

NYSERDA'S 123RD PROGRAM PLANNING COMMITTEE MEETING

April 29, 2024

Clean Copy of Transcript

Sherburne Abbott:

Okay, good afternoon and welcome. I call this meeting to order a notice and agenda for this meeting provided to the Committee members on April 16, 2024, and to the press on April 17, 2024, and a revised agenda was issued. Today, this meeting is being conducted in person and by video conference, the Authority will post a video and a transcript for this meeting on the web. To confirm that we have a quorum, I would like each of the Committee members to introduce themselves. I'm Shere Abbott, Chair of the Committee.

Sadie McKeown:

Sadie McKeown. Committee Member, Member of the Board.

Arturo Garcia-Costas:

Arturo Garcia-Costas Committee Member and Member of the Board.

Jay Koh:

Jay Koh, Member of the Committee. Member of the Board.

Richard Kauffman:

Richard Kauffman, Chair of the Authority.

Charles Bell:

Chuck Bell, Member of the Committee.

Sherburne Abbott:

And Commissioner Dominguez.

Arturo Garcia-Costas:

She count?

Sherburne Abbott:

Yes.

Sherburne Abbott:

Okay. So we're there. Thank you. The first item on the agenda is approval of the minutes, the 122nd Committee meeting held on January 24, 2024. Are there any comments on the minutes? Hearing none, may I please have a motion to approve?

Arturo Garcia-Costas:

So moved.

Richard Kauffman:

Second.

Sherburne Abbott:

All in favor?

Members of the Committee:

Aye.

Sherburne Abbott:

Opposed minutes have been approved. The next item on the agenda is a report on the Authority Strategic Outlook. This item will be presented by the Authority's President and CEO, Doreen Harris. Doreen?

Doreen Harris:

Yes. Thank you. Chair Abbott. Pursuant to Article 5, Section 5 of the Authority's By-laws, one of the purposes of the Program Planning Committee is to review NYSERDA's Strategic Outlook, a three year look ahead of the Authority's priorities and strategies. Erich Scherer NYSERDA's Director of Strategy, has led the development of this year's Strategic Outlook and is here to provide an overview. But just a couple of points from me. First, if we turn to the next slide please.

Certainly, under Governor Hochul's leadership in the coming three years, NYSERDA will continue to maintain our core responsibilities of advancing clean energy, innovation and investments working to combat climate change while improving the health, resiliency and prosperity of New Yorkers and delivering benefits equitably to all New Yorkers. So certainly we do seek always to maximize our impact in the marketplace through our various roles by developing policies or delivering programs, transforming markets to allow private actors to create new value and opportunity and certainly coordinate the contribution of others which will be necessary for our mutual success. So we certainly do recognize this year that we are in an intersection that is full of new opportunities to advance our efforts in partnership with local, state and federal partners across a variety of sectors. So certainly our Strategic Outlook for 24 through 27 builds on the progress we've made, despite challenges which we've discussed and harnesses the opportunities for this moment to rapidly increase our impact across the state and enhance our leadership at the same time.

Before I turn this over to Erich, I do want to note as you review the Strategic Outlook itself, there are a couple of instances where there is first of all a shift in the organization of the outlook. Erich will cover that, but also some content that has been removed this year as compared to last year. First, the Strategic Outlook no longer contains funding information. We concluded this was actually duplicative of the financial plan and our publicly posted budget. So clearly you are well aware as this Committee, we will have a mid-year budget update later this year and periodically as is standard for providing the latest information from a budget perspective. And then secondly, I will note that with respect to the clean energy or clean electricity chapter this year, we intentionally provided less specific information on the pipeline of renewable deployment and progress toward our 70 by 30 goal.

As you are all aware, this has been a dynamic circumstance with respect to the reset of our portfolio of renewables. And in fact, as recent as today, there was yet another update which I will be covering in my President's report. So this Strategic Outlook was not an opportune moment to provide a specific update on progress, but I will note that that information will be updated not only by NYSERDA but also through the Clean Energy Standard Biennial Review, which will be published later this year through the Public Service Commission. So with that, I'll hand the presentation to Erich Scherer to take you through this year's outlook. Erich,

Erich Scherer:

Thank you very much indeed. Good afternoon everyone. My apologies for not being with you in person today to present to you, but then again, I expect you're probably not sorry that I'm not there to share my call with you. Either way, it's my pleasure certainly to now present to you a summary of the Strategic Outlook. If we can move to the next slide please. So as Doreen already alluded to, I'll start with just a couple of points on the structure of the Strategic Outlook and how that differs in some respects from last year. Then I'll briefly cover the overall context within which NYSERDA operates, and then I'll get into a summary of NYSERDA's work on each of its mission outcomes. That's of course the core of the Strategic Outlook. And these mission outcomes in turn contain information on NYSERDA's role strategies and highlighted programs and initiatives. Finally, I'll briefly draw attention to a number of cross-cutting areas of NYSERDA's work. These are areas that don't fall as neatly into a specific mission outcome and thus are addressed across a number of outcomes. I expect my presentation here will take about 10 to 15 minutes. I would of course be very happy to be interrupted at any time, but I would suggest that I'd go through the short presentation first and then open it up for questions and discussion at the end. If we can turn to the next slide please.

And another one please. So starting with a couple of aspects relating to the structure of this year's Strategic Outlook. Firstly, as shown as illustrated on this slide, we wanted to achieve an overall streamlining of the document compared to last year. And in that respect, as you can see on the left hand side of the slide last year, the outlook was organized into five mission outcomes plus four strategic focus areas. But we concluded that this does result in quite a bit of duplication of content. So this year we decided to only use mission outcomes and obviously tweaking the scope of each of those mission outcomes where needed to ensure that we didn't lose any coverage of topics that might've been previously addressed in the strategic focus areas. And so on the right hand side, you can see the resulting new mission outcome titles. As you can see compared to the ones on the left, they aren't actually substantively different.

You can still see greenhouse gas emissions, electricity buildings, jobs and economy and community related aspects being covered. The one exception noted in the orange box on the slide is the addition of a transportation mission outcome, which reflects the continuously increasing role that NYSERDA plays in this area as part of this restructuring effort. We also wanted to look again at how we deal with cross-cutting topics. I mentioned them a moment ago, and so this year we decided to focus more consciously on how we present these kinds of cross-cutting areas in Strategic Outlook in particular as regards resiliency, equity and innovation. So due to their cross-cutting nature, these are not mission outcomes in themselves but are covered across a number of mission outcomes. And I'll talk about these more towards the end of the presentation. Next slide please.

So the other point I want to highlight with regard to the structure is that we looked at the Strategic Outlook in terms of alignment with the scoping plan. As you'll recall, the final Scoping Plan had only just come out for last year's Strategic Outlook. So this year's really been the first opportunity to consider it in more depth. And on this slide you can see how the revised Strategic Outlook structure shown here on the right broadly aligns also with how the scoping plan is structured. And this has enabled us in each mission outcome to start the discussion of that mission outcome with a summary of what's in the scoping plan on the topic in question, providing relevant context in terms of how the scoping plan helps to set the agenda for NYSERDA's work. Next slide please. And another,

So turning to a couple of slides of overall context before we get into the mission outcomes, starting with this slide on the context of New York State's commitments, you are familiar of course with our overall goals in New York from the Climate Act and also the context of the scoping plan. So I won't spend time on those items in particular. But I will note the State Energy Plan and in particular that the process for producing the next State Energy Plan is about to commence with NYSERDA in a lead role as Chair of the State Energy Planning Board. And the second point I want to draw attention to on this slide towards the bottom of the slide is a summary of NYSERDA's overall role. So in that respect as a starting point, this is to emphasize that the focus of NYSERDA's work is on execution of the range of key programs that we administer.

These in turn could broadly be characterized as market acceleration programs. So programs dealing with supply chain barriers, finance barriers, customer awareness, and many related topics. And on the other hand, resource development or resource deployment programs. For instance, our large scale renewables procurement programs and targeted incentive programs, for instance, for school buses. Secondly, on NYSERDA's role, NYSERDA has a key role to play in developing policy and analysis. So working to design and implement new programs, but also changes to existing programs, both as regards to their design but also the underpinning analysis and more generally of course, generally foundational analysis that underpins everything we do. Thirdly, in terms of how we pursue our work, it's critical that NYSERDA focuses on minimizing cost and maximizing benefits. And then fourthly, and finally, an equally critical part of our work is to consider crosscutting aspects. I already referred to them such as equity and resiliency in everything we do, as well as recognizing that with everything we do, we can only be successful through partnerships with other state agencies, communities, market actors, et cetera.

So in a couple of slides we'll turn to the individual mission outcomes where you will again see this summary of NYSERDA role repeated more specifically for the mission outcomes. But first, if we can turn to the next slide please. I'll also briefly mention the federal dimension of NYSERDA context. This is clearly one of the major opportunities that we are seeking to pursue and the Strategic Outlook recognizes it as such. But in the interest of time, I'll be very brief indeed on this topic and just flag that the opportunity here primarily consists of tax credits and federal funding programs. And I'll note obviously that the Strategic Outlook contains a more detailed overview of our ongoing efforts to pursue these opportunities. Again, in the interest of time, I'll keep moving here to the next slide please.

And again, the next slide. So turning here to the main event of the Strategic Outlook, the discussion of the six mission outcomes, I'll again note that on each of these I'll have to be extremely brief within the time available for this presentation, it's not going to be feasible to provide an exhaustive summary of the information for these mission outcomes that's in the Strategic Outlook. So instead, I'll limit myself for each to only mention a couple of highlighted programs and initiatives with the intention of conveying an impression of the work that NYSERDA is carrying out for each of these mission outcomes. And again, emphasizing that there's much more both on highlighted programs, but also more generally on NYSERDA strategies in the Strategic Outlook itself. Next slide.

So starting with the first mission outcome on GHG emission reductions, I know that if I'm turning your attention to the two call out boxes towards the bottom of this slide, I know that you are aware of and familiar with our work on the New York Cap-and-Invest program together with our partners at DEC. Indeed, I believe the last time I spoke to you was earlier this year to provide you with an update on program. This was when we had published our pre-proposals for the program at the time together with the pre-proposals. We also published analysis indicating significant benefits from this program in addition to emission reductions, namely in terms of jobs and health. And at this point, the team is now hard at work to produce the formal regulatory proposal for the program later this year. The second initiative I'm noting here is around Executive Order 22, which last year set a whole range of energy and sustainability related targets for state agencies. And NYSERDA is fulfilling a leading role here to help other agencies start the work towards achieving these goals. Next slide please.

So for our second mission outcome on clean electricity here, I want to highlight programs that illustrate the range of NYSERDA's work ranging from the largest scale projects to the distributed scale. So starting with the large scale on offshore wind, we continue to work towards New York's ambitious target of deploying nine gigawatts of offshore wind by 2035. And we took a big step in that direction with the recent award of two projects totaling more than 1700 megawatts in our fourth offshore wind solicitation. And the fifth one will be proceeding very soon in response to the evolving challenges faced by the offshore wind industry. And these efforts indicate that NYSERDA is continuing to take proactive measures to address challenges head on turning towards the other end of the spectrum in terms of size. At the bottom of this slide, the distributed solar program distributed solar is an important success story that illustrates the interplay of market acceleration efforts to reduce barriers combined with value of DER and NY-Sun payments. With those total combined efforts adding up to progress ahead of schedule and below budget for our 10 gigawatt distributed solar goal. Finally, on this slide, although not called out specifically, Doreen just alluded to it, and I do also want to note the very late breaking news for land-based renewables. Literally, while I'm speaking, NYSERDA is announcing the results of the latest Tier 1 RFP, and so we'll hear more from Doreen in her President's report on that late breaking development. Next slide, please

For our clean and efficient buildings mission outcome. To illustrate NYSERDA's efforts on this mission outcome, I'm drawing attention to a few programs related to large buildings in particular, NYSERDA of course works across the full range of building sizes, but decarbonization of large buildings is particularly hard, so it's important to shine a spotlight on our programs active in this space, which include the Empire Building Challenge and Empire Tech Prize programs. These

push forward new design approaches in large commercial and multifamily buildings. These programs recognize the importance of innovation to help overcome decarbonization challenges in this sector and in these programs, NYSERDA partners with real estate developers to identify and demonstrate solutions. The buildings of excellence program supports decarbonization in multifamily buildings and in this program, just earlier this month, Governor Hochul announced the fourth round of awards for nine demonstration projects under this program. Turning to the next slide, please.

And our clean transportation mission outcome. As I mentioned at the beginning, this is the first year where transportation gets its own mission outcome. As with the other mission outcomes, I again want to note there is of course significantly more that NYSERDA does in this area than what is described on this slide. But I'll illustrate the work on transportation again by highlighting two programs, namely the Electric School Buses Program, which pursues ambitious goals set out in legislation focused on getting to a hundred percent sales rates for zero emission school buses and ultimately all school buses being zero emission. And NYSERDA is administering the significant funding that was made available for this program through the Environmental Bond Act on EV charging, charging infrastructure, of course being a hugely important area for consumer confidence. And with the limited dollars that are available, NYSERDA is targeting those areas of charging infrastructure development that are not already being pursued through other means and will move the needle the most for EV adoption. And so called out On this slide, you see the Charge Ready program aimed at workplaces, multifamily buildings and municipalities and our investments into direct current fast charging stations, in particular in regions where fast charging stations are still lacking. Next slide please.

Under the heading of this next mission outcome, Clean Energy Jobs and Economy, I'll highlight a few key examples of the kind of economic development that both supports and is the result of our clean energy transition efforts. These include our offshore wind manufacturing and port infrastructure efforts, the huge micron and global foundries investments and NYSERDA's participation in the New Energy New York Coalition aimed at accelerating the battery development and manufacturing ecosystem in the southern tier Finger Lakes and Western New York regions. Secondly, at the bottom of this slide, I also want to draw attention to NY Green Bank's role to alleviate finance gaps and barriers across the whole range of sectors, including transportation, building electrification, affordable housing, and energy storage. Turning us to the next and last mission outcome please.

So this sixth and final mission outcome captures NYSERDA's work on resiliency as well as working with and supporting communities on sustainability and clean energy efforts. The regional Clean Energy Hubs initiative is one of our flagship efforts to engage with and help communities to provide information to residents and small businesses about clean energy and energy efficiency opportunities and more generally support energy literacy such as explaining energy bills and linking to workforce development opportunities turning to resiliency at the bottom of the slide at the state of the state. Earlier this year, Governor Hochul kicked off a new initiative to develop a comprehensive statewide climate change adaptation and resiliency plan to help entities adapt to the impacts of climate change, which as we know are already occurring. This effort will build on studies and initiatives that have already been completed, in particular the recent Climate Impacts assessment and the Extreme Heat Action Plan. And this leads me straight

to the next and final part of this presentation. Next slide, please, which is on crosscutting topics again. Next slide please.

And starting with resiliency, which of course I mentioned just now as I mentioned, the climate change adaptation and resiliency plan. But again, as I noted at the beginning, these crosscutting topics aren't just occurring in a single mission outcome. And so for resiliency on this slide, this is to emphasize that resiliency efforts are also described and highlighted in other mission outcomes, in particular in the clean electricity and in the clean and efficient buildings mission outcome. And so for instance, on electricity, this includes the fact that our large scale renewables and offshore wind solicitations require proposals to consider and mitigate risks from climate hazards. Next slide please.

The second crosscutting topic to highlight here is around equity, where the Strategic Outlook highlights how equity considerations are a part of and help drive our mission outcomes across in particular, electricity buildings, transportation and jobs and economy. So for clean electricity when evaluating projects, economic benefits, NYSERDA prioritizes disadvantaged communities. As regards energy storage projects are prioritized that support the phase out of the most polluting fossil generators downstate, and more generally, of course, on electricity NYSERDA's programs that promote deployment of renewables and storage help to back down fossil generation, delivering important health benefits to disadvantaged communities. Equity considerations are also a core part of the wide range of NYSERDA clean buildings, programs and initiatives. And in transportation, diesel vehicles have been a major source of harmful pollution in overburdened communities. NYSERDA has work to accelerate the transition to electric vehicles, in particular within environmental justice areas, helps to reduce emissions and improve air quality projects funded through the NY clean transportation prices are a primary example of this work.

And finally, within jobs and economy mission outcome, equity considerations are built into the core of NYSERDA's, workforce development and training initiatives to support a just transition for historically disadvantaged populations. Moving to the next and final slide please on our third highlighted cross-cutting topic here, innovation, this is a truly cross-cutting area of work that contributes to the whole spectrum of mission outcomes in each case by building the momentum for technologies in particular, those that we will need for the deepest decarbonization efforts. A number of examples are mentioned here on the slide, but I'm looking at the clock and I should probably conclude this initial overview at this point to enable sufficient time for discussion. So if that's okay, I'll leave it at that for now and open up for questions. And q and a,

Sherburne Abbott:

Doreen, are we going back to you and then out or Erich is the last word for the recording.

Doreen Harris:

That was the end of our presentation. Shere, we're handing it over to you.

Sherburne Abbott:

Okay. So Erich, thank you very much. It was a really concise and clear report for a very, very broad and comprehensive plan. So I have a couple of questions, but also maybe a consideration, which is on the mission of resiliency and the cross-cutting of resiliency. So I'll try to make this

short. So if you look at how far we've come from just thinking about climate change to mitigation, strategies to adaptation, which the government, US government didn't take up until 2009, so we've got 15 years of some there. But what we see is an increasing trend toward the integration of those efforts. So now we have science that identifies risk, which then relates to the connection between not just rate but cumulative emissions to a budget. And we have adaptation strategies that are connected with our mitigation. So there's much more integration of adaptation and mitigation these days.

So one would hope that as we think about the resiliency planning going forward, that more of the resiliency effort will get folded into the various mission goals and operations of the agency. Because if we don't, then the damage assessment stuff, which is looking like the costs are going to get higher and higher and higher, the less we adapt are going to be much harder to accommodate. If we do this early and get the integration earlier in the planning, then we have a better chance of really eking out the relationships in ways that are going to be much more understandable to the broader public. So I would encourage every effort to try to push that integration forward because I think at the end of the day, it's going to be a huge, we're not going to hit all these targets, so we're going to have to find some way. And in that line, this is the first time that we've had indicators of progress articulated for each in this way, right? Is that true? Yeah. Yes, it's right.

Erich Sherer:

Yeah.

Sherburne Abbott:

Some of these, the percentage of NYSERDA solicitations that incorporate resiliency provisions is kind of a low bar, right? So there are more indicators I'd suggest a more robust look at indicators, especially for this integration. Anyway, so that's my prerogative in this chair, but Arturo,

Arturo Garcia-Costas:

So I'm going to go to another of the crosscutting issues, which is equity. I'm interested in how we're providing guidance to the various programs in this strategic framework for how to act, how to think about equity considerations. For example, you talked about clean transportation and the \$500 million that came out of the Bond Act for electric school buses in New York State. We have 10% of the yellow school buses in the country in New York state, but as we know, school districts across the state are not situated similarly in terms of accessing those resources. So could you perhaps with that as an example, how are you looking at the equity frame and trying to channel 40% of that \$500 million to some of those disadvantaged communities that might not, I worry that the more affluent school districts are going to be the ones that are being able to get that money more quickly and more easily.

And so how do you address those situations where there's uneven capacity for accessing that sort of programs within the CLCPA implementation?

Anthony J. Fiore:

I think we are Arturo, I'll start now by Jason Doling, our Vice President for Communities and Partnerships come up as well, but we have a whole team dedicated to just this and helping Authority wide in looking at equity and incorporating into our program. So we have the energy climate equity team that does that. And a concrete example to reflect a comment that you made with regard to electric school buses is the program design reserves specific portion of both the technical assistance component of it as well as the incentive amount to disadvantaged communities. There's a difference in level of funding that can be accessed by disadvantaged communities and non disadvantaged communities as well. So that's a core focus for us in everything that we do, including with the federal dollars as we're developing applications to submit our energy and climate equity team is reviewing opportunities to develop those applications in a way that will benefit to Spanish communities as well.

So I don't know, Jason, if you have anything you'd like to add to that, but please do.

Jason Doling:

Okay. Just really briefly, hi Arturo, Anthony hit the nail on the head. So you could think of our ECER energy climate equity team as being both strategy as well as implementation. So the regional clean energy hubs, for instance, that's administered as part of this 12 person team. We also work internally across the Authority on things like what are communication approaches that you need to take when engaging with underserved residents? What are the right mechanisms to get the level of feedback that's appropriate for your program based on the degrees of freedom we have for change. We also have about two dozen equity stewards within the Authority. So you could think of this as someone on every team whose job is to think the most on that team around equity and energy access issues.

And they also work with our ECE team that point to the electric school bus.

David Sandbank:

Just to give you an example of there, as Anthony said, there's an adder or a school district that's in the DAC area of about 40% higher incentive for us about \$40,000 on the a hundred thousand dollars incentive additional. And also we are running a program with the 500 milli, and if we see, to your point that hardly any schools with low income people or DAC region applied, we can reallocate how we do the program and say, let's now just make it available or disadvantaged. So we're going to keep an eye on how it comes in and answers your question and then make sure that we hit that resources. Sorry, that was our No, I know we were looking, we couldn't see. I thank know the voice though.

Richard Kauffman:

So Jason, just to follow up on the hubs, so I often think about one of the things that we need to do to get more leverage on public dollars is to reduce customer acquisition costs and projects. So I'm hoping you can talk more about what you're doing when you reach out to communities that we're not just selling programs, that were part of the crosscutting activity is to work with the different parts of the Authority that are trying to animate markets.

Jason Doling:

Yeah, exactly. So thank you for the question and I look to reporting back to this Committee and to the Board as we continue in the future to help share what's working well with the hubs, where do we have areas to lean in more? But you're absolutely right. So by and large, the work the hubs are doing, they're trying to reach parts of our state that have just not been addressed before with some of the market animation programs that are really going after deployment. And so we've been trying to leverage the extent possible what exists already. And so community-based groups, religious organizations where people are already coming together and you can reach more in a higher quantity to help, as you said, reduce that acquisition cost. Particularly when it comes to either the Empower program right now with NYSERDA PLE programs. And we are at the point right now, it's been about 12 months that the hubs have been actually out there working in the field.

The New York City hubs were the last to really reach operations the late part of 2023. So we had 3,300 referrals to Empower over the last year, which doesn't sound like a very big number. As you start to look at how many of the hubs were actually operational and how many people they worked with, they also spoke at about 1200 different events throughout the year. What we're in the process of trying to do now working with DPS as well is assessing exactly how many referrals in total came to NYSERDA in the utilities, what were the outcomes of those and what is the bang for the buck that we're getting in effect, recognizing it's the very first year that they stood up and we still have a long runway to actually make adjustments as needed.

Richard Kauffman:

May I have one more?

Arturo Garcia-Costas:

Yes. So following up a little bit on the market development component of what the Authority is doing, as I mentioned to Sadie, I was at a White House event last week on Latino economic empowerment and climate action. And one of the areas of discussion around the table had to do with contractor capacity when it comes to clean energy and clean energy upgrades, particularly inhouse gas reduction fund and the \$27 billion that is being deployed through that fund. And the sense around the table is that there are certain parts of states and certain regions, parts of regions that are relatively well positioned with respect to contractor capacity and other parts that are woefully behind. To what extent have we thought about the state of contract capacity at this moment over this I think three year period where you're going to have historic amounts of federal or public dollars flowing to basically clean energy upgrades at the household level?

Jason Doling:

Susanne DesRoches, who leads our buildings team, I would welcome to have joined this conversation where we've seen a lot of the gaps, particularly as we get to the more rural parts of the state. The two most tangible things that we've been attempting to really lean into more, one is around workforce development. So tuning the program so that there are the maximum amount of support when it comes to bringing underserved residents into working in these jobs. The second is around the hubs. Empower is probably the best example today. Suzanne's team's been working really closely with ours to help those hubs that are in those regions work to identify multiple companies that aren't working in this space yet, but that could pivot into it. And especially

companies that are small shops within underserved communities today. It is a process, I know as you know Arthur, but that is really the hope that folks from outside of the state to do the work but that weren't building the capacity here.

I don't know if Anthony, we Suzanne to expand on that at all.

Anthony J. Fiore:

I mean, I'll only give a shout out to our woman resource group that said recently and had three small business women owned businesses that have come into HVAC and air source heat pump deployment was really wonderful to hear from them and how they've been able to make a business in that. And I think it's just reflective of more and more small businesses coming in. But I will say there's a lot more work to do. The capacity, the relative thing, even where I think you're saying capacity seems to be okay. I think that's relative to where capacity seems not to be okay. But there's work doing both geographical locations. We need more companies doing the weatherization, more companies that can do quality installs of air source heat pumps so that we don't have refrigerant leaks and so forth.

So it's a big push for us.

Arturo Garcia-Costas:

And they drew a distinction, Jason, between workforce development and market development, the kind of market development that we're talking about because they particularly underline the fact that you've got a lot of contractors or lots of small business and entrepreneurs in disservice communities that would be interested in entering into the space, but they're not going to be able to get the bonding or the insurance or other types of capital in order to basically enter the market. So this issue is connected obviously to workforce development. It is distinct issue that we, I think should be focusing on within the context of the implementation of this strategic plan.

Susanne DesRoches:

I just wanted to add from the back, I just wanted to add that we do have a group called the Residential Market Advisory Group, RA or have an acronym we meet about on a monthly basis, and it's open to all contractors and we go through any open issues. So open issues with our programs, open issues with the IRO money, and we're seeing more and more involvement from contractors within that group, which is why we set it up. It's both. It will have a half of the session is sort of an overview of information and then half of the session is a breakout small round table so we can hear from. So we are looking to that already existing group with the energy hubs in order to bring more and more of these companies into that hole. I'll just

Andrew Kessler:

Decide one quick thing. We have a \$250 million community decarbonization front at NY Green Bank and eligible use of proceeds includes the funding of contractors that are focused on the improvements that we're looking to animate with that capital. So that's another element that I think speaks to your concern.

Jay Koh:

I'm going to be relatively undiplomatic here first and foremost on the resiliency issue. I think it's great that we've tried repeatedly to call out this is a priority and that's a major shift in the last approaches that we have. And I think it's important to call it out as a specific priority and as a cross-cut issue. So I applaud the emphasis here in the prioritization, at least identifying my non-problematic comment here is I think that the indicators of progress is laid out in the Strategic Outlook or whatever we're calling this thing are woefully inadequate. Just having the word resiliency in a certain percentage of NYSERDA solicitations is not sufficient. And looking at the range of different outcomes here, I think is going to end up failing the strategic plan across the other areas. So I think three things are absolutely clear. After IPCC 6 2023, the trajectory of climate impact between now and 2030 is now inevitable.

It's knowable and it's inevitable. It's based on cumulative emissions. The range of variation between 2030 and 2040 is modest and we're fighting for a world after 2040. Okay? So between now and 2030, which is in excess of this plan, the trajectory of warming and the knock on effects are baked into the system. They are knowable, they're projectable, there's scientific evidence around them. They can be downscale to understand what impact it's going to have on the people that live in the state of New York. And so unless those assumptions are affirmatively projected, downscaled and baked into all of our programs, we will be building housing and making it electrified and more efficient in places that it may not be livable anymore because of flood issues or storm issues or other issues. If we are not planning for the energy forecast for heat events and cooling events and air purification impact events, then we will fail the energy transition because we will not build the capacity in the right places to do this.

If we're building landing sites for offshore wind in places that will not be above water over the projected lifecycle of those assets, this will fail the energy transition. So I would really urge the agency to not just talk about resiliency, but to specifically target and come back with a concrete example is how we actually are taking into account the trajectory between now and 2030 and every one of the programs that we are investing in so that we're building the appropriate assets that will make this transition actually successful. And so that explicitly needs to be part of our strategy in my view and my view as a Board Member here. And I think we need to downscale it so these assumptions are made clear to the communities we're talking about so they don't continue to build assets and build livelihoods in places that become unlivable or less livable.

The other thing the IPCC points out is the longer we wait, the less effective certain adaptation and resiliency strategies are going to become rapid and more costly, which will again undermine all of the other investments that we're making. So I would suggest two things that this agency has a specific capability of tool. The first is in taking that 2030 projection into account in the 24 to 27 timeline and down scaling it so that when we actually make investments, we explicitly take into account a consistent set of scenarios that we have the technical ability to forecast. It's not easy, at least some range of outcomes that informs our engineering requirements, that informs our investment requirements, that informs our long-term asset viability requirements, as well as energy projections into each of these programs that we're not in a, who do we ask the question, is this resilient?

But how resilient is to what scenario under what set of circumstances? And the second thing is to specifically create incentives within those programs in the same way that we do equity and justice requirements to make sure that we take account of and value the increased resiliency that we have to try to quantify that in a robust way, not in a theoretical way, not in a and waiving way. Because between now and 2027, we were making decisions that will set us up for failure by 2030 inevitably that we could avoid between now and 27. We take the future that we're going to run into by 20 20 30 into account right now. That is a knowable future at this point. That is an unavoidable future at this. So those are the two suggestions that I have. And without that, this will continue to be a hand wave. And in 2027 when we've foregone a bunch of different decisions, we've made investments in places that we probably shouldn't have or should have made different investments, this will undermine the actual investments we're making and the credibility of this strategy and this agency as one that's supposed to have climate change analysis at the heart of what it's doing.

John Williams:

Just to jump in Jay, and I think that there is certainly uniform agreement with those points in NYSERDA. I think the one thing that we are at least able to do is get some of that assessment done. So we've recently completed our climate impact assessment, which I think did a good degree, or at least what we could do now of that quantification that we now need to figure out what are the tracks to make sure that that work product actually starts getting accepted and adopted and integrated into the way that designers and planners and others who are actually in the infrastructure development business are really beginning to see how they should be looking at that new value proposition. So I think the next step for us after our climate impact assessment completion is to understand how we do that outreach, how we make sure that those results are broadcast. And then I think it does then turn into the actions that you're really talking about. I mean, I think that that really is the point of that document that we now need to make sure we're leveraging in the appropriate way is NYSERDA can do the convening. We can make sure that we can do that education. I think that that is perhaps our next step.

Sadie McKeown:

I could just add one. The one way to do that is to kind of follow on what the feds have done in terms of an interactive process, an interactive map that is a climate resiliency, climate services, you're here and this is what's going to happen in this place there. I mean, I just wanted to add also how important this is all of the money coming in. So the awardees under the IRA have all this pressure to deploy money, and the fear is that we're putting it out for whoever's ready without a roadmap of where we should actually put it, especially if it's in a low income or disadvantaged community, which is our number one priority. But if that's a flood zone and we're not addressing the flood zone, what have we done, but make it worse or throw the money away essentially. And so NYSERDA's leadership here is critical for New York, but also then bring it up a notch.

It's critical to model the way or the other states that are trying to figure this out who are decades. So I think it's a great opportunity. And then the last thing that I'll say is that all of this gets driven by market awareness and all of these programs are great and we're doing all of this great stuff, but nobody knows about it. And the way you drive additional demand that brings up everything is by much broader, think of it as like a Madison Avenue campaign, however that looks today,

whether that's through TikTok or I don't even know because I'm not a social media person, but how do we get your successes out there in a way that people can understand them and then want more importantly? Because I think that's the only way to get the transition truly animated, is to get more and more people thinking, oh, that's something I should do.

And I've said this many times before. I'll say it again. HGTV is the best example where everybody has an open concept in their home because the property brothers told me to do that. But it is true. And if the property brothers were doing heat pump conversions and talking about savings and resiliency, then more and more people in the American public would want that. And so I don't know how we do that. I know there's been talk of trying to connect with HGTV in some grander scheme, but we need more broad market awareness. So I don't know how nice service thinking about that.

Arturo Garcia-Costas:

And I'll say one on the resilience front, it really begs for exactly the kind of dynamic case by case assessment process that Jason talked about is going on or equity because resilience by definition is highly idiosyncratic and customized to whatever you're trying to make resilient. And how is that resilience defined for that particular system, that piece of infrastructure, what have you. So now is the time, frankly, to take the analysis, the projections scenarios that are becoming more and more clear are baked into the system and have an analytical approach within the agency to respond to those idiosyncratic systems, communities, pieces of infrastructure and investments. And I think that that Jay is like what you're suggesting is not yet developed enough within the Authority.

Jay Koh:

I mean, if you wanted my clarification, I think there's obviously things that are specific to particular communities, but there is standardization that's possible of the data and the risk.

We have flood maps today. They are standard, they are wrong if they have not been updated and they're not future protective. Right? And disadvantaged population too are disproportionately in those vulnerable areas will become even more vulnerable if you look at the projections. So my only suggestion is we have a unique position in be able to understand and develop and downscale that technical information and translate it into all the activity that we're supporting. Because we're an affirmative market counterparty through the Green Bank, we are a standard setter and enabling environment object in space that actually sets the tone for this state and a lot of the country. And if we fail to do that other than in this vague way or only in things that we tag for resiliency, the other five areas will fail, right? You'll fail the energy transition, you will fail the homes transition, you'll fail a range of these other things because they'll be impacted by the very sets of challenges that we are trying to mitigate and we should mitigate that. But you need to know that the reality now between now and 2030 and to a large degree to 2040 is done. And we need to really take account of that if we take that science seriously. And I think we're one of the agencies that's charged with absolutely taking it seriously.

Sherburne Abbott:

It's also the place where the innovation and research plays a strong role because that's where the integration can happen in ways just haven't done yet.

John Williams:

And I would say, and for future meetings, we should certainly be putting it on the agenda, how kind of that analytical translation into at least our own activities and our own programs is at least happening. So we know how we can at least approach the market. I do think it's a very fair point that Sadie was bringing up. How do we broadcast even further than that? And that is something that we can also put specific eye towards as well.

Sherburne Abbott:

Any other questions? No, no. Thank you. It was excellent. It was an excellent presentation and a really good robust discussion. And it's okay if you're on diplomatic every once in a while. Perfectly fine. That was not, believe me, that was not Okay. So where are we? Where are we? Okay. Okay. So may I have a motion recommending approval of the Strategic Outlook entitled toward a Clean Energy Future of Strategic Outlook 2024. 2027.

Arturo Garcia-Costas:

Move

Sherburne Abbott:

Second. All in favor?

Members of the Committee:

Aye. Aye.

Sherburne Abbott:

Opposed? Okay. The Strategic Outlook is recommended for approval. Thank you all. The next item on the agenda is a report on recent activities of the NY Green Bank. Andrew Kessler, NY Green Bank President will present.

Andrew Kessler:

Thank you. And just to be clear, in terms of time, I don't know if there's a revised sense of timing on this or

Sherburne Abbott :

Minutes

Andrew Kessler:

I'll do my best.

For sure. Well, we had a very busy and successful fiscal year. I'm delighted to report. Next slide please. I'm going to touch on quickly five key highlights. We closed 16 transactions totaling \$313 million. \$98 million of that benefited underserved and disadvantaged communities. Secondly, in April, 2023, we launched our \$250 million Community Decarbonization Fund. I touched on that just a couple minutes ago. This is a deeply concessionary wholesale funding pathway for community lenders. The use of proceeds is targeted towards efficiency first, building electrification projects and related improvements and disadvantaged communities

throughout New York State. Last fiscal year, we closed four transactions totaling \$85 million for this product. And this year alone, we've already closed one transaction with the second one expected this week. So altogether that will amount to six transactions totaling \$128 million. So basically we're about half at the halfway point of our \$250 million total commitment for CDF. Thirdly, we kept ourselves quite busy with the associated work for the two \$27 billion Greenhouse Gas Reduction Fund opportunity.

It's a key part of the IRA. We're delighted to report that we are a sub awardee for one of the lead applicant lead applicants that was awarded by the EPA under the \$14 billion NCIF competition. And that was with the Coalition for Green Capital. They were conditionally awarded \$5 billion from the EPA and we're working closely with CGC, other sub awardees and the EPA on documentation with the expectation of finalizing the award by June 30th of this year with funds flowing shortly thereafter. Fourthly, we close our first standalone energy storage transaction this year. That was a \$25 million commitment to nine dot and our second transaction ever supporting clean vehicles, excuse me, electric vehicles in New York State. That was an eight and a half million dollars transaction with inspiration mobility. And lastly, on the highlight side, we kicked off our review process or our upcoming 10 year review related to our Clean Energy Fund petition. We're filing that in coordination with the Department of Public Service and that sort of leadership. I'll talk more about that in a couple of slides. The next slide please.

This is last year's deliverables. I won't go through. Just quickly hit the highlights. We, as I mentioned, exceeded a \$25 million annual commitment goal by \$111 million. We exceeded our CDF annual commitment. As mentioned, we closed four transactions last fiscal year. We were committed to do three. We made good progress toward our sector specific annual commitments. Those are in yellow there, but we did not fully achieve them last fiscal year. It's very hard to predict the timing of transaction closings, but we're confident in our ability to meet each of our sector specific commitment goals. By 2025, we applied for federal funding and I just talked a little bit about some of the awards that we're expecting. We achieved our process enhancement and professional development annual commitments. We didn't quite retain a third party to complete our resiliency assessment, but we did complete our RP. We're currently in the contracting stage, which we expect to wrap up shortly so work can commence in the very near term.

And lastly, we accomplished all of our stakeholder engagement and program coordination related annual commitments through our extensive 10 year anniversary campaign last year and related work streams, which hopefully you all saw as we tick through some of these key tasks. We had a very busy and productive year. Next slide please. So what does all this mean in terms of from a cumulative perspective? Since inception through 12/31? I can't just yet show 3 31 numbers, so they've gone up a little bit. But just through 12/31, we've committed \$2.3 billion, which has led to the development of approximately \$7 billion in clean energy and sustainable infrastructure in New York State and almost 45 million metric tons of emission reduction. And as I mentioned, last year alone, we closed \$336 million in commitment commitments and we maintain an active pipeline of about \$200 million. Next slide, please.

With respect to our target priorities, we continue to make good and steady progress towards ensuring that minimum of 35% with a goal of 40% of our investments benefit disadvantaged

communities through 12/31. Our DAC commitment stands at 33%, and we have a clear line of sight that we will be able to reach our minimum target over the coming quarters. NY Green Bank's investment activity supports a goal of \$150 million in financing for affordable housing projects. We've closed \$62 million in that area. That's about a 41% progress to date. And we also have a hundred million dollars goal for energy efficiency in building electrification projects in disadvantaged communities. We've closed \$49 million in that area. I've already covered where we are on the CDF target. We're about halfway point. With respect to energy storage, we've committed \$200 million to developing community storage projects in New York State in support of the state's 3000 megawatt energy storage goal by 2030 and path to 6,000, we've closed \$79 million in that sector. That's about a 40% progress to date. And we're electrifying transportation in New York state with a public commitment of a hundred million dollars. We've closed \$19 million so far. We're keen to continue to make strong progress in these areas. And we're going to talk about the engagement, stakeholder engagement process we're undergoing right now, which I think is going to start really accelerating our ability to execute into those goals. Next slide, please.

As mentioned, we closed, we're expecting to close our second CDF transaction for this fiscal year, bringing our total to six for \$128 million in aggregate with respect to the five we have closed. Those are all on our website. These are some of the highlights. It's a great mix of large established CDFIs as well as some of the smaller community lenders, each focused on serving their target communities in their own unique way. The folks we've closed into at this point include Community Preservation Corp, enterprise true Fund financial services, low income investment fund, and Leviticus Fund for some of these community lenders, CDF is truly transformative. It's going to enable them to build out a more robust, in some cases relatively new clean energy lending practice. So we're really excited to be partnering with them. Next slide, please. As mentioned, a big initiative we started last year and we'll continue this year, will be related to our scheduled 10 year program review as a component of New York State's Clean Energy Fund.

We have a number of important work streams underway to support this review, and that'll all be reflected in our July public petition filing. Some of the key components under the review include a qualitative and quantitative summary of NY Green Bank's performance and impact to date, key lessons learned and findings from relevant evaluations that we've already conducted. And I think to me most importantly is a forward-looking proposal associated with any potential program modifications to further support the CLCPA and improve our ability to transform financial markets in New York State. We kicked off this initiative in November of 2023, and we've been in planning and active stakeholder engagement mode ever since recently. And in parallel, we've also commenced the drafting of the petition, which is expected, as I mentioned, to be filed July. And just looking at forward-looking timeline post filing, there'll be a three month public commitment, which will take place with the expectation of the issuance of a final Department of public service order in the fall or winter of this year. Next slide, please.

As mentioned, we've been in active stakeholder engagement mode since the beginning of this calendar year. The purpose of this is to really inform our annual review policy investment economic landscapes. They've all changed since New York remake was established some 10 years ago. So this review is really a very valuable opportunity to take that feedback and help us

really think through possible modifications to our strategy, to our operations to enhance and accelerate our ability to mobilize private capital to fund New York State's energy transition and help achieve our climate inequity goals. So far, we've had four round tables, accessibility and equity, clean transportation, energy storage, and building decarbonization. We're planning to hold two more. We're planning to hold a lender and investor round table, and we're planning to hold a forum to engage with stakeholders that have previously provided public comments to NY Green Bank in connection with our public filings and petitions.

We want to continue to engage with active stakeholders that are following along our progress in these round tables. We typically cover our activities related to the subject matter at hand, what barriers and that market participants and stakeholders are facing, what are some potential financial solutions that address identified financing barriers? And lastly, we spend quite a bit of time in a very interactive way discussing what specifically we can do. And all that, as I mentioned, is really going to be the foundation for informing ourselves on the petition response that we're expecting to file at the beginning of July of this year. Last slide, please. I'm going to touch on a very important topic where we're all really excited about. Last year, as I mentioned, very busy with respect to greenhouse gas reduction fund opportunities. That was three competitions, a \$7 billion solar for all \$14 billion NCIF, effectively a green bank oriented funding pathway, and a \$6 billion clean communities investment accelerator.

The applications were all due in October of last year, and announcements were made this month. So hopefully this is not news to you, but I'll just reiterate, we're all very excited that the EPA did award NYSERDA on behalf of their application for New York State, a \$249.8 million allocation under the Solar for all competition. And with respect to the NCIF, the EPA announced that the Coalition for Green Capital was conditionally awarded 5 billion. As I mentioned, we are a sub awardee under that application and we're working to finalize our sub-award amount. And more broadly, we're working with the CGC and other sub awardees and the EPA directly on documentation with the expectation of wrapping up the papering of these grants by the end June, with funds expected shortly thereafter. And that's really the big challenge that we've already discussed, is as much as it's a big opportunity, it's a big responsibility to deploy those funds in a highly responsible way. That concludes my prepared remarks. If there's time, I'll be happy to take questions.

Sherburne Abbott:

Thank you. Andrew, can I ask Richard? Yes. And then I think we should invite our online. I ignored Chuck and Commissioner Dominguez the last round, so if you have anything that you'd like to, any questions? No. Okay. Richard?

Richard Kauffman:

Yeah, so on the sector focus, I mean, I can understand the value of a sector focus in terms of attention, but maybe you can elaborate a little bit more on how much you're connecting to the programs at NYSERDA because financing should follow, it should not lead. And I also want to be sure that in terms of the review, it seemed like with DPS that the sector focus seemed to be, would appear to be a particular focus of that review. And I would hope that's not the case.

Andrew Kessler:

No, I think you're absolutely right. These sector focuses are prioritized in collaboration with NYSERDA and program leads. As we look at clean transportation, for example, looking to accelerate activity in that sector on the tail of the roadmap that was published on energy storage. Same thing working closely with David Sandbank group as they launch programs that support that space. What we're looking to do really is to do our best to replicate the success we had with Community Solar. Whereas the VR stack was announced and made public in 2017, 2018 timeframe, and that model was relatively new to New York State. NY Green Bank helped create structures that we shared with the marketplace that we crowded in folks alongside us in transactions, and we help educate the market on how to close into transactions within community solar supported by beater. And we have now one of the most, if not the most robust community solar markets in the United States. We'd like to see that over time replicated in these priority sectors, again, prioritized in collaboration with our program leads.

Richard Kauffman:

But in terms of the DPS review, again, if you go back to a couple of slides,

Andrew Kessler:

Sorry, it's slide second to last.

Richard Kauffman:

Yeah. So I want to understand in terms of the petition, how much the petition is focused on the sectors as opposed to the overall strategy of the Green Bank?

Andrew Kessler:

Yeah, it's a good question. The round tables, while you're seeing those specific round tables, obviously is tied to our priority sectors. But from our thinking, in order to have the kind of robust interactive dialogue that we want to have, we wanted to drill down with market participants. Sometimes Richard, we have the same parties participating in different round tables. So we are getting a robust view from folks that we're interacting with across different asset classes. But we're able to have these round tables that address those specific areas. But it's not the only thing we're doing in terms of obviously having stakeholder reviews. These are areas of specific, more in depth

Richard Kauffman:

I think we're talking about.

Anthony J. Fiore:

I'll be happy to come back to you with the structure of the petition itself, which is not the same as the round table. So your question is about how is our proposal to DPS being organized,

Richard Kauffman:

whether it's fundamentally different from what we've done in the past.

Anthony J. Fiore:

Right. So I think we should come back.

Richard Kauffman:

Okay. Fair enough. That is my question. Thank you.

Anthony J. Fiore:

And just in terms of programs leading and financing following, we've been connected hip to hip on with the program teams and that financing, and I think it's been valuable for both sides. And just by way of example, within the energy storage roundtable, one of the major barriers that was being identified is equipment financing and the lag time in developing a project because you have to wait so long till you get in the project lifecycle before you can place the order for the equipment. And because this equipment is not off the shelf equipment, it's another two years before the equipment can actually get delivered. So there are solutions both on the financing side and on the program side on how we can address that. So these have been really valuable for us.

Richard Kauffman:

Thank you.

Sherburne Abbott:

The flags go.

Charles Bell:

So thank you, Andrew. I was really happy to see the relationships you guys, you're building with some of the state's CDFIs through the carbon decarbonization fund and that you're going to do one of these round tables soon for lenders. But I was just wondering, do you think that the state's ecosystem of CDFIs is ready for the moment, ready for basically the historic levels of funding that are going to be coming through the GGRF? Because I'm not completely confident that they are ready.

Andrew Kessler:

Look, I think people are getting ready and they have been for a while. Whether they are ready today or not, I'm not sure I have a specific view, but I will tell you the GGRF helped create the kind of connectivity that we haven't seen. It brought together a created consortiums collaborations and enabled the CDFI community and the umbrella groups that helped tie them all together to really start thinking about what are we going to do? How are we going to execute in this historic opportunity? So sure, maybe some aren't quite ready for primetime, but the enabling services, I think are starting to get put in place to enable those that aren't quite as up to speed on how to deploy capital and the clean energy investments, know where to go and how to get support. And those that are already leading are part of that solution set. And there's been a tremendous amount of collaboration. I was just in DC last week, and it was really helpful to see everyone coming together really to support each other and share and create opportunities for that kind of collaboration.

Sadie McKeown:

I would just add, no, most of them are not prepared. The CCIA is supposed to be the enabling program to provide them with capital and technical expertise. But I would encourage when you talk about the lender group, that you bring private lenders to the table because unless until the private markets engage with these CDFIs that have been given this very tall order, GGR will be a one and done. We need to be able to pass the baton to the private sector as we're rolling out the capital. And that's both for green banks as well as for CDFIs, because that's where all the capital is, right? 27 billion is not even a drop in the bucket when it comes to the cost of this energy transition. So if you're not engaging with banks and private sector capital, which I'm sure you are, yes.

Andrew Kessler:

That's the target that round tables meant that's targeting the private sector. That's exactly right.

Jay Koh:

So two more diplomatic comments. One is I really want to stop and pause and just applaud the staff of NYSEERDA and the free bank for the participation in GGRF. And the successful recognition of the execution, I think is one of the lead agencies for the state. And coordinating a response to the federal procurement, which is really historic, the success and actually during some of the funding, really important to recognize. That's an enormous amount of effort put in. So I really want to give my personal appreciation to the team overall on staff that it's contributed to successful. That's one. Two, I think following on Richard's point about the tenure review, this is another unique moment that's sort of looking forward at GGRF looking backwards. This is one of the best case studies on the planet of successful execution of this kind of specialist platform institution in terms of executing this part of the climate problem.

And so as you design that specific product to speak to EPS, we would strongly encourage the parallel development or some normal human friendly way of understanding what the real lesson learned positively and negatively of that and your experience have been. So that if we can replicate that or turn that over as a blueprint to lots of other institutions, CD advisor, or others, that we capture what worked and what was successful and the lessons learned on the negative side too, because that is really what the advantage that Experie truly has been. So congratulations on looking for, but as we look back, let's try to collect and report those lessons learned in a way that be possible to as many people as possible. Because that one was to scale as best as we

Sherburne Abbott:

Others. No. Okay. No formal action is required on this item. The last item on the agenda is other business. Is there any other business to come before the Committee? Hearing none. I have a motion to adjourn. All in favor?

Members of the Committee:

Aye. Aye.

Sherburne Abbott:

All opposed? The meeting is adjourned.