Julia Keane, ERG

Hello everyone. Thank you for joining. We will wait one minute to begin the webinar. [silence]

All right. Hello everyone and welcome to the P2 Finance Forum Workshop 2. My name is Julia Keane and I'm with Eastern Research Group, and I'm providing today's technical support. Before we get started, a few housekeeping items. Audience members have been muted to minimize background noise. If you have any questions today, we encourage you to send them to EFAB@epa.gov. That's EFAB@epa.gov, and I will put that in the chat as well. And now I'd like to turn things over to Tara Johnson. Tara is the alternate EFAB designated federal officer. So, Tara, take it away.

Tara Johnson, EPA

Thank you and hello everyone. Welcome to the second workshop of the EPA Environmental Financial Advisory Board's Pollution Prevention Finance Forum. I'm Tara Johnson and I am the alternate designated federal official for EFAB. Before I officially open the meeting, I want to remind everyone that this is a public webinar. EFAB is a Federal Advisory Committee, an independent advisory body chartered under the Federal Advisory Committee Act, or FACA. Therefore, all meetings conducting EFAB business where a quorum of EFAB members are present are open to the public, and all related materials will be available online via EPA's website. Today's workshop will run from 12:00 to 1:30 PM Eastern and is being recorded. It will be posted to EPA's EFAB website in a few weeks. This workshop is informational in nature for the EFAB's Pollution Prevention Workgroup and its EPA client, the Office of Chemical Safety and Pollution Prevention. It does not represent the full view of the EFAB, and information and viewpoints discussed here are not the views of the agency. For the Federal Register Notice, we are not accepting oral public comments during this workshop, and we received no written comments prior to today's workshop. For our public participants joining us today, if you have questions or comments during the workshop, please submit them to EFAB@epa.gov. And I believe that has also been dropped into the chat. During the Q&A portion of the workshop, speakers, including the panelists, board members, and designated EPA staff, can raise their hand by clicking the icon on the screen to ask a question, or they can submit the question via the chatbox. We're excited to have three guest panelists with us today, and we thank them for taking the time to talk with us. I would also like to acknowledge Kerry O'Neill, our EFAB chair, who is also with us online today. Finally, I want to thank the board members, EPA staff, and others who helped organize this workshop, particularly the EFAB Pollution Prevention Workgroups chair, Ashley Allen Jones, as well as all the other members who are able to join us today. We had about 150 registrants, and I see that we have about 80 people on the line now. And with that, I will virtually gavel in this meeting and turn it over to Ashley Allen Jones. Ashley?

Ashley Allen Jones, i2 Capital There we go. Thank you, Tara. I appreciate your introduction. And I actually am going to hand it right off to Stacy, who will hand it back to me in just a moment.

Stacy Brown, Freberg Environmental

Perfect. Yes, good morning, and good afternoon for those of you on the East Coast. My name is Stacy Brown. I'm the President and CEO of Freberg Environmental and your moderator for today's second P2 forum, Tools to Reduce Underwriting Risk in Pollution Prevention Financing. I serve as a member of the EPA Financial Advisory Board, also known as EFAB. So everyone's going to hear a lot of acronyms today. But

on behalf of my fellow EFAB members and EFAB chair Kerry O'Neill and my colleagues on the P2 working group, chair Ashley Allen Jones, Craig Hrinkevich, Chris Meister, I welcome you to the E2—or excuse me, the P2 Finance Webinar. I think we've done a really good job of assembling a panel of experts who will provide insights into existing financing models and technical standards currently used in a variety of projects. Our goal today is to explore the successes and challenges of financing these environmental projects. And knowledge gained today will help our workgroup better define recommendations for financing P2 projects and, in particular, P2 projects for small and medium enterprises, also known as SMEs.

Before we start, the P2 workgroup would like to thank our speakers for their time and their valuable input. We'd also like to thank EPA staff, including Alison Kinn, Tara Johnson, Andrew Wynne, and Julia Keane, who were instrumental in setting up this webinar today. So, in a few moments, you'll hear from Ashley Allen Jones, who will provide an overview of the P2 charge. Then we'll hand off to David Widawsky, division director of the Office of Chemical Safety and Pollution Prevention, who will discuss small manufacturer pollution prevention projects, which really sets the stage for our presenters today in our presentation. The P2 Workgroup has researched various financing tools and standards used in a variety of applications. For example, Energy Star certifications, commercial property, clean energy or C-PACE, and other renewable energy financing. Where there are established standards and money flowing to these important projects, P2 projects have not yet entered into these creative funding streams.

So what we're trying to do is establish methods to use as an analog to develop financing for P2 projects going forward, and specifically for SMEs, where the need for P2 innovation is most needed. Financing pollution prevention projects for SMEs could be similar to the technical challenges of the so-called last mile, where broad services are delivered to a local user. We are looking for innovative ways to funnel needed capital to SMEs who could benefit from new technologies and corresponding waste and disposal cost reductions. So, to get into some of the more details about what we're trying to accomplish here and more details of the P2 charge, I'm going to turn over the podium to my colleague Ashley Allen Jones, who will then be followed by David Widawsky, who will talk about EPA's P2 programs. Ashley?

Thank you, Stacy. Hi everyone. I'm Ashley Allen Jones, as you've heard now three times. It's really wonderful to be here. Thank you, Tara, for leading us in today on behalf of the EPA and EFAB. It's exciting to join with EPA leadership on the topic of facilitating access to capital for pollution prevention programs. The ultimate frontier for conservation and sustainability, in my opinion, is preventing pollution at its source. That requires technology, finance, policy, and leadership. And it's exciting for EFAB as a group and for me personally to be involved in this critical conversation with David and his team.

The purpose of the pollution prevention work aims to provide a road map for EPA's efforts to provide financial pathways to a broad base of manufacturing businesses. These businesses, in most part, receive the agency's support through the agency's portfolio of grants to state-based service providers that work across food and beverage manufacturing, metalwork and fabrication, chemical manufacturing and processing, auto manufacturing and repair, aerospace manufacturing and

Jones

maintenance, and other sectors to support middle-market businesses. So, a big swath of the American economy. And the big opportunity lies in our collective ability to reduce the gap that exists between financial service providers that might provide loans to middle-market companies to install, for example, equipment that reduces source pollution, and the companies that are interested in accessing such financing.

Our first workshop, for those of you who missed it, focused on challenges identified by the financial services sector to making these types of loans. We talked about business case analysis weaknesses, which, in some cases, are because of lack of gathering information, in some cases because they're actually weaker business cases than we would like; significant technology risk; fragmentation among the SME market; and just the overall risk profile of lending to SMEs. I do note that the CDFI sector (community development finance institution sector) and the government-backed loan sectors have had quite a bit of success in making the types of loans that are needed for P2.

So this workshop will focus on how we might learn from other sectors, as Stacy said, about strategies, structures, and tools that first and foremost reduce risk for lenders that might make these loans. And then our third workshop, which will be coming up in the next two months, will focus on distribution channels and partnerships that might provide on-ramps for more effective financing. So I'm excited about today's agenda. We're looking forward to a great conversation. And with that, I will hand it over to David Widawsky, as Stacy said, division director for the Office of Chemical Safety and Pollution Prevention at the Environmental Protection Agency, to lead us into the conversation.

David Widawsky, EPA

Thank you so much, Ashley, and thank you, Stacy, and the rest of the pollution prevention and workgroup of the Environmental Financial Advisory Board. You've been fantastic partners in this journey that we're taking together. And I also want to thank Brad and Bert and Catherine for your participation today. And I also want to thank all the participants in advance for the wonderful questions and comments that you are going to share with us as we get into our discussion portion of the workshop today. There is a post in the chat on where to send your questions: to EFAB, E-F-A-B at E-P-A dot gov. And so we're looking forward to including and responding to some of your comments and questions. So if you're on, be active and be thinking. And if things come up, don't wait to add your comments or questions, and submit those so that we can include them as part of our discussion. So I just have three quick slides and a few thoughts to launch us into our wonderful presentations and discussion. The Pollution Prevention Act was passed in 1919. And so we've got a few decades of work that EPA has been engaged in to fulfill the mandate of the Pollution Prevention Act, which really focuses on the left-hand side, any practice that reduces or eliminates and prevents pollution at its source. It's that idea that an ounce of prevention is worth a pound of cure. And certainly, when it comes to sustainability, source reduction in pollution prevention, that really is kind of the currency of the realm of what our sustainable future is going to look like. There's a lot of examples, and we're not going to go through them all right here, but it means a lot of different things in a lot of different contexts. And most recently, we've been working on focusing a lot of our efforts, through our assistance programs at EPA in pollution prevention, on the manufacturing sectors that Ashley mentioned, and really focusing on those SMEs

(another acronym: small [and] medium-sized enterprises) that are engaged in manufacturing and are facing some challenges and also opportunities.

Among the things that we've been seeing in a number of years as technologies evolve naturally and some of them focus more and more on having a stronger posture with respect to sustainability, is that they're getting integrated into supply chains and supply chain mandates, whether it is implicit by having kind of low-cost production processes and supply chains, or whether there is more and more focus on the explicit sustainability characteristics of those supply chains and those value chains. There's more out there in terms of what small and medium manufacturers can invest in. The challenge is how to invest in those technologies. And when we look at the kinds of the things that those technologies might cover on the right-hand side, there's a lot of different specifics we could talk about. But generally one can talk about process management, material substitution, manufacturing modifications, resource recovery. I'll talk about—just a moment—about those a little bit later. The challenge that we're seeing as we engage in the technical assistance that EPA provides through our implementation of the Pollution Prevention Act is that more and more, as small and medium-sized enterprises are looking to improve their sustainability posture, they're looking at capitalizing or recapitalizing their enterprises. And that's where EPA has not traditionally spent a great degree of effort, is to look at the financing market, look at financing solutions, try to identify what tapestries or combinations of financing solutions might be helpful, useful, and deployable for the small and medium-sized enterprises to engage, whether they're seeing returns on investment in the short, the medium or long term. And there's a lot of differences, depending on the manufacturing sector, depending on the manufacturing facility, on how those might manifest. And that's a primary reason why we engage the experts in the Environmental Financial Advisory Board to help us look at what are some of the conditions, what are some of the typologies of the small [and] medium-sized manufacturers, so that we, as an agency in fulfilling our mandate to promote pollution prevention, have a more fulsome toolkit to bring to the beneficiaries of our assistance programs in pollution prevention. So that really kind of drives us into that area of things like technology certification. How do we buy down, with information, the cost of underwriting and understanding. Whether it's certification. There might be other kinds of tools for bundling. Company size matters. Facility size matters. Loan size matters. And so all these are the things that we're throwing on the table, asking our EFAB experts to kind of untag them and help us understand. If we go onto the next slide, it's just a very quick example of a typology of one of those industrial sectors that we've been focusing on or working on recently and seeing some really interesting successes. And so this is just an example from advanced metal cutting systems as we look at rejuvenating and enhancing America's manufacturing sector. Metal fabrication is a huge part of that, and it's certainly going to be a part of the future of manufacturing in the U.S. So converting some metal cutting systems away from systems that use large amounts of cutting fluids, that may be hazardous waste, certain degreasing operations. There are opportunities to enhance the technologies in that sector with an investment that may be in the hundreds of thousands of dollars, may be up to a million dollars. So that's a fair chunk of change for a small metalworking and a metal cutting facility. It may not be huge to a bank who's looking at the fixed costs of financing. So as these kind of enterprises then start to look at, "How am I going to capitalize with my existing balance sheet or credit availability?,"

that kind of investment debt pays environmental benefits (and some of those are listed in that slide under P2, pollution prevention benefits), but also provides some economic benefits that would allow us to service the loan that we may take out or the finance that we may take out for that project. And so there's an opportunity there we're looking for, and it's kind of one example of a lot of opportunities to help promote both environmental and economic benefits where we might face a barrier to the financing, we're looking for a solution. When we think about the—and we're looking at sectors, what the overall opportunity could be in the U.S. We've identified through the economic census that there's almost 50,000 of these small [and] medium-sized fabrication facilities in the United States. And so if we can come up with some solutions, the impact of those solutions could be profound for a large number of facilities for both environmental and economic impacts. So we can go on to the next slide. We start to talk about environmental and economic performance. That is really kind of the sweet spot of what we're trying to do at EPA with our pollution prevention program across a portfolio of programs. When we start talking about the manufacturers that we're focusing on in this conversation, as I mentioned, there's opportunities for bottom line, the cost savings, energy, water, materials. As I mentioned earlier, there's also more complex supply chains that are looking for sustainability and environmental performance as a characteristic of those offerings in the marketplace. And so that provides market access, market share, and whether it is in the, kind of, the product or the services, in a lot of cases, information management on how one structures practices and end products can be an important source of value to those entities and to those facilities. Some of the really interesting things that we're seeing more and more in the engineering and chemistry space is how to transform an environmental liability into an asset. And we're seeing some of that manifested in what's called industrial byproduct synergy. How do you take the waste from one place and turn it into an asset that can be used for another part of the industrial process? And so these first three are all kind of monetizable attributes of sustainable manufacturing and pollution prevention moving forward. And the challenge that we've got is how to convert those into the opportunities to support a well-developed and a well-articulated and robust financing system. So with that, I'm going to end my introduction. That's the challenge that we've got. That's the opportunity space that we've got. We're really looking forward now to having some of the conversational presentations that can help us move the ball forward. So I'm going to turn it back over to Stacy and thank you everybody in advance for your conversation and participation.

Brown

Great. David, thank you so much. I really appreciate it. And when you put it into context of nearly 50,000 businesses just in one sector, I think that really highlights what we're trying to accomplish here. So thank you very, very much. So let's get right to our speakers. Each panelist will have about 15 minutes to discuss projects and tools that we might be able to transform into financing P2 projects for SMEs. So we want to first bring up Catherine Sheehy, the global head of sustainability partnerships for Underwriters Laboratories (UL). (I'm having trouble this morning.) Catherine will discuss the development and use of technical standards to promote waste reduction across specific industries. Catherine and I chatted yesterday, and she's got some great stories to tell, and [we're] really looking forward to hearing from you, Catherine. So please, Catherine, why don't you introduce yourself, and [we] would love to hear more about things that you're working on.

Catherine Sheehy, UL

Great. Thank you so much. I'm really pleased to be able to represent UL in this really important conversation about how to use potential tools and models and financing related to pollution prevention. I am not a financial expert. And in fact, even some of the things that I will talk with you about today that UL is involved in, I'm not an expert in all of those things. So to the extent that questions come up about some of the details, I will be happy to bring them back to my colleagues who can kind of wax more poetically than I can about some of those details. I am the global lead of sustainability partnerships in my organization. I do want to say that I think this is really relevant to UL in our history, actually, this conversation about risk and financing risk prevention activities. Because UL was founded in 1894, a year after the Chicago World Fair in 1893, precisely because of this intersection between risk and innovation. And at that time, it was really at the Chicago World Fair, there was the house of electricity was showcasing all sorts of new innovations around electricity. And the underwriters of that exposition didn't want the city of Chicago to burn down a second time in not so many years. So they hired an engineer, a fire marshal from Boston, to come out, basically, create the standards, create the test, to make sure that that house of electricity was going to be safe for the exposition, and, hence, the formation of Underwriters Laboratories. Now, I'm actually part of our for-profit entity, UL, which is a wholly-owned entity of Underwriters Laboratories. And the difference there is that Underwriters Laboratories stewards our mission and our safety science work and standards development. And I'm in the testing, inspection, and certification side where we offer a host of different services.

Now, many people do know us for our safety work. We do see our work as aligning with safety, security, and sustainability because safety today has much broader meaning. And I specifically work in our retail and consumer products division, and I'm aligned with our product sustainability service offerings, particularly in the eco labelling category, which I'll get to in a moment. But I think the conversation is also timely because of what we're all experiencing and what we see, right? So I'm sure you've seen the SEC approach to climate, the recent SEC claims against a Brazilian company related to its statements about safety related to its dam. But that information was provided in ESG reports. There's rise of greenwashing, and the national regulators and national authorities are going after greenwashing. And then the EU is taking action on financing sustainability growth, greenwashing. And so all of these things sort of converged to help us sort of understand that there is risk, there's opportunity, there are really great pathways. And I think this is a great conversation to learn from each other.

So my role here is really to talk about how standards and third-party certification can really contribute to, can be a tool to help mitigate that risk that then the financial community can understand and take to do what they do very well, which is financing these innovations. And so I'll talk about what that means and some examples of how that's played out in our space. But let me first sort of chat a little bit about the importance of standards and then the relevance of third-party certification as we see it.

The standards certainly help clarify terms, the scope of what you're understanding, metrics and measurements, and enable benchmarking. So it's really important when we're talking about how to understand risk, to use tools that help us make sure that we're talking about the same thing, that we're not talking about apples and oranges.

Consensus-based standards, more specifically, are really valuable tools in that they enable that kind of marketplace buy-in. As credible consensus-based tools, they are also available for public digestion. So there's an understanding of what is that measurement platform that sits underneath it. There are other tools that can be used—they're credible—that don't fall into that consensus space, but consensus is sort of the brass ring, if you will, in our world. And then beyond that, third-party validation and certification helps establish that trust.

So let me explain. As we think about this space—and third-party validation is not always necessary—but certainly when I think about this in the context of product claims, we see sort of risk in two dimensions. So if you think about a Four-Quadrant Model, the y-axis, from bottom to top, low to high, is sort of confidence in your data, and then the x-axis, from left to right, low to high, is control over the relevant value chain and your data. And you can then see, at that bottom, farmost-left quadrant, that that is your highest risk category because you have low confidence in your data and low control over your value chain. And the topmost far-right quadrant is where you have high confidence, if you've got confidence in the data and high trust and control over your value chain. So when we think about financing tools for innovation, you can start to see where third-party validation based on standards can really help drive trust in that system. Where, in the world we live in, we have complex value chains. We have shifting value chains in the context of supply chain disruption, as we are experiencing now. And even where there is high control and confidence in data, sometimes there's a lot of marketplace skepticism in those results. And so, again, third-party verification can really assist to make sure that there is a credible entity standing beside or behind organizations when they're promoting some of the things that they're trying to do. So I said then I was going to talk about some examples, and I have three. We've got lots of examples in the standards space that I think are relevant, but I'll start with one that's, I think, really analogous to our conversation today. And that's a work that we did for WashREIT. So you all provided management and advisory support to help this company achieve certification of eight multifamily assets under the BREEAM In-Use certification standard. And this was funded under WashREIT's Green Bond framework. The company set aside \$350 million in capital for eligible green projects. For those of you who may not be as familiar, BREEAM is a sustainability assessment method for buildings. It was established by the UK Building Research Establishment. It's used in 89 countries, and its in-use tool is used in 10 countries and it's designed to really help building managers and owners reduce the running costs and improve the environmental performance of existing buildings. It covers a lot of different categories, so it's energy, water, materials, pollution, land use, and ecology, health and wellbeing, waste, transport management. But the point of raising this is that in assisting the organization, based on a credible standard, to get to that certification, it created sort of a trust, an element of authenticity to what WashREIT was trying to do with that Green Bond framework across a broader portfolio. The second example, I think, is really directly relevant to what we're talking about because it's in our circularity portfolio. So inside that portfolio, there's a lot of different things that's waste aversion validation at a site or across a supply chain. Recycled content validation and measurement, by-product synergy, as mentioned earlier, closed-loop systems, even biobase systems. And all of these actually roll up into a tool called UL 3600, which is in a standards technical panel now, that's a really robust measurement tool across product and facility. But I'm actually going to talk

about something that emerged from our safety side. So increasingly we're seeing sustainability crossover. Safety, sustainability, and security, it sounds like they're three silos, but it's actually quite a blend. And specifically, I want to talk about EV batteries. So we know with the growth of the electric vehicle market, a new opportunity in the power sector really came out of the fact that there's a number of EV batteries on the market today that are approaching their end of life or purpose. So what we know about EV batteries is that they degrade significantly in the first two years of operation, and they're designed for about a decade of useful life in original purpose, right, for powering vehicles. But once they're no longer suitable for that purpose, they have still about 80% of the total useful capacity in the battery. So that suggests a whole host of opportunities for second life use, right? And so paths forward include recycling, reuse, even disposal. The most suitable reuse or second life pathways are providing reserve energy capacity for utilities, deferring transmission or distribution investments, and taking advantage of power arbitrage opportunities for storing renewable power during periods of scarcity.

So that creates a lot of flexibility and resilience, particularly in local grid environments. The challenge is that not all EV batteries after original use are suitable for those purposes. So to successfully repurpose EV batteries, they must be safe, and each battery needs to be evaluated individually because each one has been exposed to different charging and discharging conditions, or a different operating environment during its use in the vehicle. So we worked with automakers, battery reclaimers, utility providers, and academics to develop a safety standard, UL 1974. And that's actually been used to validate facilities that do the second life battery reclamation work. And so it's a single-use actual battery itself, and facility-level certification that can really enable a marketplace for second life use.

And the final one that I'll mention is unrelated to some of what we're talking about here, but I think the analogy is appropriate, and it's zero discharge of hazardous chemicals. So ZDHC is really relevant to the fashion industry, most relevant in jurisdictions where there's a lot of manufacturing production, not typically in the United States, although there are those kinds of centers here. We're a certified and accredited trainer, and there is growing demand for textiles and apparel products that meet new sustainability requirements, and certainly water discharge of hazardous discharge of hazardous chemicals into waterways is one of the biggest impacts of the industry, not the only one. So we're working actually with UNIDO—that's the United Nations Industrial Development Organization—to deliver ZDHC training to support the resilience of small and medium-sized enterprises in the Moroccan and Tunisian textile and garment industry, to improve their environmental performance. And so it's an existing industry-developed standard that is applied in that particular industry. And there's subsidized training, capacity development, and technical training on this in a sector that is really being buffeted around these new kind of sustainability imperatives, and needs to be able to understand what the requirements are to be able to serve the broader market more effectively. So I just wanted to share examples of how standards and some of that third-party certification work can play out in enabling the objectives of the program, and I look forward to the conversation that we'll all have once we all have a chance to share our insights. So thank you.

Yeah, thank you very much. I wrote down "establishing marketplace confidence with credible standards." I mean, I think that says a lot right there. And certainly, in

Brown

financing, having some credible standards is pretty relevant. So thank you very much for your comments, and I look forward to the discussion period in a few moments. Next, we will hear from Brad Fletcher, vice president and treasurer of the Illinois Finance Authority, who will discuss C-PACE and efforts in the state of Illinois. Brad, hand it over to you.

Brad Fletcher, Illinois Finance Authority

Thanks, Stacy, and thank you, Catherine, as well. That was a very informative presentation. Today I'm going to focus on what is colloquially called C-PACE, or Commercial Property Assessed Clean Energy financing. C-PACE financing is an emerging financial product. It's been around for roughly a decade at this point. It had its origins originally on the West Coast in California at UC Berkeley, but it has long since moved across the country and has now been implemented through enabling legislation in at least 30 states for commercial PACE. And there's a small smattering of states, in particular, Florida, California, and Missouri, that focus on residential. Given today's presentation, my focus will be on commercial property—size clean energy financing, which has really driven the growth in volume more recently in the last few years as residential has somewhat been relegated to the backside. I think I might have lost my connection.

We can still hear you.

Can you guys hear me?

Yeah, we can still hear you. Thank you.

Okay. Sorry about the video feed. So as I was saying, C-PACE has now been implemented in at least 30 states across the country. And while every state does it differently, I'll focus on the implementation here in Illinois. Illinois first adopted an authorizing statute on behalf of commercial property owners—SMEs, if you will—in 2017. And it was at that point that the stakeholders throughout the market, both on the SME side, the borrower side, for lack of a better term, and the lenders, the capital providers, requested the assistance of the Illinois Finance Authority to scale the Illinois market, somewhat standardize the structure, because the security mechanism for such financings is a special assessment that is imposed by a unit of local government. In some states, that is done by counties. In other states, it is done by municipalities. And in some states, it can be done by both.

Illinois is a state where both counties and municipalities can impose these voluntarily requested special assessment liens on behalf of property owners. And the impetus for such financings is quite simple. Generally speaking, regional and commercial lenders that SMEs have traditional banking relationships with will typically only offer loan terms of five, seven, or (even to their best customers) ten years, when we're well aware that such energy efficiency projects—or P2 projects, if you will—need a longer runway so that such projects can result in a positive cash flow and somewhat defer that high upfront cost of what would otherwise be considered an improvement that may not be necessary for the functioning business within the four walls of the property that has been subject to the imposition of the lien, again, that was voluntarily requested by the property owner. For Illinois's purposes, IFA to date, just in the last few years alone, despite the global pandemic that has affected the commercial real estate industry, has issued PACE bonds in the approximate amount of \$70 million, as of just last week, where we had a recent closing for \$12.3 million. And

all of these upgrades include what you would expect your typical commercial real estate developer to be looking at when they're trying to pencil out their deals with respect to a new development, or for an SME that is looking to make deep retrofits to a property that is dated. These include improvements to roofs, windows, walls, HVAC, LED lighting, and similar measures that can be analogous, if you will, to the reduction of greenhouse gas emissions. But I think what's important for today's EFAB form, and the takeaway for any SMEs on the call, is this is not necessarily equipment financing that could make the manufacturing process per se less polluted or less efficient. Rather, these are intended to be fixtures that would be permanently affixed to the facility itself, and therefore has application for SMEs looking to relocate or expand their current facilities at which their products are being manufactured. Again, with respect to Illinois, because we are not a municipality or a county, as I alluded to earlier, we're instead a statewide body politic and corporate created under the laws of the State of Illinois, we collaborate with the municipalities and the counties within the state's borders. And this is all intended to reduce transaction costs because we understand, as the market does, that commercial real estate needs to move quick and it needs to be standardized so that the lenders that are operating within this market have a turnkey solution, so that, if you will, a Whopper in Chicago looks like a Whopper in Quad Cities, which looks like a Whopper in Freeport, which looks just like a Whopper in Skokie.

Lenders prefer standardization because this reduces their transaction cost. It diminishes their due diligence cost. And furthermore, because we're attempting to improve the access to capital for SMEs across the board, this standardization allows the capital providers to securitize these assets, these loans, if you will, to secondary investors. And because these documents are standardized, that due diligence, and that securitization, is somewhat effortless, as opposed to, if you can imagine, all 1,297 municipalities in Illinois and all 102 counties having different sets of documents and different ways of implementation vis-à-vis their procedures and protocols. So that's really been the experience of the authority since 2017. Some have become our bailiwick here within the last four years. Traditionally, many members on this call are likely more familiar with the Illinois Finance Authority through its engagement in a state revolving fund for the State of Illinois, where the IFA issues taxes on bonds on behalf of wastewater and drinking water facilities within the state. Given that exposure to the market, market stakeholders approached the authority for implementing C-PACE here in Illinois. And we look forward to engaging with more municipalities, more SMEs, and more capital providers so that we can begin to move the needle on climate change, which has benefits not only for greenhouse gas emissions, but from a pure operating business standpoint, many of these energy efficient upgrades, these P2 improvements, if you will, given the longer runway that is available through a C-PACE financing . . . [clears throat] . . . given the longer runway that is afforded by the C-PACE financing, these improvements can actually save money in the long run.

And really, that's the pot of gold at the end of the rainbow here as well. Sometimes we have enthusiasts on one side of the spectrum that are looking at this from a pure climate perspective. We also have benefits that accrue to the companies within the facilities that are implementing these improvements because it reduces their operating expense. And that double bottom line benefit is really what the authority is

focused on here in Illinois for SMEs that are looking at gauging whether or not these types of improvements can be done on a cost-effective basis. So I'm happy to answer any questions given that brief overview. Again, C-PACE is an emerging financial product that is certainly complex, but our role here is to try to standardize this and make it more applicable going forward so that it can benefit as many end users as possible. Stacy?

Brown

Awesome. Thank you very much, Brad, really appreciate it. Starting to hear some recurring themes here: standardization, reducing operating costs, things like that. So that was great insight as to what's going on in the state of Illinois. And let's now head back to the East Coast, and I want to introduce Bert Hunter, who's going to round out our guest speakers. And Bert's going to talk about financing for energy products in the state of Connecticut. Bert?

Bert Hunter, State of Connecticut

Yep. Thank you, Stacy. And also Catherine and Brad, both very interesting presentations. Yeah, Catherine, as far as the standards, so important for lenders who don't want to get caught up lending against equipment and projects that don't attain the functions that they were intended to provide.

And Brad, I wish we had seen your legislation about financing pollution control measures when we went to the legislature this year. We might have gotten—maybe we could have expanded it to that as well, but maybe next session. But anyway, great to be with you and talk about how more capital might be made available to businesses undertaking P2 projects. I'll just take a couple of minutes to describe what the Green Bank does, at a high level, and then get into [and] suggest some paths to capital for SMEs that the P2 program is trying to reach. We're the first Green Bank in the nation. We've been in operation about 10 years. We focus on providing families and businesses with access to capital so that they can have the funding that they need to finance clean energy improvements to their homes and buildings and other measures, charging infrastructure and so forth. We're quasi-public, meaning we're state sponsored, but we have an independent board and governance structure and we're funded by what's called a system benefit charge. So every kilowatt hour of electricity has a little charge on it. And that adds up to about \$25 million for our Green Bank annually. And we also get some proceeds from our regional cap-andtrade program that provides another \$3 to 5 million. And we have a portfolio of about \$200 million of investments that provide a lot of free cash flow for reinvestment. All of that together, we've used about \$300 million of public capital to stimulate about \$1.8 billion worth of investment into the Connecticut economy over the last ten years. So, a leverage of about \$8 for every dollar—\$7 of every \$1 of our public capital. We also issue bonds, Green Bonds, 125 million thus far. We have a very popular Green Liberty Bond, and more recent—those go up to 15 years in duration. And we also have a very popular Green Liberty Note, which is available for as little as \$100. We have offerings every 90 days. And this is all toward offering everyday citizens the opportunity to support and invest in what we do. And the response has just been very reassuring.

So how do we work? We co-invest in transactions, usually as a subordinated lender, but sometimes as a senior lender alone, or I should say, in partnership with private capital. Subordination of our funding de-risks the transaction somewhat for private capital and makes the investment more attractive by reducing risk, enhancing returns,

or both. An example of this funding we provide to SMEs through a program offered by our electric utilities, Eversource offers through their small business Energy Advantage program. They organize a group of contractors in the state, and these contractors install energy efficiency measures to reduce energy consumption, save these businesses money. That's the business case. The funding for 100% of the project cost comes from a 0% loan program for four to seven years to these SMEs.

So how do you take interest costing money to 0%? Well, somebody has to buy it down, and that's the job of the energy efficiency fund, and that's how you work that magic. Another example is our commercial Solar Power Purchase Agreement program. So again, SMEs are able to get solar, the benefits of solar, put \$0 down, and they just pay for the energy as it comes from the solar PV system. We act as a lender, but we work with other investors, some on the tax side and some just sponsoring or developing the project. And that investment is recovered over a 25-year period. We also offer credit support, most frequently in the form of a loan loss reserve, where we are shouldering a portion of the credit loss with private capital. We do that through our Smart-E Loan, which is a homeowner residential loan program, and that provides a second loss guarantee to lenders. I remember hearing, on the last broadcast, about lenders asking for guarantees for loans to SMEs, so we can talk a little bit about that. Finally, we warehouse smaller transactions, meaning we aggregate them together. A number of these transactions are small. They can be put into loan pools, and then they can be securitized and you can issue bonds against them. Those bonds would qualify as Green Bonds under the International Capital Market Association's Green Bond Principals. That's one of their categories of eligibility, is pollution prevention and control. So lots of possibilities here, and I'm going to stop it there so we can have some time for discussion.

Brown

That's great, Bert. Thank you very much. And yeah, we've got plenty of time for discussion. And to kick off our discussion, first we're going to hear from Martha Sheils, the director of the New England Environmental Finance Center, and she's going to talk about the small grants program and some of the other things that they're working on up in the Northeast. Martha, we would love to hear from you.

Martha Sheils, New England Environmental Finance Center Great. Thanks very much. Can you hear me OK?

Sheils

Yes, thank you.

Wonderful. So hello, I'm Martha Sheils. I'm the director of the New England Environmental Finance Center, based at the Portland campus of the University of Maine system. And we work in all six New England states on various programs, including pollution prevention, to help communities build capacity to fund and finance their environmental programs. So today I just would like to talk very briefly about a small business grant program at the Toxics Use Reduction Institute based at the UMass Lowell campus. For short, they're called TURI. The Small Business Grants program is an annual program, and TURI lends up to \$10,000 per year to qualified Massachusetts small businesses for the purpose to change their processes or to replace toxic chemicals with safer alternatives. We actually have a P2 partnership with TURI. We are using their research to roll out safer cleaning and sanitizing chemicals for the craft beverage industry in Maine. So we've been working with TURI

for a while now. Since the program's inception, which was in 2017, TURI has typically awarded two to four small business grants each fiscal year, depending on TURI's budget and whatever other grants are out there that specific year. TURI uses the money from the TURI general budget. And that budget comes from industries in Massachusetts that meet certain requirements, like reporting and planning and fee requirements based on their SIC, which is the Standard Industrial Classification, and their size and their chemical quantities. I'll give you two little examples of how effective these small loans can be. The first one is a small opportunity that they gave a grant to a technical school in Cambridge, Massachusetts, where students learn and work in the automotive technology program. There, they work—excuse me, the loan was to replace aerosol brake and parts cleaners, and also to replace lead wheel weights with non-lead weights. So this led to a much safer environment for these teens working in these shops. And it also reduced the hazardous waste coming from that school. And the second example is another small loan to convert a dry cleaning shop from using perc, which is short for perchloroethylene, which is a likely human carcinogen, to a new technology called Professional Wet Cleaning that's gaining traction across the country. This one shop alone can potentially eliminate the use of 200 gallons of Perc annually, improving worker health and safety and marketing the shop as environmentally friendly. So I guess what I want to say about these two examples is that this model of funding is a really good example of assistance at a very small scale. But nonetheless, it's very meaningful to these small local businesses who want to provide a safer workplace. These are just two tiny examples of what that tiny funding can do for a business. And if you look around the country, there must be hundreds—I don't know the number, but there must be hundreds of thousands of technical high schools and dry cleaners. And if we scale up this kind of model, it can be a really meaningful P2 driver at the local level. So this is another thing that can possibly be bundled with other loans that these businesses are going for. So thank you so much for your time. I'm open for questions.

Brown

Fletcher

Great. Thank you. And we'd like to open up the questions to all the EFAB board members. Any questions that you have, please raise your hand and we'll call on you. I'm happy to open up some of the questions as well. And this would be a question for Brad. Given the high upfront costs of energy efficiency and pollution prevention improvements—and as David said, some of these pieces of equipment can cost upwards of a million dollars—that's certainly a barrier for implementation for an SME. So can you describe how C-PACE financing might assist a small business in realizing a positive return on such an investment?

Yeah, it's a great question. And I somewhat alluded to it earlier. Typically, SMEs have commercial banking relationships with their regional lenders. And typically, those regional lenders will typically go out for fixed-rate terms of 5, 7, or (for their best clients) maybe 10 years. And we know that these P2 improvements—related energy efficiency improvements as well—need a longer runway so that the modeling can be performed by the SME and its advisors to ensure that such improvements would, in fact, be—result in positive cash flow. Generally speaking, PACE financing really finds its niche when we have fixed rate terms of 15 years or longer because this is, at the end of the day, real estate financing. You'll find oftentimes that the terms go out 30 years. But in some states, for certain resiliency improvements like flood mitigation, window shutters, and the like, you'll find that some lenders will be willing to go out 40

years. It's that longer runway, that C-PACE affords SMEs, is really where it's found its niche in both the hospitality industry, but even more so lately, we've seen examples of industrial application. And I'll briefly discuss one of our examples. But really, the question is why does C-PACE allow for a fixed-rate term of such a long duration? And the answer is simple. As opposed to a—excuse me. As opposed to a mortgage, the security for a C-PACE financing, regardless of how the states or local governments are implementing the procedures, the security is a special assessment on par with a property tax, and therefore it is senior to a mortgage holder, and oftentimes the states will require that mortgage holder consent is required before a special assessment, albeit voluntarily requested for a particular financing, can be imposed. Because it's a special assessment, it's tied to the property that has received the improvements, if you will, albeit more energy-efficient windows, a more thermalconductive roof, and the like. Excuse me, apologies. So because the special assessment is tied to the property, that special assessment can transfer from one property owner to the next. It's not, therefore, necessarily a corporate obligation of the entity that exists within those four walls. And it's that transferability of the special assessment that allows the niche lenders in this space to offer that long fixed-rate term. And it's that long fixed-rate term that allows for an economic modeling of the improvements to be assessed such that the SME can make the best financial decision both from a climate perspective, but both from a business operating perspective. Again, the longer the runaway, the more likely these improvements start to result in positive cash flow. As we know in the SME space, especially on the manufacturing side, every penny counts. And so to the extent that we can make P2 improvements and energy-efficient improvements economical, we're likely to see more application throughout a broad array of commercial asset classes.

Brown

Allen Jones

Fletcher

Interesting. Ashley, it looks like you have your hand up. Do you have a question, please?

I do. Yeah. I just had a follow-on question to your question to Brad. That was a really good clarification. Thank you. About what actually—the mechanisms that actually make the deals, the C-PACE deals that you're talking about, happen. So my question before you gave that great explanation was, is this transferable to a P2 equipment-based arena? You distinguished that during your initial comments. I think that's something that perhaps isn't easily answerable on this call, maybe some first instincts, but that's something that I think we're going to want to dig into, right? And then I guess a secondary question would just be more for David. How do we think about the fixed building infrastructure piece of the puzzle for manufacturers? Because they do expand their footprints, in which case it would be highly relevant in a facility context.

Right. Think of, a good example, and we have not financed this, but we have explored it from time to time over the years. Think of a cardboard recycler who has effluent when they scrub the cardboard that has effectively clean water within that could be generated from said effluent. So that is part of the, quote-unquote, "manufacturing process," where perhaps water could be conserved and recycled or reused within the plant itself. Those types of improvements would, in all likelihood, be considered by counsel fixtures tied to the property. For a hospitality project—I understand it's not industrial—but for a hospitality project, they may have a cistern at the lower levels to capture water, water reuse. Elements of that, depending on the applicable state statute, can qualify for C-PACE financing. But generally speaking, equipment is kind of

a harder road to sell, if you will. Counsel will be looking for those permanently affixed type of improvements to qualify so that they can provide that valid and clean opinion. I think it is worth stating that this is an emerging financial product. This is nowhere near the volume or scale of the commercial mortgage-backed securities market, which is the most analogous across the array of financial products. But originally C-PACE was only for retrofits. And then it somewhat was—I should say the application was expanded to new construction. New construction application being if it's an improvement above and beyond what is mandated by the state statute or the local building code, then it qualifies. More recently, many states have been updating their statutes with respect to resiliency improvements. Resiliency was not considered one of the original applications for C-PACE, but now it's somewhat par for the course. So I think this is evolving. I think the application of C-PACE will be broader, if you will, in the coming years, especially as states implement standards. To go back to our earlier conversation, to get to net-zero by a date certain, we'll need all the financing tools and economic development we can get our hands on to really make a difference. So I understand that equipment [is] a little bit difficult now depending on its use. But I could see the industry moving in that direction in short order. Just a bit of an anecdote: One of the things that Illinois added to its statute that is not available in other states is the mitigation of lead service lines with respect to tenants or commercial real estate end-users. We recognize that in Illinois, lead service pipes can become an issue given—especially if it's a very dated property. And so we took the position that this could work, may not have an everyday application, but the broader the application—can't talk today—the broader the application, the more likely we are to see those double bottom-line benefits.

Brown

Hunter

Hunter

Awesome. Now I see we have a few questions. We have a question from the chat which Tara—

Stacy?

Yes.

Actually, I had my hand up. I just wanted to chime in on Brad's response, if I could. That's on point. I think part of the challenge—I do applaud—I mean, I think I said in my comments I wish I had had access to Brad's legislation before we went into our session. But some of the challenges will be that many SMEs, if not most, are not going to own the property that their, say, machine shop or whatever, whether it's a dry cleaner, is in. So they're going to be leasing from a landlord. And so that will add a complication because the landlord would have to step forward to actually do the C-PACE transaction. And the further complication from there is, depending upon the actual relative size of, say, that investment to the amount of property we're talking about, even if it's a property that is 100% to this SME and it's 100% owned by the landlord, right, is that it could potentially turn that property from a general use to a special use because you've now introduced equipment that is perfectly fine for a machine shop but only for a machine shop. And so now you've got that investment and the repayment obligation on the tax rolls for something. And so if there is a problem repaying that assessment and there has to be a repossession, then that assessment is going to be considered less of an improvement like you have in an energy efficiency sense where the benefits of energy efficiency or solar and so forth would broadly apply to any occupant of the property. Now that property is more

suitable to another machine shop owner. So just as an extreme example. So yes, there can be these benefits, but I mean, let's be careful about how broad the applicability is, is my only caveat there.

Brown

Well, and I would—one of the things that I thought of, Brad, when you were making your comments—and Bert, you just kind of highlighted it a little bit—what about compliance, right? So you have an SME. Maybe they've had some poor practices in the past. How does compliance and potential for contamination that may exist on the property perhaps impede these processes?

Fletcher

Yeah. Just similar to a conventional commercial real estate financing, remediation is a cost. And at the end of the day, if that cost cannot be engulfed, if you will, in the proposed improvements and it still is justifiable, I hesitate to say but I think that would be quite the barrier with respect to moving forward. Effectively, you're taking something—PACE is designed, if it's new construction—very vanilla example—if it's new construction, you're taking the baseline code and you're trying to finance something that is above and beyond the code. That spread, that delta, is the eligible financing. So starting from a negative position rather than zero, if you will, as a baseline only impedes the potential for lenders to get comfortable underwriting the respective project. Albeit the security is a special assessment. A property tax obviously has quite low default rates. But I think lenders, from an underwriting perspective, would of course take that into account. And I would view that as quite the roadblock to overcome. Not impossible, but definitely a roadblock. So, a very well-made point.

Brown

Well, and then conversely, the savings, the benefits of installing these types of equipment—savings and reduced disposal cost, things like that—that certainly goes into the underwriting of these products, I would assume.

Fletcher

Brown

Absolutely, 100%. Hit the nail on the head.

Stacy, why don't—I'll go through. We have a few on the chat. I'll tee them up for the

Okay. Great. I think we might have had a question on the chat.

Allen Jones

group. The first one is from Kerry O'Neill, our chair. It's a question for Bert. She says, "I know you're involved in the National PACE Industry Group. I wonder if you could comment on the potential to work with states that have C-PACE enabling legislation to expand to cover P2 projects. Sounds like you'd be open to that in Connecticut. Any thoughts on the reception more broadly? Seems like a great argument to be made regarding the public purpose nature of the improvement."

Hunter

Yes. No, I think it's a great addition, as Brad explained, yeah, with the caveats that I mentioned. But I think that it's something that—Brad, I think at the upcoming summit in June, we should pigeonhole some of the leadership there and talk about this more broadly.

Fletcher

Yeah, absolutely.

Allen Jones

Yeah. It's very interesting and encouraging to me as I sit here running this exploratory process, that you both have an affirmative response to the potential expansion of a C-PACE type of instrument into more of a pollution prevention environment.

Hunter

Allen Jones

Yeah. It's already been expanded. I mean, PACE has already been expanded into seismic, earthquake, particularly in California, resiliency. Think of Florida, and hurricanes, and things of that sort. So going to another public benefit is not unheard of, beyond energy efficiency and solar, where it started from.

Yeah. So let me just pose a couple more questions. We have one from Josh Rivers, with St. Charles County. And Josh said, "Has pollution prevention funding been used by municipalities for projects that relate to municipal separate storm sewer systems, MS core permits? If so, in what ways could this funding be used by these programs?" And I'll just add before we open it up, that this is a topic of great interest to the group. David's nodding at me. The SRFs are obviously a big pool of money within EPA, and it's not money that's authorized for P2 right now. So that's sort of going in the other direction. But I think this is absolutely an area that we're pursuing questions and answers in. So great question. Does anyone on the panel or the group have thoughts about Josh's question?

I'm going to jump in [crosstalk]—

Yeah, and [crosstalk]—sorry.

I'm sorry, was somebody else going to speak?

No, please, David. Go ahead.

Widawsky

I was going to jump in, and then I was going to put Chris Meister on the spot. [laughter] Topic of interest, yeah, that has been brought up. So the answer to the first direct question—has pollution prevention funding been available for stormwater strategizing and technical assistance—the answer's yes, a number of years ago. It's not currently on the table as one of our [inaudible]. After Superstorm Sandy, not surprisingly, in the mid-Atlantic and northeast, a lot of interest in looking at how do you manage and what are some options for managing stormwater in a more a costeffective and sustainable way. So green infrastructure has been a topic of intense interest, and so we provided some opportunities for grants to focus on pollution prevention approaches to stormwater using green infrastructure. We're not doing so much of that now. I would also note that in the 2009 American Recovery and Reinvestment Act, there was a special set-aside for something called Green Reserve, which is where some of the state revolving fund money could be used for green infrastructure projects to help manage stormwater. As Ashley said, that's not currently a focus of the state revolving fund programs that is receiving a large amount of funding under the Infrastructure Investment and Jobs Act that was passed last November, a topic of intense interest and conversation. But I also mentioned expanding our vision beyond just the stormwater, looking at the potential impacts and burdens on water infrastructure, from dealing with hazardous waste, pollutants, and other materials that those water utilities have to deal with in the clean water context. There's been some interesting discussion about whether there are opportunities for financing upstream reductions or eliminations of those contaminants to avoid the incurring of costs by those water utilities, and how do you essentially transfer the benefits so it's a win-win from utility along with the upstream sources of that pollution. As she said, it's an ongoing area of conversation, and we've had some members of the Environmental Financial Advisory Board very interested in what are those opportunities to use the state revolving fund mechanisms to help fund those upstream kind of pollution prevention activities. And so I'll stop there and see if some of our wonderful colleagues have some additional thoughts to put on the table.

Anyone? Okay. I have some other questions here. Go ahead, Brad.

Chris Meister, EFAM

Fletcher

Yeah. I was going to say, I believe we're joined today by a special guest, Chris Meister from EFAM. Chris, would you like to weigh in a little bit on the discussion?

Thank you, Brad. Again, I'm glad that David went into that detail with the opportunity on P2. I think, as Catherine from UL sort of articulated, that there's a great potential for the use of the SRF on the watershed and the stormwater. And again, I found your clear explanation, combined with Bert's back and forth. Hopefully, what it does for the large number of people that have called in, it shed some light on this PACE tool and what it is and what it is not. So thank you, Brett.

Yeah, thanks, Chris.

So I would pose a question out to the panelists. We've talked about a lot of different things—C-PACE, different financing mechanisms—but maybe you guys could opine on all the different financing options that are out there. How might it be possible for some of these tools to be used in the ways that we're talking about today? We've gone into some detail on C-PACE, touched on SRF, but really, where the rubber meets the road, where do you guys see us going within our workgroup? Where are some of the best avenues for us to pursue in order for us to make some recommendations?

Hunter

I'll start off, Stacy. I think part of what I've heard about is, like, can the business case be made stronger? Clearly, there are tens of thousands, if not more, SMEs throughout the country. A lot of them are considered unbankable, yet they employ half of the Americans that have a job in this country. So somehow, year in and year out, these companies persist in their business operation and they're hiring people and they're paying salaries and so forth. But the banking community or other capital providers seem to think that they can't lend a dollar without a guarantee from the federal government. And sometimes that's appropriate. But to give you an example, we talk about standardization. To the extent that equipment is fairly standard in addition to the application—it could be for dry cleaning or whatever—I could completely envision a leasing program that would be perfectly safe if that equipment could be readily removed from the premises, if for some reason the business got into trouble with repayment. That's the backbone of the leasing industry, is being able to put the equipment out there, get a rental. If the business can't pay, make sure you can get your asset back to realize and redeploy that equipment. That has been done gazillions of times over decades to great effect. So I would suggest things of that. You're not going to solve the problem with one program or one method, but you can look at kind of slicing up the problem into discrete portions where you can apply capital appropriately. Another application might be to look at the SBA loan system. When I was hearing in the last broadcast or the last webinar about, basically, more government loans—or guarantees, I should say—for private capital coming into the market for these particular improvements or P2 investments, I really kind of shudder at yet another program that has to be developed because it's going to take another five years to come to fruition, at least. Expecting you could even get it done. Better to do like what Brad has done and take an existing program like C-PACE, or you take the SBA program, and you just tweak it a bit and you say, "Okay, and now you can do this

with it." Or you market the program jointly with the OEMs that are providing the pollution control equipment. And say, "Okay, we're going to use the SBA system or whatever, or maybe it's a CDFI, and the CDFI has a particular program that's more in tune with small business enterprises." So, yeah, I prefer to start from existing mechanisms and then kind of broaden the applicability rather than starting something new. And I also tend to shy away from blanket guarantees because I think that you have a misalignment of interest there, where then, yeah, the purveyor of the equipment is not looking for recovery of capital because he's got Uncle Sam sitting right over his shoulder, saying, "We'll take that risk." Well, maybe you shouldn't be taking that risk. [laughter] Maybe there's a better way to take that risk. So, anyway, just some thoughts on how we might attack the problem.

Brown

Okay. But then maybe what I'm hearing also is that—are you saying also that maybe a specific focus, specific industries might be a bit more achievable?

Hunter

Oh, absolutely. I mean, don't start with the hardest part of the market first. Go where you can—I hate the expression "the low hanging fruit," but maybe that's where you go, where you say, "Okay, we're going to go after these particular industries because we're seeing some similarities in how the types of equipment, the approaches, and the industry we can get our hands around and we can find a pathway into that market and drive it through."

Brown

That's great. Ashley, you have a couple of questions there.

Allen Jones

Yeah. I just wanted to jump in with a clarifying question or directional question for Catherine. Before I do that, we did have a question about the current program box on David's slide, the national emphasis areas. I wanted to just point out that we did paste into the link, that everyone on the call can see, an address that specifically gives more detail on the national emphasis areas. And then, Catherine, further to Stacy's question about where do we go from here. The standard and certification, it's obviously such a valuable tool. And I can think of about a hundred different ways we could use it. How do we think about narrowing the scope of possibility with the type of work that you're doing, given how many different sectors were thinking about and, really, the work that's required to establish a standard?

Sheehy

Yeah. And I like, with Bert, the concept of working with things that exist and applying them and potentially at the same time filling any gaps that might exist, if there are any, for specific issue areas. But there actually are a lot of tools in the marketplace today that can be used. I think the world of standards and certifications related to the issues that we're talking about is pretty big and dynamic. And so I know that that can be very challenging for people to understand. Whatever level you're talking about enterprise facilities, facilities within a certain region, facilities of a particular type. And then, within those facilities, what are those? Are they producing or manufacturing? And what are those business models, etc.? It can get pretty overwhelming, pretty quickly. So what I always say is start with—not the low-hanging fruit—there's actually some really great tools to understand your hot spots, right? So in product, we use life cycle assessments to understand where to actually focus attention in a world of limited resources and time. And so you identify where you can actually have the biggest impact. So looking, scanning it, whatever it is that you want to have an effect on, wherever it is that you want to have that effect. You understand what are the industries or the categories of work or the categories of impact where you can have

the biggest impact. And that can be what's the most sort of readily available thing to pull a lever on. It can be the thing that actually might take a little bit of extra effort, but it's going to have a bigger impact on those things. And there are great, credible standards that I think are relevant to any of these areas. I think there are great water-efficiency standards that can be applied today. And some of the tools that are available in the marketplace—the green building tools, the product-specific tools, the manufacturing site tools—are quite modular, and they can be pulled apart. And then what's also interesting to me is when you actually potentially use a number of those in different applications, then you can start to roadmap for the whole. So for example, if you're focusing on water in one area, or you're focusing on waste specifically in another area, you're focusing on chemical activity in another, and then you're looking at that at different levels, you can start to sort of build a system that shows you the whole, and then that can help those that you're working on water to move on to waste next, etc.

So I'd say you break it down. Even single-issue approaches are relevant, at the risk of potentially focusing on something that de-optimizes another. I think there's enough credible knowledge in the marketplace to avoid some of those things. And then, ultimately, just being transparent about it all, I think that's the key. So communicating what it is that you're doing, why you're doing it, and what you're relying on to make those decisions, I think, is just imperative on all of us to do those things, so that we avoid green-washing, we avoid the challenges downstream when people don't understand those things or can't see how you're measuring your progress.

Great. Thank you. We've got two more people and not a ton of time left. So, Ashley, I'm going to hand it to you.

I'm actually going to wrap us up in the last two minutes. So, Chris, why don't you go ahead. You had your hand up. Was that a new question?

Yes. What I was hoping is—we covered a lot of ground, and I thought that Martha might have a quick wrap-up since she's so close to the actual implementation.

So you mean Martha Sheils?

You, Martha.

I just think it's so interesting to talk about the small businesses and all these opportunities that they have for different loan opportunities. And I think there's a real problem with capacity, and also there's a real problem with giving all this information to small businesses that are so overwhelmed with just running their business. So I just struggle with trying to figure out how to implement some of these ideas in real life. And that's really my takeaway. I love that this board is thinking about this. It's very important. But working in the field, we really see that it's capacity. Capacity is a really big problem.

Yeah, absolutely, Martha. Thank you. That's a great segue to what I will try to wrap up now in the last two minutes.

Thank you.

This has been a great conversation. I think we have a lot to think about as the EFAB. Really valuable input from all of our panelists. So with just a couple of points I'll make,

Brown

Allen Jones

Sheils

Allen Jones

Allen Jones

Catherine, I think that there's wide respect among this audience how much standards matter and how valuable technical standards can be in terms of reducing risk for lenders. So everything that you said is right on point, right down the middle of the fairway. I think your summary about, "Find where we have the biggest impact, find where there's the biggest delta from a P2 perspective, and start there," which I think we can probably do in a relatively short order. We have a sense, and probably you all have a sense, of where the biggest potential impact might sit. I think it was very interesting to hear from Brad and Bert about how pollution prevention has been enabled already in some C-PACE statutes. And I think that presents a really interesting opportunity for us to perhaps work with you all on finding the levers where those opportunities can be expanded. I'll underscore what several people said about, "We don't need a new program. There's a lot out there that we can piggyback on and tweak and build on." So I heard that loudly and clearly. And then I'll end this meeting where we ended our last EFAB board meeting, which is there's a problem with capacity, and that screams at us from every corner of this conversation and other conversations that we have at EFAB. So we really appreciate that. Martha, I think a lot of these conversations happen at a high level, and we need to respect the real crux of capacity shortages across the country and the challenge for people that are running small businesses to, right, at the end of their day, figure out something else to think about.

So it is 1:31. We're a minute over. This has been a great conversation. Thank you, Stacy. Thank you, David. Thank you to our panelists, and I will hand it back over to Tara or whoever is going to close us off for the day.

Thanks, Ashley. And I was just adding to the chat that our next workshop with the P2 workgroup will be held on June 22. And you can register for that workshop on the EPA's EFAB website as well. So, thank you again. Just to echo Ashley, thank you, everyone, for joining us, and we hope you can join us on June 22. Thank you.

Thank you.