President Biden's goal of net zero carbon emissions by 2050 and overseeing all these core emissions from the National Labs to maintaining the country's nuclear deterrence. Welcome Madam Secretary.

Secretary Jennifer Granholm:

Thank you Becca. Can I go?

Becca Jones-Albertus:

Yeah. Just let me introduce quickly... Also, we have Acting Assistant Secretary of the Energy Efficiency... [audio distortion].

Secretary Jennifer Granholm:

[Audio distortion]... I appreciate the kind introduction.

Oh great. Neither Becca or my connection is unstable. Can you hear me?

Becca Jones-Albertus:

I can hear you now well. Can you hear me, both?

Secretary Jennifer Granholm:  
I can hear you. Did you introduce Kelly?

Becca Jones-Albertus:  
I will do that now. I paused for a minute, because.. something was - we had some technical difficulties, but now I think we're back. So let me introduce Acting Assistant Secretary of the Office of Energy and Efficiency and Renewable Energy, Kelly Speak-Backman who's also here with us today. Assistant Secretary Speak-Backman oversees the planning and execution of the EERE's \$2.8 billion portfolio of research, development, demonstration and deployment activities, and energy efficiency renewable power and sustainable transportation. Welcome Kelly.

So now I'm really... thank you both for being here and I will hand you the lightsaber Madam Secretary.

Secretary Jennifer Granholm:  
[Laughs] Well, thank you. Thank you Becca. Here I am. I have it. I'm so excited to be here. Happy Star Wars Day, everybody. And if for some reason my internet is spotty, just Becca, I'm going to look at you, you wave at me, and I'll try to go back.

Alright. So, on this Star Wars Day, I'm so excited to be able to talk about JEDI, of course, justice, equity, diversity, and inclusion, as Becca said. We may go a little overboard with the Star Wars references today, so see if you can catch them all - groans are permitted.

So, as you know, President Biden has laid out an ambitious agenda for the administration. As Becca said, we want to get the country to 100% clean energy by 2035 and net zero carbon emissions by 2050. We're so committed to these goals will consider tattooing them on us. And because this is a "new hope" for a future filled with JEDI meeting these goals are going to meet me in tackling the climate crisis while rebuilding our economy from the bottom up and from the middle out and making it fairer and more equitable and more inclusive than ever before. This is the way. So let me just lay a vision out for you by making the investments in research and development and manufacturing and deployment that President Biden has called for in the American Jobs Plan. We can ignite new industries that have the power to create jobs at light speed while equipping communities in every pocket of the country with technologies that will generate lower energy bills and clean up air and water and improve our health - there's no mind trick here. Just think about it. If we want to make our buildings more efficient and manufacture electric vehicles that can dominate the global market. If we want to put out solar panels where it's "Hoth" and put up turbines where the "Windu" blow, we'll need "Maul"ions of Americans getting to work. And that means renewables, resources like solar offer not just a "Rey" of energy but of opportunity. And we are laser focused on making it an opportunity for JEDI. From my time serving as governor of one of the countries biggest union states, I know how much to difference a good paying union job can make and for working families, it's a "lightsaber". That's why this administration's "First Order" of priority is making as many good paying jobs as possible. We want anyone to be able to comfortably raise a family while they pursue a career in

clean energy. But the "dark side" we have to acknowledge is that over the last decade, clean energy jobs have gone overwhelmingly to men, particularly to white men. So we know we won't just "Luke" into a workforce that looks like America that's thinking about it in "Alderaan" ways this administration won't make that "wookie" mistake. Achieve equity we must! And we're not just talking the talk, we're walking "Ewok", we're making the fundamental funding grants we award to diverse teams and that the technologies we back can help communities that so far haven't enjoyed the benefits of clean energy. And once the American Jobs Plan passes, we start making big investments in clean energy infrastructure. We're willing to "use the Force" of federal contracting and policy incentives to achieve greater diversity in hiring in equity in pay. We are actively engaging the labor community and discussions around what it's going to take to make the clean energy workforce a JEDI workforce. We are learning how labor management apprenticeships and project labor agreements can help ensure that women and people of color and veterans and anyone who doesn't have easy access to these jobs today can learn the skills necessary to land them tomorrow and to get equal pay for them when they do. So to talk a little bit more about our ideas for the clean energy workforce, it's my pleasure to be able to turn it over to Kelly Speakes-Backman, our Acting Assistant Secretary of Energy Efficiency and Renewable Energy. Kelly, There's a lot of support for the clean energy workforce. But what does that look like? What kinds of careers are these?

Kelly Speakes-Backman:

Thank you Madam Secretary and thanks Becca for bringing me here.

I just, I have to say like I knew this was going to be a challenge to come here to the Department of Energy, a challenge of a lifetime to change the world, but I didn't realize it was going to be so much fun. This is so awesome. So May the Fourth be all with you. Thanks everybody for being here, you know, our mission specific to EERE is really driving that research and the development and I'll underscore the demonstration and the deployment of these innovative technologies and systems and practices that are going to transition Americans to 100 clean energy economy, not later than 2050. And importantly, to ensure the clean energy economy is benefiting all Americans, we're at the forefront of scaling up these emerging technologies that are going to create millions of good paying middle class careers; not just jobs, but full on careers. And that's important. It's important that the workforce looks like America as Madam Secretary said. This is construction and engineering jobs from solar and wind insulation to EV and truck manufacturing, managing smart buildings and deploying storage. These are just some of the skilled trades that are going to be needed to represent the clean energy jobs of the future. President Biden said it well in his remarks to Congress when he said, "When I think about climate change, I think about jobs." And we can't mitigate climate change in the next 10 to 15 years without a well trained, well supported clean energy workforce across multiple fields and multiple technologies. So we're here today in part to talk about putting people to work and I'll turn it back over to you, Madam Secretary. Thank you for making this so awesome; such an awesome place.

Secretary Jennifer Granholm:

Well, right back at you, thank you Kelly. You know, is obviously as we plot our clean energy future, we have to bring more stakeholders to the table, which is why today we're announcing 2 requests for information or RFIs. That are going to guide our efforts on solar energy. The first deals with the future of the solar energy workforce. We want to make sure that we are pursuing the best strategies for developing a diverse and a skilled workforce that meets the needs of the solar industry and its employees. So we're looking for input from the solar industry, whether they're small residential rooftop businesses or manufacturers as well as labor and job training groups. So if you have ideas to share, please go to the link on our website. We just put it up in the chat I believe. And so now let me turn it back to Becca. Your office SETO works to advance solar energy technologies and make solar power accessible to all families and communities. So tell us a little bit about what that entails.

Becca Jones-Albertus:

Thank you. Delighted to. So our office has a broad portfolio ... [inaudible] ... working to advance solar technology, accelerate deployment. And so this includes research to lower the cost of solar electricity by making technologies that perform better, last longer, and at lower cost. It also includes addressing and reducing soft costs. Things like citing, permitting, and interconnection. All all of this comes together to try to make solar electricity more affordable for all Americans across the country. We focus on systems integration so that solar technologies can support the reliability, the resilience and the security of the grid, like all other power generating technologies - that's critical as we move toward 100 clean grid. And we work to enable more rapid and equitable solar deployment in support of the President's goals to de carbonized our energy system. Solar energy today is the fastest growing source of new energy. But it needs to grow. We need to deploy it as much as five times faster than we are today in order to reach our ambitious clean energy goals. And as we work to deploy solar faster, it's so critical that we're also working to make the benefits that can come from increased solar deployment employment accessible to all Americans. This is opportunities to save money, to enhance energy security, and to build new career pathways. We do this through community solar, which allows households to share electricity produced by a solar system that's not on their home. We work to create new financing mechanisms so more people can access the credit they need to put solar on their home if they have a roof to do that and in workforce development to create well supported clean energy careers. All of these strategies are helping to increase access to these benefits of solar. And in fact we have a goal of expanding access to affordable community solar to all Americans by 2025. So an important part of all this work, as we've been talking about, we want to make sure that everyone has a seat at the table, especially those communities that have been left out of the industry to date. And we want everyone to have a voice at the table when we make decisions about our federal solar energy priorities.

Secretary Jennifer Granholm:

Great, Great. Are you, I just want to make sure I'm not frozen. We're good, right?

Becca Jones-Albertus:

Yep!

Secretary Jennifer Granholm:

Okay, awesome. So thanks Becca. So much.

Becca's team is full of these brilliant public servants, but like all of us at DOE, they need to keep a pulse on what public needs. So the local government officials and community organizations and homeowners to tuning in "Yoda" ones we need to hear from, which gets me to our second RFI. We want to hear about the challenges you face to equitable access to community solar. If there's something we can do to help break down barriers and to maximize the benefits of solar in your community lowering electric bills, increasing economic development, building resilience from natural disasters. Don't hesitate to tell us. Of course, we especially want to hear from those communities that may have been left behind or unseen or harmed by the fossil fuel industry. Your input is essential as we work with environmental justice organizations and financing entities and state governments to figure out the challenges that are facing equitable access to solar and then to better structure DOE's programs to address that. So, so you might as well "Chewie" on that for a moment, collect your thoughts, then head over to our link in our chat to respond to this RFI. But that's not all. We're also announcing new funding for our SolSmart program and round three of our Solar Energy Innovation Network.

So Becca, back to you. You can tell us about that.

Becca Jones-Albertus:

Yes. To verse, SolSmart is our national recognition and technical assistance program that so far it's helped over 400 communities across the country build a stronger solar market and in fact, 30% of the us population lives in one of those 400 communities. And the recent analysis has shown that SolSmart communities after they received their designation, they get the number of solar installations has increased by 60%. SolSmart addresses local barriers to solar market growth and it makes it faster and easier for communities to install solar energy systems like in Leon County, Florida where county staff valued the benchmarks that were provided by SolSmart so they could understand what they were doing well and then how they could do better. And as a result of this assistance, Leon County is now able to guarantee local residents of three day turnaround time for rooftop solar permits. They also enhance their communication with residents about solar. They worked with the local utilities to speed interconnection procedures and they installed solar on five county owned municipal facilities, including the local community and workforce training center. So for communities like Leon County, SolSmart designation recognizes their leadership on clean energy issues and as a way they can demonstrate to local developers that the communities open for solar business while providing residents the tools and information they need to go solar. So today, the \$10 million funding opportunity we're launching is to manage the SolSmart program for the next five years. Over this time SolSmart is going to emphasize support for under resourced communities and it's going to include emerging market segments like Solar Plus storage. So to apply to learn more, please go to our website and we have the link going into the chat now. The second

program that we're focusing on equity with is our Solar Energy Innovation Network, and this is a technical assistance program that brings together stakeholder group teams. They're tackling real world challenges associated with solar energy deployment, like in Atlanta, where a group of non profits and historically Black colleges and universities engaged with the West Atlanta community and their utility and were supported by technical assistance from the National Laboratory to develop a vision and a design for an innovative urban energy resiliency hub that can provide critical community services in the event of a power outage. Now, that team has worked under way to implement this project and we're applying the lessons learned from their project to other groups trying to do similar things around the country. So as that project is improvised to solve local barriers to solar deployment, we need to get all of the relevant stakeholder groups to the table. And that's how communities get to the most innovative solutions and get to test them in their community. And the Solar Energy Innovation Network helps these communities be successful and to share their learning with others. So I'm very pleased to announce that we're dedicating \$5.5 million in funding for Round three of the Innovation Network, which is focusing on barriers to equitable solar deployment, particularly in underserved communities, for example, what are the novel financing mechanisms we can use to help more low income households install solar. This program is going to provide technical assistance to replicate the ideas and solutions from previous rounds of the innovation network as well. You can now find the link in our chat to go to our website to learn more about how you can apply it with Solar Energy Innovation Network. Back to you, Madam Secretary.

Secretary Jennifer Granholm:

Alright. Thank you, Becca. Okay, here comes another round of Star Wars puns. Sorry if you are not into it. But here we go. The point is this at DOE. We are fully invested in breaking barriers to justice, equity, diversity and inclusion and solar down. We want to break those barriers down. We know you "R2". So we shouldn't let another day go by before we get to work spending the benefits of clean energy to every community in the country this "sith". Our shot and building a better future for every family in America over the next "Millennium Falcon" and making it a future with JEDI is really the "Endor" be all for us. It's, "Do or do not. There is no try." So let's do it together. Thank you and May the 4th be with you.

Becca Jones-Albertus:

Thank you so much for your leadership, Madam Secretary. You are truly a force for change.

Now I'd like to turn over to Kelly to talk more about DOE's workforce efforts.

Kelly Speakes-Backman:

Oh my gosh, how do you follow that? That was just so engaging and so inspirational. And also really so serious because, you know, we're determined to advance diversity, equity and inclusion in STEM and across the entire clean energy workforce across all of the DOE. And especially in the EERE, were really proud of the work that we're doing. We're going to increase outreach to minority serving institutions and minority

professional organizations to raise awareness of clean energy research and job opportunities. One of the ways we're already doing this is through our funding opportunities like the SolSmart opportunity that was just announced. Organizations that get EERE. Funding have to focus on diversity and equity in their own work. We're also committed to funding workforce training opportunities and collegiate competitions that I get to participate in that are, oh my God, so much fun. We're trying to prepare this future clean energy workforce from the very beginning and we're trying to make sure that diversity and inclusion and equity is infused in all of it. Workforce training is more important now than ever before. And with that, I would like to introduce DOEs, Director of Clean Energy Jobs, Jennifer Kropke, who has a message about what DOE is doing to create good career opportunities in clean Energy.

Jennifer Kropke:

Good morning. My name is Jennifer Kropke. I am honored and privileged to be the Director of Energy Jobs here at the Department of Energy. Thank you so much for having me at this very exciting event. I'm excited to be here, but I'm even more excited to talk to you today about the clean energy transition, because when I think about that, I think about job creation. But instead of creating a job that utilizes only a splintered skill set such as photovoltaic installation. We are thinking at the Department of Energy about how we create broad based vocational careers in clean energy. This is very important because we want to create clean energy careers that all Americans can see themselves at. And that also means ensuring career pipelines for disadvantaged communities so that everyone has access to a clean energy career and that our job sites actually look like America.

At the Department of Energy and the energy jobs, we're focusing on strategies to effectuate our goal for creating clean energy careers that pay union and family sustaining wages and include health care, retirement, and worker classifications. This is a big, exciting, audacious goal and one that is so worthy of the Department of Energy and all of our colleagues and all of our respective stakeholders and all of our States and Industry. And I am very excited to do all of this and watch all of this. Come to fruition with all of your efforts. Thank you so much.

Kelly Speakes-Backman:

Thank you, Jennifer.

Now I want to, if you'll allow me Becca, I'd like to turn to 2 people who are going to play a key part in building this clean energy workforce. Last week, I spoke to Abigail Ross Hopper, the President and CEO of the Solar Energy Industries Association. I also got to speak with Sylvester Taylor, the Director of Diversity Equity and Inclusion at the International Brotherhood of Electrical Workers Local 1 in St Louis. We talked about the state of the clean energy workforce today, the obstacles we face, what's being done to overcome these obstacles. So, first up is my conversation with Abby, Let's take a look.

[Recording of interview starts]

Kelly Speakes-Backman:

Hi Abby, thank you so much for coming and talking to us today about diversity and growth in the solar industry. It's so good to see you.

Abigail Ross Hopper:

It's good to see you too, Kelly. Thank you so much for inviting me.

Kelly Speakes-Backman:

Of course. So let's just start right in. Like, what does the solar industry workforce look like right now?

Abigail Ross Hopper:

Well, I'm glad you asked. Later this week we're going to be releasing our 2020 census data, but I will give you a little bit of a preview. We were like every other industry in the United States last year we took a hit. Even though our installations grew, the workforce had some challenges. So earlier on in the year, like in sort of the April may time line, the numbers really plummeted in terms of employment. It's recovered a fair amount, although not all the way to where it was at the beginning of 2020. So it's about 230,000 people in the solar industry as we start 2021, which is not as good as we had hopes, but not as bad as we had feared. But clearly lots of opportunity for growth.

Kelly Speakes-Backman:

It was definitely devastating to the clean energy industry overall, the confluence of issues and our economy and it's good to see that you all made it through without the dire impacts that were expected really coming through that. What other kind of workforce challenges does your industry face as we come out of Covid as we begin to heal as we begin to build our economy back? I'm sure there's still some challenges in front of you. Would love to hear about that.

Abigail Ross Hopper:

Yeah, I would say the challenges we have now are nice problems to have, right? As we look at the rapid growth of solar and clearly policy matters and so all of the things that you were doing and the Secretary is doing and the President's doing, we hope will accelerate that growth. But there will be continued growth in the solar, the solar + storage market. And so we're going to be adding more and more people to our workforce. So one of the challenges is just finding them right? Like finding people especially skilled tradespeople, right? People that are electricians and others that are specially trained. That's one area where we sometimes have a challenge finding folks. Secondly, the report we're going to release later this week has demographic information. And so we are certainly a graph moving in the right direction, as our former boss ... used to say, but we're not there yet, right? So we have increased the number of people of color, the number of women, the number veterans in our workforce, but it's certainly not reflective of the diversity of our country. And so that is a huge focus for us. And just, you know, making sure that young people especially understand that the clean energy industry is a career. And not only is it a career, but it's really an opportunity to start businesses and create wealth. Like I just love the entrepreneurship that's in this industry, and I think I'm particularly focused on how we



create new businesses in our industry, because it's such a prime opportunity to do that.

Kelly Speakes-Backman:

Yeah, you mentioned diversity and really making sure that the solar industry looks more like all of America and I have been so impressed with what you and SEIA, your team at SEIA have done to bring awareness and to be conscious of those choices of really expanding the diversity. Would love to hear any particular success story that you might have in that area. And also kind of what kind of challenges you're facing as you really try to quantify how you're pushing that forward.

Abigail Ross Hopper:

Yeah. No, it's a really important. Thank you for asking me about that. You know, I was two years ago, kind of before everyone was talking about diversity and equity, we put out a best practices guide for employers. I mean, we're a trade association, right? So we have to be really clear about what our lane is in this conversation. And so I think my lane is to really help businesses embrace these concepts of equity, inclusion, and justice and build them into their corporate culture. So we did that about two years ago, kind of best practices in hiring and training and promoting and retaining, right? It doesn't matter if you get someone in the door if they don't stay, right? That's not good for business. But after the murder of George Floyd last year, we really shifted our focus a bit to the justice piece and really understand this is a much more systemic racist institution we're dealing with, rather than just bringing a few new people into the industry. And so we did a couple of things, and one of which I'm incredibly excited about, which is really bring those issues of justice and environmental justice and frontline communities into our policy work. I mean, that's what trade associations do, right? We provide policy solutions and policy outcomes to our members. But we worked really intentionally with a bunch of different stakeholders to create environmental justice policies that are infused throughout our policy work, so that when we go to the hill and we go to state capitals, we go to regulatory commissions those communities and those principles are inherent in the work we're doing, which it's pretty different than the way we were approached it in the past, but we've also are creating and we'll be releasing an accreditation program for companies that want, you know, some companies want to do the right thing, they just don't know what to do. And so giving them very specific and tangible steps and along the process. One of the things that I'm personally really excited about is a supplier diversity database that we are building and will be releasing soon as well. I'm sure like you, I got lots of calls last summer about, "I want to work with the Black owned developer.," "I want a woman attorney.," or "I want a finance company that's owned by people of color." And I didn't have a great resource for that. And so we spent a lot of time building that resource as a way to, again, create entrepreneurship opportunities and create wealth in communities. So I'm excited about those things because I think they are, you know, we can all say the words that we care about this stuff, but these are actual specific actions that we're taking, that I think will be really helpful to businesses and to people.

Kelly Speakes-Backman:

Yeah, once again, that's really impressive to have that resource for your members and I would love to see more associations taking that step forward.

So thank you. Thank you for spending some time with me and talking to me about how the solar industry is moving forward and creating this diverse and equitable more prosperous solar industry. Really appreciate your time today.

Abigail Ross Hopper:

Absolutely, Kelly. I can't wait to continue to partner with you to make that vision a reality.

Kelly Speakes-Backman:

Absolutely.

[Recording of interview ends]

Kelly Speakes-Backman:

That was fun. So next, you know, we're also committed to making sure that our efforts at DOE result in an industry driven, employee centred workforce. That's diverse and inclusive. I want to reiterate that we are committed to creating jobs that sustain American families and launch American communities into an economically and an environmentally resilient future. So now I'd like to share my conversation with Sylvester who brings a unique perspective from the side of labor. Let's take a look.

[Recording of interview starts]

Kelly Speakes-Backman:

Hi Sylvester, it's so exciting to have you here. Thank you for coming today.

Sylvester Taylor II:

Kelly, thank you. Thank you guys for having me. I'm just blown away. I really am. Thank you for having me.

Kelly Speakes-Backman:

Absolutely. So I'll just get right to it and ask you about the benefits of unions. I know you and I both know the some of the benefits, but if you could share with the audience, what are some of the benefits that unions bring to workers in the clean energy industry?

Sylvester Taylor II:

Oh fantastic! Well first of all we bring our expertise You know, we don't, the best part about what we do is as an IBW Member, I'm not pigeonholed into just solar. I don't just do just high voltage. I do anything that you can send a signal to, we can do it. We bring our expertise, we bring wages and benefit packages, and we bring safety.

Kelly Speakes-Backman:

Awesome. You bring good jobs to people.

Sylvester Taylor II:  
Absolutely.

Kelly Speakes-Backman:  
And I think we have that in common in what we're trying to do in this administration and the Department of Energy.

So I understand that you lead the diversity efforts for IBEW. Can you tell us why that's so important to increase diversity in unions specifically?

Sylvester Taylor II:  
I want you to think about the most affluent part of the neighborhood that you live in. Okay. And I want you to think that they're going to build a new gymnasium on a set high school in your area. And you drive past the work site and everybody on the job site. Everybody from the bricklayers, carpenters, electricians, plumbers, everybody, they're all middle-aged Black men. Be some phone calls made, wouldn't it? But you don't think nothing about coming to my neighbor and they're all white. So President Kennedy set a rising tally of all votes. So when the only thing anybody's asking for as women and people of color is an opportunity.

Kelly Speakes-Backman:  
I suspect with more diversity, you have more experiences and everyone gets to know each other a little bit more as individuals rather than as races or as groups or sets.

Sylvester Taylor II:  
I mean, Kelly, you know the ironic part about this whole thing is you'd think we were talking about this in 1960. We're not. We're talking about being inclusive and diverse now. And we're having a conversation because - and we have to have a conversation - because if employers or local unions were diverse and were inclusive, there'd be no need for them. And I can honestly... I can't speak for all local unions. I can speak to the one that I'm at. It's a small microcosm of my community. And for the first time in IBW history, our apprenticeship has 33% minorities and women and people of color for the first time in history.

Kelly Speakes-Backman:  
That's awesome.

Sylvester Taylor II:  
And they are doing a wonderful job on being inclusive and bringing other people to the table. And if you brought other people to the table in our community, then you lessen the fight of us having about being inclusive.

Kelly Speakes-Backman:  
It's a good start. 33%. It's a good.

Sylvester Taylor II:  
Yes, ma'am.

Kelly Speakes-Backman:

What else has IBEW done to increase diversity, equity, and inclusion across the chapters?

Sylvester Taylor II:

We have a Electrical Workers Minority Caucus chapter here in our chapter. And it has been... when I became involved with the Electrical Workers Minority Caucus, were all IBW Members. There were probably... the first time I went to a convention there was probably 60 people in the room. The last time I went in Chicago, there was 700. And those were the people that attended. Not all the people that are members. And it is growing by leaps and bounds. Our chapter does a wonderful job in community outreach through our coat drive. We started a mentoring program, it's called Division of Youth Services and everybody here has committed a felony From 12 to 18. And what we've done is... Kelly, to be honest. We're just changing the direction that they're rowing their boat in. And if we can change it and just give them a little push, we can change the lifestyles. We can change it for generations to come. So we have... there are three questions that we ask everyone of them: What did you do to get here? What's your next move? And how can we help? And we have gotten them in the in the painters union, laborers union, and nationally IBW union, and that is one of the ways that we're helping to recruit women and people of color.

Kelly Speakes-Backman:

That's amazing. So inspiring to hear.

Let's drill into a little bit the solar industry. How can unions, and IBEW, specifically benefit the solar industry?

Sylvester Taylor II:

Well, like I said, we bring a multitude of expertise. And and not just that, well I think the IBW brings is critical thinking, because not everytime the round peg fits in a round hole. And just... so what IBW teaches us and through our apprenticeships or training, what it teaches us is how to think outside the box, how to be proactive and not reactive, and it is... we bring our thinking, we bring our safety, we bring on budget, we bring on time. All those things plays a huge part in moving the whole project with the renewable energy forward.

Kelly Speakes-Backman:

Cool. Well thank you so much for joining me. I really appreciated the conversation today.

Sylvester Taylor II:

You know, just without getting all emotional, just having my union and my international think enough for me to sit with you and talk about what we need to do to move our industry forward. It just... I don't have words, and I thank you for your time and thank you for having me.

[Recording of interview ends]

Kelly Speakes-Backman:

Yeah, Sylvester really shined a light on the potential that we have to make sure that our workforce is a JEDI workforce.

And here's where we're going to ask for your input on which Secretary Granholm mentioned earlier, we just dropped a link to the RFI on the workforce needs of the solar industry in the chat. I really encourage you and look forward to receiving the valuable input from you, our stakeholders and the solar industry at work today.

So now I want to turn to the topic of community solar. There's a real life project getting off the ground that I'm really excited to show you. The Bronzeville community micro grid on the south side of Chicago is an exciting and innovative project for a lot of reasons. The SETO office supported the development of the technologies that are going to make this micro grid work. And it's an example of a community solar project that's designed to serve a low income community Project's already launched, so we have yet to realize all of the benefits - or just recently launched. So we don't have haven't yet realized all of the benefits that this is going to bring to the community, but we know it's already making an impact and I really want to share it. So let's take a look.

[Video starts]

Juan Rodriguez:

Bronzeville is an area of significant importance in Chicago. Also know as the Black metropolis, there are 600 families living there. We are talking about a 1000 customers. Bronzeville micro grid project is a very unique project for ComEd. We never ever build a micro grid before. In the scenario that the entire state is out of power, the idea for this project is to keep the lights on. The PV system size is 750 kilowatt/AC, about 900 kilowatt of DC. Our intent of the battery system, we have a 500 kilowatt hour battery. We want to integrate what we are building into the community. We are leveraging the community and the 16 infrastructure. One of the walls of the outside of the battery storage system right now is a mural of the community. We can tell the whole story of the Bronzeville community.

Van Vincent:

I was born and raised on the south side of Chicago, not far from Bronzeville community micro grid. We thought that working with the local housing authority would provide the community that it serves with solar as a means of inspiration. We worked with local labor to bring about the generation portion of the Bronzeville micro grid project. It provided jobs, It provided economic growth and so giving people who live there an opportunity is really important to us. It matters that Black people have a job. It matters to us that Hispanics have a job. It matters to us that people in the communities are not the last group to be welcomed into this new green economy. It made a difference for people to look out of their windows and see it in their community. And hopefully the thing that they take away from that is I can do it too. I can have it too. It's real and it's in my community, so therefore it does exist and there's an opportunity there.

[Video ends]

Kelly Speakes-Backman:

Amazing. It does matter and I'm really excited to say that here with us today is the president and CEO of VLV Development, the veteran owned solar company behind the Bronzeville project, Mr. Van Vincent.

Van it's so good to see you here today and thanks so much for taking your time out of your busy day to be here today. I'm told that a number of your workers are from the local community and that you've been really successful in cultivating this diverse workforce we've been talking about today. How do you think we can make this happen across the entire country?

Van Vincent:

First I'd like to say thank you for having the opportunity to be here with you. And with Jennifer Granholm's leadership, I'm quite certain that the "Force will be with us". And that it's going to take a collaborative effort, There is no silver bullet and if the intention is to build from bottom up and middle out, there needs to be a commitment to including the people who live in the communities. So bringing more projects to the community I think is first. Having access to the opportunities. Secondly, being able to be supported economically finding the resources to be a part of the clean energy supply chain, because everyone isn't going to install a solar panel, they may finance the solar panel, they may take on a logistics capacity in the clean energy supply chain. So I think it takes a collaborative effort; working with the unions, working with the local workforce development agencies, because everyone isn't just going to come out and make it into an apprenticeship program. It just doesn't happen that way. And so I think us widening the net will capture more diverse people who look like us in our communities, but it first starts with an opportunity and I'd like to thank ComEd for providing us with that opportunity, because we had some challenges through this project. We have to level up our thinking. We have to level up our action. We have to level up our capacity. And through inclusion and diversity, I think we're able to do that. And so I want to say thank you very much for the opportunity that ComEd gave us to be a part of a dynamic project that we are replicating in other communities throughout the city of Chicago.

Kelly Speakes-Backman:

Well, thank you Van for the work that you do and for making a difference in your community. The fact the fact is we need a lot more projects like the Bronzeville Community micro grid to pop up in neighborhoods all around the country to make clean energy inclusive. Becca I just want to also just mention and thank you from the bottom of my heart of all the work that you've been doing and all the work you continue to do in this area. It's really important and I'm so grateful to have you at the helm for the solar industry here at DOE. So I'll turn it back over to you for the rest of the webinar. Thanks for having me here. And thanks again for all your hard work to make solar power accessible to all Americans.

Becca Jones-Albertus:

Thanks so much, Kelly, for being with us today. Thank you so much, Van, for joining us as well for your part in the Bronzeville project, which as we've been talking about is something we're really excited about at DOE. So thank you both so much for being here, being part of this.

And now I'd like to introduce our next guest. She couldn't be here with us live today. But Shalanda Baker is the Department of Energy's Deputy Director of Energy Justice and the Secretary's Advisor on Equity. Last week she had the pleasure of speaking about Energy Justice with Bryan Garcia, CEO of Connecticut, Green Bank and the Donnel Baird CEO of BlocPower, a New York based clean tech company. Let's take a look.

[Recording of interview starts]

Dr. Shalanda Baker:

So hello, both Donnel and Bryan. It's so great to have both of you in the same room. Um I hold each of you in, you know, high esteem for your roles in helping to shepherd adjust energy transition. For the audience, I'm Shalanda Baker and I'm the first ever Deputy Director for Energy Justice at the Department of Energy and a lot of people wonder what the heck that means. So the President has made an historic commitment to the communities that have been on the front lines of climate change as well as the front lines of environmental harms around the country. The Justice 40 Initiative is our promise, as the part of the Biden administration, to move 40 of the overall benefits of certain federal investments to these frontline communities; to disadvantaged communities. And so at DOE, I am charged with ensuring that that happens across the DOE complex. And I'm also excited to work with my colleagues across the federal government to ensure that the Justice 40 Initiative is realized. From where I sit, there are few key issues that we really need to tackle. One is the extraordinary energy burden that communities around the country face. We know that low-income communities are often paying upwards of 10, 20, sometimes even 30 percent of overall household income just to keep the lights on. The the gap with respect to solar ownership and solar access is another issue that I'm excited to tackle here at DOE. And I know Bryan you've been heavily involved in that work, so I'm excited to talk to you there. And Donnel, I know you've been heavily involved in the energy burden piece. The third major initiative that I'm excited to work on is introducing pathways to access capital so that we have businesses that are coming from so called disadvantaged communities who can participate in this energy transition as well as, you know, communities who lack access to traditional finance, you know, they need to be able to have access to capital in this transition. So the last big initiative that I'm excited to work on is really about wealth creation and that includes creating pathways for new jobs and businesses in this transition, so that's what I'm excited about at DOE. And before I get into the conversation with you, Donnel and Bryan, I want to just make sure that everyone in the audience knows just how extraordinary you are.

So Bryan Garcia, you are the CEO of the Connecticut Green Bank And you have helped - the Green Bank has helped over 55,000 families, businesses nonprofits to reduce their energy costs. That is extraordinary. The Green Bank uses limited public funds to leverage private investors to create low cost financing for green energy projects. And you know, I'm excited to learn more about how that is done.

Donnel, you are also an extraordinary person in this energy landscape. You're the CEO of BlocPower, which is a company that has retrofitted over 1000 buildings and I think yesterday when you and I talked, you said

1100, so the number is growing. 1000 buildings to cut energy costs for the people living in those buildings. And you're taking the lessons that you've learned across the country to continue to bring that business to scale. And I know that you've had some huge wins over the last several weeks and months.

So thank you both for being here. That's enough for me. I want to start with Bryan.

Okay, So can you just please overview for the audience what a Green Bank is and how Connecticut Green Bank was formed?.

Bryan Garcia:

Dr. Baker, Donnel. It's great to be with you both here today.

So the Connecticut Green Bank was formed in July of 2011 through a bipartisan act of legislation. And essentially, we like to think of ourselves as trying to use a limited amount of public funds to mobilize multiples of private investment. And when we do that, we drive more investment into our local communities to deploy clean energy that clean energy deployment, as we know, can actually lower the energy burden for families and businesses. That deployment of clean energy creates jobs in our communities and then it delivers on all those environmental and public health benefits that we're after in terms of reducing greenhouse gas emissions, reducing particulate matter so that our public health is improved. So Green Banks are a mechanism to enable more private investment in our communities.

Dr. Shalanda Baker:

You and I have had a lot of conversations about - excuse me - capital and the risk associated with lending to certain communities and certain households. Can you talk about how the Connecticut Green Bank views risk?

Bryan Garcia:

We did some research that showed that income is not correlated uh to credit scores. We shared that research broadly with the solar PV market. We issued a request for proposals to attract contractors specifically in to serve low to moderate income and vulnerable communities, communities of color and in some cases were completely eliminating the energy affordability gap. So private investment, you know, sometimes it takes a little public funds in the Green Bank context and we all learned a lot from the American Recovery and Reinvestment Act to drive that investment in and attract the private investment. We know that together when we do that, we're going to scale up clean energy deployment, benefit our families.

Dr. Shalanda Baker:

Wow! So I want to circle back toward the end to talk about some of the lessons you've learned and maybe some key takeaways that you can offer to other states and other advocates who are in the solar field to begin to model or to follow the model of the Connecticut Green Bank. So I just want to see that up, that's something I want to come back to.



But Donnel, you also are very concerned with this issue of energy burden and you you started a company that is committed to that. You've also I think really learned how to leverage both private markets and public markets of financing. And I want to make sure that, you know, entrepreneurs in the audience can understand how that happened. But can you just start with the business, the core business that you run and that you started and the key aims of that business?

Donnel Baird:

Sure. Happy to be here with you Dr. Baker. So at BlocPower we focus on analyzing financing and installing and then monitoring smart, healthy green equipment for urban buildings and low income buildings that are traditionally financially underserved, which basically means no banks will lend to them. You know, these buildings, there's millions and millions of them across the country. We figured out how to develop a new structured financial products that allows us to finance these projects at scale. And then we work with veteran, women, minority owned construction firms to install equipment in these buildings and all the equipment is smart. So in this way we built a platform that uses software and financial tools and internet connectivity tools to connect underserved buildings. And so we serve them with clean energy.

Dr. Shalanda Baker:

You and I have talked about wealth creation and using the energy system as a pathway for wealth creation and traditionally underserved and marginalized communities. And the model that you have created is really just multi-scalar and sort of across many different domains. I mean, you're talking about internet, you're talking about energy, you're talking about, you know, unique financing mechanisms.

What would you say were some of the key barriers that you faced in starting this? I mean, and again, we're thinking about access to finance, we're thinking about, you know, the ways in which certain communities are characterized as having higher risk and the investments in those communities as being particularly risky. What were some of the issues that you encountered in starting BlocPower?

Donnel Baird:

Fundamentally, the communities that I come from and grew up in and serve aren't viewed as profitable communities, they're viewed as high risk communities. And that is a misperception because obviously there's billions and billions of dollars that flowed through these communities every month. And so, this idea that different stakeholders have, whether it's venture capitalists and private equity or the banks or the clean energy infrastructure investors, right? They all view low income communities as not being worth figuring out. And because I come from a low income community, I have a totally different view, I know that these communities are stuffed with talent. They're stuffed with infrastructure - it's crappy infrastructure - but it's there and I know that it's going to take trillions of dollars to replace it. And so that is a tremendous business opportunity. We have to kind of learn the methodologies and processes of accessing capital from these different pools across our society, across the business world. And so that was a primary challenge or secondary challenge that we have to navigate, you know, subsequent to

the fundamental misperception that these communities aren't quote worth serving.

Dr. Shalanda Baker:

I love it. I want to go back to Bryan for a minute because I see Bryan's work also as being part... of playing a role in translation, right? And sort of translating across different domains from the solar industry, which may have sort of viewed the communities that the Connecticut Green Bank focuses on as risky to the other sort of private investors who also hold that perception. Bryan, I'm getting back to that question of the key lessons that you've learned and takeaways. What were some of those lessons in communicating and translating across those different types of stakeholders in the solar industry?

Bryan Garcia:

Well, some people actually call a Green Bank and intermediary, you know, we kind of sit in between the markets and the public policy. And it's kind of our goal or our role to interpret the public policy context so that we could attract the market investment in de-risk and attract their capital in to support the policy objectives; in our case, of the state of Connecticut. Less than 5% of Black and Hispanic families own homes. So right there, when we start thinking about the macro data on residential solar PV markets and where they're going well, what happens then to Black and Hispanic families who don't own homes? You know, we have just developed one arrow in the quiver to solve an energy affordability gap. But I think, Shalanda, your work and revolutionary power has really challenged all of us to think bigger, right? We need to begin to think about workforce development, the diversity of our workforce, making sure that Black, Brown, Asian that we've got the workforce of everybody age, everyone contributing to the clean energy economy that we've got, the wealth that we're building. You know, how do we think about wealth if you don't own a home? Like it's hard to think about wealth. But the resiliency of our neighborhoods and what Donnel is talking about in terms of community ownership in this kind of, buying from everybody. How do we own assets? How do we own companies? All those sorts of things - I think we're coming off of a decade of really solid foundation to now build into 2.0 of environmental justice being frontline, the role of finance and capital being in frontline, jobs being right at the front line of all of this. And it's just exciting to see where we are heading as a nation and as a community.

Dr. Shalanda Baker:

It is so exciting, Bryan, I mean, I'm just getting sparks, like I'm thinking in spanish like chispas like this little like, you know, the little sparks that you get when there's energy. And I'm thinking about sort of how the energy system can overcome the structural racism and structural inequality that exists in our society, right? Like if we know that home ownership has been a problem in certain communities, are there ways to sort of short circuit that and still create opportunities for owning assets, right? And building wealth when the home has been the primary vehicle for wealth creation in this country. But that hasn't been the reality for so many people. What else can we do? We know that the Department of Energy is seeking to hit some very ambitious energy goals. The President last week really laid out, you know, those goals in very

clear terms, and we have our work cut out for us. Some of those goals will require that solar energy will be deployed at 2-5 times the rate that it is now. And so I'm wondering where each of you sees the low hanging fruit for the solar industry and how can we avert the inequity as we tackle that climate crisis. Donnel, I'm going to start with you and then Bryan, we'll give you the last word here.

Donnel Baird:

Well at BlocPower, we had worked with the state government in New York and I sort of, to design a \$50 million dollar solar micro-grid that was owned by community members. And we sighted the project in New York city's poorest neighbourhood on top of the public housing complexes. Unfortunately, there were some problems with the public housing authority in New York. So the project was delayed. We'll see if they actually get organized. But the idea was that you form a central cooperatively owned site or holding company for solar and battery infrastructure. So, as the solar gets installed on the roof of the public housing complexes and the batteries gets installed in the parking lots and basements, the families that live in this public housing complex owned 51% of the solar and battery assets that are being installed in the public housing complexes where they live. So as demand response revenue or other forms of revenue come into that project as other buildings around the city buy electricity from that project, that generates revenue and a portion of that revenue would be distributed to heads of households in the poorest community in the country. I think that we can set up, if you will, these urban clean energy co-ops all over the country in the same way that Franklin Delano Roosevelt set up rural electric co-ops in the forties we can set up urban clean energy co-ops all over America that will allow low income communities whether they live in a home or own their home. They can certainly own a piece of a clean energy infrastructure projects in their city or in their neighborhood and in that way start to generate some revenue and build some wealth. As that infrastructure project becomes more and more valuable. So we're very focused on figuring out how to scale those kinds of opportunities up.

Dr. Shalanda Baker:

I love it and Donnel, you're making it look too easy and so obvious. It's like, well of course we have these assets that need to be capitalised on. So thank you for that contribution. I'm sure that many people in the audience will take that and hopefully run with it.

Bryan, I'm going to give you the last word here on low hanging fruit and my marching orders in terms of creating equity in this transition.

Bryan Garcia:

So what comes to my mind is the low hanging fruit that we have now is I think we're starting to get our arms around understanding the solar PV market. So whether that's on site/off site with community solar and the like. The question is how do we use solar as a unifier to other technologies? So how do we use solar to integrate battery storage? How do we use the combination of a resilient storage system, delivering those benefits to the household to also be inclusive of other technologies, renewable heating and cooling? You know, demand response technologies, smart thermostats, you know, everything Donnel was talking about the

integration of telecommunications and energy. Solar can be the platform to that integration, right? And if we start to think about how the benefits of solar can socialize those benefits to everybody in a community or a society, whether they're environmental, economic, public health, you know, you name it. I think that integration of technologies is the low hanging fruit. It is kind of the next area that we have to figure out how to get to and, you know, we're going to get there. This is, you know, our vision here at the Green Bank is a planet protected by the love of humanity. If we start with loving each other and respecting each other, we're going to find these solutions and accelerate clean energy deployment and solve all those crazy environmental problems and things that we're after. But it starts with love of each other.

Dr. Shalanda Baker:

And you know Bryan, I am aligned with that, I think Love is a revolutionary concept and we have to come together. If the two of you were in the room with me we would join hands and say okay we are in this. But I'll just give you this cyber hand, handshake and say we're in this together, let's go, let's transform this economy, let's transform our world in service of our humanity. So thank you each. Thank you both for being a part of this conversation. I'm excited to see what's next.

[Recording of interview ends]

Becca Jones-Albertus:

So many great ideas in that discussion. We're very fortunate to have Shalala's expertise with us at DOE.

Conversations like this one are really just the beginning and we're really counting on the RFIs we're releasing today to open up this dialogue. So as we close today, I just want to reinforce that we're really excited to be collaborating with all of you and we're counting on you to provide your feedback on our workforce and community solar efforts by responding to these Requests for Information and by helping us spread the words to get the broadest reach possible. We're also looking forward to your applications for our SolSmart FOA and, as well, the Solar Energy Innovation Network. So if you have a minute, please do visit our website for more information about everything we've discussed today. And last, I just want to reiterate our investment and our commitment to leaving no American community behind. Solar energy is critical to the President's American Jobs Plan to ensure job creation and economic development in communities hurt by the decline of coal and for communities that have been left behind by environmental injustice and the burdens of pollution. We know and we need diverse perspectives to help us plan how we're going to get our job done most effectively and most equitably. And we really do mean when we say that your opinions, your perspectives are central and critical to helping us build our clean energy economy. So thank you so much for being with us today and made a solar "force be with you".