

**NYSERDA 118<sup>th</sup> Program Planning Committee Meeting**  
**January 25, 2023**  
Clean Copy of Transcript

**Sherburne Abbott:**

Hey, good afternoon and welcome. I call this meeting to order a notice. An agenda for this meeting was provided to the Committee Members on January 13, 2023, to the press on January 17, 2023. This meeting is being conducted by video conference. The Authority will post a video on a transcript of this meeting on the web. To confirm that we have a quorum, I would like to ask the Committee Members to introduce themselves. I am Shere Abbott, Chair of the Committee.

**Jay Koh:**

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

**Frances Resheske:**

Frances Resheske, Member of the Committee and Member of the Board.

**Sadie McKeown:**

Sadie McKeown, Member of the Committee, Member of the Board.

**Chair Kauffman:**

Richard Kauffman, Chair of the Authority.

**Sherburne Abbott:**

Thank you. The first item on the agenda is the approval of the minutes of the 117th Committee meeting held on October 3, 2022. Are there any comments on either of the minutes? No comments. May I please have a motion to approve in the minutes?

**Jay Koh:**

So moved.

**Sherburne Abbott:**

Second?

**Sadie McKeown:**

Second:

**Sherburne Abbott:**

All in favor?

**Members of the Committee:**

Aye.

**Sherburne Abbott:**

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

**Doreen Harris:**

Yes good afternoon to the Committee, and specifically we're here to provide actually two, two updates. The first is our annual January presentation of our Strategic Outlook. Again, we, we approved, the Board approves our Strategic Outlook every January. So we're here to provide details around this three year forward looking document. And we also having completed a New York's Final Scoping Plan as part of our Climate Action Council process. Really think about these two pieces in, in a way of connecting them together as to the State's planning and our strategic involvement within that ecosystem. So today I, together with our Chief of Staff, our Senior Advisor, and the Executive Director of the Climate Action Council, will seek to provide these dual updates to each of you. Next slide, please.

And so, we'll start with the Strategic Outlook. We will then turn to the Scoping Plan and discuss some priority recommendations within the plan before we take any questions or discussion. Next slide, please. So, certainly as we have and as you will see in the Strategic Outlook document in my letter contained within it I'm reflecting on the facts that certainly a new chapter is unfolding in the transition to a clean energy economy. In many ways, 2022 was a banner year for climate policy from the Landmark Federal Inflation Reduction Act, the previously the Infrastructure Investment in Jobs Act, and of course, the finalization of New York State's Final Scoping Plan for the Climate Action Council. So, certainly in, in many ways for New York we see very strong reasons for optimism and ways in which we can be advancing this future together.

I would say meanwhile of course, we find ourselves in the term I see used increasingly the term midtrans we're in the transition, and which conventional fossil based energy systems are coexisting with a growing renewable and zero emission energy system. A transition in which we are advancing technologies and solutions in our day-to-day lives that we know will be changing them for the better, but a transition, nevertheless. So certainly, we are experiencing with respect to that transition, new challenges, new iterations of old problems. And of course, I'd say overlaid with the challenges of geopolitical uncertainty on energy supply and prices inflation and the realities of a changing climate. So when you, when we advance our Strategic Outlook discussion today, I would say we're very cognizant of these mid-transition issues and the specific challenges we see today in advancing the outcomes that New York State and indeed the world are accelerating. So I will turn the presentation in the next slide over to Jamie Dickerson, our Chief of Staff to discuss the start of our Strategic Outlook for this year.

**Jamie Dickerson:**

Thank you, Doreen. Everyone. Let's go to the next slide and dive right into the Strategic Outlook. Really before starting, I just wanted to extend a, a big thank you to everyone across the Authority who contributed to the development of this great document, including some of the folks and their teams behind me. As always, there's a team effort so just a couple of us here today, but a big team behind us on the next slide. If we go there you'll see the familiar mission outcomes and strategic focus areas that have guided our outlook in years past. And we're, we're

reaffirm reaffirming that sort of structure and that set up for this year's outlook. We think, you know, these, these categories have held true for the last few years, and we think they'll continue to hold true for the, at least the near future. And so for that reason, you know, they remain unchanged and they hopefully should look, look pretty familiar. We did make a couple of minor tweaks, for example, the clean energy jobs focused area at the bottom, sort of de-emphasizing the, you know, post pandemic economic recovery. But nonetheless, now we're setting our site council of the job growth opportunity on for, for of a longer timeframe basis. So, with that very brief introduction, I'll be back in a few slides, but I'm gonna hand it over to Erich Sherer Doreen's Senior Advisor to tale it away.

**Erich Sherer:**

Thanks very much, Jamie. Hello everyone. Those of you I've met, nice to see you again, others. Good to meet you. It's been my pleasure this year to partner with Jamie and the wider NYSERDA team to work on the Strategic Outlook. And my pleasure now to talk us through the mission outcomes next slide. And actually given Jamie's introduction that there's not much change as such on the scope of the mission outcomes. I'm going to skip this slide as well in the interest of time and dig right in the substance of each of them for next slide, please.

Thank you. Starting with our mission outcome on GHG emissions reductions, I think this outcome as such doesn't need much introduction. So I'll move right to the specifics noted here on the slide, starting with the recognition of NYSERDA's role on the CAC Scoping Plan, of course, in developing it, and now that it's out in taking forward the recommendations, I'm not actually going to say anything more about that because we have a whole section on the Scoping Plan that Sarah will talk us through in just a moment on the State energy plan that's in the long held role of NYSERDA is to contribute to that effort as well. And now that the Scoping Plan is out, we will certainly set our sight on that one again. Now I will move on to the next point noted on, sorry, I'll stay with the slides for just a bit longer, if please.

And so, noting in the middle of the slide, economy-wide GHG reduction strategies within that context, I'm going to make two points. First of all, this covers, as the term says, cross-cutting strategies, such as the Captain Invest Initiative just launched, and we'll have more opportunity to talk about that today as well. But also within that heading, I'm noting that there are certainly some activities at NYSERDA that don't have their own, if you will, mission outcomes specifically dedicated to them. But the number course was important. And so within this heading, I just want to call out my service activities on transportation. Where going forward, we are focusing on medium and heavy-duty vehicle decarbonization, including school buses where we're working towards a target for all new school bus services being zero emission by 2027 and the entire fleet by 2030. On the next bullet point here, this recognizes NYSERDA's important analytical role to develop and support analysis that tracks our greenhouse gas inventory, including supporting the DEC annual emission inventory.

And then finally on the slide noting the important effort choosing to lead by example, noting in particular last year's Executive Order 22, that set out wide ranging targets for the State agencies to pursue, including the target of a hundred percent renewables by 2030. So ahead of the Statewide target. We'll talk about the Statewide target in a moment. And so I want to note NYSERDA's role going forward in helping to lead implementation and oversight of those lead

by example efforts. And then finally, not specifically pulled out on the slide, but just as, as a reminder of the critical role, of course, of the various federal funds that have emerged under the IRA, the Infrastructure Investment Jobs Act, and the Chips and Science Act. And again, NYSERDA's role going forward in, in helping to coordinate investments under those files. So with that, we can go to the next slide, please.

Taking us to our renewable energy mission outcome. Also, one that I think don't, doesn't need much introduction. In particular, our 70% by 2030 target is probably one of our most well-known targets that we are pursuing and certainly our North Star within this mission outcome. And in order to pursue that target, the, the foundation is really the predictable and continued procurements that we've been running for some time and continue to run going forward along a number of programs, in particular the Tier 1 program and also critically the Offshore Wind program, where at the moment we have an ongoing RFP under which we seek to procure at least another two gigawatts of offshore wind. And beyond that, within the offshore wind effort, we will focus on developing a master plan 2.0 that will review our path to the nine gigawatt goal, but also steps beyond that goal.

I also briefly want to call out the NY-Sun program, also an important contributor of course, to the 70% target, especially now that distributed solar is seeing an increased 10 gigawatts procurement target. And finally, not renewables as such, but also an important element of this storing efforts on storage where we've just submitted to the Public Service Commission proposal for an increased six gigawatts of storage target by 2030. So all of these efforts are, of course, an admittedly subject to barriers and challenge challenges, so called out here in particular around transmission and siting. So I'm going to note NYSERDA's important, draw on transmission to support DPS and NYISO on the various transmission upgrade proceedings. I also briefly wanted to mention the Tier 4 program, even though admittedly I'd say much of the action, if you will, for NYSERDA on Tier 4 happened last year as a reminder Tier 4 program that aims to bring renewables to New York City.

And last year the PSC approved selection of two projects the Champlain Hudson Power Express, bringing hydropower from Quebec and the Clean Path New York project, bringing upstate solar and wind power to New York City. But going forward, NYSERDA will continue to support these projects to through construction and completion. And I'm just going to mention the CHPE project's groundbreaking event just a couple of months ago aiming for construction by early 2026. Next, we have climate equity, supply chain localization jobs, all of those areas I'm not going to spend time on right now. We will have specific strategic focus areas dedicated to those important areas that I will talk through in a moment later in this presentation. But I'm going to mention, of course, the important emphasis on reducing cost throughout our work and also within this mission outcome and within, within the heading of reducing cost, I'm just going to mention two aspects illustrates that first of all, the importance of scale and therefore NYSERDA's purchasing power, as I said, also going forward under those procurements. So scale to help drive down cost. And secondly, also how we run those procurements. A bit technical, but I'm, I'm sure you've, you're all familiar with the concept of index wrecks that we started to develop a few years ago and are important aspect to help maximize efficiency of these procurements. And I'm just going to mention, I noted storage a moment go ago going forward,

we have now proposed, and we'll be developing that index concept also for storage index storage credits.

So finally under this heading actually that's it for this slide, so we'll move on to the next one if you please taking us to our third mission outcome on energy efficiency and building decarbonization. We have been now working towards what is already an ambitious target with the 2025 185th TER vtu target. I think the key message here must be in, and certainly the Scoping Plan draws attention to that, that even beyond that target, we need to scale up. We need to ramp up further and faster. So that's a, a key message to bear in mind for our work going forward over the next few years. And NYSERDA's role in that respect, firstly, will focus as it has done already on providing policy and strategy leadership to help drive that. And so you'll see on the call out on the slide some of the specific efforts that are underway in that respect, the Carbon Neutral Buildings roadmap was just released and sets out the framework for the longer term and forthcoming will be the building electrification roadmap and the 2 Million Climate Friendly Homes action plan, providing more the perspective towards 2030, both to pursue that 2 million homes target that the Governor, as well as efforts on the commercial sector as well.

And I also briefly want to mention ongoing proceedings before the Public Service Commission to review the new efficiency in New York Initiative, as well as the Clean Energy Fund to more proceedings that underpin also NYSERDA's work in this area. So those proceedings are ongoing and NYSERDA's also contributing towards those to review those initiatives as well as consider the path beyond 2025. Now to the next heading there, excuse me, codes and standards. This is important to recognize that even though many of our programs focus on market development and incentives, certainly incentives are not ultimately the solution. And we want to transition to a situation where adoption of clean energy and decarbonized building technologies is the default, is the standard, and so is realized under codes and standards. And the Governor, of course, announced important next steps in this respect at the State of the State.

And so NYSERDA will work to take forward these initiatives on new construction, zero emission, as well as phasing out of heating and existing, sorry, fossil, also fuel heating in existing buildings. Again the issue of barriers is clearly critical to mention barriers in this area include barriers to finance, but also consumer awareness, workforce development. So on finance, of course, the NY Green Bank has an important role to provide support and solutions for housing decarbonization. And then barriers such as consumer awareness, consumer confidence, workforce development, those are all areas that are part of NYSERDA's ongoing market development efforts, including going forward. Also, a greater focus on low and medium income households.

Moving on to actually lemme just check myself now. I'm not done yet with this slide, John. I don't want to forget innovation, of course. So talking for about innovation in this area for a moment, three priorities going forward. Firstly to pursue technology solutions. Secondly, to reduce cost, and finally to build local industries. The emphasis there will be also on multifamily and the commercial sector where deployment at scale hasn't occurred as much. And so new solutions are still more needed than perhaps in the single family sector. And an example to mention is our Empire Technology Prize program. In this respect, that takes us to the end of this slide. And moving on to our next mission outcome, please, on the clean energy economy. Gonna

start with the, the headline message here. Jamie already alluded to it. A really important positive message, of course, that after the, the dip in jobs during the pandemic already in 2021, we saw really encouraging recovery.

And so again, that's, that's even in 2021, clearly, of course, also going forward still a, a critical area, also more broadly beyond jobs, just humanity, economy, as I said more broadly. But the slide here provides a bit of a summary of, of our efforts. I want to go in a little bit more detail on what's on the slide structured around how NYSERDA structures itself in this area, which is around innovation, the green bank, and workforce development and economic development. So I'll start with innovation, leaving off where I just left off on the previous mission outcome. So in on innovation, I want to mention three priorities. Firstly, to bring companies to New York, secondly, to grow the companies that are already in New York. And thirdly, to develop the human capital in the innovation space. And to do that also going forward, we are focusing on transformational technologies.

So that includes offshore wind, battery technology, hydrogen, low embodied carbon technologies, renewable force with technologies and resilience. And to mention a couple of examples EmPower program has been successful in attracting new technologies to the State. And also this year, we are looking to announce a new climate tech incubator program, again, with that focus of both bringing companies to the State as well as growing the companies that are already in New York State. So next few words about the NY Green Bank contribution in this area, of course, critical contribution to provide finance. And NY Green Bank has invested card token \$550 million to contribute in this area. And this is focused around areas including transport, buildings and storage. And part of this NY Green Bank effort is also to demonstrate the viability of the, our targets to focus on disadvantage community.

So show that finance investments are viable in combination with those targets. Investing at least 35% in disadvantage communities, finding this area broadly, our efforts on workforce development, economic development, also there we continue to focus on areas, growth areas. So I want to call out buildings storage and offshore wind, and also, and so you see these are recurring themes. Also, there a focus on disadvantaged communities and other priority communities. And so this includes for workforce development, a range of active activities around recruitment, training, placement programs, and the like. And for economic development, I also want to mention again, our priority to compete with other States on attracting manufacturers. And as a, a few critical examples of that, our efforts on attracting offshore wind manufacturing, and of course, I must mention the micron semiconductors facility. Major, major investment, of course. So with that, I want to take us to the final mission outcome on the next slide, please.

The role of a resilient and distributed energy system. So contrasting this with a centralized and essentially overly rigid system. So pursue more smart and flexible options through distribution and, and the benefits of resilience through distribution as well. Starting on this slide, again, a reference to lead by example. So I already touched on that earlier, so I won't dwell on that here. I do want to call out in the second bullet point, the extreme heat action plan. So that's a major effort also going forward, working with more than 20 other agencies to deal both with adaptation to climate change, extreme heat, emergency response, more generally under the heading of

resilience, I want to call out, let's call it maybe mainstreaming. So working with local Authority's to consider for instance model local roles that reflects climate study findings. Also to develop local resilience guidebooks.

Also to consider the role of resilience in finance and insurance. So to ensure its rates reflect resilient infrastructure appropriately. And then finally, again, under the heading of resilience, also NYSERDA's, own efforts to lead by example as part of our operations and as part of our program design. So next, we have a couple of entries on this slide that in the interest of time I'll be brief on. So I do want to mention, of course, again, night service's, important analytical capability and to contribute that capability also on climate research, including importantly, that climate impact multi-year, the climate, sorry, the climate impact assessment study. And then finally mentioned here again, grip technologies and our flagship DER programs closer, of course, also called out on the left hand side of the slide, again, with that 10 gigawatt distributed solar target, as well as the six gigawatt storage target that we just proposed to the Public Service Commission. With that, I want to wrap up my summary of our mission outcomes. And Jamie, if that's okay with you, I'll hand it back to you to take us through the focus areas.

**Jamie Dickerson:**

Thank you, Erich. That was great. Let's go to next slide and we'll transition briefly into our strategic focus areas. These should seem familiar, and again, these are sort of our cross-cutting strategic focus areas rather than sector specific targets and, and mission outcomes. So as we move on to the first one folks will remember, building an inclusive clean energy economy has really been a pillar of our efforts for really, you know, the last three years since the passage of the Climate Act and really well before that as well. And we can go slide where this is laid out in some detail. This really recognizes that while, you know, we have the sort of the, the general clean energy economy mission outcome, it's sort of not sufficient just to pursue that without also intentionally trying to build one that is inclusive in, in its approach and its, and its composition.

So specifically whether we're talking about disadvantaged communities, environmental justice communities, LMI households you know, different constituent groups who have been disproportionately affected historically in a number of ways pertaining to energy, cost burdens, you know, exposure to pollution investment or disinvestment in housing stock, et cetera, et cetera. So, the purpose of this section is really to lay out across all of our portfolios how we're seeking to meet specifically the equity mandate of the Climate Act and how we can do so in sort of a, an adjust and equitable way. So in this slide and NYSERDA is really gonna be taking some of the key actions that you see on the slide. Leveraging our newly awarded clean energy hubs is one example of a new important tool that's in our tool belt. Really getting at the regional level and trying to broaden exposure and awareness of our programs and, and future policies.

Training certainly part and parcel to our long-standing work, but expanding training and workforce development initiatives that will bring job opportunities, you know, to all New Yorkers, but specifically to priority populations and, and disadvantaged communities to get at that economic access. You know, imperative Erich alluded to this earlier, but you know, specifically as pertains to, you know buildings and, and building decarbonization. It's even more challenging to get replicable electrification and efficiency solutions that work and are sort of tailored for the LMI market. And so that's one reason why we're so focused on developing those

pilots. Those who are paying attention closely. Might have seen Governor Hochul talk about one such pilot through the Empower Plus program that we're advancing this year with, with the Department of Public Service team, to not just make efficient and electrify, but actually pilot capping the long term sort of operating expenses for an LMI household to hopefully, you know, provide even more assurance that those models will work for them and, and not come at sort of an economic cost.

Next, we're definitely also focused on advancing models for community ownership and, and generally trying to expand the benefits of DER adoption. I think that can take a number of forms, but critically, the new federal flexibility in the federal tax credits around, you know, direct transfer, for example, we expect to expand the universe of entities that can take advantage of the, of, of DER adoption, essentially, for their own benefit. One thing we've highlighted in years past, and Sadie, I know you've been working on this one, is how we inject our investment into affordable housing finance and continuing to build on the partnership with HCR, with HPD NIHA and beyond so that we can actually, you know, get more bang for our buck by weaving our investments right into their models and deliver those, you know, performance benefits and, and Co-benefits to tenants across the State. And finally, our hosts here at the Green Bank are gonna be, you know, keenly focused on launching and, and implementing on the Community Decarbonization Fund, that \$250 million fund funding pathway to support, again, sustainable infrastructure and decarbon investments benefiting disadvantaged communities. So there's a whole lot more in this section. I think it's one of it not the longest section in our outlook but we'll leave it there. As we turn to the next slide and pivot a little bit to clean energy jobs.

So if you were looking at the, sort of the, as it exists today, job numbers on a couple slides back, you'll notice that, you know, the job oppor job growth opportunity that we see in the future is really quite substantial compared to what we have today. And while there is a potential for some displacement there, as you see on the left, we see that, you know pretty considerably dwarfed in terms of the number of jobs to be created compared to the number of jobs that might be at risk of displacement as a result of the energy transition. So you know, NYSERDA, this is a Statewide transition and challenge, but NYSERDA has a key role to play. So we're gonna be focusing on things like scaling up career pathways, which is an example of a successful model that we've, we've built around clean energy apprenticeships, pre-app apprenticeships job readiness programs, really all oriented around building that talent pipeline.

Again, especially for individuals from disadvantaged communities, or also from workers who've historically been, you know, gainfully employed in the in fossil fuel industries who may be pivoting to clean energy offshore wind. Certainly a priority given as the slide notes in the bottom right. It will be one of the fastest growing sectors that we see in the coming decades. We've already set up the Offshore Wind Training Institute, and there's other industry efforts underway. So that's going to be a continued focus of ours no matter what. And again, partnerships are, are super important here. I think we're already working with ESDs new Strategic Office of Strategic Workforce Development. We also have forged a tremendous collaboration with the Department of Labor through our Climate Action Council process. And, and undoubtedly other partners will be, will be needed to help, you know, turn this huge opportunity into reality. Of course, the, the flip side of the opportunity is that we have a, a lot of jobs that will need to be filled, so the partnerships will be key to making that happen.



And finally, again, we'll be leveraging our own purchasing power, our procurements, our program design really trying to mainstream the opportunities for New Yorkers and New York firms, be they MWBE or SDVOB firms into our procurements directly you know, for, for the installation, for the servicing, for the equipment. And again, we, we do think that, you know, the nexus of jobs comes hand in hand with, with economic development. So seeing where there are opportunities to support economic development programs and, and projects that that come sort of with, with the workforce support directly embedded.

Okay, two more. We're almost there on our next slide, we're on the we're gonna be focused on the, the transition from Fossil Natural Gas to a low carbon future. Again, this has been another long-standing focused area of ours, and it's, it's sort of more abundant than ever as a result of the Climate Action Council process, just how vital, or just how it, you know, critical this piece of the transition is and will be for getting the picture right. I think if, you know, it's, it's well understood in this room, but just to reiterate that sort of the core strategy here to tackle gas use in, in heating and cooling is to scale up energy efficiency and to, and to move to electrification solutions and buildings. But in, and certainly in some tougher to electrify areas. That's, you know, it's also Id into potentially a wider set of solutions that we'll be looking at, including green hydrogen including alternative fuels.

But all of that consistent with the, the very extensive framework that was laid out in the Scoping Plan on those topics. I think folks will probably be aware, I think Erich mentioned them, some of our long-term roadmaps in this area. The Building electrification roadmap, 2 million Climate Friendly Homes Action Plan. Those are the sort of the guiding policy documents that we're working on to chart this multi-decade transition. And not to mention the hydrogen roadmap that was launched in tandem with our pursuit of the federal funds that were recently made available as well. We have our own work to do at NYSERDA and, and also the other program administrators pertaining to sort of the offerings of, of natural gas related solutions in our efficiency programs. So we're continuing with the phase out of support for Fossil natural Gas that we previously outlined in, in years past.

Obviously we, we can't and should not send contradicting signals to the market, so that's an important phase down, that's underway as well. And then finally, as I mentioned earlier, the electrification solutions tailored for, for LMI and disadvantaged communities will be key here as well. Given the affordability and sort of imperative of avoiding regressive outcomes in this area. Innovation, a single word on the slide, but many words behind it, because this is one area where we know innovation will be key, be it on reducing the cost of electrification solutions, or being on, you know, finding novel ways to reduce gas peak demand during peak periods or, you know, preventing mitigating, addressing leak prone, leak prone pipes and, and beyond. And then finally, this is actually a new one. You know, in light of the legislation that was passed in June, we're now taking a much closer look at thermal energy networks, thermal, thermal energy districts for, for really the first time at the State level under a new regulatory framework, which we're actually very excited, has a, a very strong nexus with the sort of just transition elements of the, you know, the historic pipe in, in plumbing trades whom we see have, have a good opportunity there.

Alright on our last slide last mission, our last focus area we have is fostering healthy and resilient communities. So I see this one as sort of focusing on the community level action we need, but weaving in the sort of attendant priorities of, of driving health and driving resilience benefits. And again, it sort of transcends the, the built environment, transportation and industry. So this sort of the, again, the local place-based focus, some of the first things will be undertaking as you see on the, on the slide relates to the siting and the sort of the construction of renewable power and other projects that provide real tangible community benefits so that it's not just a sort of a one-way transaction, but that post communities feel like they're empowered and benefiting from the, from the projects that are being cited.

We're also hoping to strengthen local resilience. Again, what does that mean? Well, you know, pursued at a number of levels. There could be community scale, distributed energy, you know, solar storage, green hydrogen, and district geothermal you know, installations that can help support resilience and redundancy and, and reliability. We're also undertaking some work to support some of New York's municipally owned utilities and, and rural electric cooperatives to undertake their own climate vulnerability assessments and, and strengthen their resilience of those local grids. And obviously in some ways, a, if not the key nut to crack here is preparing homes and buildings for, for the resilience solutions they need with, with some clean backup systems that they will need. And certainly the recent winter storm and summer, you know, weather events have, have really underscored the, the mounting priority of that work.

So, I know we're short on time. I think I will wrap up by saying, you know, there's other key parts here, mobility, you know, when you think about a healthy and resilient community, it's walkable, it's easy access to transportation and transit. So we're, you know, through our clean transportation prizes and beyond, we're also trying to boost mobility under this framework. And Erich, I'm not sure if you addressed the extreme heat action plan, but that too is another avenue of our, of our collaboration the very acute risks of extreme heat damage here in at least in this climate zone. But, but really across the State. So that was the lightning round tour of the strategic focus areas. Sorry for the mouthful, but really just wanted to leave as much time as possible for q and a. However, before that, I think we're gonna be turning it to our Scoping Plan colleagues, and then we can bring it all together before we open it up. So thank you.

**Sarah Osgood:**

Thanks, Jamie. I'm Sarah Osgood, Executive Director of the Climate Action Council. I've been before you a couple times in this capacity most recently in, in June of last year, where the council was in the midst of its public comment period. So I'm thrilled to say that we've released the, the Final Scoping Plan at the end of last year. The Scoping Plan does cover all economic sectors of New York's economy. But in the interest of time, I'm not gonna get go through all of those. Could we advance two slides please? And rather I'll just highlight some key sectors that are relevant to NYSERDA's work namely transportation buildings, gas system transition, electricity and economy-wide strategies. Next slide please. The emissions from these first two sectors transportation and buildings total over 50% of the State's greenhouse gas emissions.

So we'll start with, with these two. Really, I, I'll skip over a little bit of the, the visioning here and just try to highlight what some of the, the key strategies are within these sectors. So for transportation the biggest area here is transitioning to zero emission vehicles. New York will

require 100% light duty zero emission vehicle sales by 2035. And this will also be accompanied by enhanced investment in zero emission vehicle workforce development and purchase incentives especially for low to moderate income customers. Rapid depart, rapid deployment of charging stations with a focus on disadvantaged communities. Again multi-family housing and travel corridors in rural areas will also help reduce barriers to zero electric vehicle adoption Statewide. In terms of other zero emission vehicles New York will require 100% zero emission sales for non-road vehicles by 2035 and medium and heavy duty vehicles by 2040. This will be supported by greater incentives, again, investments in charging infrastructure and prioritization of converting public buses school buses, service vehicles, and State fleets. Jumping down just a little bit more on this slide. Also looking at expanding mobility options having investments in pedestrian bike and public transit infrastructure, which will provide low-cost transportation options for discretionary travel. Next slide, please.

In buildings we're looking to see widespread energy efficiency and electrification of space and water heating with high efficiency heat pumps, which can be supported by the strategic utilization of alternative fuels. Also looking to reduce embodied carbon associated with building construction through building reuse and lower carbon or carbon sequestering products and materials. And so to get there really what we're looking at is a lot of emphasis on adoption of zero emission codes and standards and requiring energy benchmarking for buildings. These were also mentioned in the Governor's State of the State address as key priorities for her. So we'd be requiring new construction to be highly efficient and to incorporate resilience features starting in 2025. This would prohibit fossil fuel combustion equipment for space conditioning hot water and for appliances and new construction starting in 2025 for single family and low-rise residential buildings. And in 2028 for multi-family buildings with four stories four stories are larger in commercial buildings. Also looking to, to phase out fossil fuel replacements of residential size, heating, ventilating, and, and air conditioning, as well as hot water equipment starting in 2030. Commercial sized HVAC and hot water equipment starting in 2035 and cooking enclosed drying appliances in 2035.

We're also looking to expand New York's commitment to market development innovation and leading by example. Some, some words that you've probably heard in the, in the Strategic Outlook here. So in coordination with financial incentives and regulations State support for market development and innovation will be important to the delivery of building decarbonization solutions that perform well and will make lives better. Areas of focus here also include workforce skills, broad public awareness and engagement so that folks understand the motivations here and we can influence behavioral change. Moving to the next slide. The gas system transition is clearly a big another big topic for, for the Scoping Plan. Definitely a cross-cutting issue. We know that our success in achieving the climate acts emissions limits are gonna require a substantial reduction of fossil natural gas use in a strategic down downsizing of the gas system.

And so we know that this is gonna require significant planning and coordination across a number of sectors to integrate the decarbonation of power generation, of the power generation sector, and the buildout of local electric transmission distribution systems to meet the anticipated increases in land throughout the State. And so what the Scoping Plan does in this area is outlines a detailed framework, framework through which a coordinated gas system transition plan can be

developed. The framework provides strategic strategies and guidance to ensure the transition plan sets a clear timeline for the transition, while also ensuring key principles, key principles are satisfied, such as greenhouse gas and coke, pollutant emissions reductions, equity considerations, workforce protections, affordability, safety and reliability decision making by informed independent analysis, coordination with the electric system expansion and consumer engagement. So a lot of stuff is gonna be, you know, coordinated through this, but I think this is the only way we're gonna get it done is, you know, through carefully coordinated planning.

Finally, if we can, oh, no, not, not finally, sorry, second to last electricity. If we could go to the next slide, please. The vision for the electricity sector was largely laid out in the statute itself, and as mentioned earlier the goals for distributed solar and energy storage were actually increased administratively subsequent to the passage of Climate Act. So we're now looking at 10,000 megawatts of solar and 6,000 megawatts of storage as our new goals by 2030. And so what we're looking at here in, in the electricity sector, we know that the analysis that accompanied the Scoping Plan showed us the annual electricity demand is anticipated to more than double by 2050. And so we really need to focus to progressively clean up generation while also while demand is also growing significantly.

So here we're looking at transforming power generation. Again, that's primarily focuses on planning processes to allow for the phase out of fossil fuel generation resources, accelerating the deployment of renewables. And also accompanied here is outreach awareness, planning, support and, and coordination with communities. Also looking to enhance the grid as we're doing this buildout to improve the efficiency, delivery, and reliability of electricity. This will also facilitate the integration of renewable energy. And so in this area, we're looking at deployment of energy storage technologies, as well as investments in transmission and distribution systems Statewide and better alignments of the energy markets with the Climate Act. And finally for this slide, we must invest in new technology, particularly dispatchable solutions like storage to meet the increased demand and maintain reliability.

Finally, on my last slide here, we have economy-wide strategies. The Scoping Plan recommended, and the Governor provided direction in her State of the State address for an economy-wide cap and invest program to cap emissions and invest the proceeds from those emissions reductions programs to hasten the, the transition and provide support for economically vulnerable New Yorkers. Can you please have the next slide? DEC and NYSERDA will be designing the program that sets an annual cap on the amount of pollution that is permitted to be emitted in New York. That's mouthful. Pollution cap will, will lower over time to meet the greenhouse gas reduction requirements that are established in the Scoping Plan. Large scale greenhouse gas emitters and distributors of heating and transportation fuels will be required to purchase allowances for the emissions associated with their activities.

And the invest portion of the program will incentivize consumer businesses and other entities to transition to lower carbon alternatives. The Governor also identified several guiding principles that should be considered as the State works to implement this strategy. These will guide how DEC and NYSERDA to design the program, and they focus on affordability, climate leadership, creating jobs and preserving competitiveness across the State, investing in disadvantaged communities, and funding a sustainable future. And so if you if we take a, a, a step back and

know what does this mean for NYSERDA, I would say that our work largely is consistent with the direction and emphasis of the Scoping Plan. However, I see the biggest challenge will be in prioritizing the, the many recommendations that are contained within the Scoping Plan to identify which we want to pursue and implement on, on first. And then to adopt those strategies that are focused on really scaling up and reaching more New Yorkers. The scale of this transition and the recommendations to get us there is, is really quite impressive. And I think it will take more dedicated focus. You know, we already are focused here, but continued focus to ensure that, that we meet the goals. And then I think final slide.

**Doreen Harris:**

Yes,

**Sarah Osgood:**

Back to you, Doreen.

**Doreen Harris:**

Yes. So this is it. So when we look at these two deliverables side by side it is the case that I would say, how do the two line up? You know, this is something that we at NYSERDA have made progress in in this year's Strategic Outlook. I expect that to continue over time. Certainly NYSERDA as the Co-Chair myself and the agency is the Co-Chairs of the Climate Action Council. We've had a job to plan on behalf of the State, and we will continue to have the energy planning role that we have going forward. At the same time though, and NYSERDA as implementer and executor, you know, those are two separate things in some instances. And certainly we are relying on others our fellow agencies the federal government, and many others to help deliver on these goals.

For sure. So as we look at these side by side, I'd say there is some clear alignment specifically in the sectors that you heard Erich speak about on buildings, electricity resilience, climate justice and economy-wide strategies. We will be not only looking at those in the context of the Scoping Plan, but also really reexamining the sectors like industry and waste agriculture, et cetera, for areas in which we at NYSERDA should or could be expanding our focus or further collaborating with others who would take the lead on those activities. All that to say this remains a work in progress. I'm very thankful for the incredible NYSERDA team in preparing the Strategic Outlook. And for our role in advancing the Scoping Plan. I think we have a moment in which more than ever we have a roadmap on how to get from here to there. We're heavily in the execution mode, and that will evolve over time, certainly in next year's Strategic Outlook. No doubt. So with my, to the team for everything including the business unit leads, sitting behind the team. I'll open it up for questions and discussion. Back to you.

**Sherburne Abbott:**

So where did it begin? Cool. <laugh>, really, it's an impressive amount of work. And then, and in fact when you think about the discussions of the Board up, you know, previously about the, the linkages between mission scope, scoping metrics outcomes programs, it's beginning to really show a lot of. So I wanna I have three things that three points, but I want to pick up on something that Sarah said about priorities. One of the things that I was hugely disappointed in in the, in the IRA fed numbers was the efficiency number, which is pretty low. And, and in fact,

this is one of the scaling up is gonna be extremely important, right? And it's gonna be the thing that really reaches all, all people in the State. And I, so I was really grateful to hear some of your comments about this, particularly on the innovation side.

Cause there's a lot of innovation left in the efficiency improvement stuff. And I think that's a big, big piece on the second thing is on metrics. You know, I, I, I have some questions, specific questions about the double count, you know, key pumps, counting reductions that come in, in efficiency improvements, how that works. There's one number that's interesting to me. In October, the efficiency numbers is set. We were 60% of the total, now it's 67. And so that's a couple of months of 7% increase. Where did that come from? So that's one question. The other thing about metrics in terms of measuring, measuring workforce, workforce, so we talk about new in the clean energy world, thinking, thinking about new people in the, in the pipeline. One of the fig impediments that I see, especially in central New York, is the retraining of existing workforce because we have a huge opportunity to deploy heat pumps in a cold region, and nobody wants to do it because they're, they haven't been trained there.

The final thing, and, and this will sound self-serving, it really is not meant to be, but when I, when I read through the Doreen, and it's not directly, it's in your, your, your opening line where it says we're in this all on this together, this, this common effort. The academic community is not in that, that that statement. And the reason it should be is because it's really creative these days. There are huge opportunities to shorten the pipeline between the, the salient knowledge and the academic to stop thinking about the academic community as a grantee and more as a partner in knowledge transfer and I, and, you know, all these school, the, the New Climate School at Columbia, there's all this innovation, and particularly around the i the AI data machine learning stuff where, where they're huge things to gain. I think it's really time to have some sort of, of, of initiative or something that has to do with, you know, to really trying to shorten that pipeline. And, and, and, and ways to do it where it's not just a, just one more stakeholder, but really a partner in the knowledge room. That's <inaudible>. Sorry,

**Sherburne Abbott:**

I'm sorry. There weren't any too many questions in, but

**John Lochner:**

That no <laugh>, I'd say John Williams, I that working on something so that it's just right on. Sorry. What you were before. They, we have a tremendous amount of excellent universities in the State, great STEM graduates, and, and we do think there's a value coordinating them and, and making sure that we're making the most outta the opportunities every the ecosystem. So more, more to cut on that for sure. Okay.

**Doreen Harris:**

Yeah. And on the, the point with respect to sort of progress, we have been working hard execute on our clean energy fund goals, of course, but also to move forward in the waning years of the program to execute contracts. So what you're seeing is the effectuation of that effort really hard at work to get monies committed and moving.

**Commissioner Dominguez:**

I think the, the other side of that though, on the workforce piece, it's critical. It's not just university graduates, it's everybody putting people to work. And I think I, I, I'll start with commending Doreen for her leadership she and Basil as Co-Chairs as somebody who was on the climate leadership, community protection you know, the CAC that actually worked to develop this, it was, it's an enormous amount of work and you guys did a fantastic job. So kudos. And this is Sarah's <laugh>, unbelievably short summary of it. I've heard it <laugh> is not reflective of the number of hours and level of effort that have gone into this. But just to translate really quickly, Shere, what you were saying about the the workforce initiative. One of the things that I thought was a real inflection point, a really smart tactical, but also smart strategic thing that the CAC did was bring in organized labor to these discussions and it really, it made a huge difference. It was very, very important. And as a result of all of that, I think we have workforce opportunities at every level of this. So,

**Chair Kauffman:**

Yes, go ahead Jay.

**Commissioner Dominguez:**

<Laugh>

**Sherburne Abbott:**

<Laugh>.

**Jay Koh:**

So I am, I have three comments myself too, Shere. The first is, as you guys know, since I've been on this Committee on the Board, I've been pushing the application resilience component of this. And it's great to see that threaded through some parts of the discussion. I think it's still interesting to see it as like, you know, number five or number four, when I think the time now because reality is going to catch up with us over the duration of every single program that we're talking about by 25, 30 or 35, is that a reality based approach to the future that we are gonna see requires us to incorporate the impact of climate change into our assumptions fundamentally starting today, right? So if we're gonna deploy, you know, 2 million climate friendly homes, they better be not on floodplains and they better have the right cooling technologies to face massive variability going forward.

If we're deploying 3000 megawatts of storage, is that enough? Because last year in California, but for one text message, you could have had a massive grid crash because heat spikes are causing massive demand for air conditioning. That pushes us way outside of the operating projections that historically made any sense. And so if we're gonna rebuild our entire economy going forward, we better rebuild it for the reality that we are absolutely going to face, right? We actually have more certainty about the path of climate impact today over the next 10 years. Then interest rates, inflation, consumer behavior, covid or the Russia war, right? So in that context, if we have this target a destination that we wanna reach in terms of the decarbonization and net zero transition, that target better exists in a real world that we will live in, which will be climate changed period.

Okay? So in that, I think it's great to have resilience adaptation leads as words on there. To Shere's point, I would love to see a metric, I'd love to see in each one of these programs, how are we adjusting our projections and design for the future? Are we looking at flood maps from 2000 or we're looking at projected flood maps for LMI housing investments and retrofit? Cuz if we're going there to put in heat pumps, we should probably check whether the building survives the next hurricane in or the next hurricane standing, right? If we're gonna build, we should plan for heat spikes that we have not seen before on a frequency and severity that is going to accelerate if we're trying to transition away from the existing natural gas. The reliability of that infrastructure in increasing weather events has gotta be matched by the new infrastructure that we're deploying.

So I'd love to see a metric for resilience or reality in some ways, I wish I didn't call it adaptational reality or, or resilience. I, which we call it reality because the reality is decaying, okay? Business as usual trajectory is not delta is zero. We're just gradually replacing our energy supply and our housing stock in our transportation system. We're doing all of that in the space of increasing amounts of global warming and impact. So you can ask the third of the population in Pakistan that was flooded out and displaced this year. You can ask anyone that lives in any OECD country about whether they want to survive fires, floods, storms. If we're gonna spend this amount of rate payer and taxpayer money, it better be in a way that takes seriously the reasons why we're doing it, which is climate is changing.

So I'd love metrics and some kind of robustness, not just, oh, we're gonna make it more resilience too, is the fifth piece of it. Like, we're gonna make a fireproof pipe at the end of the day after we build all this stuff, we're gonna spray fireproof paint on it and therefore it'll be fireproof. We'll think about that afterwards. The second point is I think there's a really interesting opportunity and we're talking about with a number of different stakeholders. I think I sort of might be well placed for this to do. The equivalent of a project drawdown for adaptation and resilience or, or, or climate impact. The State of New York in 2035 is knowable within a range of environmental projection. You're gonna know to some degree how much more flooding you're gonna have, how many more heat events you're gonna have, but the potential coastal region, storm surge situation is likely to be, or there's certainly directional projections that you can make.

And on that basis, you can sort of solve by algebra supposed to asymptotically every year updating how bad it is and say, okay, if we know that the economy will look like this or the State of the environment look like this, what do we need to be prepared for? What do we need in each of these sectors? Not just to be low carbon or carbon neutral, but to be carbon neutral and resilient or adapted to the environment we're in. If we build offshore wind operations and maintenance facilities in ports that will be destroyed by storm surge the 30-year life cycle that we're gonna need to support the offshore wind investments we're gonna do now will be impaired. The value of our investments we impaired, if we don't land the undersea cables in places that are gonna be storm surge resilient, we're gonna be repairing them five years.

And so in all those situations, I think it's possible to take this system-wide approach, this whole of economy approach, not just think about the carbon implications, but think about those carbon implications in a world that will definitely be changed because of climate change, right? So if we genuinely take that seriously, which I think we do, and we're seeing it manifest in an increasing way every single year now, then I, I would like us to be able to project that forward with the



resources we have with this kind of an attempt, very ambitious attempt through a comprehensive view of where the New York and economy can be, where it needs to be from a net zero perspective, but for that net zero transition to be successful, it must be done in the reality that we will face, or we'll have this Board meeting five or 10 years from now and be like, wow, I really wish that we had planned just a little bit more storage in these places.

Or just, you know, move the port inland or think about how we incorporate natural solutions into the infrastructure we're building, or, you know, substations that we wanted to elevate faster before the failures of things like power to nursing homes and hospitals, right? And before the lack of planning results in what it always does, which is exacerbated impact on disadvantaged communities, because without planning for that future the people have resource to adjust to it are usually the wealthy populations. So I think that's an interesting potential project, but a metric, not just a hand wave at the conditions reality that we're gonna face, I think is important. Right. so those are my two things. Thanks.

**Sadie McKeown:**

Sorry I jump in. Yeah. I just wanted to also thank NYSERDA started do for your leadership, Sarah, for the Scoping Plan, the whole team, the amount of work I too was on the Climate Action Council. And it was, it's, it's amazing to see and see so clearly how the plans are laid out. I think critical to the work going forward is a continuation of the work that the Climate Action Council has done to continue convening external stakeholders and seeking alignment because you have this amazing plan, but unless external partners are aligned with the plan and contributing and working actively alongside of NYSERDA to execute on the plan, then it's just nicer services plan. And I think this is so hard that people are happy to let it go back to being nice service plan. And it can't just be nicer, nevermind you know, from utility companies to labor to education to the financial system.

It's not about creating new green jobs, although we talk about that's about greening existing jobs and everyone in an existing job taking steps to acknowledge and adapt their own work towards the changing climate in the context of what NYSERDA is doing. And I think that's really, really important because it is gonna keep changing. Thank you for your comments. Jay, they're spot on. And if we don't keep talking about it, it's like it has to keep living and breathing and evolving and changing. We have to stay current with it because it, it can't be we're done with it now. The work is really, honestly not even begun yet. So I think bringing in those external stakeholder, reaching to the highest levels, getting those stakeholders involved is really important. And the Climate Action Council did that. And we need to continue that.

**Chair Kauffman:**

So I was just gonna make some very small, small points, <laugh> some questions that, that have follow up session. I mean, it, it strikes me that Sarah's point about priorities, it'd be helpful for the Board to have a little update at each meeting. The can't have an update on everything. But on the things that are most, most important, I think we're, we're quite con the Board is quite comfortable that we're gonna achieve the renewable energy targets. Right? That's pretty easy when we talk about the energy efficiency targets. You know, I think that you know, I look at that bar chart and it's still really what I would characterize as kind of the way we've been doing things in the past. You know, it's still etips and utility programs and so they, what we're gonna do in

terms of what we've been continue to work on in terms of, you know, market-based solutions, I think would be interested in following up on the community.

DER is interesting, particularly in light of the emphasis at DOE the loan program for virtual power plants. And so I'd like to know more of, you know, I'm assuming that's a related concept, but how that can fit into the whole, and it's obviously not just about, you know generation, it's also about energy efficiency too, if we think about it as a, as a system. And then we've talked about this in the past on the, on the connection with health because that's a, of course, a important in and of itself. But from a financing standpoint, we spend a lot of money on health and how much health can be health. Health benefits can be integrated into the, into health costs. Savings can be used to helped finance the transition. And you know, I think this whole smart surfaces stuff was very interesting.

When you talk about and I, I read report recently that in Dallas there's a 20-degree difference in temperature between some parts of Dallas and other parts of Dallas. And we know who's got the higher temperature and what the, what the consequences are. And so they're not just health benefits and equity benefits, but also things like tourism. So in Baltimore, I understand that there's been a lot of interest in, in in, in smart services because the tourism industry is failing in the summer too hot. So I mean, these are, this is relatively low tech stuff. Any roofs and applying surfaces to different surfaces to roadways and things like that. So happy to connect you to any of any of those resources.

**Doreen Harris:**

On the, on the topic of, of buildings, I think where, and, and it'll be something I think we should be checking in on more regularly in which not only are we in the process of a review of the public service commission of the new efficiency in New York, to your point <laugh> sort of processes, goals, et cetera, but also, frankly, an opportunity through this 2 million homes effort to really think about what it takes to scale up our, our buildings investments and, and transition by an order of magnitude easily. I, I would agree with you. And, and so we can take certainly that back as a regular update for the Board. And with respect to the point on resilience and metrics that's also something we, we can consider in advance and certainly have <laugh>, our executive team's been working hard to determine how to actually, as you said, integrate this within our programs and across our sectors of in of influence.

**Sadie McKeown:**

One other comment, oh, I'm sorry. Go ahead, <inaudible>. Sure.

**Arturo Garcia-Costas:**

Once again, thank you to, to everyone that, that worked on Outlook and everything. As I read through outlook and, and reflected a bit on the Scoping Plan, I, I was thinking about sort of the carrot and stick dynamic that, to your point, Sandy, it's like really not just about, and I sort of, which is really the big carrot or programs are really the big carrots in the mix. In your presentation, you talked about, for example, local laws, local court enforcement, the nature of those and how those are gonna interact with mess area programs. And I was thinking about local law seven and local law 38 in New York City, 38 basically phased out the use of number six

heating oil and allowed the use of number four heating oil through 2030. Local 97, as most of you're aware, has to do with the amount of carbon that can be admitted from larger buildings.

At the current situation, 95% of the buildings that use number four heating oil are covered by local law at 97. So I, I am really interested as we think about the Strategic Outlook and the implementation of the Scoping Plan, how we navigate that, that inter interplay with the stick of regulatory enforcement and the carrot of NYSERDA programs particularly from the perspective of disadvantaged communities interested in this continued use of number four heating oil, which has resulted in hotspots of poor air quality over northern Manhattan and South Bronx, as I've mentioned in previous meetings. But right now, now that the Scoping Plan is out really get, affords us an opportunity to really examine what that really means for our investments. And not as I'll admit to not understanding the thermal community thermal networks that you mentioned as well as I would like.

So I'm, I'm sort of interested in learning a bit more about that and what the mechanics of that are gonna be going forward. And finally to, to Jay's point about resilience. The other element of that, which you touched on, is the massive investments in resilience that are on the horizon. I just left a meeting of the, the Army Corps of Engineers early this morning. They've talked about the \$52 billion they plan on investing in New York City around resilience issues. And I couldn't help but think about what are the implications of the various types of power infrastructure that are located in New York City with respect to, cuz they didn't mention it at all. They mentioned other aspects of infrastructure, but they didn't mention really power infrastructure at all in their presentation. So those are kind of the things that I wanted to lift up. But this, this Strategic Outlook was, was excellent. So thank you so much.

**Sadie McKeown:**

Honorum, I wanted to mention, and that is climate risk disclosure, which is coming to financial services community and to, you know, banks and the work of capital, the more that and, and with local law 97 here in New York City on the horizon, everyone thinks that that's an impact to a building owner. It's actually a bigger impact to a lender because it's the lender that actually owns that risk. Because it is 80% of the capital typically is from a bank. And so I think one of the things that NYSERDA can be helpful with, and we, we do have a working group with the New York Fed, but much more helpful with, I think is up those playbooks around how a lender can reach for a tool to help a building owner figure out how to get to decarbonization in a way that is less technical than a flex tech study.

Which takes, you know, 18 months and, and is a very expensive tool, which is a terrific tool not knocking it. But if we, if we want to get to scale across all buildings and use the financial services community to drive that change because when you think about the future investment beyond the IRA, where is the money going to come from? It's going to come from the financial services industry. They're the ones that will be investing in this. And so creating those tools now using the IRA to help try to create some of those tools, I think it's really critical to modeling the way for how to invest then in that transition. Cause buildings, to your point, Richard, are the hardest. It's like when you look at, at the, the chart, I always feel like there's brick wall there and we can't quite, you know, you can see that solar and the wind, then you can feel the transition of, of cars on the road being electric and charging stations. But when you see buildings and it's just

really, when you walk around, you get overwhelmed, like, how is that building gonna be electric? How is that gonna be electric? But it is the, the tools required at that level of, of guiding

**Sherburne Abbott:**

The money to show how it gets invested. That I think they sort of can be very helpful. Okay. Any other comments, questions? Thank you very much. It was a, it's amazing. A really good summary and we have lots to follow up on. Okay, so let's see, where are we here? We have a motion please have a motion recommending approval of the Strategic Outlook entitled toward a Clean Energy Future, A Strategic Outlook 2024. 2026.

**Jay Koh:**

So moved.

**Sherburne Abbott:**

Second?

**Sadie McKeown:**

Second.

**Sherburne Abbott:**

All all in favor?

**Members of the Committee:**

Aye. Aye.

**Sherburne Abbott:**

Opposed? Speech. The Strategic Outlook is recommended for approval. Thank you all. The next item on the agenda is proposed revisions to the Regional Greenhouse Gas Initiative Operating Plan. John Williams, Executive Vice President for Policy and Regulatory Affairs will present this item. John.

**John Williams:**

Thank you Shere and everybody. We'll move this one along pretty quickly. We're here with our annual routine RGGI approval process. So the, the Members have received both the three year plan that we're proposing as well as a memo of summarizing all that. Just some high points here for awareness. You know, we did engage our annual process to come up with our proposal and present that to stakeholders. And on December 12th we held a webinar for receipt of stakeholder input on that. So some participation there and some exchange of thoughts happening at that December 12th webinar. The proposal was also open for written public comments through January 6th, and we did receive a couple of comments there. The proposal you have was you know, does take those public feedback into account.

So just from the financial perspective, the revenues this year were developed again by applying an average of this time we went back six auctions. So that there has been some volatility in the RGGI price. But looking back at that kind of what we call our compliance period, so this is, this is the pricing that's going on in this current compliance period, we figured that would be a good

indicator as to how we can see like the longer-term planning of compliance entity and how they're strategizing and coming to the auctions. So applying a price of \$11.85, that's a bit of a bump from last year. But again, that's a partly reflective of the volatility. It's partly reflective of the nature of the cap and the compliance that's occurring in the program. And the way that we see the, the cap projected over the next compliance period.

That'll be starting soon. So based on that \$11.85 price, which we allocated, you know, we just used that as a projection across the three-year planning period. We identified a number of different activities again, all of which was outlined in the proposal before the Board Members. Unfortunately, if Jay had to leave the room, I was gonna take, I think I actually had it on sixth, not on fifth that he said. But anyway we are reserving some funds this planning period specifically designed at climate's resiliency risk assessment work, right? So I think in maybe fairness to our State entities, we're at a little bit of a starting period and trying to ensure that we have a good understanding about how risk assessment can be applied, particularly in NYSERDA based programs and our clean energy assets that we are deploying.

So that is a high priority in terms of how we're approaching this risk assessment. But also, you know, with our engagement with other State agencies particularly with new directions coming from Governor Hochul's Executive Order 22, that's agencies do start integrating resilience considerations into their investments. We're also hoping that we can work with other agencies to develop a risk assessment process and methodology that can be broadly applied across State entities. So really trying to take on even if it is first steps how we need to start thinking about resiliency, integrating that into the way that we are thinking about our investments and applying our funds. So that's, and that's here at NYSERDA as well as thinking about other State entities also taking a good amount of funds and trying to get at that building's portfolio, Sadie that you were mentioning, right?

So we've got a number of different initiatives that are really designed to try to capture and get at a little bit, you know, a lot of different component pieces on what we're seeing are gonna be necessary to get to that 2 million electrified or electric Ready Homes initiative. So that's, that is gonna be a new push for this RGGI portfolio. And a lot of good work I think to come there on that. And maybe the only last one that I'll mention here is really also to ensure that we are looking to make sure we are readying ourselves for potential federal investment opportunities. And so you, you will have seen that in the RGGI portfolio as well. And kind of just making sure that, you know, as those opportunities do emerge from DOE, PA, that and, and some of those will come with State match requirements that NYSERDA is kind of poised to really capture those high value opportunities. I'll leave that and happy to have any questions. Any questions for John?

**Chair Kauffman:**

So the, I know that there's a lot to be done on the cap and invest, but the integration of RGGI to how, how will that work?

**John Williams:**

Yeah, so that's a good question. We you know, the way that we think about it, certainly the new economy-wide cap is gonna have to take account of the cap, you know, of the emissions coming

from the power sector. But I don't think we want to disrupt the, you know, the ongoing RGGI program. So the idea is that we still maintain RGGI as kind of the compliance track for power plants through that cap and invest program. So we kinda keep RGGI whole in partnership with our partner States in that program. And then we focus on the economy-wide program on other sectors of the economy that are not currently kind of captured by any emissions cap.

**Chair Kauffman:**

And I was, the second question was about what you see going on broadly with the constituents in RGGI. I know Virginia is out and

**John Williams:**

Yes. You know, I think yeah, Virginia has, you know, made indications about it. We haven't gotten a plan from Virginia yet on how that really looks. And I think that there seems to be a degree of commitment that, you know, we're going through a compliance period now Virginia maintaining kind of its engagement in the program through this compliance period kind of makes any kind of transition that they may consider after this compliance period much easier, right? Because that means that the amount of admissions that we've planned for from Virginia based facilities and the amount of allowances that Virginia has put into the program will coincide, right? So we, we, we at least have a smoother transition for Virginia staying through the compliance period, I think from the rest of the RGGI States. You know, we've been in the early stages of a program review period, and I think that there is a lot of dynamics going on among a lot of different State activities, you know, as, and as much as Virginia is thinking of its own transition, Pennsylvania is also transitioning in.

And so we're waiting to see if and how, I mean that's, I think that's still a plan, but we're still waiting to see how Pennsylvania comes into the program. But our program review process is still going to be going forward. Certainly New York's new announcements are, are going to be you know, a center point to make sure that our partner States are understanding how RGGI, you know, still sits inside like New York State program, but also advances on a regional. I think the commitment from, you know core RGGI States is still very strong, you know, maintaining the program is, is a tough policy priority participants.

**Chair Kauffman:**

Thank you.

**Sherburne Abbott:**

Okay. vote here. So if favor, please have a motion for recommending approval of amendments to the Regional Greenhouse Gas Initiative Operating Plan?

**Chair Kauffman:**

Second.

**Sherburne Abbott:**

All in favor?

**Members of the Committee:**

Aye. Aye.

**Sherburne Abbott:**

Oppos, the, the amendments to the RGGI operating plan are recommended for approval. Thank you, John. Next item on the agenda is the consideration of the Authority's fiscal year 2023-2024 budget to be presented by the Authority's Chief Financial Officer, Pam Poisson, Pam.

**Pam Poisson:**

Thank you very much, Shere. And if I may also recognize Peter Mahar, our Assistant Treasurer and Controller coming to us today from our Albany office, who will be assisting with the updates.

The Members today are requested to recommend the adoption of a resolution, recommending approval of its portions of the Authority's budget for the fiscal year ending, excuse me, March 31, 2024. This budget is structured to support the increasingly sophisticated work scope required to deliver the goals with which NYSERDA is charge. It incorporates currently approved programs and funding, including the recently approved PSC order regarding the 2023 Clean Energy Standard administration funding and the RGGI operating plans presented. It also reflects additive work scope and funding anticipated through the recently past Environmental Bond Act and recently finalized federal formula grants. The Final Scoping Plan now through New York Solar Target stepped up to 10 gigawatts by 2030. The storage roadmap 2.0 recently announced by the Governor and heightened focused on resilient solutions to keep our grid reliable and power our buildings with homegrown clean energy. Our goals and worth plans are appropriately ambitious.

We aim to ensure that our resources are matched to the task and additional steps toward that are reflected in this budget. We also concurrently remain firmly committed to fiscal prudence consistent with past practice. This budget is conservative and as such, it does not reflect potential additional funding that may materialize through subsequent PSC orders, such as in relation to that energy storage or back 2.0. Nor does it yet reflect federal grant funding that NYSERDA may receive beyond the form funding. If those become finalized in the peer material, we would propose to present to the Members an amended budget for consideration in an upcoming meeting. This funding may evolve over time. We are also phasing in resource additions to ensure we do not overcommit beyond what highly certain funding will allow. The budget that's put forward today in our view is both fiscally rigorous and allows critical path efforts to begin to scale up to support reasonable progress toward the team and the key milestone goals ahead.

Let me highlight just a few key change drivers influencing this year's budget. We have, as you just heard, increased funding and work scope associated with RGGI proceeds. As they trend higher, we are able to put those funds to good use. We have planned State appropriations for the ports development related to the offshore wind supply chain, large scale renewable and NY-Sun PSE orders the federal, federal grants in the aforementioned State Bond Act. We also are seeing anticipated decreases in ZEC revenues and expenditures, though not insignificant, these nearly perfectly offset and they have negligible impact on work scope and related resource needs. Let me note, just one clarification on that point. The decline on the ZEC revenues may well be less

than this budget currently reflects since we went to press the PSC approved an updated SEC price and based on that updated price and the expected purchase level we now project a roughly \$100 million year over year decline in revenues and also corresponding expenditures.

So that's a, a significant amount less than what's shown and actually would translate to revenues increasing year over year and expenditures as well. So kind of a consistent trend there. That said at this time, because that was a late breaking update, we would propose to advance this budget is now presented noting we do anticipate to come back with mid-year updates given the other funding that's likely to materialize. Other key drivers that you've heard in some of the discussion around the Strategic Outlook are of course, economic factors, inflation supply chain delays, interest rates and uncertainty around potential IMP pending recession. We also continue our focus on DEI pay equity and skill building consistent with our <inaudible> commitment statewide and to ensure that our team has the skills they need. That is a continued path to ensure that the investments ultimately reduce our net operating costs through lower turnover and improved outcomes through better employee skills. And finally, capital investments is briefly discussed with the Waste and Facilities Management Committee <inaudible>, proposed for approval to allow sufficient room for office space updates and consolidations that we may advance provided further analysis confirms that doing so would be net budget positive over the next seven years.

I will pause now and turn to Peter Mahar who's going to take us through some more detail points on the revenues and expenditures embedded in his subjects. Peter

**Peter Mahar:**

Thank you, Pam, and good afternoon to everyone. As just discussed, we will look to present a mid-year budget update to the PPC and Board reflecting the recently approved Public Service Commission SEC pricing and additional revenues likely to be confirmed at that time. We are likely to see an upward trend in our revenues year over year. With regards to the draft budget before you. In total, revenues are projected to decrease by \$208 million or about 12% from last year's approved budget to about \$1.56 billion. This is primarily from decreases in the zero emission credits as previously discussed, and \$32 million in utility surcharge assessments. These decreases are offset in part by anticipated increases in the New York State appropriations up \$94 million year over year, an increase in RGGI auction proceeds of about \$70 million and an increase in interest earnings of about \$49 million. The decrease in utility surcharge assessments is due to the timing of anticipated rate payer expenditures under the Clean Energy Fund, New York Sun Energy Storage and the RPS programs and amounts projected to maintain a two month working capital balance of funding for these programs under the Bil-As-You-Go.

Funding mechanism, the increase in the New York State appropriation revenues is due to an increase in investment of \$55 million in the offshore wind port Infrastructure Development Initiative and \$32 million under the recently passed New York State Environmental Bond Act. The increase in RGGI allowance auction proceeds stems mainly from a higher allowance price used for planning purposes consistent with last year's methodology. This price is informed by historical prices over a determined lookback period and remains a conservative estimate. That is, that has more of an upside than downside. Potential interest income is anticipated to increase due to a significant rise in investment yields as compared to a year ago. Prior year yields were less



than four tenths of 1% as compared to an assumed 4% yield, which is slightly less than the weighted average yield of a one year treasury obligation. With regards to program expenditures, our budgeted expenditures are anticipated to decrease by \$302 million or 19.4% from last year's budget to about \$1.46 billion.

Of these program expenditures are projected to decrease by \$320 million to \$1.3 billion, primarily from a projected decrease in the Clean Energy Standard Exec program. Payments also contributing to the decrease are lower New York, NY-Sun program expenditure projections, which are now better informed by the New York NY-Sun Roadmap to 10 gigawatts and factoring in recent shifts in consumer behavior and recent project completion dates. This decrease is offset in part by an increase in investment investments under the Offshore Wind Port Development Initiative in the New York State Bond Act, which are, which have offsetting revenues. As previously discussed, we believe that our program expenditures are reasonably forecasted, although as we've noted in the past, the timing of program expenditures can be influenced by timing of project completion and many economic market factors. At this point, I'll turn it back over to Pam to complete our presentation.

**Pam Poisson:**

Thanks Peter. Let's dig into the expenditures just a bit more in terms of the people resources needed to deliver on this work. So as we think about salary and benefits shown in your materials, given the ambitious agenda in front of us, we've carefully assessed our projected work scope and identified the human capital needed to successfully advance the goals by the CLCPA. We've looked at a combination of new needs as well as the opportunity to convert some employee, I'm sorry, some contractor positions to employee positions to make sure that we're utilizing the most economic mix of resources out there. And so we've proposed some small shifts herein to convert contractor to employee roles in areas where there is high labor demand and clear ongoing needs such as IT also based on our assessments and considering the funding allocated through the recent PSC orders and other approved work scope and funding budget reflects an assumed average employee headcount of just over 450 FTEs.

Few notes on the compensation budget in total because we are seeing the labor market tighten slightly and also with our intentional efforts to improve retention, we've adjusted the vacancy rate to be just 2% versus the 5% years passed. Our salaries continue to be benchmarked to the Management Confidential schedules published at the State level to use as a frame of reference have reflected in this budget a 2% general salary or placeholder to be effective April 1, 2023. That is informed by historical State precedent but will of course move forward. We would anticipate only to the extent State agency employees are similarly authorized. We likewise have some placeholders for performance-based salary increases that are consistent with State agency typical behaviors. We've also included an allocation for some potential adjustments from a pay equity study currently underway and consistent with activities previously discussed with this Committee and the Board on fringe benefits.

Just a quick note because pension expenses are contingent on market behavior and the markets have been very dynamic this past year, we're being conservative and basically have looked at a past 10 years' worth of pension exp expenses to feed that into the projections for the time of year. I think there is more actually positive on that side than there will be downside risk, but we

wanted to err on the side of being more conservative. We also see some higher health premiums, both reporting with the staff levels, but also general market trends for health insurance medical costs. Moving on to the program operating costs, they're budgeted at \$5 million. That is a fairly modest 5% increase or \$237,000 year over year. And that is mainly associated with program travel costs as we see both the post pandemic activities resuming and the need to be increasingly out in the field to ensure that we can help here from communities and get our message across in a meaningful way.

General and administrative costs are increased in this proposed budget by \$1 million from last year's budget. That's concentrated primarily in technology solutions to efficiently support growing program needs and address increasing cyber risk. We also included in there some expanded call center services for more timely response to increased public inquiries that we are beginning to see and further anticipate. Concurrent with the Scoping Plan, Bond Act, and Inflation Reduction Act all converging at once in wanting to be an Authority, incredible source for the public there. And finally, professional development to build staff skills and expertise and priority focused areas. And if Jay were here, I would note that that includes resilience among other things. So <laugh> finally with capital assets, just about the budget proposes up to \$4.1 million in capital asset investment that would represent an increase of \$2.8 million from last year. The majority of that increase represents a placeholder of \$2.7 million per cost effective building and leasehold improvements, furniture and fixtures.

That would be contemplated mainly to support a potential update to NYSERDA Albany headquarters configuring it to reduce overhead costs ongoing and allow for more sustainable reduction to our emissions consistent with State EO 22 goals. Such initiatives are predicated on further financial analysis and will only advance further in consultation with the Waste and Facilities Management Committee, but we proactively include the placeholder from a budget standpoint here. I would notice John rescues me from water. Thank you. We also have included some IT upgrades again in that capital budget including for a program database upgrade and about \$51,000 for vehicle replacements as they approach the end of their useful life. And again, we'll be shifting over to EVs. Finally, this puts us in a net position where we've got, you know, the result of the revenues and expenditures in combination that will be increasing approximately 70 million year over year to \$730 million in total.

That's primarily due to the timing of program revenues and expenditures. Revenues typically will proceed the expenditures. NY Green Bank position is anticipated to increase by \$30,000, approximately remaining around \$1 million resulting from the net effect of anticipated capital cost matured and recycled capital and cumulative result of revenues exceeding expenses. We'll get further updates from Green Bank later in our session today. And finally, the unrestricted net position is anticipated to be just about \$5.7 million at 0.4% of our total funding, slightly above where we were last year. But overall, it's actually aligned with where we've been the past several years and we estimate that this level provides reasonable resources to meet foreseeable working capital needs thus far, anticipate the expenditures. Thank you for listening through that. Let me see if there are questions.

**Sherburne Abbott:**

Are there any questions for Pam or Peter?

**Chair Kauffman:**

So just on the ZEC, I mean it, I know it, there's an accounting issue here, but in terms of isn't it really just a case where because of wholesale electricity prices, there needs to be less of ZEC support payment. And so that's, that's was money that was just a kind of pass through NYSERDA, doesn't affect the operations programs.

**Pam Poisson:**

That's absolutely correct. Okay. Yes. Policy perspective, <laugh> certainly have the contracts work.

**Sherburne Abbott:**

Anything else? Hearing nothing? I please have a motion recommending approval of the Authority's fiscal year 2023 to 2024. Budget?

**Chair Kauffman:**

So moved.

**Sherburne Abbott:**

Second.

**Sherburne Abbott:**

All in favor?

**Members of the Committee:**

Aye. Aye.

**Sherburne Abbott:**

Opposed the Authority's fiscal year 2023 to 2024. Budget is recommended for approval and thank you, Peter. Other business. Is there any other business to come before the Committee? Hearing none, may I have a motion to attend the meeting?

**Members of the Committee:**

Both.

**Sherburne Abbott:**

Second.

**Sherburne Abbott:**

All in favor?

**Members of the Committee:**

Aye.

**Sherburne Abbott:**

Meeting is adjourned.