

**NYSERDA'S 113<sup>TH</sup> PROGRAM PLANNING COMMITTEE MEETING**

**June 22, 2021**

Clean Copy of Transcript

**Peter Costello:**

Sir. Do we have quorum?

**Sara LeCain:**

Yes, we do. Good afternoon.

**Commissioner Dominguez:**

This is MarieTherese Dominguez.

**Sara LeCain:**

And actually, if we could just check Gil.

**Gil Quiniones:**

Hi, can you hear me? Hello everyone. Yeah. So Richard, we're all set. Okay, great.

**Chair Kauffman:**

Good afternoon. And welcome. I call this meeting to order a notice. An agenda for this meeting was provided to the Committee members on June 11, 2021, and the press on June 14, 2021. 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'd like to ask Sara LeCain, Secretary to the Committee to conduct a roll call of each of the Committee's members and attendance.

**Sara LeCain:**

Thank you. I will. First note your attendance. Now take the remainder of the roll call. When I call each, please indicate present, Shere Abbot.

**Shere Abbott:**

Present.

**Sara LeCain:**

Jay Koh.

**Jay Koh:**

Present.

**Sara LeCain:**

Commissioner Dominguez.

**Commissioner Dominguez:**

Present.

**Sara LeCain:**  
and Gil Quiniones.

**Gil Quiniones:**  
Present.

**Sara LeCain:**  
We have a quorum.

**Chair Kauffman:**  
Thank you, sir. The first item on the agenda is the approval of the minutes of the hundred 13th Committee meeting held on April 27, 2021. Are there any comments on the minutes? Are there being done there being done? May please have a motion approving the minutes.

**Jay Koh:**  
So moved.

**Sherburne Abbott:**  
Second.

**Chair Kauffman:**  
Thank you. When Sara calls your name, please indicate whether you are in favor by stating aye, or opposed by stating no.

**Sara LeCain:**  
Thank you. When I call each name, please indicate your vote. Authority Chair, Richard Kaufman.

**Chair Kauffman:**  
Aye.

**Sara LeCain:**  
Shere Abbot.

**Sherburne Abbott:**  
Aye.

**Sara LeCain:**  
Commissioner Dominguez.

**Commissioner Dominguez:**  
Aye.

**Sara LeCain:**  
Jay Koh.

**Jay Koh:**

Aye.

**Sara LeCain:**

Gil Quiniones.

**Gil Quiniones:**

Aye.

**Sara LeCain:**

The minutes have been approved.

**Chair Kauffman:**

Thank you. The next item on the agenda is an update on the Climate Action Council. A much awaited update. I would say the Council's Executive Director. Sarah Osgood will discuss this. Sarah, please.

**Sarah Osgood:**

Mute. Thank you. Can you hear me okay?

**Chair Kauffman:**

Yes. Yes.

**Sarah Osgood:**

Great. Thank you. I'm pleased to be presenting this re this update to of the Climate Action Council to the Program Planning Committee here at NYSERDA. I will also just say on a personal note, I'm pleased to be back at NYSERDA for my, my third time around here. And especially in this role that is, is quite exciting. So if we can go to the next slide, please. So I'm gonna give about a 30 minute presentation that's gonna go over the Climate Act goals and requirements a little bit of the, of the structure of, of the Council and the advisory panels. Then I'll jump into the timeline and the progress that we've made to date. And then I'll touch on some recommendations that have been in advanced by a couple of the advisory panels that will have implications for NYSERDA programs. And so relating it to what does NYSERDA need to be thinking about as we move through this process? Next slide, please. Can I get the next slide please?

Thank you. So the climate leadership and community protection act, which we lovingly call CLCPA or the Climate Act was established in 2019 and creates aggressive, necessary greenhouse gas reduction requirements that are set in statute for the first time in New York. The, the requirements are economy wide reduction in greenhouse gas emissions of 40% by 2030 and by of 80% by 2050 on a path to carbon neutrality supporting achievement of these goals are several sub targets related to specific technologies, including offshore, wind distributed, solar energy storage and energy efficiency. And in addition to the climate leadership, another central component of the law is its requirement for our communities, particularly those that have been historically most over most overburdened to benefit from the actions taken to implement this law. And I'll just touch on that. Just a little bit more next slide, please.

The act establishes a requirement that, that 40% of the overall benefits of State spending on clean energy and energy efficiency investments, flow to disadvantaged communities with a minimum requirement of 35%. This will be effective starting January of last year when the Climate Act became effective. I'll get into a little bit more about the criteria that's being developed to define disadvantaged communities in a moment. But for right now, this is I just wanted to make you aware of this, of this quite important feature of the Climate Act next page, or next slide, please. The Climate Act established a 22-member Climate Action Council, comprising heads of State Agencies, as well as members appointed by the Governor, the Senate and the Assembly. The main job of the Council is to deliver a scoping plan to achieve the required statewide emissions reductions that were specified in the act while ensuring the benefits to the disadvantaged communities.

The Council has been supported by advisory panels that have developed recommendations. Also consulted with the just transition and, and climate justice working group that I'll, I'll get to on the next slide. And the council's going to be using that input to develop the scoping plan. The draft plan is scheduled to be out by the end of the year. There will then be a series of at least six public hearings on the, on the draft plan. And those will shape the final scoping plan that we'll need to consider all of the work holistically and balance the economic and noneconomic costs and benefits of the full package of recommendations. Next slide, please. The Council all started its work in March of 2020, just before the pandemic and in the fall of last year, convening the advisory panels as well as the just transition working group, bringing together experts and testing them with delivery of sector specific recommendations to meet the goals laid out in the Climate Act, the recommendations that are developed by these by these advisory panels and the just transition working group are, are really at the heart of the scoping plan. And at this point in time

Sorry, I lost my spot here. The, the members of the panels are largely about 15 people per panel and are balanced across of across academia non-governmental organizations, environmental justice organizations as well as industry consumer and labor representatives. And each of these panels were convened through a public process to consider the emissions reductions required from the sector and to advance recommendations to make those reductions of reality. The just transition work group was also tasked with, with conducting a study on job creation and workforce disruption related to the transition to a low carbon economy that work, some of that work is still ongoing, but there have also been recommendations of the, by the just transition working group a climate justice working group was also created and that that group is largely tasked with establishing criteria to identify and develop a list of disadvantaged communities for which the 35 to 40% benefits must, must go to the climate justice working group will also advise the Council on climate justice issues and then supporting all of this work is it requires engaging folks from all corners of NYSERDA as well as various State agencies.

And we're really drawing on a considerable amount of State expertise in, in development of the recommendations and in the draft scoping plan. All State Agencies will also be required to implement strategies to reduce emissions and agency decision making must be consistent with the, with the act touching on the timeline and progress. If we can go to the next line, we've recently hit a very significant milestone in, in terms of where we are with progress. The slide here is a little bit busy, but if you look at the blue chevron arrows here for the advisory panel

work, that's about in the middle of the slide. You can see that in April and May the advisory panels, and as well as the just transition working group presented their results the results of their work in the form of recommendations to the council, this represented the culmination of the main work that they had been tasked with.

And they did so in a comprehensive and transparent public process. Not only were the members of the panels experts in their field, but the panels also engaged with additional outside experts. They engaged the panels amongst one another and with the climate justice working group in development of their sector specific recommendations. So now the work is shifting a little bit back to the Climate Action Council. If you go down the next row into the orange-ish colored chevrons, you'll see that the, the recommendations from the panels are now being combined and analyzed in an integration now analysis. And this is intended to provide data on the societal cost and benefits as well as a mission reductions that could be included in the draft scoping plan, which is due at the end of the year. The Climate Action Council will consider the recommendations provided to them by the council, the results of the integration in that analysis, the feedback from the climate justice working group as it develops its draft scoping plan for release by the end of the year, and then following the release of the draft scoping plan will have a minimum of 120 day written public comment period, as well as a minimum of six public hearings.

And again, the State staff team, including a good number of NYSERDA to another agency, folks are working to support the integration analysis and initial drafting of the scoping plan, as well as assisting the ongoing work of the climate justice working group and just transition working group following in public comment opportunities, the Council is required to finalize its scoping plan. By the end of 2022, the scoping plan will provide direction to State to State eight entities, including NYSERDA, that will need to be considered in their normal course of business. But that also doesn't mean that we have to wait until the end 2022 for the final scoping plan. And, and in fact, we haven't been next slide, please. So for example, we've already, oh, a little bit too far. Can you go back to the clean energy standard slide?

**John Campagna:**

Are these are the slides I have, I apologize.

**Sarah Osgood:**

Okay. Sorry. I might not have gotten the, the latest version here. Well, I'll just speak to it. The clean energy standard, for example it is an example of some actions that were taken prior to the scoping plan being finalized. Last October, the public service commission approved expansion of the clean energy standard to meet the key provisions in the Climate Act related to securing 70% renewable energy by 2030, including defining renewable energy technology eligibility, and defining the amount of renewable energy needed to, to meet New York's goals. It also, I identified annual procurement targets for the large scale renew, renewable energy program that is administered by NYSERDA. It sets targets for offshore wind as well as energy storage and distributed solar

**Chair Kauffman:**

Fair should be for interrupting, but it might be helpful to go back to that. I think your very first slide to, to point out the things that I sort of was already working on before the CLCPA to give people the confidence that we're not just waiting until the end of 2022 to get going.

**Sarah Osgood:**

Okay. Sure. So we've already established well, so consistent with the clean energy standard order. There was a new tier four large scale renewable program to bring environmental or, or to deliver renewable energy into the New York City area. And then there was an expansion of, of the tier the tier one renewable energy eligibility, which is remove facilities that would allow participation by renewable energy facilities that are undergoing repowering. The clean energy standard is something NYSERDA to has been implementing for a number of years. The goals prior to the signing of the, of the Climate Act were slightly reduced from what they are now. They were I believe it was 50 by 30. And instead now we're looking at trying reaching 70% renewable energy by 30.

And so this is the this is what I was referring to when I say that we've already taken action. The public service commission has expanded that the clean energy standard requirements to meet the 70% renewable electricity by 2030, and procurements have already been ongoing related, related to those programs as well. We're currently we are currently under contract and in development with projects that would power 50% of New York's electricity once, once operational. So we are making good progress here. There, there are a number of other actions that that could be taken by the state. And I think that you know, looking at the recommendations from the panels, we're, we're able, we're able to mean some insight there at least in terms of, in terms of magnitude and directions, so we can begin preparing for the necessary changes and adjustments, even while those recommendations are not yet finalized. And so the rest of the presentation in includes a sampling of recommendations that aren't that, that, that if are included in the scoping plan, would most directly impact NYSERDA activities. And for these, I'm gonna be looking at the energy efficiency and housing recommendations, as well as the transportation recommendations.

Next slide please.

Next slide, please. So starting with energy efficiency and housing I just wanna start with a view of, of what level of greenhouse gas emissions are attributable to the building sector. And I will mention these slides are pulled from material that was presented by the panels to the Climate Action Council. And so here, I'll be just touching on a couple pieces of, of, to highlight in these slides. So if we look at emission sources statewide by sector on the lower left side of the screen here, you can see that buildings account for a major portion of annual greenhouse gas emissions. So it's around 30%. The panel was primarily concerned with what's direct emissions from, from buildings. And these emissions are, are ones that come directly from the source in this case, burning fossil fuels in the buildings themselves moving to the stacked bar chart on the right.

You can see that residential has slightly higher emissions than, than commercial. That gas is a, a larger source of emissions than oil and other fuels, and that spacing in water heating use the most significant share of fossil fuels. So that means that lowering or eliminating the reliance of these fuels in existing, in new buildings is, is really the only way we're going to be reduced seeing direct emissions enough to make a substantial contribution to getting us to our 2030 and 20 15,

2050 goals. And so therefore electrification is going to be one of the largest drivers of direct impacts or direct emissions. And you can see this reflected in the recommendations of the panel. Next slide.

Before I get to those recommendations, though, I want to touch on the scale of the issue and the, and the scale of the solution. You can see in 2018, we estimate that the sector accounts for 115 million metric tons of carbon dioxide equivalent fuel combustion in residential and, and commercial buildings drove the majority of these emissions, but there's also a section there for imported fossil fuels, that's emissions that are associated with the extracting processing and transporting fossil fuels. And then there's another section related to refrigerants or HFCs that accounted for almost all of the increase that we saw from 1990 to 2018, which is during the time period where, where these products came to market the recommendations advanced by advanced to the Climate Action Council from this panel would achieve nearly a 30% reduction from 1990 levels by 2030, and put the, the State on track to meet emissions from the New York building to reduce emissions from New York's building sector by about 85% by 2050.

So as you can see, this is, this is a, a quite significant or massive reduction. And then in the next slide, if we can go to that and just puts it into a little bit more context in terms of what that means for the State there are there's approximately 6.2 million buildings in the state. Most of these are single family homes and approximately 70% of these buildings were constructed before there was an energy code. So these buildings will need to have significant investments and upgrades to become energy efficient. We also need new residential and commercial buildings constructed to new and higher standards. And so if you look over on the right hand inside of the screen, if you kind translated this into what does it mean in terms of what do we need to deliver on an annual basis? We're looking at by 2038, more than 200,000 homes, we'll need to be upgraded to all electric and energy efficient systems every single year.

That's gonna add a lot more demand on the electric grid, and we'll need to be sure that the grid is ready and flexible to accommodate that. And if you look at the the commercial and institutional buildings, the, these will need to cut their energy use in half and stop using fossil fuels for heating and hot water in order, in order to meet these reductions that are being put forward. Next slide please. And so the panel put forward a number of recommendations. I'm not gonna go through all of them, but I just wanted to to show this overview, the summary of the mitigation strategies to show the full breadth of, of the recommendations. The panel looks for me, main strategies to to meet its emissions reduction goals. One is phasing out fossil fuel in buildings over time. This is gonna be fundamental to decarbonizing buildings requiring benchmarks to inform consumers shifting reliance on fossil fuel gas, to clean energy systems. This isn't you know, unique to buildings, but it's gonna be central to, to nice service work as well. And reducing hydro hydro floral carbon refrigerants. Each of these strategies has has underlying initiatives with mold component pieces to them. And I'll just go into one of those, the first one to to give you a flavor of the types of recommendations the Council has received. Next slide, please.

The first strategy relates to codes and standards and is considered the, the most transformative of the recommendations put forth by this panel. It would use codes and regulatory standards to send clear market signals ending the reliance on fossil fuels in buildings. And these would be phased

in over time to do this. The State would need to enact legislation and adopt building codes, equipment, standards, and regulations to improve energy efficiency, reduce emissions, and enhance building resilience. And while these changes will not be easy, there are absolutely necessary to achieve our critical green high gas reduction goals. This, this strategy will, will drive some of the scale uncertainty that's needed to transform the market and to help reduce the cost of transforming the market.

And from a benefit that's perspective efficiency, resiliency, they'll all improve the quality of life and health and result in, in cleaner air as onsite combustion is phased out. So next slide, please, just getting into a little bit of more of the details of this for new construction. We see that we need to ensure that residential and commercial buildings are built to a highly efficient zero emission standard, and that they incorporate resilience. There are three major elements that would be required to do this. The first is a highly efficient State energy code to stop wasting energy to incorporate low carbon resiliency solutions such as solar P energy storage and electric vehicle readiness for new buildings. And lastly the panel recommends moving to an all electric code for new construction with a, with a phasing of 2025 for single family homes. And by 2030 for multifamily,

**Jay Koh:**

Can I ask just one question or are we waiting to the end for comment questions? Yeah. And that's, I'm glad to see that there's a mention of resilience here what appears to be for the first time in this presentation. But just wanted to understand while we're going through this process of reviewing these sets of recommendations and planning assumptions per particularly for mitigation strategy, energy demand, energy usage, and buildings. For example, I think it would be a missed opportunity if there wasn't analysis done specifically about what the physical climate risk environments like, they look like over the next 10 and then 30 years. And so, you know, would love any comments on how that's being incorporated into this type of analysis cause of a, are planning a transition where we assume that conditions are gonna be static, whether it's from an energy demand standpoint from a grid reliability standpoint, or other kinds of assumptions, it would seem like we're gonna be doing this exercise again in about 10 years to do the retrofits and all this. So we'd love to hear about that. And it's great to hear that, well, we can do it where it's feasible, but I would encourage strongly to incorporate this on behalf of New York State taxpayers and rate payers. A set of assumptions if we take climate seriously.

**Sarah Osgood:**

Sure.

**John Williams:**

So, so maybe, oh,

**Sarah Osgood:**

Go ahead.

**John Williams:**

Yeah. Williams here. Maybe I can just take a little bit of that one and Sarah please fill in with right. Leaving gaps. So I I'd say Jay, we've got actually a, probably a couple of strands of work



that are going on. And to the degree we will be building that into the way we're thinking about both resilience outcomes specifically that we can recommend for advancement in the scoping plan. Now we've, we've had a specific advisory group or a sub-channel of one of the advisory groups looking at those types of strategies. And they did recently present to the climate Council on some of those kind of resilience and, and perhaps more adaptation type measures that we should, that we know we should be planning for now and can be built into the way that we are looking at these clean energy types of investments across all of these various sectors.

So that's certainly one set of recommendations that the Council will be looking at in terms of looking at how we should be kind of planning and calculating for climate risk in our infrastructure investments going forward. We will have a look at that probably on a little bit of a lighter level in some of what we're calling our integration analysis work that we'll be looking at these various panel outputs but making sure that we are taking account of, you know, what we can expect to be varying changes in energy consumption and emissions outputs due to changes in climate that we're able to calculate now in parallel to that kind of current analytical work, we do have really quite a lot large study that is that we are kind of launching at the same time in parallel.

And so this is a, a follow on to our climate work, which you know, was a product of NYSERDA from about 10 years ago. And, and we feel it's time for a refresh on that. There's a lot of information that we really do need to make sure we got our arms around and our integrating that into the way we'll be looking at that. So climate will be happening. We'll be looking for outputs from that work over the next couple of years. And then as we look at this kind of climate scoping plan process over time, our State energy plans will be kind of feathering in all of the outputs from that climate work to make sure we are really fully in accounting for the resilience and the climate changes that now will be occurring over time.

**Jay Koh:**

Thanks, John. That's very helpful.

**John Williams:**

Great.

**Sarah Osgood:**

So just to wrap up this you know, while we're focusing on new construction on, on this slide, obviously we, we can't just focus on that. We've also got the existing buildings the majority of which we will likely be around still in, in 2050 going to the next slide, the panel put forth additional codes and standards that would drive substantial emissions reductions in existing buildings. And right, this, the strategy here is focused on replacement at the end of, of useful life. And the, the timing of this being the end of useful life is really intended to help contain costs as opposed to making a date specific requirement for certain equipment. So first year is adoption of energy efficiency standards for appliances that are not otherwise regulated by the Federal Government.

And so that means when somebody goes to purchase a new appliance, whether it be over refrigerator or a dehumidifier they'd only be able to buy, to buy the most efficient ones. And the

benefits of, of this type of a client standard really results in kind of tens, tens of billions of dollars for, for consumers in energy savings by 2030 having an energy efficiency performance standard for all large commercial properties would help ensure manage demand on a clean electric grid. And ultimately the panel is putting forth that the State needs to enact emissions based standards that would prohibit replacing space, space, and water heating equipment with fossil fuel equipment. Next slide, please, in addition to the mitigation strategies, the panels also put forth enabling strategies. These are strategies that don't contribute directly don't provide direct emissions benefits, but they would enable, or, or magnify some of the mitigation strategies. Again the panels put forth a number of strategies, including public financial incentives low cost financing workforce public awareness and consumer education investments in new technology and innovation and reducing embodied carbon. And I'll just go into the first one of those listed here.

**Arturo Garcia-Costas:**

May I ask a, may I ask a question before you completely leave behind the housing sector, or is this still embedded within the housing sector conversation?

**Sarah Osgood:**

This is, this is still embedded within the housing sector, but you're welcome to ask a question.

**Arturo Garcia-Costas:**

Yeah, I just just wondering and I forgive me if this is actually gonna be covered in the future slide, but to what extent was the role of manufactured housing discussed by the Climate Action Council as a strategy going forward in the state?

**Sarah Osgood:**

Well, maybe I can ask I can call on Janet Joseph to, to jump in and take that one. The, the advisory panels were chaired by one or two folks from State Agencies. Janet Joseph was one of the Co-Chairs for the Energy Efficiency and Housing panel. And perhaps she can speak a little bit more to manufactured housing specifically.

**Janet Joseph:**

Sure. Would be glad to jump in on that. Thank you, Sarah and hello, Arturo it's, it's good to see you. And also I should note that Sadie, our new Board member was also on the energy efficiency in housing panel and participated in a number of the discussions. So the panel did have some discussion about the role of manufactured housing as it relates to the single family sector. But did not put forward a specific recommendation aided solely to manufactured housing. That said NYSERDA has several initiatives underway to address that sector because it's a very important place for low and moderate income consumers. And there are tremendous needs for upgrading in that housing stock. So we have a partnership with homes and community renewal to advance some strategies to improve manufactured housing, electrification, and, and insulation.

So the panel had some discussions on it, acknowledgement of the role of manufactured housing for low and moderate at income consumers. But the panel did not put forward, you know, a specific and unique recommendation for, for that sector. The incentives that are being proposed to be advanced here would, would be eligible for, for that sector certainly for, for sure. So it is a

need, it is an opportunity and we're working with our, our colleagues at HCR. We're also working with some vendors of manufactured housing. We have a few in New York State to develop new and improved products.

**Arturo Garcia-Costas:**

Thank you.

**Sarah Osgood:**

So next, next slide, please. And I'll just go into the, the public incentives just, just quickly the panel recommends that incentives would be, would help to speed the uptake of, of building efficiency, electrification, and decarbonization F there's also a need to focus on lower income households as well as disadvantaged communities. So they're not left behind or additionally unfairly burdened. And if you look if you look to, you know, kind of what, what were we talking S advise they've estimated that at least a billion dollars annually a funding is needed specifically for programs that would serve low to moderate income households, affordable and public housing as well as disadvantaged communities and this number would, would be on an, on an ongoing basis. So this is quite a, quite a significant scale here.

And we may need to look at different mechanisms to, to deliver the financial incentives as well. Next slide, please, elements that the panel saw needed to be in place provide these public financial incentives include creating, creating direct cash. I programs for electric service upgrades to offset the cost of preparing a building for electrification expanding and creating new cash incentives for energy efficiency and electrification with a priority being on the load, moderate income households and disadvantaged community. And the panel also wants to ensure that that efficiency, electrification and resilience in public housing is supported and accelerated across the, the State they recommend creating a retrofit and electrification readiness fund to supplement incentives to cover the cost of non-energy building improvements that are necessary before energy projects might be the undertaken and lastly to healthy homes, services, and funding across housing, health, and energy improvements for low income households to fund green and, and healthy housing retrofits.

I do have a few additional slides on transportation but in the interest of time, I might stop here and see if there are questions. I guess the, to sum up what's in the, the transportation slides, I would say the we need to see similarly dramatic reductions in greenhouse gas emissions and that largely required converting the transportation sector to run primarily on zero emission technologies. So whether that's electrification or, or hydrogen fuel cells and so really I would say a lot of nice service does work is right in the, the wheelhouse of a lot of the recommendations coming from the panels. And all in all will be looking at even more of the types of programs and services that nice has historically provided. And so with that, I'll just say thank you and Steve, there are any questions on this.

**Chair Kauffman:**

Well, I'll, I'll, I'll kick it off then with some questions, Sarah. So I want to go back to Jay's comment when we talk about cost. How do we think about this? And I know it's a hard question or hard answer, how do think about marginal cost because their cost of doing nothing. But there are some things too, that we know our costs that we are, are currently incurring, but aren't

necessarily internalized. So you mentioned health is an example. So State is already spending a lot of money on health. So, so there's that question. There's the hardening stuff that I think that Jay was implying, then there are the costs of outages and stuff like that. So the other thing is there's also, I mean, it's hard to know of, but, but at some point it's certainly possible that the feds may have a cost of carbon during the period.

And so, again, how, I'm just curious how we think about the sort of marginal cost question. That's the first question then the second question is cuz when you talked about appliance standards and so forth, I'm curious about the work that you think is gonna happen or is happening in terms of coordination with other states so that, you know, we get the benefits of, of scale and you know, nobody's gonna make a product just for New York State. And then the third relates to when in terms of the process, when there are certain things that NYSERDA has already been doing, like the manufactured housing, when, when does this stuff sort of come together?

**Sarah Osgood:**

Okay, sure. Starting with the, with the marginal costs I would say the integration analysis is, is taking all the recommendations from the panels to look, to see what the, the, the incremental costs and benefits would be of all the recommendations. And that will also include a variety of scenarios that will look at perhaps kind of pushing on different policy levers, more or less ultimately the panels themselves come up with some of the cost estimates, but there is still more work to be done to determine what, what these costs are and how they will be paid. I think the one of the greatest opportunity will be, I think personally working with new markets to help understand what they need to help internalize some of these costs. So for an instance in, in housing, the mortgage, you know, lending community, what do they wanna see in terms of healthy homes?

What, what would move them to make them value some of these approaches that, that we're working to take? Are there things that they would value that, that we can basically take advantage of to help internalize some of those, those costs? So we don't have it all figured out. We need, there's gonna be a lot of, of, I would assume public private part partnerships. But clearly all the funding cannot come from the state. The State just doesn't have that amount of funding. And so we need to look at ways to reduce costs overall. And I think, you know, kind of that almost feeds into some of your other your net ask question about coordination with other states on appliance standards and such. We do some of that now. And I think the RGGI program, the regional greenhouse gas initiative is kind of one area that connects us with a number of other of minded states in the, in the region that are looking to pursue some of these same types of initiatives.

And working with them is certainly a way to to help move the market a bit faster than we would be able to do just on our own. And certainly at the federal level you know, movement there on carbon pricing or clean energy standard of, of some sort for all of the states. I mean, that would also help to level the playing field in some respects. So at New York, by taking these important and necessary actions, aren't inadvertently disadvantage itself economically compared to, to other states.

**Janet Joseph:**

And, Sarah perhaps, I can jump in on and kind of build on that in terms of the regional coordination and Richard, your last point about the work that we're already doing, you know, how does it kinda come, come together? So as, as Sarah said, RGGI is, is one example of regional collaboration, but specifically on, in the codes issue, we're working with several regional and national organization to try and indeed do exactly that at the biggest largest market area to push for these more efficient appliances, carbon neutral appliances. So we're also working with Ashray, we're working with the New Buildings Institute, RMI, the Northeast Energy Efficiency of Partnership. And there's an association of groups focused specifically on appliance standards. That's trying to harmonize regional work. So we're, we're, we're definitely attuned to that and the bigger the market, the better for sure, for the, these different equipment driving standards.

So that's, that is a top priority in terms of how do things come together, what we're already doing, maybe best way to answer that is, is by a, an illustration. Think you're probably familiar with some of NYSERDA's work with new construction under, or the clean energy phone fund. We've been driving high performance buildings with new construction and trying to get more efficient buildings and more electric buildings. Let's just pick on single family for, for as, as one example. Well, one of the recommendations that we have proposed is that by 2025, all single family, new construction needs to be highly efficient and all electric. So we're working right now, 2021, 2022 forward driving the market leaders to show that they can do that at a cost that is competitive with conventional. Our incentives would be driving down towards zero by 2025 when the regulations would kick in. So that's an example of how we're working with market leaders to try to show, you know, it can be done in a way that's profitable, affordable, and good for consumers and our programs or our incentive for, for new construction, just picking on single family would tail down as the regulatory drivers take off. So that's one example of how, you know, our current work with the clean energy fund would comport with these recommendations, should the Council adopt them and, and we move forward with promulgate and there's many other examples like that. So hopefully that, does that kind of answer your question or, or give some color to

**Chair Kauffman:**

All right. Just try to find my button. Thank you. No, very good. Thank you. Other questions?

**Sherburne Abbott:**

Yeah. I had a couple of questions, but I just wanted to follow Janet's last very good points. One of the things that strike strikes me is, is that it's a real opportunity for NYSERDA to kind of look at across the Board, all those things programs that you have just been talking about to see now that we have this, the beginning of this strategy where NYSERDA could have biggest impact in the near term in ways that, you know, bias some time to the regulatory and legislative frameworks kick into place, because that's one of the ways in which New York State could lead in, you know, and especially helping 'em at the national level, how you take some of this stuff to scale and cuz it's gonna be the biggest problem while you know, the need is here. The legislation is often the distance and you know, what do we, what do we do now that we can, can really make a difference and show the public that it works?

Anyway, that's just a point I, I had just had a specific question maybe for Sarah, for John, you know, since following on Jay and, and Richard's excellent points, which is thinking about, you know, how we deal with risk. One of the thing I, it's not clear to me from the State perspective, what, what assessments stand? I mean, are you looking at you looking at, IPCC numbers, the national climate assessment is New York State. What, what's the, what are the scenario? What are, what are informing the scenarios and how are they connected with, you know, this, this, this varied in my view, since I've been looking at this stuff for 35 years every, every single time and a new, the new scientific numbers come in, it's worse than we thought. So you know, the latest NASA stuff. So we have to really double down on, you know, what are these, what are these set?

What are the, how do the assessments come together in a way that informs very localized decision making in terms of resilience and understanding risk and perception of risk across some of these areas. And so I'm, I'm interested in, you know, how you're thinking about the integration of the, IPCC national climate assessment, State analysis stuff, and how this works together. And, and likewise on the, on the, you know, it seems, this is really gonna be where the rubber meets the road in this integrated plan. And so I'm kind of interested in how that's gonna go forward.

**John Williams:**

Yeah. And maybe I'll jump in Sarah and then you can you know, again, fill in in a guess that I might lead. So I, I agree with you Shere and it is really what a ton of work is really gonna be going into, you know and it is a constant learning process. Maybe I can put it that way. And I think we just have to set ourselves up that we are really in more of a process than in any kind of thought that we have kind of firm knowable understanding of all potential impacts at any one particular time. So, you know, our climate project is really going to begin getting, add a lot of that. It will be pulling together kind of, you know, who we see as our, our best New York State scientific and academic experts to and economic experts to help us understand, you know, how we should be thinking about, you know, whether it's current, IPCC standards or, or whether there's new emergent information coming out of, you know studies and literature, you know, certainly we wanna be kind of on the cusp.

And I think New York will always be sort of somewhat on the, the front end edge of, of learning. And from term that learning will be able to then figure out the best way to apply that whether it's to NYSERDA programs, whether it will be informing how the State and other State agencies should be considering the investments that they need to be making and, and the factors and considerations that we should all be building into our decision making. You know, I'll say one thing. So, so I think you, you know, you're, you're are asking really quite a good global question and to the degree that we are going to try to put some of those processes in place particularly through the climate 2.0 study, we'll, we'll be doing that. And, and perhaps we can have a, a more in depth understanding of, of that important work at a, at a future meeting we'll we can certainly do that.

And so I would say that you know, maybe just to a specific point also to, to the point you're making, is that, you know, part of what the Climate Act also requires us to do is to really kind of pivot off a little bit of, you know, what may have been foundational IPCC analytical work, you know, using a 100 year global warming potential across all greenhouse gases and, and looking at it from a 20 year potential that will certainly give us a different kind of perspective on what the

emissions profile in New York will look like. We, we do have a little bit more work to refine on that outcome, but that will become part of our scoping plan process. And, and we'll also have to help inform how we're thinking about these scenarios for this integration analysis and, and you know, what the what the, what the needed recommendation sets will need to look like in order to make sure that we are taking action at the appropriate pace and kind of hitting all of the appropriate activities. So a little bit of a high level answer, unfortunately, Shere, but hopefully that does help give a little bit of kind of perspective on how, you know, we, we are kind of putting ourselves some, putting some structured work and analysis around the way we wanna try to get it.

**Jay Koh:**

Can I just make one comment here? And that is just to suggest to, to, to Richard's point and a bit of shares as well, just that there are be a pathway that includes engagement with potential private sector sources of financing and their consideration. So, you know, I think how mortgage lenders will look at this, what they'll take account of how rating agencies will look at this, because many of the improvements that are, that are being considered here, whether they're increased resilience to hurricane or storm or other types of impacts or better energy efficiency or more long term you know, value for properties, if those are structured in a way that lenders and other, you know, whether it's pace financing systems or mechanisms can take account of them from the beginning, then that value can be evaluated and captured.

And there might be ways to affirmatively design, these sort programs and, and interventions in a way that you know, takes account of those factors. And if we then get better mortgage rates and better ensure rates, because we're having more efficient, lower cost and more resilient homes and that can be directly reflected in better credit quality, because they're simply more secure and cheaper to own and cheaper to operate houses than I think some of this kind of, you know calculation of how do we actually met the value on the increment might be captured by in a way that's digestible by the market from the get go. So I would just encourage that kind of outreach and engagement. I'm sure it's somewhere on your plan, but it's something that could have an important impact on New York's housing market.

**Commissioner Dominguez:**

So, Jay yeah, this is where to raise. I just wanna underscore, I think that's an excellent suggestion as we are, you know, looking at all the different financial mechanisms here it is a more global approach and and your suggestion is, is a very good one.

**Sadie McKeown:**

This is Sadie, if I could just comment around that, cause I was on Janet's working group and we did really elevate the issue of private financing and really elevating for, you know, private debt of all types, but mortgage capital, primarily as it relates to buildings, what the risks are of non-compliance. And, you know, the risks are particularly in New York City, when you look at local law 97 and fines but from an insurance perspective that, that is an important thing. One of the groups that was not at the table in any of the working groups were as finance or, you know, the department of the State banking department. But I think it's really important for NYSERDA to try to engage capital much more directly because a lot of the financing mechanisms that have

grown up around this sector have been driven by people who are interested in technology and science and not really understanding money and finance.

And it's not a bad thing. It's just that in it, there's much more capital in the mortgage markets and the consumer markets than there will ever be in the pace markets or, you know, the Green Bank markets. And those are meant to instruct and inform private capital and making that connection I think is really, really important. And I think NYSEERDA sorta can play a real role in that the other comment that I just wanted to make was I was very impressed with the combination of Janet Joseph and RuthAnn Visnauskas as the coaches of the, the Buildings Committee, because RuthAnn Visnauskas as the Commissioner of Housing has a lot of levers to pull as it relates to driving demand for electrification and decarbonized buildings. And I think taking her through that this process alongside of Janet really informed her about when we're putting public money into multifamily properties for affordability, we really should longer be doing.

So if they're gonna hook up to fossil fuel, at least on the new build side. And I think she really came around to that. And, and so then NYSEERDA incentives really need to line up with housing incentives to the extent that it costs more so that it's easy for the user and not another source of complication in what is an already affordable housing world. So affordable housing is one opportunity to drive demand and we have a lot of it on the new build side in New York. And I really thought that Janet and RuthAnn did a great job of, of working together to, to set the stage for that. So I just wanted to make that common.

**Janet Joseph:**

Thanks Sadie for, for that and, you know, sort of make it this all real just to share with the Board, we are rolling out a collaborative with homes and community renewal HCR should hit the market this summer where we are actually integrating our NYSEERDA to offer right into their financing deals. So that's exactly the, a kind of you know, reduced frictional transaction that Sadie's talking about. And we're, we're very excited about that. And that was sort of a spinoff of this, of this partnership and one example of how we're sort of adjusting what we've historically done to hopefully have a bigger market impact going forward working through, for example, the housing finance entities.

**John Williams:**

Yeah. And another, another thing to just also bring up to, to the con months from the group, is that what we do wanna make sure that we are putting the appropriate lens on kind of these financing opportunity spaces and, and how we need to make sure that we are integrating the, these types of outcomes in the way we're looking at our recommendations and in the scope been planned generally. So, so we will be you know, convening a number of different forums that one series of which we will be looking at these kind of just for lack of a better term kind of financing potential financing outcomes or, or things that we should be taking into consideration as we are looking at the scoping plan generally. So maybe to do a little bit of real time thinking here with Sarah, you know, we can certainly look at expanding our thought process, maybe two rating agencies and, and other similar types of institutions to make sure we have the appropriate perspectives that, that really can give that insight as to, you know, what the decision making maybe currently is, is being made on and, and where we need to see that shift so that we do



ensure that kind of our clean energy and resiliency outcomes are integrated into the way we're thinking about capital.

**Arturo Garcia-Costas:**

May I ask a question?

**Sarah Osgood:**

Go ahead, Arturo.

**Arturo Garcia-Costas:**

So I just have a couple questions about how the CLCPA implementation process is interacting with some existing State law and local laws. Could we get a set better sense about when they're gonna come up with a definition of disadvantaged communities and what the timing of that is and how that's gonna interact with existing legal mandates, such as an article 10 generation, the environmental of justice analysis there, and finally building on what Sadie and others have been talking about what is the thinking right now about how this process is gonna interact with the ongoing use of number four heating oil in New York City, and the fact that that is gonna be allowed to be used until 2030 at the moment, at least. So those are, those are my questions.

**Sarah Osgood:**

So for the climate justice working group and the definition of disadvantaged communities the, so the climate justice working group is working on that definition right now. There's, there's a lot that can go into that and a lot that needs to be kind of considered. I think the, the schedule is that we wouldn't anticipate the, the disadvantaged communities criteria being released later this year, I, I believe in the August or Septemberish timeframe, but there's no formal deadline for that. And then there I believe there are also public hearings on that disadvantaged communities before it's finalized in with respect to how it's being, you know, how it will impact other processes in the State like article 10. That's a really good question. I don't think we have all the answers at this point.

Disadvantaged communities as a term, I think is new to the you know, it was introduced with the Climate Act. And so I actually used to work on article 10 back when I was at the, the department of public service. And so there, the intervener funding that's provided for instance I, I doubt it would change that, but in terms of considering the impacts on environmental justice communities, that's currently required to be considered in the article 10 pro process. I imagine that that would continue and perhaps you know, there's the opportunity or the ability for the siting Board to request that consideration of disadvantaged communities also be considered alongside that in, in those analyses. The term isn't actually in other processes like article 10, however I, I think there's still the ability to incorporate those communities kind of in the, in the spirit of what some of the other laws were when they were created were, were, were thinking.

**Janet Joseph:**

And I can jump, oh, sorry. I was gonna pick up the heating oil if you like, Sarah.

**Sarah Osgood:**

Thank you. I was gonna ask that.

**Janet Joseph:**

Okay. So on the heating oil issue the dates here are significant. So what the panel proposed was that after 2030 for single family buildings, you could know longer replace a furnace or a boiler. You'd essentially have to go electric. And after 2035 for multifamily and commercial, you need to go electric for existing buildings. So we do envision some continued use of, of heating oil that point. Now, this is an example where our I'll call it voluntary programs will, will step in and try to reduce the use of, of heating oil. As an example, we have an initiative that we're rolling out, focusing on schools and in particular disadvantaged schools, we're gonna try to help those schools accelerate their process of getting off of a number of a number two fuel oil as, as, as an example. So we do envision some continued use of fuel oil until those points in time.

And I think that brings up a very important point and issue about, you know, hard to electrify buildings. And I don't think I will say the panel didn't land solidly on this, but we acknowledge that there are some buildings that will be difficult to, to electrify. And we probably are going to need to think about some other form of low carbon fuel, whether it is a biofuel or hydrogen or R G you know, you, you, you pick it. But that's, I think work ahead to really figure out how to get to, I'll say that last 10 or 15 or 20% of, of the buildings.

**Arturo Garcia-Costas:**

Thanks, Janet. I just wanna point out that you already have hotspots of buildings that are using number two, number four, heating oil in New York city, and mean having those hotspots exist all the way to 2035. I just don't think is an acceptable outcome given the spirit of the CLCPA.

**Janet Joseph:**

Yeah, no, it's a great, it, it, it's a great point. And then we're, we're going to have to figure out whether we address those hot spots through I'll call it, you know, the voluntary incentive programs, or there is a more accelerated regulatory schedule. I mean, those are the sorts of trade offs, but that's, A's a good point.

**Doreen Harris:**

If we could. First of all, with apologies, Sarah Osgood needed to leave to speak at an event. But I, I will say we're happy to continue the discussion. You have the benefit of many folks working on the Climate Action Council here in the room or the virtual room. I, I did wanna double back to the question on finance though. We were able to have John Lochner join the meeting. And I felt as though we had, had missed a, a critical portion of our work with respect to, to our innovation teams efforts both internally and, and with other agency. So, John, did you wanna jump in on that topic?

**John Lochner:**

Sure. Thank you, Doreen. And just verifying my audios working.

**Doreen Harris:**

Yep. Yes it is. Sounds good.

**John Lochner:**

Great. Thank you. Yeah, I just wanted to mention, you know, over the past year NYSERDA has signed a memorandum of understanding with the department of financial services and is working with their first ever Director of Climate Finance to assess how we can coordinate with the regulator on that side with some of our programming. And we recently brought on someone new to my team with a long background in, in finance, at a large bank in, in New York city. So we're starting to pull together, I think a team which can address some of, of the comments made here more holistically. And, and we're also working on some programming, which, which is not yet reached Department of Public Service but, but is in our CF petition budget that that would address some of these issues as well. And so we look forward to continuing to share more of that information as we can move forward on those initiatives.

**Chair Kauffman:**

Okay. So what's the next step here in terms of reporting back from time to time to the PPC?

**Doreen Harris:**

Well it, it would be clearly Sarah shared the schedule for the coming say six months. It, it wouldn't be a bad idea to, at a minimum. I think once we have the scoping plan in, in a pretty organized format, I think that would be a good time to report to the PPC for sure. Which would be again later this year John Williams, what are your thoughts on, on of the findings of the integration analysis in the interim?

**John Williams:**

Yeah, you'll, you'll forgive me for not having the schedules all kind of immediately at my fingertips, but to the degree that we can look at our next PPC meeting I think is falling in October. And you know, if you have some good output coming from that integration analysis, happy to happy to put that forward and, and provide that, that look into that. I, I would say after that, you know, when we're in January, I, you know, we are on a schedule to, to have that scoping plan, right. So certainly we'll be able to look at the various scenarios that will have been developed through that integration analysis work and, and what you know and what that scoping plan that we'll be making available to the public will also be looking for. So, so I do see that there are some good touch points for that we can organize for further.

**Janet Joseph:**

And Richard, sorry.

**Doreen Harris:**

Oh, please, please.

**Janet Joseph:**

Just to connect this back to sort of the NYSERDA planning process a bit January would be a great point to sort of take a look at what what's in the body of recommendations and what does that mean for what NYSERDA offers programmatically going forward. And also in January, we'll be talking about our strategic plan. So I think that could be a, an appropriate point for, for Board engagement a little bit more about the, you know, how does this stitch together with

where we're making investments at NYERDA. And I think January, you know, the January, April time period will be when that is sort of developed out.

**Chair Kauffman:**

Yep. Okay. That's good. Thank you. If there are no other questions or comments, since we're certainly gonna have more opportunities to discuss this, and I encourage Committee members to continue to weigh in with, with the NYSEDA team in between meetings and vice versa, by the way I'd like to go on to the next item on the agenda would, which is the review and approval of the Governance Committee Charter. So this item will be presented by Peter Costello. Peter,

**Peter Costello:**

Thank you, Chair Kaufman pursuant to the Public Authority's Accountability Act of 2005, each of the Authority's Committees adopted Charters saying forth the each Committee's responsibilities. One statutory requirement is to periodically review the Committee's Charter and determine what if any amendments need to be made. These recommendations are then presented to the Board for approval. A copy of the current Program Planning Committee Charter was included in your meeting package counsel's office does continually monitor relevant guidance from the Authority's budget office, the controls office legislation and other agency practices to determine whether to recommend any modifications at this time. Management is not recommending any changes to the Program Planning Committee Charter, happy to take any questions or comments.

**Chair Kauffman:**

I apologize for using Governance. It's the Program Planning Committee Charter. And so, again, Peter, I'm gonna ask you the same question. I know that our, we have we're structured differently than other public Authority's, but is there anybody else that any other Authority that you've checked with terms of benchmarking their Charters relevant Charters?

**Peter Costello:**

Yeah, so we do, we do periodically look at NYPA, LIPA, the Dormitory Authority, Environmental Facilities Corporation you're right. In terms of Program Planning we are unique in that the environment EFC, the environmental facilities corporation does have sort of a policy Committee, which is somewhat analogous. But as I said, we also look at you know, all of, all of the various guidance that's coming down relative to Public Authority best practices.

**Chair Kauffman:**

Okay, good. Thank you. Are there, are there any questions, if not, they have a motion recommending approval of the policy Planning Committee Charter.

**Members of the Committee:**

So moved.

**Arturo Garcia-Costas:**

Second.

**Chair Kauffman:**

Great. When Sara calls your name, please indicate whether you're in favor by stating aye, or opposed by stating no.

**Sara LeCain :**

Thank you. When I call each name, please indicate your vote. Authority Chair, Richard Kaufman.

**Chair Kauffman:**

Aye.

**Sara LeCain:**

Shere Abbot.

**Sherburne Abbott:**

Aye.

**Sara LeCain:**

Commissioner Dominguez.

**Commissioner Dominguez:**

Aye.

**Sara LeCain:**

Jay Koh.

**Jay Koh:**

Aye.

**Sara LeCain:**

Gil Quiniones.

**Gil Quiniones:**

Aye.

**Sara LeCain:**

The Charter has been recommended for approval.

**Chair Kauffman:**

Thank you, Sara. The last item on the agenda is other business. Is there any other business to come before the you're being none may have a motion to adjourn this meeting.

**Sherburne Abbott:**

So moved.

**Jay Koh:**  
Second.

**Chair Kauffman:**  
Thank you all in favor?

**Members of the Committee:**  
Aye. Aye. Aye.

**Chair Kauffman:**  
Any opposed? Very good. The meeting is adjourned. Thank you all.