

NYSERDA'S 112TH PROGRAM PLANNING COMMITTEE MEETING
April 27, 2021
Clean Copy of Transcript

John Campagna:

We are all set.

Sara LeCain:

Okay, Mark, if you would like to start.

Mark Willis:

Well, thank you, Sara. Good afternoon. And welcome. I called this meeting to order a notice and agenda for this meeting was provided to the Committee members on April 18, 2021 into the press on April 19, 2021, this meeting is being conducted by video conference. The Authority will post video and of this meeting on web. To confirm we have a quorum. I would like to ask Sara LeCain, the Committee's Secretary to conduct a roll call of each of the Committee members.

Sara LeCain:

Thank you, Mark. I will first note your attendance and now take the remainder of the roll call. When I call your name, please indicate present Authority Chair, Richard Kaufman.

Chair Kauffman:

Present.

Sara LeCain:

Shere Abbot.

Sherburne Abbott:

Present.

Sara LeCain:

Chuck Bell, Chuck Bell

Charles Bell:

Here.

Sara LeCain:

Thank you. Ken Daly,

Ken Daly:

Present.

Sara LeCain:

Jay Koh. Don't see Jay yet and Gil Quiniones

Gil Quiniones:

Present.

Sara LeCain:

Thank you. We have enough members for a quorum.

Mark Willis:

Thank you, Sara. The first item on the agenda is the approval of the minutes of the Committee meeting held on February 2, 2021. Are there any comments on the minutes?

Chair Kauffman:

None.

Mark Willis:

Okay. Not seeing any may I please have a motion approving the minutes?

Sherburne Abbott:

So moved.

Chair Kauffman:

Second.

Mark Willis:

And seconded. Sara when Sara calls your name, please indicate whether you are in favor by stating aye, or opposed by stating no.

Sara LeCain:

Thank you. When I call each name, please indicate your vote Committee Chair, Mark Willis.

Mark Willis:

Aye.

Sara LeCain:

Authority Chair, Richard Kaufman.

Chair Kauffman:

Aye.

Sara LeCain:

Shere Abbot.

Sherburne Abbott:

Aye.

Sara LeCain:

Chuck Bell.

Charles Bell:

Aye.

Sara LeCain:

Ken Daly.

Ken Daly:

Aye.

Sara LeCain:

And Gil Quiniones.

Gil Quiniones:

Aye.

Commissioner Dominguez:

Aye, I'm sorry.

Sara LeCain:

I'm sorry. And also Commissioner Dominguez.

Commissioner Dominguez:

Aye.

Sara LeCain:

Thank you. The minutes have been approved.

Mark Willis:

Thank you again. The next item on the agenda is a report on the Authority's' Diversity, Equity and Inclusion initiative. This item will be presented by the Authority's, President and CEO. Doreen Harris Doreen.

Doreen Harris:

Yes. Thank you.

Mark Willis:

Might mention we started here a little late. So we'll probably still try and make to one 30 for the name Board meeting, but

Doreen Harris:

Okay. We'll do, we'll do our best Mark. Thank you. Good afternoon everyone. And thank you again. Today you'll hear a number of updates around our internal and external work on the general topic of equity. And as we all well know, equity is a topic central to the climate act that we are implementing. And you'll hear in a bit about a number of initiatives we're advancing externally with these issues central to our planning and execution, but first turning to a critical area of our internal work. We'd like to spend some time today discussing Diversity, Equity and

Inclusion to highlight the efforts we at NYSERDA have underway as an Authority to make progress on this important dimension of who we are, what we do and how we do our work. So as we've spoken previously during prior Board meetings, we have been undertaking a comprehensive strategic planning initiative designed to increase Diversity, Equity and Inclusion, or DEI at NYSERDA.

And this has been formerly underway for almost a full year now facilitated by an outside consultant TH Easter with months before that spent on preliminary scoping and planning. So I am thrilled that we are joined today for a presentation by my colleague, Michelle Andry, who has been doing a superb job, spearheading the management of this process. In addition to her day job on the energy affordability and equity team at NYSERDA. Michelle has been our lead on interfacing with the external consultant, communicating progress updates to all staff every month and providing guidance to our internal staff who are devoting time to this important work along with a lot of other behind the scenes work. So Michelle's presentation today will provide important updates on the status and previews as to the substance of this work. And subsequently we will be reviewing the full and finalize strategic plan at a, at a Board meeting in the future.

So without a doubt, there's important progress to be made and real roll up your sleeve's work that needs to be done to achieve it. And that's why we're doing so at NYSERDA, we see improving DEI as not only a means to achieving a beneficial ends, for example, such as best representing and serving the diverse communities of New York, but also as an inherent good that deserves our meaningful focus, no matter what. So the strategic planning team we've assembled to tackle this work stream has developed a set of guiding principles for DEI that speak to this mantra, which you will see later in Michelle's slides. And I will observe that the progress to be made extends across the clean energy industry broadly, both in New York and across the us New York's clean energy industry employs significantly fewer women and people of color than the broader labor force.

And this demographic trend is observed among clean energy workers across the United States. So this is a major area of work. As we build to work, to build an inclusive, clean energy economy. One where the benefits of clean energy are not simply accessible to all but delivered equitably. So, so with the tremendous job creation potential, we see, we want to leverage our internal efforts to help inform our work across the industry, such that representation among our industry partners starts to match much more closely with the State's rich, diverse communities. And so before I turn things over to Michelle, I want to close by underscoring how much of a priority commitment this effort is for me personally, as President and CEO and for the full executive team, accountability is a major theme coming out of the goals, objectives, strategies, and tactics that our teams are formulating. And I certainly intend for us all to be accountable to progress in this regard individually, collectively, and as leadership, it is truly foundational to our work and success. So with my thanks, I will turn the presentation over to Michelle now for the more detailed updates, Michelle,

Michelle Andry:

Thank you very much, Doreen for that excellent introduction. Good afternoon, everyone. I'm happy to have some time today to, to provide actually a brief introduction, an overview of the, the actual DEI strategic planning work that we've done to date. And as I think Doreen may have

just mentioned, we're definitely looking forward to coming back to you with a, with a folder presentation. Once we begin once we complete this phase and are ready to begin implementation, and we're really looking forward to that. So with the next slide, please I, I really will just kind of start by really kind of just walking you through the, the mechanics of the various phases of this, of the strategic planning process that we've been undergoing since last fall. So first after onboarding our consultant last late, last spring we kicked off of work with the consulting team at TH Easter consulting, holding meetings and discussions with our full leadership team, both collectively and individually, while in parallel providing some initial capacity building and level setting workshops for both leadership and the full staff on understanding the value of Diversity, Equity and Inclusion, as well as implicit bias that work dovetailed with a discovery phase, which included conducting a survey of sample NYSERDA staff of a sample of NYSERDA staff, compiling data provided by HR, our Human Resources Department, and also by conducting focus groups with staff volunteers.

And if we can go to the next slide, please, after all of those opportunities to, to talk with people and review data and get direct input from both leadership and staff, the consulting team drafted the following insights and recommendations for NYSERDA's strategic planning process. And I'll just quickly review those here. One of the primary recommendations was that we needed to create a DEI Strategic Plan, which focuses on these areas that will guide the organization to address, to address engagement challenges. Those are recruiting practices, our onboarding process career and professional development, performance management, formal employee recognition, our internal process review leadership development and effective communications throughout the entire organization. Additionally it was recommended that we focused on building more effective collaboration across teams to increase efficiencies of resources and support functions, and also capitalize on the successes that currently exist in the organization among our teams to establish a consistent experience for everyone. And we can go on to the next slide, please.

The consultant team then provided us a roadmap for a strategic planning process. And we assembled a team of approximately 12 staff members to engage and inform the strategic plan development that team developed the guiding principles for our planning process, which Doreen mentioned. And I will be showing you shortly as well as goals, objectives, and strategies for the, for the strategic plan itself. Those draft goals, objectives and strategies have, have since been reviewed by the executive team. And we've moved forward to the development of tactics to achieve those goals with the incredible effort of approximately 40 staff members who came together as four tactical teams who are, as we speak this week, finishing up their working sessions and finally finalizing tactical plans. Those plans will lead immediately into the next step of pairing the tactics with budget considerations and allocations, as well as the necessary exercise of determining responsibility, accountability, and the various communication and consultation roles for the implementation of what will ultimately be our final five year Diversity, Equity and Inclusion plan, the final and most important phase, which will transition us into implementation is communication of the plan in detail to the full NYSERDA staff team and as well to the Board and a future meeting.

And if we go to the next slide, please, so I've included this slide for reference there's a lot here but I wanted this to kind of be available for folks to see the timeline of how the activities I've just

described have been completed and the final stages that are in progress, and we can go onto the next slide.

So that was a lot of technical talk about strategic planning. But I wanted to give you a sense for the spirit of how this work has been unfolding by sharing the guiding principles established by the strategic planning team. I wasn't going to read all of these and in, in the interest of time I do wanna highlight just a couple that really stand out to me. One being that continuous learning and respectful openness to dialogue and change our foundational to Diversity, Equity and Inclusion at NYSERDA. And that NYSERDA will hold itself accountable at the individual leadership and organizational levels for effective and successful Diversity, Equity and Inclusion. So those are, those are just a couple that speak really strongly to me, but as you can see, you know, our guiding principles also speak to the energy industry the people of New York State as do mentioned earlier, and, and honestly just what it's like to work at nice at nice for the staff, for our employees.

And next slide, please finally I wanted to give you a sense for this tactical planning phase that we're in right now. Just a brief sense for where we're kind of focusing our thinking about actual actions which will help us to achieve the goals that we've laid out and which we'll be sharing with you later. So those general areas of, of tactical planning are around employee engagement, our policies and processes, accountability, and metrics, which we will use to, to guide our progress on this Diversity, Equity and Inclusion Strategic Plan, and finally our industry impact. So with that I have finished my presentation. Thank you for your time. And I'm looking forward to coming back to you in the coming months to brief you in more detail on the final strategic plan. Thank you. And we can go to the next slide.

Janet Joseph:

Okay, well, thank you. Michelle, this is Janet Joseph. I think I can pick up with the, the next set of discussions and, and presentations. And we'll try to do some compressing of the time here. So the next panel presentation will continue with the focus on building an inclusive, clean energy economy, and we're gonna pivot to our programs and external investments. So these presentations will illustrate how we're trying to bring to life, this new focus with real programs, with real initiatives, with communities across New York State. You'll hear from Chris Coll, who is our Director of Energy Affordability and Equity, and Chris's leading and facilitating some of our programmatic planning work across NYSERDA, focused on disadvantaged communities, also working with multiple agencies on the topic. And then you'll hear from three teams who are driving some really important, and I think exciting new initiatives to deliver benefits in disadvantaged communities and low and moderate income, New Yorkers to the benefit of low and moderate income New Yorkers.

So Jamie Marcotte will discuss a new initiative focused on clean and green schools in disadvantaged communities. And I think this is a very timely initiative given the discussion that's happening nationally about infrastructure investments in schools, a across the country, we'll hear from Robin Marquis, who will discuss an initiative that we launched just during earth week to advance several transportation prizes focused in disadvantaged communities. And Emily Dean will discuss a suite of work focused on affordable housing, including another exciting new

initiative that was announced by the Governor in the State of the State called Raise the Green Roof. So with that, I'll pass it over to Chris to kind of kick off the conversation.

Mark Willis:

Right. If I can, before you Chris, I'm sorry. I managed to keep myself on mute there. So I apologize for that. If there are any questions on the previous discussion, we can do those now, or we can, as Janet has grace gracefully suggested we can combine all this in, in a discussion game. So unless it's something immediate than somebody who wants to, let's go to Chris then. Thank you, Janet.

Christopher Coll:

Okay. thanks Mark. Thanks Janet. So as, as Janet mentioned, I want to spend a little bit of time here. Just kind of providing some, some additional framing on the, the NYSERDA programmatic strategy development and evolution, as we're thinking about, you know, building out this more inclusive, clean energy economy and you know, ensuring that we're in a position to deliver benefits, to disadvantaged communities for a little bit of context. And I think we've talked about this, you know, in, in a few different settings as a large group, but, you know, as we're thinking about climate justice and environmental justice, we know it's a multidisciplinary issue, right? There are a lot of a lot of issues and challenges and burdens that our frontline communities in New York State are facing when it comes to their ability to engage in the clean energy economy.

But if we look at the you know, the issues through kind of our NYSERDA lens or our energy lens, you know, we're seeing that you know, frontline communities and, and, you know, these are our communities who are not only environmental justice communities, but also low and moderate income communities, communities of color you know, they they're, they're facing, you know a disproportionate burden related to pollution from our fossil fuel economy. So whether that's combustion from electric generation heating, cooling transportation the disinvestment in, in communities specifically focused on housing and, you know, clean energy infrastructure we know that energy costs, you know, especially for lower income households are, are playing a, a large role in, and in their kind of inability to make ends meet the broader set of systemic inequality related to education and workforce development opportunities leading to you know living wage jobs.

And, you know, we also are seeing kind of barriers related to just engagement, you know the ability for underserved or frontline communities to engage in and participate in, you know, public statement hearings, and, and ultimately inform the way that policies and programs are, are developed, you know, cuz these are the programs and policies that will ultimately affect these communities. If we are gonna be successful, you know, with, with our goals here related to an inclusive, clean energy economy. So, you know, these are issues that we need to address and we need to solve for through the portfolio of initiatives that you know, we're thinking about and, you know, beginning to roll out here at NYSERDA you know, as, as everyone is, you know, familiar, the climate act sets an expect at our clean energy investments across a number of funding areas.

So whether that is, you know, housing, workforce development pollution reduction, transportation, economic development, so on and so forth that those investments ultimately benefit disadvantaged communities with a goal that 40% of the benefits associated with these

investments that we're making ultimately, you know go to the, the disadvantaged communities. And there's a lot of work that's happening under the, the Climate Action Council in the climate justice working group construct to define what a disadvantaged community is and to ultimately, you know develop a, a, a framework for kind of what, what those benefits should look like. But what we want to talk about this afternoon with you all is, you know, kind of how we at, I started starting to internalize this need to shift, right? So, you know, realizing these objectives will require pretty foundational shifts in, in how, you know, we develop and implement our clean energy strategies and, and programs and really kind of focused on how we can, you know, not only deliver benefits, but we also, you know want to be able to make sure we're listening to, and, you know, incorporating input and you know, feedback from communities as we think about how to kind of position them to better participate in and benefit from the, the emerging clean energy economy.

So you know, I'll provide a bit of an overview now of the, some of the internal mechanics related to our, our program and strategy developments. Really kind of acknowledging that the business as usual, you know, is not really sufficient to get us to where we need to go in terms of, you know, designing and implementing programs that are benefiting disadvantaged communities. And so last, last winter, so, you know, maybe five or six months ago, we started to develop a series of initiatives really focused on in our internal capacity building to ensure that, you know, our teams across the NYSERDA portfolio are positioned to orient their, their market focused strategies, their sector strategies to better deliver benefits to disadvantaged communities. And then also, you know, look at how we can better improve our engagement of these communities in order to ensure that, you know, we're incorporating feedback and are putting our, our programmatic initiatives in a, in a position to, you know, benefit those communities.

So we, we launched we recently launched earlier this year an initiative called the Energy Equity Steward Stewardship initiative, which essentially is identifying an equity steward in each of our program teams and in our operational units. And those, those individuals are responsible for, you know, working within their team, you know, to kind of ensure that, you know, as initiatives are developed, that we're really, you know, kind of internalizing the considerations for, you know, benefits to disadvantaged communities. And so the, my team at I started the energy affordability equity team is working closely with each of these stewards in order to position them to be effective in this role. So, you know, we, we started earlier this year working with, with the stewards to really assess how their program areas are currently you know, engaging with, or, you know, otherwise benefiting disadvantaged communities, how their investments may be flowing to communities where we have a, a series of monthly community of practice sessions where, you know, we're educating and kind of engaging with stewards in order to ensure that they are up to speed on, you know, the, the developments that are happening with the climate justice working group, but then also, you know, supporting them where they might need assistance in order to, you know, kind of improve their skill sets related to engagement with stakeholders and you know, kind of working across their team.

We also have developed an, what we're calling an energy equity residency program, which essentially is providing these energy equity stewards with an opportunity to spend six months embedded within the energy affordability and equity team to work, you know, more closely with the, the team members, as we're kind of engaging with communities you know, key stakeholders

in this area and ultimately kind of, you know, developing or implementing initiatives to give them more of a hands on kind of experience you know, in the subject matter, as we, as we seek to develop their, their expertise in this area to ultimately benefit their team and, and NYSERDA as a whole. So that, you know, so that's an exciting kind of initiative that, like I said, we, we recently launched and you know, looking forward to you know, positioning our teams across the Authority to, to better you know think about and ultimately benefit disadvantaged communities.

The other important area I wanted to focus on is a series of deep dive strategy and program development sessions that we're calling the Energy Equity Co-lab initiatives. And so in this case, the energy affordability inequity team is doing deeper dives into some key program areas to think about how best to, you know, position those, those programs or initiatives to benefit disadvantaged communities. So, you know, this is kind of a, you know, four to six week kind of intense kind of engagement where, you know, we're working with teams to kind of engage with their stakeholders, you know, develop their business case and ultimately, you know, identify how that, you know, initiative or investment can deliver benefits to disadvantaged communities. And so early on we've, we've prioritized several initiatives across NYSERDA.

So our large scale renewables programs is one area our clean transportation workforce development and our communities initiatives are the kind of initial program or initiative areas where we are kind of doing this deeper dive co-lab exercise. And so we've had some, some good, good results over the last month and a half. And you know, I know you'll hear a little bit, little bit about the transportation work from Robin in a, in a few minutes. So I'll you know, I'll, I'll, I'll steal her thunder there. And then I will also flag before I, I pass my time off to her. Or I'm sorry, Jamie's next. We're also kind of working through kind of an approach to better orient our stakeholder engagement across the Authority in order to ensure that we are kind of engaging with you know, stakeholders in the environmental justice or LMI space in, in a way that is kind of, you know, respecting their time and their expertise, you know, as you know, representatives of, of these communities and, you know, they, they know kind of they know best, you know, what their experience has been, you know, working with our clean energy programs and, you know, where there may be opportunities to improve.

So we're, we're working to kind of launch an energy equity collaborative, which would essentially be you know a regular engagement a quarterly engagement with key stakeholders in this space in order to, you know, help, help us be proactive in providing kind of our, you know, our, our agenda to the stakeholders to help them prioritize where they engage with us. But then also to help reduce administrative burden for those organizations, you know, most of those organizations are, are, are pretty small and, and don't have the resources to engage at the level that we may need them sometimes. So we're looking to streamline that, that activity. So, you know, with, with that, you know, it is an exciting time here, you know, as we're thinking about this equity agenda and you know, the, where we left off at the Program Planning Committee meeting in January when we kind of spoke to a number of, of key initiatives that we had identified as being kind of core to the you know, the, the rollout of our, you know, equity focused set of initiatives.

We did identify several of these that you'll hear about now. So our clean, a Clean Green Schools program, our transportation prizes, and then our affordable housing work. So I'll now turn it over

to Jamie Marcotte, who is our Program Manager in our Energy Efficiency Planning and Engineering program.

Mark Willis:

Right, Chris let's pause you for a second to see if there's any discussion or questions. You know, what I'm hearing here is really a broadening of the perspective and the involvement of the community to the disadvantaged in making sure that all of the activities, which I are being undertaken by NYSERDA overall initiatives are paying attention to all communities that they're, that are out there and making sure their voices are being heard. And to the extent that policies can be adjusted or else I'll say just to make sure that they are inclusive and they are helping as broader community as possible with a particular focus on the disadvantage. Sounds to me that that's very important what you're doing here. So I don't know whether any of the other Board members want to weigh in or ask, ask questions at this point before we hear some of these specific examples.

Ken Daly:

Yeah, Mark, I mean it, Ken, I, I would second your motion. It does seem like a very, very comprehensive approach. I mean, just looking at the agenda, you have schools, transportation, housing feels like you're hitting it from every dimension. So I, I applaud NYSERDA team, especially being, you know, State leader in this space. I think my one comment, you know, going back to Michelle's presentation was excellent. I do think it has to start internally and we just encourage NYSERDA the same way. We now track energy efficiency and green savings to track our progress in terms of inclusion and diversity. So I'd love to see kind of before and after hiring, you know, Board staff within the energy sector, you know, I think there's a metric that's gonna take us a while to move the needle, but I do think we have to relentlessly track progress whenever there's an opening, make sure we have diverse pools. I mean, there's a series of metrics. I just think we should now as a Board start to track in, in a very similar way that we track, you know, some of the core energy related missions.

Mark Willis:

And I'm glad you mentioned that. Cause I, I think the word accountability was used a lot. I think the Board would be very interested in seeing how you do that. And seeing some of those metrics also referring back to Michelle's presentation, which I agree also is really important. What you're doing internally here with your own staff will definitely help in the, in, in the work you do outside as well. It's kind of hard, I think, to do one without the other. And so I'm glad to see this presentation, having both the internal and the external impact being thought about at the, at the, at the same time.

Chair Kauffman:

I have a, a couple of, of questions. So one is what's the collaboration, if any, with DOE which has an energy justice initiative. And I think in the past we've connected Shalanda Baker to, to NYSERDA who's the deputy director of that program. So that's the first question. And then the second question is maybe, maybe the different presentations can address this as, as they go through, which is, how do we think about market based activities versus things that are non-market based?

Christopher Coll:

So, Richard on your first question we, we are collaborating with DOE and Shalanda Baker. So, you know, as at the federal level, they're looking to, you know, develop and implement the, the justice 40 initiative. There are a lot of parallels to the work that we're doing in New York related to operationalizing the, you know, the, the justice components of the CLCPA. So whether that is, you know, defining what a disadvantaged community ultimately is, or developing a framework to, to track and report out on benefits. There's a lot of similarity in, in addition to, you know, there are a lot of stakeholders that are, you know, kind of engaged in both forums. So we do have a, a regular, you know planning session with, with Shalanda at this point. So we are collaborating at that level.

Janet Joseph:

And Richard, this is Janet. Maybe I can pick up on the, your question about the market based approaches versus other, you know, regulatory approaches. I, I think one example and Emily will get a little bit more into it, but in the affordable housing area we are looking to build new collaboratives with housing agencies and these housing agencies influence what's happening in the affordable housing market. So one of the things that we're trying to do to scale decarbonize buildings in affordable housing is to incorporate energy efficiency, electrification right into the, the basic financing deals that these housing agencies are doing. So it's kind of a hybrid if you will, of a market based approach and a regulatory approach, but one that we actually think can drive cost reduction for carbon neutral buildings and actually scale. So that's, that's an example. I, I guess I would put that forward as a bit of a hybrid model where we are leveraging existing market transactions and structures to benefit affordable housing.

We're trying to do that where, where possible. But you know, it definitely is a significant challenge on the federal side, as Chris said, you know, we really are just kind of cranking up our engagement with DOE now that they have new light new initiatives and, and new funding. And we do see a lot of opportunity in the housing area in schools. And, you know, we're trying to, to track assess and look for opportunities, welcome input and steers on, on ways to do that. That's a rapidly moving landscape right now.

Jay Koh:

Thank you. If I might just make two points quickly and appreciate the presentations Michelle really I'm happy to hear about the practical internal actions we're taking on diversity and inclusion broadly across the agency and, and Chris as well, and to highlight maybe some of the features of Richard's and Ken's points. I think it would be great to know that there's kind of a harmonized approach in tracking metrics between how maybe the federal government is looking at some of these issues of equity in the climate context, broadly speaking, not just energy access or energy efficiency but I would also point to some of the resiliency initiatives that are moving forward in making sure that we take full advantage of what might be a substantial amount of resilient infrastructure investment that can benefit communities within New York State, particularly those that are disadvantaged or low middle income communities through the multiple access programs, not just in energy, but also on the infrastructure side and transportation, which will be relevant to our own energy transition.

But also the resiliency focus that we've added to the strategic objectives of NYSERDA broadly speaking. So great to hear that there's practical actions being taken and look forward to the you know, the, the, the outputs of that process from Michelle's outlines on the internal side of NYSERDA. I'm glad to see that there's a real dedication and commitment there. And Chris looking forward to some more of the, the commentary here would love to see you know, just an emphasis also on the resiliency aspect of this for energy. It is a critical component of how we're gonna make this transition work. There is a massive amount of potential mobilized funding and expertise and resources. And so to the extent that that can be harmonized and that we look at metrics and aligned with how the federal strategy is gonna move forward, particularly if there's funding availability or reinforcement of some of our activity that can be tracked along the same metrics would, would love to see that happen. But you know, applaud the practical efforts and look forward to discussions on the program side and hope that we can also have some follow up conversations about how this is being pulled into the resiliency agenda, which I think there's a lot of immediacy and preparation for some of these pre mitigation of disasters, or just kind of protecting our communities against what will be an ongoing set of impacts from the climate phenomena.

Mark Willis:

Are the Board members wanna weigh in here before we talk about these specific programs?

Charles Bell:

Mark, I just wanted to comment that there, you know, there's an important aspect of Diversity, Equity and Inclusion in terms of the communications and public relations functions for NYSERDA that we want the, the stakeholders and constituents and users of our programs are broadly speaking all New Yorkers, and we have a very diverse and somewhat fragmented media landscape. So trying to communicate to diverse audiences about the programs that we have about the initiatives that we're taking about the opportunities that are available, I'm sure is an ongoing issue or challenge for the agency with the resources we have. And another dimension of that is language access, where we have about 4.5 million New Yorkers that speak a language other than English, including 2.5 million Spanish speakers. And so you know, partnerships or finding ways to get our materials and information about products or programs to, to those diverse audiences would seem like it's a very important dimension of what we also want to be doing.

Mark Willis:

Yeah, Chuck that's very helpful. And I, I think in, in COVID there are a number of lessons here about how to work with the community and the importance of working through local organizations. That this has really been very true on right now on rental assistance, but also on unemployment assistance, all of those have faced the challenge of reaching people both in language, but just basic communication. And how do people learn out there? So you don't have to learn all this from scratch, although I know you have some experience in NYSERDA in the past doing this, but there's a lot of creative ideas and programs that, that have worked out there that you might work to.

Sherburne Abbott:

Yeah, I could, I make one more point about the communication, which is getting a message out that reinforces the near term actions while the strategic planning is underway. Because I think

one of the, the things that people look for is the specific activities that are being undertaken. While we're considering these larger questions of, you know, what does it mean to redefine disadvantaged communities while all the census and HUD stuff is, is migrating as well as more understanding within the State, it's really important to get out the message of what the specific investments are in the near term. And, and, and also including the, the internal work, which is I, one of the things that Michelle mentioned was in the strategic plan on employee engagement, I assume that means diversity trainings as well. And so keeping a watch on how that is on that, that, that, that those trainings are continuing to occur while this larger set of initiatives is being looked at. I think that messaging is really important internally and externally.

Mark Willis:

I just wanna point out again, that the obvious is what we're trying about doing is strengthening the organization, strengthening its success, strengthening its utilization of all the talent that that's out there, strengthening what we are doing to make sure that it helps as many people as possible. Sometimes we start to think about, we just gotta need to focus on diversity. Diversity is part of a much bigger picture here of trying to make a difference to be overly grand in the world. And I think the opportunity here is huge, and it sounds to me that you're trying to operate on all of those dimensions is really admirable and does require specific invitation specific attention to do that. Other Board members have a thought of thoughts, if not, I assume we're gonna hear some great stories here. So nothing like ending the presentation on that. We actually have a full 25 minutes left. So think we have plenty of time to listen in and share those. So whoever's should I, should I introduce, say hello to Jamie? Or do you do that, Chris?

Christopher Coll:

No, let's say hello to Jamie. Jamie is the right. The floor is yours and let's get started.

Jamie Marcotte:

Okay, great. Thank you. Good afternoon, everyone. I'm Jamie. I have the pleasure of presenting our P12 Green Schools initiative. This effort's currently under development with a planned launch in the first half of 2022. So this is really an opportune time for us to present our current approach and get your feedback. Next slide, please. So schools across the State, really across the nation you know, struggle, they are struggling, especially when it comes to finding time and money to focus on clean energy. And I think this past year and the pandemic shined an even brighter light on some opportunities in disadvantaged community schools to improve these learning centers and upgrade their building systems to improve the education atmosphere on multiple fronts. There are approximately 6,000 pre-kindergarten through 12th grade schools across the State of New York. That includes public, private and charter. And roughly one third of them are in a disadvantaged community. As our interim disadvantaged community definition has defined the geography right now. And so we wanna provide those schools with financial support to make progress in decarbonizing the existing building stock while engaging students in the community, in the process. Next slide.

So right now we're, there will be approximately \$45 million in incentives issued into the market. And we're thinking this will be a multi-phase program where the first phase we're currently calling professional services is going to be open offer. So schools and school districts alike can apply at any time they want to get third party consultant support. And if the schools need a list of

consultants that they don't know who to work with, we will have one handy to match them up. But this will provide things like planning assistance, indoor air quality assessments, energy feasibility studies, as well as money for them to hire staff who can support the school and actually even filling out the application to this program. Find opportunities at the site to help the school. We typically call them an onsite energy manager, but really providing any professional service support that the school needs to move the needle in moving towards decarbonization.

And as I mentioned, application, even application assistance, you know, schools don't have time to even digest the program sometimes, and we wanna make sure they have the resources and support to do so. The second phase will combine giving awards in a competition based approach for what we're thinking of is in two different stages. So two different due dates here where we would give awards ranging from say \$500,000 to \$2 million, and those numbers are still being researched. But that would be for capital upgrades, including comprehensive energy efficiency projects, heat pump, ready projects. So that could mean envelope improvements up the school, electrifying kitchen equipment upgrading distribution systems that would get them ready to install clean heating and cooling systems, as well as the large, the large investment of upgrading or heating system entirely and switching over to either air source or ground source heat pump.

So we think we're gonna offer that in two stages. So that schools who are ready to move forward sooner, have the opportunity to do that. But other school districts who are going to need to do all of their planning and then apply for a phase two incentive will have the time to do that planning and not worry that the money will all be consumed. So we know schools that have a very, you know, schools have a long lead time in general to get things approved. And certainly, you know, that that's not going to change with these, with these projects and the approach we're taking in addition to this funding's going to be directed toward educating students and the community about the project that the schools are undertaking. We'll be educating students on possible career pathways as a result of the project and related to clean energy and decarbonization as in general. And we may include we're, we're trying to investigate and are really excited about including maybe some paid student internships for the schools that get awarded scholarships or other paid trainings for students and teachers alike. Next slide please.

So we're currently engaging multiple stakeholders. This is a list of some of the partners we've started conversations with to get support and feedback on the program. And

Mark Willis:

Yeah. Can I just talk you for, for a second on the previous slide, \$45 billion sounds like a lot of money, but you've got 1900 schools. I don't know, what does it cost to redo one of these schools? And I know they're all different sizes, but yeah, yeah. Good. And there's a \$45 million include the staff time that, and the outreach and all of the other pieces that need to go along with us.

Jamie Marcotte:

Good question. So the \$45 million is just the incentives. There's additional funding that we're going to use for outreach efforts like that. So it was \$45 million. It might even be a little bit more, that's going to go out into the market to actually do the project. Okay. What we're thinking and you know, other good questions. So in phase one in servicing the schools, we're thinking of

offering awards ranging from \$50,000 to \$150,000 for those professional services support, we think we can serve about 300 schools. And then for phase two, we're looking, as I mentioned, giving, you know, multiple ranges of awards, but probably serving, you know, about 20 or so schools. So hopefully reaching about 20% of the population and trying to encourage, you know, districts to apply and not just the individual schools themselves.

Janet Joseph:

I think Mark, this is a point where the, the opportunity to leverage federal funding could be significant. So that's something that we'll be, we'll be paying attention to and discussing with our colleagues and State-ed, and, and at the national level as well.

Mark Willis:

Right. And this isn't exactly what Richard was talking about markets, but you gotta, you know, localities are fixing up schools all the time replacing. So somehow you need to get into that process there that if they're gonna fix it, fix up their heating system, there's a right. There's a better way to do it. I was gonna say, there's a right way. That might be true. Awesome. But there's a better way to do it as well. So taking advantage of other sources of money that would be naturally going here. And I'm sure you're thinking about all that, but this is a major project obviously, and disadvantaged school districts are probably the least likely to apply to even have the staff to, to do that.

Jamie Marcotte:

Yeah. I mean, I, I think that's a really good point. I mean, we've been, you know, looking at, in the past of, you know, participation from disadvantaged schools has obviously not been as high. So a big focus of, as we're developing the program right now is even making the right connections and working with Chris Coll's team, as well as other stakeholders on, it's not just about designing the program, but how are we going to engage that community to ensure that schools actually apply to the program at the end of the day, cuz it's one thing to design a program it's another to get them to apply. So absolutely agree.

Mark Willis:

Well, I diverted you a little bit. So

Jamie Marcotte:

No, you're, you're good. I, I was pretty much running.

Mark Willis:

It time for the next two. So please.

Jay Koh:

Yeah, just Mark quickly, which is, I would really urge you guys to consider integrating at least assumptions about future climate conditions and resiliency here into the design of any of these investments or engagements. It would be incredibly silly for us to do a lot of energy retrofit and energy efficiency with these kinds of very difficult to engage disadvantaged school populations, centers of communities, and then not plan for the next three hurricane Sandys that are inevitably going to eventually arrive here in New York State. So I think it's a great program to do it, but

let's do it in a way that plans for the world we're gonna all have to unfortunately live in. Otherwise the hard work that's being done right now will have to be redone and this is all impacted by the physical impact of climate change. So I'd appreciate it if you guys could consider how to systematically integrate that and to consider how to do that in a coordination with how the, maybe some of the federal strategies might be going in this direction as well.

Mark Willis:

The word is resilience. I know, so we gotta shake, but it is, you can never stop forgetting it.

Jay Koh:

Follow it resilience, or we can call it reality. It's gonna reality.

Mark Willis:

That's fine.

Janet Joseph:

I think there is an opportunity to look at dual purposing, some of these school facilities and school spaces for community based resiliency centers and, and that's definitely something that we want to and need to be looking into.

Mark Willis:

Right. Okay. We get two more minutes, maybe one. So we give everybody else some time and

Jamie Marcotte:

You're good. I, I don't even need it. So these just some of the partners we're beginning to have conversations with are listed here. Next slide, just to recap, as I said, we'll be launching next year. We're in design and development right now, so thank you very much for your time.

Mark Willis:

Oh, thank you. I think Robin is next.

Robin Marquis:

I am. Thank you. Good afternoon, everyone. So I am so excited to be talking about the transportation prizes that launched last week exactly a week ago today. Next slide please. So the prizes originally came out of the make ready order that the PSC adopted last July it authorized funding for NYSERDA to administer three prize competitions that would be addressing emissions, equity and electrification. So some of the motivation for this particular program, I know you're all aware in New York State that transportation is the largest source of greenhouse gas emissions. And we know that local air pollution issues disproportionately impact these disadvantaged communities, also in these communities clean mobility options and access to essential needs is a challenge. Their significantly underserved by transit and other clean options, or they don't have affordable or safe means of getting to work, getting to doctors, getting to essential services. So as we said, a week ago, we launched these prizes to accelerate this transition to a clean transportation. Future NYSERDA is doing this with a multi-agency steering Committee with DPS and DEC and we've co-designed this program with a prize firm named carrot as in carrot and stick who is administering the program with us. And they've done previous

work with MacArthur Foundation, NASA, European Commission, a lot of really large sponsors that have programs of this scale. Next slide please.

So a major focus of these prizes is the alignment with community needs. So the three challenges are the clean neighborhoods challenge, which is primarily focused on addressing this air pollution reduction at scale specifically in disadvantaged communities. So this will be coupling the deployment of electrified assets with changes to built environment or policies that further incentivize the use of these electrified modes. So an example might be some sort of green transportation zone where you can only access the, this block or this neighborhood. If you're driving an electric truck to make deliveries, for example, the electric mobility challenge is looking for innovations that increase the access to safe and convenient electric mobility options. So these will likely be shared services from scale of e-bikes up through some of these vans and micro transits solutions to ensure that these communities have multiple modes to access their essential needs such as getting to work.

And the third is the electric truck and bus challenge. And this is focused on identifying some of the, the next set of solutions that could be further incentivized through a, a future make ready type of program. So the current make ready is focused on light duty infrastructure. And there's still a need to identify some of those solutions that will really get market pick up in medium and heavy duty vehicles. So this particular challenge is going a step further from, for example, the VW settlement money that NYSERDA's administering through the truck voucher incentive program, where the focus there is really on swapping out dirty diesel vehicles for a clean counterpart. Here we are trying to tackle the total cost of ownership and minimize impacts to the grid, particularly at the local level, as you're starting to electrify entire fleets and entire depots.

So the one thing to note here is that the first two, it is a requirement that the project efforts are benefiting at least one disadvantaged community in the State for electric truck and bus. It's not a hard requirement, but we have built into the proposal and the rubric that top scores will be for those projects that are targeting those communities and across all of these, there is a significant focus on replicable and scalable solutions that not only work for these disadvantaged communities, but ideally all communities across the State and beyond we aren't taking technology risk here. So we're not expecting someone to create a totally new e-bike or develop a new electric car. We are looking for solutions that have had some pick up somewhere else whether that's California or Europe or other places, but the way in which they're packaged together to address the local context in New York State is where we'll be seeing the innovation come into play. Next slide please.

So the total program budget here was now 103 million initiative from the make ready order, there was 85 authorized. We have added an additional grand prize award from the clean energy fund and LIPA has agreed to commit up to one grand prize in their territory as well. So the original allocation was focused on investor owned utility territories, and we have set up the program in two phases. So what just launched this past week has opened us up for the first phase it's doors wide open global competition, give us your best solutions that will help solve New York State's challenges. And from those we will down select into a cohort of up to five planning grant awardees, or I guess with lightless contribution up to six per challenge. So 18 total each of those finalists will receive a hundred thousand dollars planning grant.

So that is broken into milestones to get them from the feedback from their first round proposal to a stronger second round proposal where they're in a better position to actually implement their concept, addressing any gaps in their team, tapping into access from experts that can help them with New York State context, permitting utility relationships rights of way changes, et cetera. So that's the additional 50K in kind support. And what I wanna highlight for you all is we also are providing, in addition to the planning grant award up to \$50,000 in funding for their community partners to ensure their active participation in this phase. So we wanna make it very clear that community input is important, not just from the outset of, yeah, we, you know, we talk to some people and they wanna see this, but really that they're be involved in the design development of proposals and ultimately the implementation.

We don't want it to feel as though a company can just come in, drop in their solution and everyone's just gonna kind of accept it. And as Chris had had mentioned in his remarks, we know a lot of these partners are, are very heavily overburdened right now, a lot of competing priorities. And it's often kind of implied that they'll be participating in this even if not a hard requirement. So we wanna make sure that they're being compensated for their participation in this process. So once we've taken that the phase one winners, they have submitted their final proposals and pitched to the selection Committee, we will select up to three grand prize awardees in each of the competitions and the award increments range from \$7 to \$10 million per project. So this is a shift from some of our earlier innovation work, where we've had a lot of support for individual pilots of a specific technology or business model and shifting to a more holistic integrated scale of solution where you're looking at multiple modes, you're looking at policies, local planning changes to rights of way considering the entire ecosystem around how not only you can deploy these solutions and electrified assets, but actually ensure uptake and utilization of them.

So for example, you could drop in an electric bike share station, but if people don't have bike lanes or places to actually safely ride them, then we've know we know from other communities that there isn't a large uptake in that solution. So we've targeted these award increments to ensure these larger, more integrated projects and a more portfolio based solution set versus just an individual technology. Next slide please.

And a major focus for us, both at program development level and on the individual project teams is really strong partnerships. So pairing this subject matter and execution expertise with the New York State context. So as I said, we're targeting global innovation innovators with this. So what we can do as the State is provide them with that useful context and understanding of what is the opportunity here, what are the challenges that our communities are facing? So we've done that with our steering Committee and tapping into experts who have executed similar projects or, or programs elsewhere. And we are bringing, we are, our State agencies are bringing the, the State context. And then in the way we've created the proposal and the requirements for the teams really ensuring that there's emphasis on the ability to execute a project of this size. And again, a strong emphasis on community engagement and local partners.

And for the phase two proposal, we will be requiring each team to have a partner that is representing the selected community. For this first phase, we aren't dictating your team needs to be comprised of an A and a B and a C. We are giving them some time and space two get pretty far along in their planning process, but not necessarily have everything locked in, but once we do

that down select and provide them with the more hands on support to further refine their solutions, the expectation is that they will have locked in that particular partner at that stage. So the steering Committee is also continuing to refine our off ramp strategy. So the question earlier about DOE we did have a briefing with them earlier in the week. And there's a lot of, of interest in seeing what's coming out of this program, cuz we're a little bit ahead of some of the, the prizes that we know they ultimately will launch.

And they were very interested in the way we structured this particular program and keen on seeing the solutions that come out of it. So I think they'll be a, a good source for additional eyes on this, both in scaling in the places that we ultimately do award. But also for those that don't receive funding from us to ensure that there are other partners who will have access to the proposal materials and for the finalists who have gone through this planning process. We know from previous from previous work that has happened at the federal level that they build a lot of momentum. They've brought these partners to the table, they've laid out their implementation plans. And even if they don't receive the funding from the program itself, they're in a better position to pursue through other opportunities such as DOE FOAs foundation support, et cetera. So the, the replication strategy is a very important component of program design. That will, we will be continuing to build out in this next phase of our work. Next slide, please.

Mark Willis:

Let me suggest you sum up here, you can see the schedule.

Robin Marquis:

Yup, this is my last one.

Mark Willis:

I know that, but I, I think people can see that visually the schedule and then we can still have some, a few minutes here for the next presentation.

Robin Marquis:

So just quickly on the schedule then just the, the huge milestones here are that we will proposals are due in late August for this first phase. We will have selected those and be announcing it in January of next year. Those finalists will do that planning phase propose in the spring. And then our current expectation is to have selected the CRA prize awardee by June of 2022. And they will then have up to three years to implement their solution. All right. Next slide, I think has contact info in all of that, but otherwise I'm done.

Mark Willis:

Right. Well, we need to sign you off for a future meeting here and you'll have some results to, to talk about. So sounds very exciting. Any of the Board members have specific questions on this? Obviously I failed to get us done at 1:30, but I think I was given some leeway to go a few minutes further. And as you all know, housing is probably as important to me as any of these conversations. So I wanna make sure we don't under, there are no questions. Let's go to Emily for the affordable housing.

Emily Dean:

Great. Thank you, Mark. Can you all hear me?

Mark Willis:

Sure. Thank you.

Emily Dean:

Great, well, I appreciate the extra time. I'm really delighted to be here today to share NYSERDA's work on three pilots that are under development with our affordable housing partners across the State to advance highly efficient, electrified, healthy, and more comfortable affordable housing buildings leveraging what really is around hundreds of millions of dollars each year invested through these housing agencies. Next slide please. So just to, just to level set in terms of the numbers. So 19 million New Yorkers live in three 7.3 million housing units out of a total of 8 million total. So roughly roughly two thirds of those units are in the one to four family residential building type and a third are multi-family or five, five units in greater 1.5 million of those units are regulated units. So regulated by either our, our colleagues at New York State Housing and Community Renewal, New York City Housing Preservation Development, or Local Housing Authority's. And that is the target market that we are seeking to serve with the three pilots I'm gonna share with you today.

Mark Willis:

Right? Just to be clear. You're not talking about rent regulated rent stabilized. What'd you talk about regulated.

Emily Dean:

Yes. Yes. Rent stabilized is included in that.

Mark Willis:

Okay, good.

Emily Dean:

And in terms of, so just a level set again, 40% of our population in New York State are lower moderate income households, many of which have really high energy burdens upwards of 20% of their household income going to their energy costs. And if we look at the interim definition for disadvantaged communities, 27% of our New York households are in those disadvantaged communities. So today New York State through utilities, NYSERDA, NYPA, and other programs New York State is investing nearly \$1 billion through 2025 to advance efficiency and reduce energy burden for low and moderate income residents. I do wanna note that the energy efficiency and housing panel estimates that we will need on the order of \$1 billion annually to address the needs of this low income and disadvantaged community market segment, consistent with our climate goals. Next slide please.

So as Janet mentioned in January, as part of his State of the State agenda, Governor Cuomo announced the raise, the Green Roof initiative through this work NYSERDA and the NY Green Bank will partner with New York State homes and community renewal or HCR to develop a model to directly include grants and supplemental capital within HCR financing deals to support

electrification and efficiency, solar, and other technologies to decarbonize our affordable housing stock. So for this pilot, NYSERDA is will, is expecting to provide approximately \$20 million a year for efficiency and electrification, as well as additional contributions for from NY Sun and NY Green Bank. So what this model seeks to do is get it a critical barrier. So there are really, there are two programs here. There's affordable housing where affordable housing developers go to the housing agencies for financing or refinancing, and then separately, there's a process for accessing clean energy grants.

And far too often the affordable housing developers don't access the grants available to them. And for those that do those grants are deemed not reliable by the housing agencies and therefore they're not included in the capital stack and they aren't don't inform the underwriting of the scope that gets included in that financing deal. So what this seeks to do is to create a single process using the affordable housing refinancing process to insert grants and supplemental capital and increase the scope to deliver those, those benefits as part of the refinancing process. So this would be including incremental funding for efficiency, electrification, solar, other solutions, as part of that financing deal. We are also investigating the technical assistance they'll be needed for both our housing agency partners, as well as the developers and the service providers to allow us to do that.

So the goal here is really to, to get to a point where the subsidies are no longer needed, and this becomes business as usual, we do expect this will take several years of subsidies to be needed to serve the retrofit market, the preservation market, but less for new construction. So our expected outcomes are to serve at least 5,000 units through this program with potential to expand as cost decline. So right now we are working with our HCR partners to assess their pipeline and the opportunity both in terms of their existing buildings and their new construction pipeline, developing green performance standards, identifying their technical assistance needs and the, and developing that model with the goal of going to market by the end of this year. Next slide please.

So we are also working with our colleagues at the New York City housing at New York City Housing Preservation and Development, or HPD on a very similar model to in effect inject energy efficiency and electrification funding into HPD's refinancing process. So we, we're looking to create, again, like we're doing with, with HCR, a scalable model for decarbonizing in this case, existing affordable housing. So just a bit on HPD's preservation pipeline. So the typical properties they see are around 10 to 50 units. They're pre-war buildings, central fossil fuel heating and hot water with steam distribution. They see around seven to 15 of this project type each year out of an annual pipeline of 20 to 25. Now that's not a huge pipeline, but that building type is significant because it comprises over 50% of the New York City multifamily rental stock. Thanks to the good work of the Furman Center conducted in 2010.

So really by, by demonstrating the viability of electrifying heating and hot water in these building types, we are not just demonstrating the technology, but we're also demonstrating the construction logistics, the tenant disruption implications, and the costs, particularly the cost of the electrical upgrades needed both on the building side and on the grid side. We hear a lot from multi-family building owners, particularly those in New York City that are grappling with local law and 97 compliance. They're telling us, show us how this can be done. What are the technologies, what are the costs and how does that equipment perform and how can it be

constructed in a building that's occupied? And this is gonna give us some of those answers and those learnings to start to scale these adoptions, that these, these solutions more broadly across the multi-family market. So NYSERDA is investing \$20 million over three years to serve this to serve a subset of, of HPDs pipeline. Next slide please.

So, as I mentioned here, it's seeking to create a single process where grants will be provided as part of the, of, of HPD's refinancing process. Basically within the financial term sheets, we're expecting to serve roughly a hundred roughly one, 1000 units across 40 buildings over the next three years with a potential to expand as cost decline. And we're keeping our utility partners, ConEdison and National Grid down State, particularly up to date in terms of how this is evolving as a potential opportunity for them to get involved and provide some of their LMI funding in, in future years. So in terms of next steps, we're finalizing our work with H HPD. And we're looking to launch this in market, put the term sheets in market in Q3 of this year, so that we can affect the deals that will close at the end of this year in December. Next slide, please.

So last but not least our NYCHA Electrification Partnership, the goal here is to establish a multi-year partnership within New York City Housing Authority, NYCHA to test assess and scale adoption of electrification solutions in their portfolio. So NYCHA, as many of you know, is the largest public housing Authority in the United States. So they offer a really big prize. They operate roughly 170,000 apartments in more than 2000 buildings. They are also deeply committed to electrification as, as both a climate solution and also a resilience and risk mitigation solution. So electrification, not all, not only does it reduce their emissions, but it also solves a number of other problems for them. You know, it, it, it delivers more reliable heat to their residents than their current system, which is, which is largely campus steam heating systems, which are suffering from significant deferred maintenance. It also mitigates the issues of under or overheating that are often an issue in the, in these buildings.

And critically, it delivers cooling to the vulnerable residents in many of these, their, their properties, particularly in, in senior housing, furthermore, as a, as a hyper power customer, the economics of electrifying are, are more favorable for NYCHA and they, and they're keenly pursuing that opportunity. It also provides redundancy. So for apartments that have multiple electrification units, they will have heating and those units can be quickly repaired or replaced to restore heating. So NYCHA is a very motivated partner and they offer a significant market opportunity. So what we're doing together is at NYCHA and nada have developed a set of specifications and are putting a challenge out to the industry, out to manufacturers to create a packaged window mounted heat pump with cold climate performance. So nada' working with our innovation co colleagues to do this. So we've developed specifications, and we have several interested manufacturers. We will be selecting products and demonstrating the installation performance of those products, two or three NYCHA buildings. We're also working closely with our colleagues at NYPA who have deep expertise of, of NYCHA buildings and discussing their potential role to assess buildings and potentially project manage and implement some of this work.

Next slide, please. So for this NYSERDA is leveraging roughly \$13 million in RJI funding as approved in the recent re operating plan. We expect to, to be able to fund a demonstration of technologies in two or three NYCHA buildings, delivering these solutions to 4,000 apartments or

roughly 11,000 heat pump units. So on the right, you'll see a mock up of what this might look like. NYCHA actually custom modified a commercially available product, just to kind of just to test what this would look like. And so it's very much a home spun solution here, but this is really what they're seeking to get at. So, you know, the direct impact is small. It's two or three buildings. It's, it's 4,000 heating, 4,000 apartments, but the big prize here is that if those, if these solutions prove out and perform NYCHA will redirect a significant portion of its heating capital currently tagged for, you know, in-kind steam heating replacements to these solutions.

So we're talking about upwards of \$200 million or more that will be redirected to these solutions if they are developed and performed accordingly. So what we're seeking is both to accelerate the technology innovation to serve NYCHA but serving it here also creates a much broader opportunity for multifamily buildings, struggling with how to electrify. So we're working on agreement now with NYCHA and also with NYPA in terms of their role in helping us administer this partnership. And we expect to commence pilot design and construction in 2022. So thank you for the additional time. And I welcome any questions.

Mark Willis:

Well, thank you. I'm, I'm sure you're aware that 62,000 of those hundred 70,000 units will be transferred to the to private sector to do the rehab that's ongoing right now. So hopefully you can make sure that you know what they're putting in will not be obsolete within a couple years. So thank you. You're nodding. So I'll just, I'll, I'll leave it at that. Just, this is a major rehab of those buildings that's going on now. Not all of which NYCHA doing directly, so pay attention to any questions or other observations here.

Jay Koh:

Projects used in the project. There there's just consideration on the resilience side of things. You know, there's gonna be an increasing unexpected weather events. You know, the silliness of the Texas situation. I don't think we replicated here in New York, they had that experience in 2011. Just didn't do anything about it, but to the extent that it's possible to be in quantifying it or tracking the data and incorporating into the design, even if it's not part of this intervention in terms of the retrofit on electricity or electrification or energy efficiency, thinking about potential future design or design for potential future installation of energy storage, for example, that might increase resiliency in the face of weather events and so on. I think, you know, if we're gonna spend the time to engage and have touch points here, which is very difficult to do, we should try to design that at least for the next 10 to 20 years, not the last 10 to 20. So appreciate at least the beginnings of that and hope that that can be incorporated systematically throughout these programs.

Mark Willis:

The first one they did under the what's called the rad demonstration rental assistance demonstration. They put the heating units on the roof.

Ken Daly:

Emily really good to see the focus on night share. I, I know those buildings very well. And in terms of the city, you know, I think we've had great success in the past with the Clean Heat Program under, you know, Mayor Bloomberg. So I think a similar approach now, electrification

is really good to hear on the residential side. My only comment is ever would be on Long Island, you know, still almost 60% oil heat, just a very targeted strategy there in that you get the double benefit of going from, you know, oil all the way to electrification or to some other, you know, cleaner form of energy. So I still feel there's a targeted opportunity where there's pockets of oil, you know, that's effectively what the clean heat program was, and it eliminated 5,000 of those big buildings. I think we've made progress there, but still at the residential level, just a more targeted strategy for anyone still heating on oil. There's massive economic benefit as well because of the price points. And I think the economics then creates the headroom in the bill, you know, to make more of these types of pro projects you know, go forward with pace.

Mark Willis:

Great. Any other comments from the Board? Well, thank you. Thank you to all the, all the speakers, very exciting work done here. Very important work. So I know we wanna hear more as you make progress said, I love the accountability part, so I'm sure you'll be able to report how you're measuring it and how well you're doing. So thank you very much to all of you. Last agenda item is other business. Is there any other business to come before the Committee if have a motion to adjourn?

Charles Bell:

So moved.

Mark Willis:

Second?

Jay Koh:

Second.

Mark Willis:

Meeting is adjourned. Thank you.