NYSERDA PROGRAM PLANNING COMMITTEE MEETING
June 26, 2023
Clean Copy of Transcript

Sara LeCain:
If I tell him to start the recording?

Sherburn Abbott:
Oh, absolutely. Okay. Good afternoon and welcome. I call this meeting to order a notice and agenda for this meeting was provided for the Committee Members on June 12, 2023, and the press on June 20, 2023. This meeting is being conducted by video conference. The Authority will post a video and a transcript of 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, Member of the Committee.

Charles Bell:
Chuck Bell, Member of the Committee, 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:
New York.

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

Sherburne Abbott:
Great. Thank you. The first item on the agenda is the approval of the minutes of 119th Committee meeting held on April 26, 2023. Any comments on the minutes? I have a motion. Approve the minutes.

Charles Bell:
So moved.

Sherburne Abbott:
Second.

Sadie McKeown:
Second.

Sherburne Abbott:
All in favor.

Members of the Committee:
Aye. Aye.

Sherburne Abbott:
Opposed? The minutes have been approved. Thank you. The next item on the agenda is the review and approval of the Program Planning Committee Charter. Pursuant to the Public Authority's Accountability Act 2025 or 2005 on dates are really bad today. Each of the Authority's Committees adopted Charter setting forth each Committee's responsibilities. One of those responsibilities is to periodically review its Charter and determine what, if any amendments need to be made. These recommendations are then presented to the full Board for consideration and approval. A copy of the current Committee Charter was included in your meeting packet. Council Office. Council's Office continually monitors relevant guidance from the Authority's Budget Office, the Comptroller's Office, legislation, and other Authority practices to determine whether to recommend any modifications other Authority's reviewed in reviewed include the New York Power Authority, the Long Island Power Authority, Dormitory Authority, and the Environmental Facilities Corporation Management is not recommending any changes to the Program Planning Committee Charter at this time. Are there any questions or suggested changes to the Charter? So, can I just raise the question I raised with the, the Audit and Finance Committee which is to make sure that the, these is to ask the question of whether or not the Charter is consistent with the broader responsibilities of the Authority vis-a-vis the, the climate law.

Peter Costello:
So we believe it's consistent. Both certainly review it to add additional contextual information.

Sherburne Abbott:
Any, okay. May I have the motion recommending approval of the Program Planning Committee? Charter second May. May I have a motion recommending? Oh, second. Okay. Second.

Charles Bell:
Second.

Sherburne Abbott:
Sorry. All favor.

Members of the Committee:
Aye.

Sherburne Abbott:
Opposed? Program Planning Committee Charter has been recommended for approval. The next item on the agenda is an overview of the Authority's Cap-and-Invest Program. Vlad Gutman-Britten, the Assistant Director for Energy, Environment and Analysis and Senior Advisor Erich Sherer will present this item. Vlad and Erich.

Erich Sherer:
Good afternoon everyone. I'm Erich Scherer. We did introductions a moment ago, just for the record and the viewers at home. I'm Senior Advisor to NYSERDA's President Doreen Harris. And for the purpose of our discussion this afternoon, I act as the NYSERDA Project Lead on the Cap-and-Invest Program. And indeed, as we just heard with me, is Vlad Gutman-Britten, that you do your own reintroduction in a moment. The two of us have short presentation for you this afternoon on the development of the program. We'll do it in two parts. Vlad will kick us off in a moment with the background and the concept of capital invest as such. And I will follow up with an overview of the current status and next steps of the program. Vlad I'll hand it over to you. Yeah,

Vlad Gutman-Britten:
I'm happy to be with everyone today. I'm as, as Erich and, and others have mentioned, I'm Vlad Gutman-Britten. I'm an Assistant Director for Policy and Markets in our Energy and Environmental Analysis Department. I've been with NYSERDA for around 18 months, and a lot of that has been focused on the Scoping Plan and now on the, on the Cap-and-Invest effort that we've undertaken over the course of the last several months. So, I, I think we have some slides maybe. Yeah, yeah, no problem.

Sara LeCain:
Working in the background.

Vlad Gutman-Britten:
So, so I'll just, I'll just start I'll just start talking with a little bit of background. So you know, the the Cap-and-Invest system was recommended by the Scoping Plan that was adopted at the end of last year as one of the keystone sort of proposals intended to organize and marshal the state's effort toward achieving climate activation reduction targets. The, it was that included in the State of the State earlier this year by the Governor. And I, I just wanna kind of highlight the sort of main purposes and the main benefits. The reasons is that that Cap-and-Invest was included as a core, as a pro core program recommendation within this building plan. So one is it's a certainty of emission reductions across the entire economy because it sets a cap on an entire, on the entire New York State economy.

We have a, we have a, a high level of confidence that the different sec, the different sectors will decarbonize in a way that is consistent with an overall economy-wide goal. While we have and continue to contemplate a variety of sort of sector specific and, and use specific regulations and programs, this is a way to make sure that those programs are well reconciled with what's happening across the economy. So, as one, as one sector cuts its emissions deeper than, than another, that that is reflected within the broader architecture and what the, and the set of transitions that the that the captain, the best program will, will seek to, to advance. It's also a cost minimizing it's a cost minimizing option because it says an economy wide cap, and then let's a market mechanism drive emission reductions and allocate emission reductions across the economy between sectors, between different use cases and the like.

We have a certainty that the market is going to be delivering, is gonna prioritize the, the least cost reductions first and put the, the, the higher cost reductions toward the, toward the end of the end of the train, so to speak, if, if at all, meaning it'll, it'll identify the, the least cost way of pursuing each of our annual targets, our 2030 and our 2050 targets, and the interim targets that are established within the, within the capital invest system in a cost minimizing way by allocating efficiently across the economy. And finally, it's, it's a really well tested policy framework and policy paradigm. It's been used since at least the early 1980s for a variety of a variety of environmental policies, environmental targets. It's the way we the United States helped partially unleaded our gasoline system. It's part of the way we dealt with acid rain.

It's been used to deal with criteria of pollutant programs in different parts of the country as well. And of course, it's also the most common way of pricing greenhouse gas emissions across the globe today as well. And that, of course, includes RGGI, which we are already Members of and have seen benefits to the State of New York from, as well as economy-wide programs. We will be joining our west coast peers that are pushing forward and, and that have adopted Cap-and-Invest Programs over the, over the, over the last several years. So as I mentioned, Cap-and-Invest is a market based flexible way to set an overall limit on emissions. And, and it creates a predictable pathway for the economy to follow That I'll, I want describe, I'll, I'll describe the, the, some of the basic architecture, and then I think Erich will follow up with some of the policy and sort of New York specific landscape that might be useful.

So the, the way de is there, I apologize. NYSERDA is going to work in coordination with DEC most closely to set and launch this program. So DEC would set a declining, enforceable cap on emissions across the entire economy. This will provide a signal, a direction to the entire economy, to every obligated party to the regulated community across the state, that that enables them to build those decisions and the, and the certainty of the mission reduction requirements into their capital and operating decisions beginning today and, and, and covering the, the next several decades of their of their engagement in, in the State of New York.

Great. So on slide five, so, so maybe I'll just pause. So this is, this is maybe to, to kind of accentuate the point that this is a well tested program. Th this map shows prices, carbon prices across the world, and the teal and navy geographies are places that have functional cap and invest systems or cap and trade systems of some kind, as well as some of the, some of those kind of purple ones you see Washington's purple. It should be where, where the IMF will produce this map to update this map that would be teal now. But you can see across Europe, our West Coast states RGGI Canada and a variety of other places have adopted Captain invested systems to date I'll, yeah, so, and maybe I'll, if we could jump forward to slides. Thank you. So as I mentioned, DEC will set an enforceable declining economy wide cap on, on emissions across the economy.

The way this will function is that DEC will issue allowance as equal to the emissions limit in order for an entity to emit a ton of, of pollution or sell a fuel that it will ultimately be combusted and resulting in a ton of pollution, an entity will have to retire an allowance. So, DEC will issue allowances equal to the emissions the entire economy, or the desired emissions the entire, across the entire economy as that declines. And it'll first start by retiring allowances for sectors that we are not placing a, a, a cap and invest obligation on. So that's that kind of red wedge there at the top. What remains the blue wedge after we take the total cap and remove the emissions associated with non obligated sectors are the allowances that will be available to obligated sectors, to all those entities that will be required to demonstrate compliance with the State of pr.

Auctions are gonna be the main way, just as in RGGI, that allowances are distributed into the economy for obligated sectors. DEC will issue the bulk of those allowances to NYSERDA for auction, and then NYSERDA will execute and oversee the auction, and we will collect the proceeds. We'll describe a little bit of the process of, of, of spending, of, of spending those proceeds and, and investing those resources across a variety of mechanisms in a moment. But broadly speaking, the intent would be that these proceeds are spent to accelerate clean energy deployment and, and carbon reduction across the entire economy with those proceeds. So they'll be recycled back into the economy, back towards solutions that have been identified throughout the Scoping Plan consistent with the Governor's guiding principles that she identified when she launched the program as part of her State of the State and other essential priorities.

And of course, the spending will incorporate the Climate Act requirements to invest a minimum of 35% with the goal of 40% or more in Disadvantaged Communities. And on my final slide, before I hand it over to Erich here, I just wanna identify that on the next slide that we will, we, we will be attentive to preventing sort of undesirable outcomes. So obviously any price on emissions has, has, you know, poses costs on the economy. So we want to be NYSERDA, DEC will be attempted to cost control as we design the New York Capital invest system where we've been calling NYCI to minimize total costs. There are a variety of mechanisms. One is a cost containment reserve, which is present within RGGI, which releases additional allowances once a certain trigger price has been reached. As part of the kind of rollout of the program the Governor announced in the legislature approved a climate action fund, which will direct a third of proceeds to rebates to households and small businesses across to across New York to defray some of the cost impacts that we might imagine.

And of course, investing in clean energy will, will mean that the, the transition and vision within the Climate Act isn't just on private households and private companies alone. They'll have a partner in the State of New York in, in next year, specifically in, in, in achieving this. And together the investment in these other mechanisms will help reduce costs that indeed the investment will help allowance prices stay lower than they would otherwise be. And finally, I want to identify leakage. So there are certain sectors that we, we that are, that are described as a mission intensive and trade exposed. These sectors are usually industrial sectors, and they have a difficult, we would've a difficult time passing on their costs to their, to their consumers. These are commodity sectors very often that create a product that cannot compete. If costs are, are, are increased too much.

And so for these sectors to prevent them from shifting production to high mid end jurisdictions that don't have a cap, best system, that don't have the climate act, that don't have other environmental intercourse, workforce, and other regulations NYCI would incorporate an EITE protection mechanism, which would keep all of these sectors under the cap, but reduce their cost of compliance. So they still are part of how New York achieves its decarbonization targets. They still have a, a deep incentive to reduce their emissions and energy use, but we will be safeguarding their continued participation thrive thriving and growth in the State of New York. So that's, that's what I wanted to cover, and I'll pass it back to Erich for the second half.

Sherburne Abbott:
Can I ask you a quick question? Can you remind me what, who are the non obliged sectors?

Vlad Gutman-Britten:
So the rule making will, will kind of identify which sectors are obligated or not. So the full a comprehensive list isn't set, but one, but an example might be, for example the aviation sector under the way, the way federal, the federal, federal law around aviation fuels is structured. New York has sort of a limited reach in that space. So that might be an example of a place where we wouldn't have a direct obligation under a cap invest system, but would still be a portion of setting, you know, the total allowance budget available to everyone else. So if aviation emissions continue going up, or they're not going down as quickly as the overall economy, that would be incorporated within the cap design to make sure that overall the entire economy continues to stay on track.

Erich Scherer:
Thanks very much, Vlad and Sara, if you could ask the next slide. So with that overview in mind really all we need to do now is actually implement the program. Next slide, please. And indeed, as Vlad mentioned earlier this year at the State of the State, that was kind of the kickoff, if you will, with the Governor's announcement to proceed with the development of this program. And indeed also, and Vlad alluded to those as well, set out five key principles that should drive the design of program. And so I'll briefly run through those again. We've heard a couple of them already being referenced. First of all, affordability. This one will surprise anyone that this is on the list. And on the next slide, I'll talk in in a little bit more detail about that principle. Actually, let's stay with the, the previous slide.

Sorry for the confusion there. So while I just finished this list, climate leadership, both within the context of states in the, in the Northeast, of course, RGGI is already placed, but New York, New York is, can going down the, the more comprehensive path of capital list, but also linkages with other jurisdictions, including potentially those that already have a similar program such as Washington or California. The next principle here around jobs and competitiveness, I'll just note on the competitiveness point, the link with what Vlad just explained around energy intensive and trade exposed industries, and the need of course to maintain our competitiveness in that respect. So clearly an important part of how we consider the design of the program. And then Disadvantaged Communities, again, there are really no surprises on this list, I, I would've thought. But noting here that the principle of least 35% of benefits accruing to DECs more broadly as set out in the Climate Act.

But there will of course be a range of other design components in the program where we need to actively consider the, the interests and the impacts on this Disadvantaged Communities. And then finally, also point that Vlad already referenced, referred to here, here as funding sustainable future. This is really primarily about the link between the money that on the one hand raised through the auctions and how those funds are then used, namely to also as indicated here, support those clean energy investments. Also, on that point, I'll talk a little bit more about it on the next slide. So, Sara, now ready? Oh who, whoever is advancing the slides, please. Thank you very much. So on this slide, this is providing a summary of the key next step that was taken after State of the State announcement, namely dealing with a number of components of the program that interacted with the legislature.

And in particular, I mentioned this a moment ago, two key principles that found a home in what the legislature included in the, the last State budget, namely on the one hand affordability. So that's noted here also by means of the pie chart. So if you look at the, the top right, and there's also something that I already mentioned, the 30% of revenue that the, the budget indicated will go to affordability rebates. So to ensure that a good chunk of that revenues is used to alleviate affordability concerns the question, the next question will be how are we actually going to implement those rebates? That's noted at the bottom of this slide, the reference to the climate affordability study. This is also something the budget set out and tasked us to conduct this study, indeed to pursue mechanics and, and related issues around how to make these rebates work in practice closely related.

There's also that sliver, the 3% you can see in the pie chart, similar concept, these will be rebates for small industrial businesses. And I'm also going to note a link there with the, the topic of energy intensive and trade exposed, where as well as described, on the one hand, you maintain competitiveness by designing the way the allowances are allocated, but that might not work for small businesses. And so what this component sets out is that there is also a set aside where we can use up to 3% to also alleviate any concerns relating to that smaller industrial business sector. And then the big chunk here that the dark blue bit comes back to what I refer just now reinvesting funds that are raised at the auction into clean energy development. Really a key point as such, mentioned as its own principle by the Governor, but again, also very closely related to affordability, because when you take those funds that are coming out of the auctions, which are effectively, as we've heard, placing a price on the use of carbon, and you direct those same funds back to the solution that we of course want to see coming forward, clean energy solutions, arguably a win-win, right?

You make one side of the equation more expensive than the other side cheaper, and therefore also a key component of how the costs of the, the overall program can be managed and kept affordable. So that's the overview of what happened at the budget. So some key components that were addressed and, and signals that were given to us going forward on how the program works on those components in the legislature, in the legislation itself. We can go to the next slide. Beyond the role of the legislation, the core development of the program, the design of the program happens through regulation, as we've already heard with DEC, and NYSERDA in the deep roles to the, to develop multiple sets of regulation. And if you can take one thing away from what's on the slide here, is that yes, we are still very much at the beginning of the process to develop those regulations.

The other point I'd like to make in reference to this slide, as you read through the various blocks, which for me are just far enough away that I think I need to go back to my optician. But the, the other point to, to point out here is that you can see the iterative approach to engagement with stakeholders. And that is really a key part of how we how we will conduct the process of actually developing the regulations, multiple opportunities for stakeholders to provide input and for us to, to learn from the views that stakeholders are bringing to us. Yes, please. So

Sadie McKeown:
How long is this timeline? This is a year, is three years.

Erich Scherer:
Good question. Vlad you asked. We have not admittedly been able to firmly commit to an endpoint. However, if you do look at least broad brush, we are pretty clear in our minds that the earliest the program can start is at the beginning of 2025. So that's the overall timeline that you should keep in mind. But at the same time, that's, that's still a tight timeline. So to be quite honest, no, no guarantees at this point.

Sadie McKeown:
So 18 months at the soonest?

Erich Scherer:
More or less, yes. And, and I, I can talk a little bit in more detail about some of these steps between now and then. And for that, again, I'm going to ask for the next slide, which is also going to be the last one of this presentation. So just to provide a bit more detail on the steps that we're taking, again, with a focus on stakeholder engagement, the key aspect of how we're engaging with stakeholders is that we're looking to prepare the way, if you will, before we are going out with a formal proposal of the regulations. So in our plan, we have multiple instances of what we refer to as informal engagement. The first such phase of engagement has actually is, or rather, is about to conclude, that happened throughout this month of June in the form of a series of webinars that we held accessible to anyone.

And everyone, as you can see noted here, seven sessions covering a range of topics from general overview to the role of gas liquid fuels, again, energy intensive and trade exposed industries, waste the electric electricity sector, and also dedicated session on how we're approaching the analysis effectively, the cost analysis. So that took place throughout this month. At that point, given that this is the first opportunity for stakeholder engagement, we've not released any proposals or even indications of proposals. So we are consciously approaching this first round of engagement with an open mind, asking questions to stakeholders and inviting to give us their views at the same time. That's the first bullet on this slide. Pretty much the moment the program was announced, we started having bilateral meetings all throughout the earlier parts of this year, and those will continue. So that's also an opportunity for key stakeholders to give us input at a personal and more detailed level than would otherwise be possible.

So moving beyond that to a couple of other milestones coming up this summer. Firstly, we are still looking into dedication specific times, engaging with in particular equity and labor focus stakeholders. So what we're referring to as round tables dedicated to those stakeholder groups and the opportunity to explore the concerns that are specific to those groups. Another point to mention here is that engagement, or rather interest in this topic is not only initiated by ourselves, but of course also by other parties, by third parties. So we are certainly aware that there are a number of third parties that are looking to schedule what's referred to here as learning sessions. And even though we won't be in the driving seat on those, we will very much look to join those and, and learn from them, including capture learnings from other jurisdictions. And then that takes us to what's referred to here as the second round of engagement.

This is still at the informal level that I referred to earlier, later this year, but the difference is going to be at that point we certainly intend to share with the public what one might refer to as policy leanings, certainly indications of the direction that we are, we are thinking towards, again, based of course on the learnings from the stakeholder engagement that's currently taking place, but very much with an objective at that point to give stakeholders something more concrete if you will, to respond to. And all of that informal engagement has, has its objective that when we come out with the formal proposed regulations, that at that point we will at the very least be pretty clear on where stakeholders are coming from. And that stakeholders would equally not see any surprises, not see any major surprises in what would then be contained in the formal post regulations, which in turn should help us to keep the timeline as tight as possible. And so then following that formal issuance of proposals and the formal process that attaches to, to those proposed regulations, including public hearings, then we'd be hopefully, fingers crossed in the position, you know, smooth sailing famous last words, I'm sure, but to then capture that in in the final regulations to, to be finalized again, hopefully around the end of next year for a start, early 2025. So that concludes our brief overview and status update. And course, very much

Chair Kauffman:
So. This would be a normal, I mean, the timing might be a little bit different, but the normal process that you're describing where you do outreach and eventually come up with a strong proposal and get react, that's a normal regulatory process, right?

Erich Scherer:
Yes. So, so certainly the formal process is very clearly defined for regulations, but the extent to which this informal process takes place is of course, more discretionary.

Chair Kauffman:
So the one thing you've mentioned a couple times, but the reaching out to other states, I understand that there's the outreach to other jurisdictions that have already done this, but part of the, what the Governor wanted in terms of the principles is to try to enlist other, other entities to join us in this initiative. So that presumably needs to be folded into this process because we, we don't want, it would be good to have more coordination along the way, and we don't want it to delay our process.

Doreen Harris:
Yeah. If I could jump in on that we have a couple of ways in which we already are working with other states notably the Northeastern States. RGGI helps as a convening you know, means of convening, but ultimately there's a lot of interest in what New York is, is doing. I think one major difference though that is, you know, necessary is that our timeline is, is sort of our timeline, you know, their interest would not be our timeline, that would not be impacted by their interests. Right. In the sense that if they would wanna pursue a parallel path, they certainly could do so, but we're advancing this as our own, you know, objective and outcome. But yeah, there's, there's, there's good interest and we'll be working that through unparallel.

Sherburne Abbott:
Any other questions?

Charles Bell:
Well, I have a question about general question about affordability. That we have different tiers of income in the economy. So we have like low and moderate income. We have folks that are maybe notch above that are kind of working class people working year round, but no savings or asset accumulation. Then you have middle class folks. So when you, we operate the climate action funding, we, we make money back to rate payers or consumers so that they can afford the energy they're using. Have you considered the impact on the different tiers of income within the economy?

Vlad Gutman-Britten:
Yeah, so we, we are in the, we're in the midst of an analytic process to help just broadly understand how this program will deploy, what kind of allowance prices we might anticipate who will bear those allowance prices and the effect that those allowance prices will have on the transition energy choices. So, and, and part of the questions we're asking are, are the ones that you're raising, right? Not just what is an average household pay? We know that there are differences. People drive more or less in different parts of the State. They have different fuel choices that they're using to keep their homes. They may not always have control of the field choices they have to keep their homes. And so we're, we're, we're gonna turn a, we're going to turn a critical eye toward all of those questions. And the climate affordability study that, that Erich mentioned, would, you know, the legislature directed us to be particularly attentive to what are those distributional impacts and how do we deliver benefits in particular to low and moderate income folks and to community, to, to households and Disadvantaged Communities at a very preliminary basis.

I think what we know, what we are likely to be able to find is that, and if the program design will ultimately matter, that certain households will actually be better off financially as a result of this program and the associated rebates being launched than, than they were before. And so as we spend the coming months both understanding the, the policy choices within NYCI, within the Cap-and-Invest Program, as well as on the design of the rebate, we're hopefully sort of maximize that as much as possible across the State.

Charles Bell:
Great. Thank you.

Vlad Gutman-Britten:
Yep.

Chair Kauffman:
So in terms of when the Board can be brought into next steps in the process, I mean, it'd be good if we could be updated or appropriate.

Doreen Harris:
Yeah. I mean, given the, you know, certainly you can see that roughly on a quarterly basis, we're going to have milestones we'll be hitting. I would anticipate it'll just be part of our standard cadence through PPC in the more in depth look, if there's major milestones, we'll bring it to the

full Board. Okay. For sure. It says major implications. Yeah, obviously <laugh> but also a lot of steps along the way. So, we'll, we'll keep you posted.

Chair Kauffman:
Good.

Sherburne Abbott:
Any questions from the New York?

Frances Resheske:
No.

Sherburne Abbott:
Good.

Sadie McKeown:
I have one other question. The webinars that you've been holding, are they recorded?

Vlad Gutman-Britten:
They're all posted that both the recordings, the slide decks and also State materials are posted online on the climate Ny.Com?

Erich Scherer:
capandinvest.ny.gov

Vlad Gutman-Britten:
Yes. Yes.

Erich Sherer:
Thank you very much for the question. Cause we really missed a trick in not advertising.

Vlad Gutman-Britten:
That's right.

Erich Sherer:
Encouraging you all to go there and check it out.

Sherburne Abbott:
Okay. Well, thank you, Vlad and Erich it was very helpful. No formal action is required on this item. The next item on the agenda is an update on the Authority's programmatic progress and plans. Jennifer Meissner, Director of Performance Management will discuss this item, Jen.

Jennifer Meissner:
Alright, thank you very much for the chance to be here and have this discussion with the Committee. This agenda item was actually added in response to some discussion among Members at the last PPC meeting, I believe, about NYSERDA programs, how we're helping to

meet climate Act goals, and in particular, how NYSERDA programs help to fill the gap you know, in terms of where we are today versus where we need to get to meet the ambitious goals. In the interest of time, I'll move through a discussion about a handful of the key Climate Act goals. And I, I will note also though that the Board is considering I serve as public Authority, law operations and accomplishments report at this, this day's meeting. And it does include an accounting of what NYSERDA has done in the past year to meet specific targets that we've set up, which do have ties to these overarching climate goals.

So it's a good, a good point of discussion to have. If we could go to the next slide, please wanted to do a little bit of framing. I think when we talk about the gap that has to be built to meet the very ambitious goals of the Climate Act, we have to think about NYSERDA’s unique role in the State engaging in market transformation initiatives. And we definitely do need deployment programs you know, the traditional rebates and incentives but getting to the needed scale of adoption of clean energy and associated emission reductions is not gonna come about as we know through a singular focus in individual projects. This is why many NYSERDA programs are organized around and include elements of market transformation. And as we know, really market transformation is the longer term effort spur systematic changes in the market durable changes that is also that that increase adoption of clean energy products and services really at scale over time.

And I will say in the, in the era and timeframe of big, you know, federal funding programs coming about really this is leading to increased activity across states. And then I sort of approach to meeting the market is, you know, viewed as kind of best practice, you know, gold standard where we are looking at the full spectrum of activities to influence outcomes rather than just a rebate approach. So we'll touch on these approaches a bit as we talk about the, the various goals. And if we might move to the next slide we recognize that the emission reduction goal really is our master goal on which all the other more specific goals sit. In, in the graph we're reminded of the 1990 baseline and where we need to get to meet the 2030 target the initial 2030 target there.

And it truly is indicative of the challenge ahead and the need for broad market movement and market intervention. This data is sourced from the DEC Annual Emissions Inventory. And 2019 is in fact the current benchmark of, of progress and it represents a 7% reduction in 2019 versus the 1990 emission levels. So we equate that to 18% of that 40 by 30 goal being met. I apologize for that overlap there. I'm not sure what happened on the, on the slide. The bar is not supposed to be overlapping, but we see that that 7% emission reduction from 1990 is equivalent to 18%, you know, progress toward that 40 by 30 goal. We do see in the graph there's been good progress made in the electricity sector. That's a middle orange part of the bar that is reducing.

And this links to many longstanding program activities at NYSERDA. Other sectors though are harder to decarbonize, maybe dependent on national actions and just have been more difficult to see you know, changes coming, coming about and movement. NYSERDA is definitely directly addressing challenges in the building sector, for example, which is the bottom you know, maroon part of the bar. Our Clean Energy Fund programs, including technical services market challenges, which I think the Committee's heard about recently are definitely large contributors to portfolio emission reductions as are efforts and initiatives and product standards and codes. So we're really you know, tackling the challenge in buildings with those key initiatives. Let's just move to the next, the next slide please. Where we'll, we'll in on the renewable energy goal in the Climate Act. So the goal is to achieve 70% renewable grid by 2030.

And also the longer term goal is a hundred percent zero emissions electricity by 2040. We see that the State is making good progress with operating and pipeline renewable energy making up more than 90% of that initial 70 by 30 goal. And progress is largely spurred by NYSERDA solicitations, which although they've been few in number, they have been quite successful in getting and generating market interest. So the, the NYSERDA projects actually make up around half of the operating and pipeline renewables as we see kind of moving from, from left to right in the graphic on the bottom. And the real challenge is ensuring that the build progress ensues. But even in the large scale renewable realm there are important market transformational supports that NYSERDA is, is offering and the market including workforce training, port infrastructure, even r and d activities to spur the industry and really support and, and bolster this activity. This is especially true, we won't have time to feature a slide on offshore wind, but you know, where we're seeing some, some early success with contracted projects making up nearly half of the 9,000 megawatt by 2035 offshore wind coal from the Climate Act.

Let's move to the next slide. Detailed focus here on distributed solar and regarding distributed solar and NY-Sun happens to be one of our longer standing portfolios that's contributed substantial progress toward reaching 10,000 megawatts of installed solar by 2030. And we should say that is actually an expansion of the original climate goal, which was 6,000 megawatts by 2025. Today the State progress of installed and pipeline distributed solar projects is nearing 80% of the 2030 goal. As you can see in that top bar. And 2022, we're happy to say has been the most active year of solar deployment in the State. You can see that bar graph. We, we've been able to say that actually the most active year for the past, the past few at least year where 850 megawatts was installed. And NYSERDA has supported about 750 megawatts of that activity in 2022 and in, in the solar area as well. There have been many market supports and transformational activities and drivers beyond just solar incentives that have led to this success, including training and growing the installer workforce, promoting quality installers, and really importantly, the policy drivers, the value stack compensation that have come about. Another major factor that we can't forget to mention is New York's nation leading effort in terms of community solar, which has been key to lowering cost and increasing scale especially noteworthy in recent years. And let's advance one more slide please.

So energy efficiency is our next goal and represents, I would say, equal ambition. As the other goals, it is a shared goal actually to reach 185 TBT of site energy savings by 2025. And this is a shared goal between NYSERDA, utilities, power Authority's, and other entities. This is really a key reason why NYSERDA programs are organized around that market transformation approach for energy efficiency and building electrification to compliment and expand upon the, the suite of activities that are being undertaken including utility financial incentives. NYSERDA is expanding upon that with community-based activities, workforce development, education and awareness. As I mentioned earlier, technical assistance and technical services is a really big contributor to these NYSERDA impacts and just information provision overall. So very good progress has been made, you know, in total for the State toward the energy efficiency goal.

The install and pipeline activity that you can see in that top bar, and the top bullet here on the slide represent 110 TBTs for about 60% of the 2025 goal. And then we can zoom in on NYSERDA's portion specifically in the little donut chart in the middle. What NYSERDA is responsible for in this stack up of 180 5 TBTs is 63 TBTs. And with our combined installed and pipeline activity, we are at about 70% of our portion that that NYSERDA is, is set to deliver. And, and really, I I did wanna point out that the remaining to be met amount, so the gray portion of that little donut chart if we look to the right, is largely expected to come from market transformation efforts. So we refer to these savings that we count up from those market changes as indirect savings or indirect benefits.

And again, these are broad market actions spurred by the NYSERDA activity and interventions, but not directly paid an incentive in most cases. And so we can see in small figure on the right that as we move through time out toward even 2030 over the longer term, nearly half of the total forecasted TBTU savings from NYSERDA interventions are coming from those indirect benefits, those indirect effects. So given the, the long term nature of these, obviously we're just beginning to evaluate these savings and we are seeing them come out. We've, we've done sort of the market studies and the quantification to add up you know, a few TBTs in total as of the end of 2022, which aligns fairly well with that, you know, little yellow amount in the forecast. And we are continuing to really evaluate and quantify those activities and count them up, you know, in that progress donut over time.

We can move to the next slide, which is actually the, the last goal here to highlight a bit of an earlier progress indicator. But with regard to the Climate Act Disadvantaged Communities goal NYSERDA will drive its portfolio to deliver 40% of the benefits of investments to Disadvantaged Communities, 35% as you know, as the minimum in the law. And NYSERDA has been over the past year or so leading up a State effort to establish a benefits and metrics framework and reporting templates to address clean energy investments across State agencies, working very closely with DEC, with DPS partners and other agencies on this. And now with the, the disadvantaged community criteria having been finalized by the Climate Justice Working Group at the end of March we are working to incorporate that final criteria into our operations, preparing data systems and processes bolstering meaningful engagement with underserved communities and also continuing to build internal capacity to support this work.

One of the things that we've done in terms of preparing data systems and processes is a concerted effort in recent months over the past year actually, to get to geocoding all of those place-based investments that we're making so that we know where things shake out according to that final definition of the geographic Disadvantaged Communities. So sharing here on the right hand side, a couple donor charts that represent a preliminary analysis of NYSERDA's market development portfolio. These are investments that we have made really since the effective date of the Climate Act January 1, 2020 through the end of last year. And how they fall out in terms of Disadvantaged Communities. So we can see in the small donut chart that over 90% of these investments is now geo-coded. So there's a little small piece, 9% believe it's not yet. You know, geocoded, we are working on that.

And actually in that small donut chart, we can see that 48% of the dollars are either in a Disadvantaged Community from a geographic location perspective or going to low income customers which are also part of that, that definition. And then as we move to the larger donut chart on the right we're getting some visibility about the specific, you know, areas of investment that NYSERDA is making that are serving to meet this goal. And this will be, you know, really informative to our efforts to manage, you know, toward this goal over time. But as can be seen in that larger donut about half of the investment in Disadvantaged Communities is coming about through support for low and low to moderate and income participants. So the two blueish parts on the, on the bottom of the graph, whether they be in those geographic locations or just statewide low income customers.

But there is in fact a meaningful amount of benefits and investments coming about through commercial industrial and agriculture programs through renewable DER new construction. Those are also some, you know, meaningful chunks of that, that right most donut chart that we are seeing. And so we will continue to drive efforts and programmatic support to Disadvantaged Communities along with other State agencies. We'll work to fully develop the, the, the needed reporting on these activities. That'll be definitely a, a top level effort as we continue through this year. And really those are the main climate act goals and I sort of progress points that we wanted to highlight in the time that we have. And I think we can, we can move to the next slide and, and any, any focus discussion or questions that Members might wanna have.

Sherburne Abbott:
Thank you. You're gonna judge question. Go ahead.

Chair Kauffman:
I'm gonna start,

Sherburne Abbott:
I was gonna start from the last slide, the last slide going back. So, so the, the, because of the role that the State is playing in, in this overall effort as a sort of a, as a an early target for, for justice community, that justice 40, so Justice 40 is, is model. So this is, this is a question that you will ask so much better than I will, but I, but I'll ask it anyway. It's, it's, it would, one, it would be really nice to have an update on this, this, the, the benchmark your, your progress toward understanding the, the, the metrics and, and performance and stuff. Because as you develop this, it's gonna be so important from me. Understood. So I work in the sustainability, science and policy world, and so one of the big questions is how you apply.

It's, it's easier to deal with the environmental metrics because we have more data, we have more understanding of it, of, you know, lifting, making bad things better. We have very little good evidence on the improve improving wellbeing, right? And other than other, other areas, and this is a place where it's gonna matter so much that we get this right, because there's so much other national initiative focused on this. It seems to me that that a continuing look at this, at the, you know, from an academic perspective, from a performance perspective, from a an adoption perspective, from a community engagement in every dimension, it's gonna matter how this plays out. Particularly because it, this is a different question, but it still is unclear to me how the 35 to 40% target was even, you know, how it was thought of because I think that we pull these numbers out of the air, but we really don't have a sense of, of what they mean. And so it seems to me that this is gonna be a really important piece of this, of this thing. And, and particularly this,

this if you look at our map, the, the map of where, where the NYSERDA investments go across the State, and then if you, if you took the, the D map or and overlay that do they look similar? Not so much. There, there are places where the, the, the, the needs are greater than, than currently the investments sit. And so how is that gonna play out all the time?

So, but just so that we could have to put on record, it would be really nice to have an update on, on the progress of that, the metrics. Yeah, certainly you, you'd look at it, you're looking at it across multiple funding sources, right? Right.

Jennifer Meissner:
That is right. And, you know, while we're focusing in on dollar spending as kind of the first compliance metric, if you will we have a whole host of co-benefits metrics, right? That we are working to develop, you know, some of which are affordability related, environmental health related. But these are, you know, cha challenging metrics, you know, to quantify. I think that once that benefits and metrics framework is kind of finalized and you know, put into first use across agencies, that that might be a good time to come back and just say, this is kind of, this is kind of where we're at because I'm sure it will evolve, you know, over time.

One of the, so we just for awareness, we engage regularly with the, on the federal level in this realm. Well, they're very interested in New York.

Sherburne Abbott:
Oh yeah.

Jennifer Meissner:
Because obviously, well, we're very interested cause we'd like nothing better than the two to align <laugh> so that we're solving for one set of metrics rather than two. However, I'd say the, the other aspect of this that is, it's extraordinarily complex, but one thing that you know, we have been dealing with in the first instances is the fact that not every investment we make can be clearly attributed to a particular geography as to the benefits that it provides. Right? Right. You know, the large scale renewables are a good example of it, but it, it's beyond that, you know, training programs, you know, on an electric bus. You know, it just, right. The point is that when we agree on, on these, this framework, it will have to grapple it's grappling with all of those issues at the same time. And in fact, I see a lot of in incoming from the federal government on those issues as well.

Sherburne Abbott:
Well, and just to the point, the simpler version of the difference between investments and benefits.

Jennifer Meissner:
Yeah.

Sherburne Abbott:
I mean on the Fed side it's never done right <laugh>,

Jennifer Meissner:
But on the other hand, they're looking at us to actually define exactly what is quote unquote right?

Sherburne Abbott:
Right.

Jennifer Meissner:
So whether it's transportation or energy or the environment, whatever it is, air quality, health effects, all of it, it's across the Board.

Sadie McKeown:
So I think the only way you can truly measure is with direct investments that are located physically and Disadvantaged Community, which is why the housing program and the investments from NY Green Bank need to really focus on zip codes that are Disadvantaged Communities. And then the rest goes from there.

I had a different question. Looking at slide three, which is a little bit overwhelming for me to look at.

I think I remember Jay's, it was Jay's question from the last Board meeting. How much of what, you know, the investment that we're making is, is actually moving the needle and all this stuff. And when you look at this slide could go back to three the only one that's significantly moved a needle is the orange, which is electricity looks like mm-hmm. <Affirmative>. And that's obviously all the work that you're doing in renewables, right? So, got one more. And transportation and buildings, agriculture waste, they all seem pretty stagnant. And you look at 1990, so that's what, 30, 40 years? 30, 35 years, 33 years and we have seven to get to the next yellow bar. And it's kind of stunning to think that in seven years we have to, where are we gonna make up back ground if we, if we made up the same amount of ground in where we're, we're currently doing quite well, which is in electricity, it doesn't get as close to the the 2030 bar.

And so I, I really, I, I think it has to be beyond just where aner investments are. And I'm certain that you're all working on this, but it's really around building codes and mm-hmm. <Affirmative> regulation and pushing the cap and trade and all of the other things that are crowding in around just the rate payer dollars that we're trying to put in Disadvantaged Communities. Cause that's, we have all these benefits coming in from the IRA and New York will get a piece of that. But even so, the lack of alignment across sectors, the lack of alignment across codes and requirements and regulations is really what is stagnating everything else. Because if we had a building code back in 1990 that required no more electric or no more gas or flame in the buildings, then we would see the buildings high part of the chart here, the, the maroon down significantly.

Because all of the private investment would have driven it there. Public investment alone is not gonna move the needle on buildings. It's not gonna move the needle on transportation. You know, it, it has to be regulation. So I guess my question is, is less of a question, more of just a statement of how, how much control do we have over the other pieces of this, of this pie outside of just what we're investing great payer dollars and how can we try to influence accordingly? Because I'm in the building sector and I, I know how hard it is just to impact affordability on the back of government regulation and whatever resources we can get, which are significant affordability. But with respect to decarbonization, I think Richard made a comment like, you can see cars becoming electric. It's really hard when you walk down the street in New York City to see buildings becoming electric without some significant regulatory or code change.

Doreen Harris:
Yeah, no, you're pointing out the exact discussion that went on through the Climate Action Council, I know you're well aware of, which is if we were to stack up great pair of funded programs in the dent that they will make, you know, in this 2019 to 2030 trajectory, it's, it's, it's tiny,

Sadie McKeown:
right?

Doreen Harris:
And, and what we're talking about is literally with respect to buildings and transport in order of magnitude difference as to, you know, the scale of what we're the impacts that we're having. So it's, it's, it's totally true. And by the way, the electricity sector can't even say that that's really renewables. That actually was a lot of the transition going on even to fossil, you know, like natural gas, right. Technologies that we benefited from in that timeframe. So yeah, you're right, the sectors we have to go after are not only extraordinarily challenging, but ultimately we're, you're right. That's why when we look at the 2 million homes initiative of the Governor, for example, it's not, you know, the, from a rate perspective is actually relatively small relative to all the other measures that have to go into place to get to the buildings sector alone in order to get to that number. 2030 is, I'll say it, the biggest challenge in the planet block it is, it just is because of the timeframe we're dealing with.

Chair Kauffman:
So just building on, on the same point, if we go to, to the, I guess was the energy efficiency slide couple. Yeah. This one. Alright, so as we define energy efficiency, this is, this is for what we wanted. How does, how does this number on the right compare to the, the bar chart that we had before about what we need to do in terms of getting to 2030? And it's, cause most of this, I presume, relates to buildings, right? This is mostly buildings,

Jennifer Meissner:
Buildings and industry, right?

Chair Kauffman:
Yep. Okay. So, so again, I'm just trying to, good, how do you understand my question in other words, is this, are we taking a small part of the bar that we have to achieve by 2030? And so when we say that we're 60% of the way, is it 60% of that total bar or 60% of the market that we've decided that we can control?

Jennifer Meissner:
It's meaning 60% of the 185,

Chair Kauffman:
I, I don't know what the 185 I understand, but how does the 185 relate to the slide that, that said he just had You look at

Jennifer Meissner:
The emissions, I don't know how it translates directly to emissions but I do believe that the 185 TBTU annual site Energy savings goal is around a, you know, a 10% savings statewide, it's, it's something in that neighborhood to put it to, you know, energy use in that, in that segment. Right.

Anthony J. Fiore:
Okay. Yeah. Suzanne's,

Susanne DesRoches:
Yeah. Hi everybody. So I think to put this in context the 185 was set by the new Efficiency New York proceeding, which is currently in a review process. So I, we will be looking at that and what that number should be by 2030 as part of this ongoing proceeding. That's at the PSC right now, what you're really seeing here is that NYSERDA's chunk of the 185 is 53, and we're about 70% of our way to 53. The rest of that goal is achieved through the remainder of the repair fundings through the utilities. But as Jen said, this is only about 10% of the state's energy use. And at this point, through this new efficiency New York proceeding, we'll be taking that and looking at what it means from a greenhouse gas reduction and meeting the Climate Act perspective.

Chair Kauffman:
Okay. So, thank you. So Susanne, I think the other question that, but I think maybe not for today, but for a future meeting, I mean, when I look at the indirect, I mean, that's, that's very hopeful. Hopeful because it would extend presumably to, if we can really get markets working, it might take on more than the just 10%. And it, it looks, to me it was based on the chart here is that there's actually by the end of 2023, you know, real material evidence that there's something going on with this indirect part. So I think we'd like to understand more of what that looks like.

Susanne DesRoches:
Sure. And, and I'll just highlight there that sort of a tangible way that I think about the indirect is not just the market transformation, but also things like codes and appliance standards, which I know we've, you know, you guys have seen numerous presentations, so just as an example, that gets captured as indirect rather than direct savings.

Chair Kauffman:
Great.

Sherburne Abbott:
Sorry,

Sherburne Abbott:
Any other questions? None, none from New York.

Charles Bell:
Well, I have a question about just the component of, of emission saving that could be accomplished through waste. Could someone explain that? I just don't, I need like waste 101, that methane emissions. What are we talking about? Is that a

Vlad Gutman-Britten:
Yeah, do you want No, the, the emissions slide back up.

Chair Kauffman:
Yeah.

Vlad Gutman-Britten:
Yeah. So, so, so waste is principally methane emissions, although it's not exclusively methane emissions. That sector includes wastewater recovery facilities. It includes land filling and a variety of other kind of mission sources like that in, in in New York, due to the waste seal CPA accounts for greenhouse gases, not all of those are physically in, in the State of New York. We take responsibility for the waste that we export to our neighbors. Mm-Hmm. and, and it is that in those landfills or, or, or whatever facilities they that are received there as well. So the waste is a variety of kind of different sectors, but it also includes small, you know, septic systems and things like that as well. So there's water and, and sort of municipal solid waste and things like that that are in there. So it's a kind of a diverse sector

Chair Kauffman:
For farms included agriculture. Oh, agricultural. Yeah. Yeah.

Sadie McKeown:
So that's cows in green. <Laugh> cow. Well, you think cows,

Charles Bell:
So, yeah. Yeah. I guess I just don't want waste to be neglected. It's like less sexy. Maybe it's, but no, no.

Sherburne Abbott:
Lot.

Charles Bell:
Okay. Thank you. Thank you for explaining.

Sherburne Abbott:
Maybe more sexy than

Charles Bell:
Yeah, yeah, yeah. So it's very important to the Board that we make progress in all these. Yes.

Sadie McKeown:
So on an individual septic system. So it's just replacing a EP septic system. How do you move that needle?

Vlad Gutman-Britten:
I, I'm, I'm really not very well versed in, in, in that, you know,

Unknown Speaker:
Yeah. There, there are gonna be certain ways submission sources that are just gonna have, be part of that remainder 15%, and that's a good example. One

Vlad Gutman-Britten:
Tighter septic, you know, tighter systems and things like that, that less is certainly a part of it. So, you know, quality control across, across all of these spaces is important.

Unknown Speaker:
But yeah, when you look at our, our Scoping Plan, there are some major sectors at the very end that are very hard to decarbonized and wasted. So we're gonna be working on our landfills, but there's going be

Charles Bell:
Sources. And who are, is it like the DEC and they sort together provide leadership? There's like, there's not really like a centralized

Unknown Speaker:
Supporting Yes.

Doreen Harris:
Yes. I was, I was gonna bring that up because it is important to note that not every one of these sectors we necessarily would lead right. Within. And, and in fact, it's important, right? That we have the partnership of, of agencies that are better suited to get from here to there, like HCR as an example on the housing front or, you know, d o t on transportation or whatever the case may be. Yeah. I, and in this instance, DC is

Unknown Speaker:
Is we get, we get the least sexy stuff, or not sexy waste septics Ag, like ag and markets, or we would, yeah.

Sherburne Abbott:
Yeah. The DC The

Charles Bell:
DC Okay. Great. Thank you.

Sadie McKeown:
So this is that alignment that the Yep. Climate Action Council intended to address that. I think we need to continue to push on and really we try to set a standard, but it needs to be continually, we see lack of alignment in building sector all the time. You know, when somebody wants to electrify a building and a local utility might say, no, there's not enough capacity in the electric grid. And maybe that's, maybe that's ill-informed. But we, I've spoken to Rory a little bit about it, but we all have to be rowing in that same direction. And I really appreciated the climate action process approach to intending to get the different sectors to all meaningfully address the CLCPA way. NYSERDA addresses it. And that's not your responsibility, but that, that's something that needs to continue.

Doreen Harris:
And through the reporting like that Jen was just talking about, there'll be subject to that same <laugh> mm-hmm. <Affirmative>, but it very much needs all hands and will continue to do so.

Sherburne Abbott:
Great. Okay. Anything else? Good. Thank you Jen. No formal action is required on this item. The last item on the agenda is of your business. Is there any other business? Everybody shakes their head. Thank I have a motion.

Charles Bell:
Motion to adjourn.

Sherburne Abbott:
Yes.

Sadie McKeown:
Second

Sherburne Abbott:
All in favor?

Members of the Committee:
Aye. Aye

Sherburne Abbott:
Meeting is adjourned.