

Hey, everyone. If you've joined this webinar we're gonna give it a few minutes for other folks to join and then we'll get started shortly. So hang tight.

[No conversation 0:00:27 to 0:01:20]

Again, if you've joined we're just gonna give it another minute or so. Get a few more people on the line and then we'll go ahead and jump in.

[No conversation 0:01:30 to 0:02:05]

We're about a minute after. So I'll go ahead and jump in and keep an eye on more people rolling in. Hi. Thank you for joining. My name is Axel Pearson. I'm coming to you live from snowy Salt Lake City, Utah. This is a webinar that will cover the new recognition categories for 2023 in the integrated lighting campaign. I'll tell you a bit about those categories as well as some general information for the upcoming campaign year and I've also left some time at the end for question and answer. So feel free to send those in as they come up.

Next slide, please. So first some logistics before we get started. The slides and recording will be posted shortly after the webinar on the Better Building Solution Center. If you'd like to navigate there now go to BetterBuildingSolutionCenter.Energy.Gov. You hover over the events and webinars and then click on On Demand webinars. From there you can click on lighting under the technology heading and find this webinar and many more good ones. I personally recommend all the lighting ones, but there are other technologies there too if you're interested.

So also I mentioned this, but feel free to enter your questions into the Q and A pane of Zoom. If you scroll down to the bottom of your open window there should be Q and A. Feel free if one comes up, send it over there. I'm the only one speaking today. So I won't have the ability to really keep an eye on there until after the webinar, but there will probably be plenty of time to answer some questions. So if they come up, drop them in the Q and A. If we don't get to them or if it's a personal question or a more specific question, rather, I'll follow-up with you via e-mail. Then finally you can always reach us at integrated lighting at PNNL.gov with questions or comments. So don't hesitate to shoot me an e-mail there. I'd be happy to chat.

Next slide. With those logistics out of the way, let's cover some campaign basics. So technology campaigns are market transformation strategies. They're collaborative programs designed to speed the adoption of energy savings technology and also really build trust that these technologies and these things actually work and save energy in the real world. So really we target typically building owners and managers who are early adopters. They're open to try this new technology. For example, a building owner realizes that they're due for a lighting upgrade and they want to integrate their lighting with the HVAC system. Those building owners help demonstrate the real world savings and benefits of the technology and we recognize them for it. We also provide resources to

make it easier for the other buyers to consider those solutions. Those resources might be this webinar or fact sheets or other information. I'll cover the resources a little bit later.

We also offer technical assistance to help make those applications successful. So if you're working on something that you need some help with, let me know. I work with a bunch of really smart lighting people and I'd be happy to connect you with them. So to sum up. As you can see on this slide we follow this handy formula. If we put together resources with technical assistance and recognition we get accelerated adoption. So that's really our goal here with integrated lighting.

Next slide. So now that we know what a technology campaign is, we can see how it's done with integrated lighting. The ILC recognizes insulations of, you guessed it, integrated lighting. In this sense, the term integrated means that the lighting system can communicate with other building systems to enhance the overall building performance. Today's lighting has really come a long way from basic LED retrofits and tubes. It can work and it can talk with the rest of the building to achieve deeper energy savings at the building level, for example, by exchanging information with the HVAC system or controllable plug loads or even more broadly than the building level by communicating with the electric grid.

Lining and lighting sensors hold some really valuable real estate up in the building ceilings, meaning they really have a great bird's eye view of the space. This is an important perspective for collecting information about the space. They have the ability to relay that useful information to other building systems like the occupancy information that they collect or ambient light, temperature and humidity, location of assets, a lot of things. So while this campaign is especially interested in these integrated systems, there are still advanced lighting and control systems that we're hoping to capture as well.

Advanced lighting systems and controls in lighting that more basically improve the lighting performance are definitely of interest and we'd love to hear how these systems are going above and beyond simple occupancy daylighting and scheduling approaches. In particular, installations where sensors and controls are enabling deeper operational savings and lighting applications are creating an enhanced occupant lighting experience and that could be luminaire level lighting controls, also known as LLLC or maybe a white tunable system that can have a positive impact on the circadian system of the occupants. So through the ILC we hope to learn about and recognize some of these innovative lighting projects as well as recognize the supporters that get them there.

Next slide, please. The ILC is really a collaboration between seven organizations and they collectively make up the organizing committee. They are our primary planning and management team. They help by providing guidance to the ILC. They support our outreach efforts. Each of their organizations has an alignment with and interest in the campaign. They review all the submissions for recognition that come in and they ultimately decide who gets recognized. So they are the Better Buildings, which is an initiative of the USDOE; the Design Lights Consortium or DLC; the US General Services Administration or GSA; the IES, Illuminating Engineering Society; the International

Facilities Management Association or IFMA; the Lighting Controls Association; and the International Association of Lighting Management Companies or NALMCO. We are happy to work with these organizations and if you want to get in touch with any of them also let me know.

Next slide. So along with the organizers there are a couple other groups of stakeholders that really play a key role in the campaign, supporters or organizations that deliver value to a building owner or end user. It could be products, services, electricity, incentives or something else. It could be energy efficiency organizations, manufacturers, utilities, implementers. Supporters play a key role in our success by helping promote the ILC. They identify a lot of projects that could be a good fit for recognition under the program. Last but not least, we talked about them a little bit, participants of the ILC are the adopters of that new technology like building owners or facility managers or really anyone who's overseeing the use of the technology in a building. So those are really the folks that get recognized that each of these different partners help and are critical along the way.

Next slide. So I talked a little bit about the resources earlier on. So here's just another quick note on the resources that we offer. The ILC website serves as a resource for things like reports and case studies from national labs, PNNL, and others, other third party organizations as well as utility incentive list that might help provide financial support for those taking on these advanced lighting projects. Webinars like this one and trainings are also listed there, along with topic relevant videos available to view right on the site. So check it out if you haven't been to our website, IntergratedLighting@PNNL.gov. Good stuff there.

Next slide. So I also wanna tell you a little bit about our recognitions this year that have already happened in 2022. We had a really great year. We had a total of 18 recognitions, 15 participants, and 3 supporters. The left side of this slide shows the recognition categories and the number of recognitions in each, but I do wanna make the point – I said there was 18 organizations recognized, but the number of recognitions in that right column of the table is higher. That's because participants can be recognized in more than one category. You can see that most are recognized for advanced sensors and controls, but also a bit of a spread across the other categories with of course the exception of that zero next to plug load controls. That was a little disappointing this year. We really hope to find more plug load projects next year.

If you have one or know of one, let us know. We would love to work with them. We still think that's a great technology with good energy savings and other benefits. So let us know. So the right side of this slide shows all the logos from our recognized partners. Again, you can see we had a really good year. Range of participant organizations from manufacturing to higher education, greenhouses, long term care facilities, a co-working space, some car dealerships, and a few more. So really all of these buildings were able to install high quality LED lighting and advanced controls to save a bunch of energy and improve their spaces while doing it. So again, we recognize these and we have a lot of

information. If you're interested in any of these, let me know. We have more information coming and a few more other resources on them as well.

Next slide, please. So one of the main benefits of being recognized by the integrative lighting campaign is that we do a lot to promote your organization and lighting project. We set up DOE e-mail blasts, social media announcements. We did a lot of case studies in the past. This year we're creating info graphics that can be used as website banners that give key details of the project like the features of the lighting system, the capabilities, the energy saving, and other successes. So you can see there's a snippet of one of the info graphics in the top left there. Then we're also producing videos of the project where the participants themselves can tell the story of their project in their own words.

So again, both of these screenshots are from the Northwest Energy Efficiency Alliance or NEEA, who is recognized for a lighting retrofit they did on their office building in Portland, Oregon. They installed luminaire level lighting controls, LLC's, and tunable fixtures in their space. So we'll be releasing this infographic and video soon and you can keep an eye out for the rest of the materials and more coming out soon for our 2022 recognized participants.

Next slide, please. Recognized participants are also invited to attend an event where we present their projects and offer them a certificate of recognition. This year's event was at the 2022 IES annual conference in New Orleans, Louisiana and just included a few pictures of the event. We had a great turnout. I was really surprised with the number of folks that showed up. We hope to keep that momentum going in 2023. We expect to hold the recognition event at the same conference, the IES annual conference, but there's still some more details to be worked out there. I have a timeline slide in a bit to tell you when we're gonna expect that. Keeping an eye on the questions pane. If you have any questions, feel free to throw them into the chat or the Q and A pane. On to the main event for today's webinar, the 2023 recognition categories.

Next slide. So this slide, you may have seen this one before. This slide shows the current six recognition categories, current meaning 2022. These are still relevant for 2023. So we're keeping all of these. They've been revised a little bit really just in terms of wording and trying to simplify them a little bit more. We've also added examples on our website just so people know more clearly what category best fits their project. So starting on the left there, that is the advanced use of sensors and controls for lighting. You saw a few slides ago that this is where many of the recognitions occurred earlier this year because it includes general connected lighting systems, network lighting controls, LLC, or white tunable systems.

Again, I mentioned earlier, this category is really for all the nonintegrated systems, but those that are going above and beyond simple occupancy daylight and scheduling approaches to controlling lighting in a space. So again, this is still very relevant for our campaign and we'd really like to see those advanced control projects. So next, the next three here are three separate categories for integrated systems. Integrated controls for plug loads, which are controlled receptacles that respond to, it could be lighting

occupancy sensors, meaning that the controlled receptacle would shut off an appliance that is plugged in in the case that someone leaves a space or will be turned on in the case that someone comes into an unoccupied space.

There is integrated controls for HVAC, which could also respond to occupancy signals, but instead of shutting off a receptacle, it adjusts the temperature set points. This is, again, compounding those energy savings with the lighting and in addition to the HVAC. The third integrated system category looks for all those other systems where lighting systems help inform things like security, IOT, grid interactivity. There are really a ton of options here. So this category is a bit of a catch all for advanced lighting integration. I expect some really cool technologies here in the coming years. I'm really excited to see it and we've got some good ones this year, some advanced technology. Again, keep an eye out for some of our info graphics and videos on those.

So the next – we're now on the fifth one, integrated lighting and horticultural controls. So this includes integration that optimizes greenhouse energy efficiency. It could improve crop yield. It reduces the use of chemicals and pesticides and other nonenergy benefits in growth spaces. This was a new category in 2022. We were really excited to have two recognitions in this category. I'm actually holding a webinar next week where those two recognized participants will tell us about their greenhouses. This is, again, just another benefit of ILC recognition getting people to participate in those webinars and share their stories and also promote their organizations. I see that Jasmine dropped that link into the chat. So thank you. If you're interested in joining you can click that link and I hope to see you there. It'll be next Wednesday, 10:00 AM Pacific, 1:00 PM Eastern, I think. Check the registration link on that.

So now on the far right side of this slide there was another new category this year in 2022, the innovative maintenance operation and financing service models. This includes really innovative approaches to fund integrated lighting. It could have been lighting as a service, unique utility incentives, or any other alternative financing options. We had one recognition in this category this year, which was a really nice example of lighting as a service project. The company was called home innovation research labs. So they got a lot – the entire lighting retrofit installed. They didn't pay up front. They pay a monthly fee and actually their savings in energy are greater than their monthly payment. So it's really almost a no cost to them. So they made it work with a funder. Really good example.

There are ways to fund these advanced lighting projects that save a lot of energy and also save money. Again, so these are existing participant categories. Have not changed. There is some slight wording changes if you're really keen on that, but otherwise you won't really notice a difference if you were looking at the page previously. So the next slide are the four new categories for 2023. I have my throat coat tea knowing I get a little raspy when I talk a lot. So again, starting on the left. Our first new category is specifically focused on small buildings, which we define as buildings smaller than 50,000 square feet. So this category really acknowledges that lighting controls are not one size fits all and we've heard this from participants and other stakeholders before.

Sometimes it doesn't make sense to have a complex network lighting control system, especially in smaller buildings with a small amount of luminaires or buildings that don't have a building automation system, a BAS, or dedicated facility manager. So here we're really looking for novel room control approaches here. So if you have a project in mind tell us how your small building or small space has incorporated an advanced lighting control system that works for the space and the occupants.

The next category, so moving on to that second box, this is a category for germicidal ultraviolet, or GUV systems for energy savings and improved indoor air quality. So this is really a hot topic right now and a promising technology for safety and buildings. We want to recognize projects that have successfully deployed energy efficient GUV systems in buildings to reduce the spread of airborne pathogens and improve indoor air quality. This is especially relevant for the larger goal of building energy efficiency as recent research suggests that GUV lighting is more effective in terms of disinfection and energy efficient alternative to ramping up a buildings ventilation and increasing the outdoor air exchange rate, which is what many buildings did early in the pandemic.

So by employee GUV lighting there are energy savings to be had and safety improvements to be made. So I'm really hoping that we see some good projects in this category. Our third new category, sustainability and lighting, is also a popular topic right now. If you went to Light Fair, if you're not familiar with Light Fair it's where all the lighting nerds collect every year, there was a lot of talk about sustainable fixtures, sustainable installations, and we want to highlight projects that have successfully minimized their environmental footprint and impacts across the whole project lifecycle. Excuse me.

This could be using projects that are serviceable, those that are made of recycled materials, or approaches that extend the product lifetime and support maintenance or improve end of life outcomes like reuse, remanufacturing, recycling, and proper disposal of e-waste. We're also interested in projects that use transparency documentation or labelling to determine the selection of the specified luminaires or control systems. Finally, the last new category is energy justice, diversity, equity, and inclusion in advanced lighting. This one might look familiar to another supporter category that we have, which I'll talk about on the next slide. This is a participant category.

So it seeks to recognize advanced projects which successfully incorporate energy justice, diversity and equity, and inclusion practices. This can include siding, installation, contracting, or procurement. For example, a lighting retrofit in a building or site that offers benefits to local disadvantage communities like offering education on the energy savings or a plan for donating or sharing the cost or energy benefits with the community. Another example would be a project team that includes a community liaison that ensures that the community is engaged throughout the construction process. So there are more examples for this category and each of these categories on our website. If you'd like to talk through any of them or you think you have a project that fits into one of these categories, please don't hesitate to reach out. We'd be really happy to talk it through with you.

Next slide, please. So I mentioned that we also have recognition categories for supporters. Supporters can be recognized for encouraging the use of advanced lighting controls and technologies that facilitate integration of lighting with other building systems. This could be an innovative utility program. We did recognize a utility program in 2022 and maybe the supporter recruits one or more projects into the ILC and that's a pretty big role of a supporter. They could provide technical assistance on recognition submissions. So any of these would fit into this first exemplary supporter category. The next one is again, continuing for its second year.

Again, we slightly revised this one to be a bit more clear and provide some examples, but this category recognizes exemplary supporters that support energy justice, diversity, equity, inclusion. So here they could demonstrate successful efforts to deploy advanced and integrated lighting solutions in underserve communities or support projects in diverse communities and minority owned businesses. Ultimately, we would really like to see supporters that work with and represent the communities that they are serving and bring the benefits of advanced lighting to the people that need it most. Those are our categories this year.

The next slide is the timeline I mentioned. So this is what we're looking at for this year. The 2023 campaign year as officially started. It was pretty much right after the recognition event of 2022. This was when we started developing these new categories and we're always reaching out and talking to folks trying to get projects. Really the kickoff for this coming year is right after the new year, January 22, 2023 is when the campaign year or submission process opens. So if you have a project that you're interested in submitting, that is when the website will open up for submissions. You'll have about four months to complete those recognition submissions. So right now we're scheduled to close the submission process in mid-April. Then we, meaning the internal ILC team, the ILC organizers that we talked about will take until about the end of June to review those submissions.

When we get those submissions in we often ask – we review and ask for more information and have conversations about those and notifications of selections will be made by the end of June. I wanna mention that this is not when recognition is conferred. This is just a notice of selection. Recognition is actually conferred and announced at that IES annual conference. That's what we have scheduled for August 2023. Again, the exact date is still TBD, but we'll update that as soon as we can. We just work with the host IES on that one.

Next slide. All right. So if you have a project that you'd like to submit, this is what the submission form looks like. It's not too complicated. There's a few questions, just information collection before this. Then you select a category and the field opens up to tell us a bit more with two key parts, the narrative and supporting data. This is really, again, the key part of the submission. You just tell us the story of how your project fits into the recognition categories and how it's novel or advanced or innovative. Then you can provide supporting data such as the number of buildings, the number of luminaires,

energy savings that are measured, though that's not required, incentives received or any other quantifiable information that supports your narrative. Again, it's a pretty simple and streamline submission process and again, if you submit we will work with you a little more closely to learn about the project and be able to analyze it more formally. So as you look to submit we're looking for good narrative here. Tell us a story and don't leave out any of the juicy details.

Next slide. That was it. That was all my slides and we can start some Q and A, but I'm glancing over at the question and answer section and there's nothing there. That either means I did really well or very poorly and you don't understand any of it. So I'm gonna go with the former and assume that I explained it well. If you have questions later on, feel free to e-mail me. I monitor that inbox. It comes right to my Outlook. So I'll be there. I will give you another moment. If you have a question to enter in, now is the time. Okay. Well, with that, I will give you a half an hour back. I really appreciate your time. Again, feel free to e-mail me and look forward to seeing your lighting projects come in. Thanks.

[End of Audio]