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# *Committee Meeting*

of

SENATE ENVIRONMENT AND ENERGY COMMITTEE

ASSEMBLY ENVIRONMENT AND SOLID WASTE COMMITTEE

*“The Committees will meet to hear testimony from invited guests and the public on issues of climate change and coastal resiliency, and what steps the State can take to address these issues”*

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**LOCATION:** Toms River Municipal Complex  
Toms River, NJ

**DATE:** August 11, 2022  
10:00 a.m.

**MEMBERS OF COMMITTEE PRESENT:**

Senator Bob Smith, Chair  
Senator Linda Greenstein, Vice-Chair  
Senator Richard J. Codey  
Senator Edward R. Durr, Jr.  
Senator Jean Stanfield

Assemblyman James J. Kennedy, Chair  
Assemblyman Sterley S. Stanley, Vice-Chair  
Assemblyman Clinton Calabrese  
Assemblywoman Bethanne McCarthy Patrick



**ALSO PRESENT:**

Eric Hansen  
Christina Denney  
*Office of Legislative Services*  
*Committee Aides*

Joseph Gurrentz, Ph.D.  
*Senate Majority*  
*Committee Aide*

Rebecca Panitch  
*Senate Republican*  
*Committee Aide*

Catherine Tung  
*Assembly Majority*  
*Committee Aide*

David Harkness  
*Assembly Republican*  
*Committee Aide*

***Meeting Recorded and Transcribed by***  
**The Office of Legislative Services, Public Information Office,**  
**Hearing Unit, State House Annex, PO 068, Trenton, New Jersey**

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Bob Smith  
Chairman

Linda R. Greenstein  
Vice-Chairwoman

Richard J. Codey  
Edward R. Durr, Jr.  
Jean Stanfield



Eric Hansen  
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## NEW JERSEY STATE LEGISLATURE

### SENATE ENVIRONMENT AND ENERGY COMMITTEE

STATE HOUSE ANNEX • P.O. BOX 068 • TRENTON, NJ 08625-0068  
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### COMMITTEE NOTICE

TO: MEMBERS OF THE SENATE ENVIRONMENT AND ENERGY COMMITTEE

FROM: SENATOR BOB SMITH, CHAIRMAN

SUBJECT: COMMITTEE MEETING - AUGUST 11, 2022

*The public may address comments and questions to Eric Hansen or Christina Denney, Committee Aides, or make bill status and scheduling inquiries to Pamela Cocroft, Secretary, at (609)847-3855, fax (609)292-0561, or e-mail: [OLSAideSEN@njleg.org](mailto:OLSAideSEN@njleg.org). Written and electronic comments, questions and testimony submitted to the committee by the public, as well as recordings and transcripts, if any, of oral testimony, are government records and will be available to the public upon request.*

**The Senate Environment and Energy Committee and the Assembly Environment and Solid Waste Committee will meet jointly on Thursday, August 11, 2022 at 10:00 AM in the LMH Room, Toms River Municipal Complex, 33 Washington Street, Toms River, New Jersey.**

The committees will meet to hear testimony from invited guests and the public on the issues of climate change adaptation and coastal resiliency, and what steps the State can take to address these issues.

#### FOR DISCUSSION ONLY:

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| S416<br>Smith, B/Greenstein<br>(pending referral) | Prohibits investment by State of pension and annuity funds in, and requires divestment from, 200 largest publicly traded fossil fuel companies. |
| S2978<br>Smith, B<br>(pending intro and referral) | Revises State renewable energy portfolio standards.   |

Issued 8/2/22

For reasonable accommodation of a disability call the telephone number or fax number above, or for persons with hearing loss dial 711 for NJ Relay. The provision of assistive listening devices requires 24 hours' notice. CART or sign language interpretation requires 5 days' notice.

For changes in schedule due to snow or other emergencies, see website <http://www.njleg.state.nj.us> or call 800-792-8630 (toll-free in NJ) or 609-847-3905.

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**SENATOR BOB SMITH (Chair):** While the Chairman is coming out, it's great to be back. It's been two years since we had a shore environmental hearing, and it is a thrill to be back to talk about some really important issues.

Assemblyman Jim Kennedy runs the -- he's the Chair of the Committee on the Assembly side, and he's going to introduce his members, I'm going to introduce my members.

But, a couple of ground rules, if we can. Life is short, we're getting a little bit of a later start. We're going to have a hard stop at 12:30 p.m. So, we've got a lot of work to do in two hours, and, just so you know, we have a number of speakers before we even get to the two bills that are on the agenda. We have the Commissioner of the DEP Shawn LaTourette to talk about the impacts on the shore--

MR. GURRENTZ: Oh, there's no Nick, by the way.

SENATOR SMITH: I don't know what you mean.

MR. GURRENTZ: I'm sorry, Nick Angarone is gone.

SENATOR SMITH: Oh, okay.

So, in addition to the Commissioner, we have Eric Olsen, who is the Director of Conservation Programs at the Nature Conservancy. They'll be the first two speakers to talk about global climate change and the effects on the shore. And then we also have--

MR. GURRENTZ: So, (indiscernible)

SENATOR SMITH: So, Adrianna Zito-Livingston, Peter Kasabach, and Kimberley Irby. We're going to try and do all that in an hour, and then the second hour we'll try to do a half an hour on each of the bills.

For those people who are intensely interested in those two bills, this is a hearing -- no bill release, no votes -- we'll start to elicit some of the issues, and in the fall we'll be taking those bills up and there will be plenty of opportunities for people to testify. So, if you don't get a chance today, don't feel bad about it. There will be plenty of opportunities.

And, that being said, we are blessed. Senate Environment Committee is blessed, because we have Assemblyman Kennedy as the Chair of the Environment Committee on the Assembly side. And, I will say, the Speaker did a great job of picking the Chairman of the Assembly Committee.

Jim, if you would introduce your members, that would be great.

**ASSEMBLYMAN JAMES J. KENNEDY (Chair):** Sure. Thank you, Bob.

Sorry, I was running a little bit late this morning. Okay, let's see.

We have Assemblyman Calabrese, we have Assemblyman Stanley, Assemblywoman McCarthy Patrick, and myself.

**SENATOR SMITH:** Terrific; what a great crew.

And on my side, I have Senator Durr -- Senator, raise your hand. All right, and Senator Stanfield. And, both Senator Durr and Senator Stanfield are products of South Jersey. And, then I have Senator Linda Greenstein, who is Vice-Chair of the Committee, from Plainsboro, right? From Plainsboro.

So, that being said, our star witness today is Commissioner Shawn LaTourette, who has the second-toughest job in State government, as the Commissioner of the DEP.

Commissioner, if you would come forward, we would love to hear your thoughts on what the shore of New Jersey has in its future, and what we should be doing about it.

**SHAWN LaTOURETTE:** That is a lot of microphones.

**SENATOR SMITH:** Yes, and everything is hot, so be careful what you say.

**MR. LaTOURETTE:** Well, first of all, thank you all for the invitation to join you today.

I think everybody has been attuned to climate change, and the risks that we face in New Jersey. But, then, when I'm out and about the state -- and I travel the state a lot. Just yesterday alone, Senator Durr, I was in your district, in Salem County on a farm tour, talking to farmers about some of the climate impacts that they're experiencing. Then made it from there all the way up to Hudson County talking about some of the impacts being experienced in Jersey City.

And, I think that, as much as we believe we've gotten the message out from the work that we've all done together, between the committees that you lead, Senator, and you Assemblyman, and your colleagues, and the work being done at DEP -- but sometimes if the radio is not on, folks aren't hearing the song. So, in case I need to say it again, New Jersey is ground zero for some of the worst impacts of climate change. And, they're here, and they're happening now. It's the single-greatest threat that we face to our communities, our economies, our way of life.

It was explained again last year in the UN's sixth assessment report. The year before, in the New Jersey-specific report on climate change, distilling for our residents and our leaders the facts. Because the science is clear: Temperatures are rising; sea level is rising; extreme weather is becoming more frequent and intense. We have to make faster and more considerable changes to reduce emissions and, to the purpose of today's hearing, to build

our resilience to the climate impacts that we are already experiencing and, let me be clear, only get worse from here.

It doesn't matter if we go all solar or all wind or all nuclear. We could have every train electrified, every car electric -- and we should -- we could do all that tomorrow, which is a practical impossibility, and the conditions still only get worse. A product of the emissions we've already placed into the atmosphere, because the 1980s were the lost decade to get climate under control and we failed, miserably. And, so we have no choice but to build our resilience.

You know, we're sitting here one year after the remnants of Tropical Storm Ida brought New Jersey the deadliest floods that we've seen in a long time. It was the second-deadliest natural disaster that our state saw in a century. And, it only gets worse. Thirty precious lives lost, needlessly. And, as we sit here today, the state is just coming out of its fourth heatwave of this season. And, just this week I declared a statewide drought watch. And, these alarming conditions, they're exactly what the scientists, including those at DEP, said were coming. That we've been warning policy makers about; imploring legislatures and regulators to do more, right?

We are experiencing the very extremes the scientists told us about: Incredibly hot and dry conditions that stress our water supplies, our crop yields, and our public health, situated between periods of frequent and intense rainfalls that overwhelm our aging infrastructure that is undersized, causing extreme flooding, destroying property, and, sadly, costing lives. I think we only need to look at the events of the two months alone that make it so obvious that our state is struggling to reckon with the reality of a changing climate. The sudden floods that struck Bergen County amid pre-

drought conditions just last month. An unnamed storm. The arid conditions that are diminishing crop yields in farm-rich Salem County. The largest wildfire in over a decade that destroyed 15,000 acres of our pinelands just barely two months ago. And the 9-mile-long harmful algae bloom that is infecting the Millstone River right now and threatening water supplies in central New Jersey.

We should all be alarmed -- and not because I'm an alarmist. I think our friends in the environmental community, as much as I value their partnership, would tell you as much. I am a pragmatist. And, it makes good economic sense to get this state more ready. It is going to secure our bond rating to build greater resilience; to upgrade our flood hazard rules and our stormwater rules. Because we're not ready. But, empowered by sound science, a willingness to make wise choices, we can get ready. We can help our communities, our residents, our businesses, become more resilient to a changing climate.

I think we're here at the shore, and we're about to note the 10-year anniversary of Superstorm Sandy -- after which we immediately revised flood rules to elevate structures on the shore on an emergency basis. And, we're a year from Ida. And, I travel the state so much. Just two days ago, in Passaic City with Mayor Lora and Assemblyman Schaer, hearing the story about how flood conditions in the flood plain at a park where the recently crowned prom king and queen were swept away by a sudden flood rush and killed. Ended up in the Passaic River.

We have the power now to change this. But, it only happens one way: through concerted action at all levels of government. We have the tools to make a difference, but we have to be willing to change the status quo. To

build a little higher, a little more resilient. To manage for more stormwater. Because we're getting it now. And you may hear differently. So, from some colleagues of ours in the business community -- they are wrong, or they are lying. Because everything we build today is based on rainfall standards the last data point for which is from 1999. I could not sit at a bar and order a drink at the time our last data point was managed -- or the stormwater for which we manage the data point, where that comes from, rather.

Yet, in the last 23 years, rainfall has increased between 2 and 10 percent, depending on where you are in the state of New Jersey. More in the north and the central areas than along the shore and in southern Jersey. And, when we look ahead using a downscaling of reliable climate models -- because the science is real, and it is reliable -- that increase goes from 20 to 50 percent. If you were to look at the state of New Jersey in your mind's eye, draw a teardrop shape, put it around Millford -- or New Millford, rather. That's the hardest-hit areas for more chronic inundation. The communities that suffered during Ida and the inland communities that suffered from storm surge during Sandy. The flooding is going to continue. The Idas and the Sandys will come.

So, what do we do about that? It's not easy, right? But, we have to plan for it. The sometimes unsexy work of local land-use planning, we have to do it holistically. We have to empower and give resources to every regional and local government in this state. Because there is no one silver bullet that is going to protect our communities from the ravages of climate change, but there is a network of solutions, and it starts with climate-resilience planning. With putting more resources and more force behind the law, Senator Smith, that you shepherded, that requires climate vulnerability

assessments in the municipal master-planning process. And then from there, what we can do is identify where this suite of four things that I'll explain to you are best placed. We have the power to invest in flood resilience infrastructure -- the hard civil engineering projects that are going to help build more resilience for any community.

But, as I'm sure you'll hear from other folks today, that alone isn't enough, and we should not put all of our eggs in that basket, to build resilience for the shore or for our inland riverine communities. We have to pursue both engineered and natural climate resilience infrastructure; working with the Army Corps to continue partnering with them and matching the Federal funds that are getting spent -- including the billion dollars that's about to come to New Jersey for just a few projects and a few places. It won't protect everyone. We've got to continue our work on beach replenishment, but that alone isn't enough. We need to pursue naturally engineered living shorelines that will better protect our communities. Just continuing to replenish sand and watching it get washed away over and over again is not the only thing that we should be doing.

Some folks will tell you it is spitting into the wind. They're not wrong. But, we have to protect our shore economy, too, and that is a way to do it. And, most of that money does come from the Federal government. But, we have to protect and enhance the resilience of our natural ecosystems as well, because doing that will help us reduce flooding; to address weakened wave force; and to reduce heat and to address carbon absorption, just by engineering with nature. It starts with that planning, it helps us to figure out where we put -- make the hard, expensive investments in that hard civil engineering infrastructure.

And, then where we might strategically do more Blue Acres buyouts. That's the program that DEP runs to get folks out of harm's way. But, we have to ensure that that is used not just as a reactive disaster recovery method, but proactively to help get our families out of harm's way while creating more flood storage that can then double as parks and open space, or an opportunity to create regional stormwater infrastructure so that stormwater management is not only on the back of every developer in this state as it is now.

The biggest problem with our land-use practices as it relates to our climate-resilience needs is our postage stamp by postage stamp approach. It does not enable us to really reach the watershed-wide needs for flood resilience. It doesn't allow us to solve for the circumstances that Passaic City will continue to experience. More kids washed away from that park. We should all find that wholly unacceptable, and we have to modernize our flood standards. We cannot accept developers telling falsehoods and running around with their hair on fire because DEP wants to change a rule.

We don't do environmental protection because we love the trees -- in fact, environmental protection is the wrong name for our agency. Because we don't protect the environment for the environment's sake, we protect it for peoples' sake. Because when we restore the riparian areas or protect them, we're giving the water more places to go; we haven't done enough of that in New Jersey, it's why we see the flooding now. So, we must build a little higher; we *must* manage for more stormwater. It is not going to cost a fortune -- if you are hearing that, it's wrong.

To meaningfully confront the challenges before us, there's one thing that it's going to take that we all need to summon, and that is political

courage. Because our leaders have to focus on the long-term growth and protection of our communities. We have to commit ourselves to actions and investments that will take time to show their benefits, just like a warming climate took time to show us its fury. We have to acknowledge that it may not be possible to measure our success in the next budget or on the next ballot. We have to have confidence. Confidence that our successes will be measured instead in the safety, security, and resilience that we leave our children and the communities that they will inherit.

I thank you all for this opportunity. If you hear urgency in my voice or passion in any of these words, it is because we are *not* ready -- but we can be. If we all pitch in, if we do it together. The only way we ever do anything that matters.

So, thank you all. If you have any questions, I'm happy to take them.

SENATOR SMITH: Commissioner, your words are stunning, and we appreciate you being here today. Please keep up the good work.

We have such a tight agenda we're going to keep the questions absolutely to a minimum.

Assemblyman Kennedy.

Mr. LaTOURETTE: Thank you, sir.

ASSEMBLYMAN KENNEDY: Thank you.

Next, we have Eric Olsen, Director of Conservative Programs, and Adrianna Zito-Livingston, Coastal Projects Coordinator.

**E R I C   O L S E N:** Hi, good morning, Chairman Smith and Chairman Kennedy and distinguished members of this Committee.

My name is Eric Olsen; I am the Director of Conservation Programs for the New Jersey Chapter of the Nature Conservancy. I have been working on land and water conservation issues in our great state for more than--

UNIDENTIFIED AUDIENCE MEMBER: Speak up, please.

SENATOR SMITH: By the way--

MR. OLSEN: Do one of these work?

SENATOR SMITH: Yes, but I wonder -- are they turned on? Let's take a look. I'm not hearing that tap-tap-tap.

MR. OLSEN: Is that better?

AUDIENCE: Yes.

MR. OLSEN: Thank you.

So, on behalf of the Nature Conservancy of New Jersey, I applaud Chairman Smith and Chairman Kennedy and Legislative members here today for holding this hearing; this is an important topic.

TNC, as we're called, is one of the leading conservation organizations in the world, with a presence in all 50 states and over 70 countries worldwide. Our mission is to conserve the lands and waters on which all life depends by working in a collaborative science-based manner with a variety of partners. In New Jersey, TNC has helped to protect over 60,000 acres of open space to preserve habitat for biodiversity; we've removed dams to restore riverine habitats; restored coastal marsh habitat using dredge materials; and promoted at the state and local levels the use of nature-based solution to reduce the impacts of climate change.

As New Jersey experiences the increasing impacts of climate change, we want to ensure that New Jersey's iconic forests, rivers, and coasts

are healthy, resilient, and connected. That we have invested in the health of our coastal habitats to benefit millions of residents and visitors, and that our cities are climate resilient and healthier. Today, TNC would like to focus on the importance of nature-based solutions and making all of our communities more resilient while maintaining the valuable habitats, enhancing ecosystem and fishery sustainability, providing recreational opportunities, and sequestering carbon.

From our nation's capital to our state's capital, our elected leaders -- you all -- have acknowledged the growing impacts caused by climate change and have committed to making our cities, our towns, and our homes more resilient to anticipate the changes on our horizon. The Nature Conservancy of New Jersey shares the State's goal of increasing resilience in New Jersey and believes that nature can be pivotal to help reduce the risks of these impacts statewide.

Climate change, we know, will affect everyone. But, certain people in certain places will be affected more than others. Some areas and people are more exposed to climate-related health impacts such as extreme heat, flooding from extreme weather events, and tickborne diseases. We strongly encourage expanded efforts to ensure that the needs of our socially vulnerable communities are addressed holistically and implemented thoughtfully with equity in mind.

We're making good progress. Governor Murphy took steps to address the State's climate change issues by signing Executive Orders 89 and 100, and our Legislature are reentering New Jersey back to the Regional Greenhouse Gas Initiative -- major steps. The Executive Orders led to the development of a New Jersey Climate Change Resilience Strategy, and a

Coastal Resilience Plan, and a call for regulatory action to address precipitation, flooding, and temperature impacts that we are projected to experience.

However, there is more to be done -- as you know, that's why we're here. On our coast, the Nature Conservancy is collaborating with agencies and organizations with similar goals in applying what we've learned from our on-the-ground restoration projects to plan, implement, and advocate for increased marsh-restoration projects throughout coastal New Jersey. Championing nature-based solutions like restoring marshes along our coast are a win-win for addressing climate change. These restoration tactics are practical, effective, and provide numerous benefits to communities. Increasing the health of New Jersey salt marshes will protect peoples' homes and livelihoods from changing climate conditions by absorbing water, storing carbon, and slowing down wave energy.

From a broader level, it is TNC's goal to see New Jersey's marshes protected, restored, and enhanced systematically, similar to how our beaches are in the Beach Replenishment Program. New Jersey has taken steps and has proposed solutions to many of the issues facing our state. The State released their coastal resilience plan and the State's Climate Adaptation Strategy that calls for increasing nature-based solutions and nature-based resilience measures. Our organization strongly supports many of the recommendations in this Climate Resilience Strategy and strongly encourages implementation.

I wanted to highlight a few resilience actions we particularly support, and would like to see attention and more resources provided for a successful execution. First, we would like to see the acceleration of marsh

restoration through regional sediment management. Nature Conservancy shares the Department of Environmental Protection's goal of ensuring that valuable sediment dredged from our boat channels remains in the estuarine system as a resource for back-bay habitats. Our organization is engaged with both NJ DEP and NJ DOT, as well as stakeholders across the state, on how to best manage clean dredge materials to benefit our salt marshes. The goal is to align the needs of our declining marshes with the need to maintain these navigation channels for more resilient coastal communities. Much like the way New Jersey engineers with nature along the ocean front to maintain our healthy beaches and dunes, the State should invest in developing a comprehensive program on how to best engineer with nature to maintain our healthy marshes.

Second, we should invest in an identification of shovel-ready salt marsh restoration projects to help inform future funding of coastal restoration projects, NJ DEP has begun the process of identifying coastal restoration opportunities through the Coastal Ecological Restoration and Adaptation Plans called CERAP. Current efforts will allow the identification of an initial set of priorities based on the ecological resilience in carbon sequestration benefits. However, an ongoing effort is needed to take opportunities to shovel-ready projects providing resources to plan, design, and permit these projects.

Third, NJ DEP should conduct a review of regulations to facilitate this restoration. Our organization commends the department's current efforts under the NJ PAC initiative to review and improve its regulations to improve the permitting process for coastal restoration and enhancement projects. However, we need to begin the process of adopting these NJ PACs.

Fourth, the identification of sustained funding for resilience initiative -- I'm sure you hear this a lot -- there are a couple of ideas that we've brought here. The success of our coastal restoration, most notably the restoration enhancement of these coastal habitats will depend on sustained long-term funding for these efforts. There are five areas that we've identified for deeper assessments.

First, we've been lucky to have the infrastructure funds, the IJA that's passed, that's a once-in-a-lifetime -- once-in-a-generation -- opportunity to establish a coordinated, focused effort to bring Federal dollars to New Jersey for climate change work as soon as possible. However, there does not appear to be a major urgency in our state that's necessary to make sure that we can make the most of this opportunity available to us. We encourage that there's a more coordinated, more ambitious push within the State to secure these funds for this work.

Second, funding and technical assistant resources are desperately needed for the development of local and/or regional resilience plans, at the municipal level. Potential funding models to consider, including the municipal vulnerability program established in the state of Massachusetts, which provides incentives to cities and towns to undergo action-oriented resilience plans.

Third funding source: The New Jersey Shore Protection Fund has primarily been focused on funding necessary beach and dune nourishment projects on the barrier islands. This is critical work. The review of the program and associated funding could create a vehicle to facilitate increase in investment, and the health of coastal salt marshes throughout our state.

Fourth, to help support the added cost of restoring coastal habitats to the beneficial use of dredge material, the State might want to consider funding sources for dredging beyond the gas tax.

Fifth, and finally, RGGI -- I mentioned that earlier -- we should consider having a percentage of offsets allocated to carbon capture projects directly on State lands. The State owns a lot of salt marsh in our state.

Which brings me to my final point, which is an increased investment in coastal wildlife-management areas. The state of New Jersey owns most of the non-federal salt marshes in our state, and to ensure that these habitats persist into the future in the face of climate change, New Jersey should expand management of its coastal management wildlife areas to take sea-level rise into account. For both the habitat benefits they provide, as well as the social and economic benefits to neighboring communities. Ensuring the successful use of clean dredge material to restore these salt marshes for prior sufficient capacity. While conservation partners can fill this role in the short term, as nonprofits, a long-term solution is necessary, and the Division of Fish and Wildlife will need more capacity to address these future needs on wildlife-management areas.

As the Commissioner mentioned, nearly 10 years ago, Superstorm Sandy left an everlasting impact on our great state. Nearly a year ago, Hurricane Ida hit New Jersey and claimed the lives of 27 of our residents. New Jersey continues to see the impacts of climate change, and, unfortunately, the increase in frequency and storms and the magnitude of their damage. We have the opportunity to prepare for the potential impacts -- let's do so now.

And, with me today, I have Adrianna Zito-Livingston, our Coastal Projects Coordinator, who will speak to the value of our coastal marshes, the work TNC is doing on the ground, and the impact it's having on New Jersey coastal salt marshes.

I thank you for your time and your commitment to New Jersey's environment.

SENATOR SMITH: Thank you for your comments.

We only have to ask all speakers to try and condense and summarize; a lot of people want to speak.

**ADRIANNA ZITO-LIVINGSTON:** Absolutely.

Thank you for the invitation and opportunity to speak with you today. Is my volume okay? Great.

So, as Eric said, I am excited to have this opportunity to share a little bit with you about the work that the Conservancy and our partners have been doing to advance the practice of beneficial use and really accelerate salt marsh restoration while there's still time for our coastal salt marshes.

So, coastal wetlands are an iconic and important feature along New Jersey's coast -- shore. Seventy-five percent of New Jersey's coastlines are fringed by salt marsh habitats. It's an area of about 200,000 acres; it used to be a lot more, but that's what we're left with. These meadow-like grass-dominated habitats are visible from the Garden State Parkway and our barrier islands. They are a valuable resource for wildlife habitat, but they also act as a buffer to protect coastal communities.

As Eric identified, most of the state salt marshes are actually in Federal or State ownership. That puts our state in a really unique-- We have a unique obligation and a unique opportunity to regionally plan a strategy to

keep our salt marshes in place for their multiple benefits, for our communities and for the wildlife that depend on them.

So, it's important to understand how salt marshes work, and I will keep my ecology lesson very, very brief. It's important to understand that marshes are not merely habitat, a place where salt marsh plants live. They are literally created by and sustained by marsh plants. So, the growth ranges -- the narrow growth ranges -- of our salt marsh plants are intrinsically linked to the persistence of these habitats, which is something that our coastal program is very narrowly focused on. So, keeping these marshes in place means keeping happy plants. That means they can't be too wet for too long in the tidal cycle.

Marsh plants are specially adapted to catch sediment that exists in the water column when water comes into the marshes on the tides, it carries with it valuable sediments. The plant's leaves help slow down that water, and then material settles out around the root systems. The roots of these plants are especially designed to hold the sediment in place and pile up, creating very rich peat layers, which sequester carbon. So, the marshes, over time, every time they're flushed with water have the ability to grow vertically with small, incremental changes. Our salt marshes have the ability to be resilient and to persist. The challenges they're facing now are related to the accelerated rate of sea level. So, the sea-level rise is happening faster than these marshes have the ability to keep pace. So, there are a number of studies, the State Climate Science Report has a lot of important details and a great synthesis on the threats facing our coastal wetlands and the trends in sea-level rise.

But, we're looking at about a foot, maybe more, by 2050. And, that's a very urgent situation for salt marshes. So, in salt marshes, where salt marsh grasses can live is really dictated by elevation. And, we're talking inches, not feet. So, as sea levels are rising and that rate is accelerating, marshes are literally drowning. Add to that our coastal management practice of managing navigable channels and removing that sediment, previously placing them in, essentially, landfills -- confined disposal facilities, due to the Clean Water Act.

That practice has added, or exacerbated, the problem by removing sediment from the system, where it could normally be moved around consistently by storm events and on regular tides. Removing that resource-- So, we're in a very exciting place now in New Jersey where our navigation managers, NJ DOT and the U.S. Army Corps of Engineers have made commitments to keep that sediment in the system and to utilize that sediment in innovative restoration techniques, like beneficial use of dredge material.

So, I'm very excited sitting here before you today. Since Superstorm Sandy, we have implemented pilot projects demonstrating the success of this technique to bring plants back to marshes and places where they had been lost, due to elevation loss with sea-level rise, and we're applying what we know to compare notes with other-- So, it's not the Conservancy or DEP alone that have been doing these projects; U.S. Fish and Wildlife service has been doing these projects, and we're convening all those partners together to compare notes and figure out the best way to maximize the multiple benefits for salt marshes and retain those, in addition to the salt marshes themselves. We're not looking for flat sediment disposal on our marshes,

we're looking for retaining those important characteristics of marshes. And, if we retain the coastal salt marshes in the state through these techniques, and everyone works together to get it right both from the dredging industry and the ecological side -- and we have a number of activities in those veins that I will not bore you with today. We're working on it as hard as we can, it's my every day.

We're in a position to keep the coastal protection benefits, the fisheries, nursery benefits, and the carbon sequestration benefits intact in our marshes in this state, which is very important to our resilience.

SENATOR SMITH: Thank you so much for your comments. Very, very helpful.

Our third group is New Jersey Future. Pete Kasabach, who is the Executive Director, and Kim Irby, the Policy Manager. I'd like to hear your views on what we should be doing.

**P E T E R   K A S A B A C H:** Good morning.

SENATOR SMITH: Go ahead, Pete.

MR. KASABACH: Well, thank you very much for having us. To both Chairs and to the Committee members, we really are appreciative of the opportunity to speak before you, and really appreciative of the fact that you guys came together to have this important discussion about a really critical topic.

My name is Pete Kasabach, I am the Executive Director of New Jersey Future. New Jersey Future is a statewide smart growth and sustainable development organization, and as I'm sure you can appreciate, climate change is integral to both of those smart growth and sustainable development. We work at the state and local policy level as well as helping

local governments implement both sustainable development and smart growth.

We are here today not just representing New Jersey Future, but also the Rise to Resilience Coalition. This is a coalition with the singular focus of advocating for climate change adaptation. I would like to thank our partners at The Waterfront Alliance who are a backbone staff to that organization and to that Coalition. The top priority of the Rise to Resilience Coalition is flood disclosure, and that's what we are here to talk about today: how New Jersey needs a transparent disclosure process for both prospective renters and buyers. Today, we are going to talk about why this is so important, and how we are lagging behind other states. We're going to share important background data with you and emphasize the urgency of moving forward on flood disclosure. We're going to then go into the elements of what a good flood-disclosure policy would look like, and we'll talk about the gaps in New Jersey's current policy and how these gaps can be filled.

So, I would like to introduce now my colleague, Kim Irby, who will go into more details and information about this.

**KIMBERLEY IRBY:** Thank you, Pete, and thank you to the Joint Committee for allowing us to speak today.

So, as you all know, due to New Jersey's geography and relatively high levels of development, our state is faced with threats from various types of flooding -- coastal, stormwater, and riverine. And, as we've seen in recent years, especially with remnants of Hurricane Ida and what the past speakers have commented on, flooding can be absolutely devastating to the quality of life in New Jerseyans, which is partly dependent on the dwellings in which they live.

So, because the inception of the National Flood Insurance Program in 1968, in 2019, New Jersey home and business owners filed more than 160,000 flood insurance claims that totaled over \$5 billion. In 2018, the Union of Concerned Scientists estimated, based on a high sea level rise scenario, that 62,000 homes in New Jersey will be at risk of chronic flooding over the next 30 years, and that figure is expected to nearly quadruple to over 245,000 homes by the end of the century. Floods have been incredibly costly to some New Jerseyans in the past few decades, and more will likely face rising costs in the decades to come. A 2019 report by Rhodium Group estimates that the expected average annual loss to New Jersey from hurricane-related wind and flood damage today is likely \$670 million to \$1.3 billion higher than it would have been had sea levels and hurricane activity in the 1980s remained constant. So, regardless of the progress that we make on our greenhouse gas emission targets going forward, a non-trivial level of increased flood risk can be expected.

In a report really stressed last month by the Natural Resources Defense Council shows that New Jerseyans who buy homes with a history of flooding can expect to pay tens of thousands more dollars in flood damages over the course of their mortgage than the average homeowner. So, based on a climate scenario representing current climate conditions, the report estimates that the expected average annual loss for New Jersey homes with prior flood damage is about \$1,700 compared to only about \$100 for the average home. So, over the course of a 30-year mortgage, this equates to roughly \$50,000 of expected damages to a previously flooded home, compared to only about \$3,000 for the average one. And, keep in mind that

these costs could double or even triple when factoring in the worsening impacts of climate change.

So, sea levels rise and heavy rainstorms become more common, many New Jersey communities can expect increasing vulnerability to flooding and thus increase financial liability. For homebuyers and renters to be able to make good decisions when choosing where their family will call home, they need sufficient information about flood risk. So, strong flood disclosure laws require sellers to inform potential buyers about any flooding damage to their property that they're aware of, and landlords to inform potential buyers of the same. The laws can also require disclosure of whether renters or buyers will be required to buy flood insurance for the property, or whether the property is in an area projected to flood more frequently or severely.

Currently, there are 29 states that have flood-disclosure laws in place, including our neighbors Delaware and Pennsylvania, and, although New York is not on that list yet, they have made progress on disclosure in the last legislative session. So, in a state where flood risks are high, like in New Jersey, disclosure laws are an important first step to understanding how one might be impacted by climate change. These laws provide consumer protections and transparency around climate risks.

Recently, FEMA released model state requirements for disclosing flood risk during real estate transactions, and that guidance is intended for use by elected and career officials responsible for state-level legislative action. So, that guidance lists 10 flood-risk disclosures that are commonly found in state disclosure laws, and/or legally mandated disclosure forms. So, examples of specifically those disclosures include whether the property is in a flood hazard area, and/or the FEMA flood zone in which the property is located;

the presence of an active flood insurance policy for the property; and the current cost of flood insurance premiums, previous flood events and/or flood-related property damage, and any past disaster-related aid provided, including dates and amounts, and those are just a few examples.

So, in terms of New Jersey, the level of disclosure here is much weaker compared to the national standard. So, for buyers, there is some level of disclosure that takes place when properties are sold by real estate professionals, but the questions on the disclosure statement are not numerous or specific enough to give potential buyers the information they need. So, in the 107 questions on the seller's property condition disclosure statement, there are only three questions regarding flooding. Those refer to property damage from fire, smoke, wind, or flood; whether the property is in a flood hazard zone; and if there are drainage or flood problems affecting the property. These questions mostly require a simple yes or no response with little to no further information provided. Additionally, there's no question concerning flood insurance claims and requirements and no guidance on future flood risks.

And, for renters, the disclosure requirements are even more sparse. There's only one, which is whether or not the unit is in a flood zone, which is already ambiguous on its own. Additionally, standard renter's insurance policies exclude coverage for flood damage, which many renters may not be aware of. Vulnerable communities in particular have expressed concerns regarding the growing cost of flood damage and insurance policies, as well as never being warned about the risk they face when they move into a new home. Much of these concerns can be attributed to an inadequate emphasis on flood risk in the current disclosure statements.

So, to strengthen the current flood-disclosure framework in New Jersey, we need legislation that requires additional and more robust questions on the current seller disclosure document, and requires lessors to provide a specific flood-disclosure form before the lease is signed. Specifically, disclosures should include all of those elements in the FEMA guidance that I mentioned earlier, as well as information pointing to online and updated future flood-projection maps and data so that they can understand a future increase in risk.

The legislation should be specific to flood risks, with the aim of raising awareness about climate risks, and it should also aim to enhance consumer protections and transparency and real estate transactions, and help to change patterns of behavior related to flood insurance, with the ultimate goal of reducing burdensome costs for tenants and home owners. In many states, flood-disclosure bills have passed in bipartisan efforts, with support from housing groups, the real estate industry, and environmental groups. And, recently, the National Resources Defense Council conducted a poll of New Jerseyans and found that flood disclosure has broad-based support both when framed generally and specifically to a change in the law.

So, from that poll, 83 percent of respondents agree that property owners should be legally required to share information about a property's past flood history to prospective buyers or tenants, and about 59 percent support changing the current law to require property owners to do so. The poll also found that flood disclosure has broad bipartisan support and that voters, particularly those in South Jersey, see flood disclosure as having a positive impact on home buyers and tenants in coastal communities.

So, in summary, flood disclosure is increasingly pursued as a strategy to protect communities, individuals, and local economies. The New Jersey Climate Change Resilience Strategy references flood disclosure as a law, and with further resilience and allow potential buyers to fully evaluate monthly mortgage costs and weigh the disaster-recovery costs prior to making an offer on a property. As New Jersey works to advance both decarbonization and resilience efforts, we must ensure that residents are able to make informed decisions for themselves and their families in the wake of grand climate risks.

New legislation with long overdue reforms would ensure that New Jersey homebuyers and renters are fully informed about the ever-increasing risks of flooding so that they can protect their belongings and families.

And I will yield to Pete for brief closing.

MR. KASABACH: I just wanted to add a couple of quick points, which is that we started the conversations with Senator Smith's office and staff about what a good flood-disclosure policy would look like and how that could move forward, and we've also initiated conversations with a large number of stakeholders across New Jersey.

To the point that Kim made, this is generally a move and a policy that has widespread support across the development communities, the environmental communities, local communities as well.

So, we're really looking forward to working with you all on this and we hope that it can move forward expeditiously.

Thanks.

MS. IRBY: Thank you.

ASSEMBLYMAN KENNEDY: Sure.

Next, we have Ray Cantor from New Jersey Business and Industry -- Government Affairs.

**RAYMOND CANTOR, ESQ.:** Thank you, Chairman; members of the Committee.

My name is Ray Cantor, I am with the New Jersey Business and Industry Association. I appreciate the opportunity to speak here today, and I will try to keep my remarks brief.

I just want to emphasize three points here today. One, sea-level rise is a reality. Two, we need to take regulatory and other actions to address that, but third, there's no need at this moment to retreat from the Jersey Shore. Let me address each one.

Sea-level rise, again, it's a reality. New Jersey has been -- much of the eastern seaboard -- has been sinking by 1 foot for well over 1,000 years, and no matter what we think about anything else we're going to continue to sink 1 foot over the next century, and the next century, and the next century. That cannot be avoided. What we need to figure out is how much more is sea level going to rise relative to the land in New Jersey. We have talked to experts, hired a forecaster, and we believe -- and based on all the latest data from the IPCC and the Federal government -- that we're going to see additional sea-level rise in New Jersey of 1-2 feet. So, that means we're going to have between 2- and 3-foot sea level rise by the end of this century, and we need to address that.

Our recommendations are we should be changing our flood standards. We believe at this point to go up 2 foot, we believe 2 foot is a prudent level to do right now. If trends and observations show that sea-level

rise is going at a higher rate than anticipated, we have 80 years to make those adjustments, or at least we have decades to make those adjustments. So, we believe that 2 foot is a standard we should be adopting right now.

We also believe that everything that was said earlier about the adaptation and using natural measures, you know, to enhance our coastal wetlands, using natural measures to enhance our estuaries -- for far too long those natural measures have been overlooked and have not been taking advantage of; we need to do that. We need to enhance how much money we put into our shore-protection funds, even though those are only short-term protections, they're important protections, and the \$25 million dedication can easily be doubled to \$50 million. That is almost a no-brainer of what we need to do. But we also need to look at other engineering controls, be they on the property level or on a regional level. And, we need to do so in a manner that allows for those engineering controls to be changed over time. We should be looking for-- Build in uncertainty into our engineering techniques. So, if we're finding a climate change or a sea-level rise, rather, is accelerating quicker than we think it is, then those measures, engineering designs, can be modified and made even more resilient. So, again, we should be engineering with uncertainty in mind.

And, again, I'll just repeat as well, given the sea-level rise -- which is alarming, which is going to cost, which is a problem and needs to be addressed -- there is still no need to retreat wholly from the New Jersey shore. There are certain areas of the Jersey coast and our riverine areas that cannot be protected. It is economically disadvantageous to try and protect them, and we have a Blue Acres Program that is out there and that should be buying up those properties. Again, we believe that even more money should be going

to the Blue Acres Program, and we should be taking people out of harm's way and returning some of these areas that probably should never have been built in the first place, and restoring them back to nature.

So, again, just to emphasize: Sea-level rise is happening; we need to address it through a combination of natural measures and engineering controls and shore protection, but there's no need at this point in time to retreat from the Jersey Shore.

So, I thank you, Chairman, for this opportunity, and I look forward to continuing this conversation.

SENATOR SMITH: And, thank you for your remarks and your brevity.

So, we have six people who signed up to talk about this portion of the program. We have 10 minutes left on this portion. If we don't get heard, not to worry. Every single hearing of the Environment Committee we have climate change, and people will be able to get their views in. There's no fair way to do this in terms of who speaks first, so Chairman Kennedy and I just put everybody in alphabetical order. And, we'll get as many done as possible. If we finish the second half of the program earlier, we will put the remainder up for comments.

Tim Dillingham, American Littoral Society, and with the comment that brevity is the soul of wit.

**TIM DILLINGHAM:** Good morning, Mr. Chairman, Chairman Kennedy, and members of the Committees, thank you very much for the opportunity to speak.

The American Littoral Society is a coastal conservation organization. We're based in Sandy Hook, we work from New York down

the Delaware Bay. We're very involved in adaptation and climate issues. Right now, we are conducting 15 separate adaptation, coastal-resiliency, and habitat-restoration projects. The biggest one is in Bivalve, in Commercial Township, where we are working to integrate marsh restoration, oyster reef restoration, and breakwaters to help protect the oyster fleet and the commercial interests there, as well as boost the ecological value of the site. We have been involved in restoration of beaches for horseshoe crabs and shorebirds along the Delaware Bay, and currently we have a project in Forked River and Lacey Township helping to protect the community which is quickly eroding away and falling in the Barnegat Bay through building oyster reefs.

I shared with the Chairman some pictures of this -- I will get this all out to you electronically -- just to show you. Our efforts (indiscernible) we're a proofing concept, right, to show that this idea of building with nature can both provide resiliency, can protect the natural ecological values of our coastline as well as the economic interest in our communities. And, so far it's been very, very successful.

I want to thank the Commissioner for his comments; they were great, they were passionate; and, they were right on target about the need to move forward and to take steps. From our experiences, I would recommend a couple things we need to think about. Particularly, as we look at Federal dollars that might come into the State, and really positioning ourselves to take advantage of that. We always hear about New Jersey paying into Washington and not getting as much back, and here's an opportunity to address a critical crisis that we face, and to do it well.

One is really need capacity. The Department needs capacity. They do, effectively, work with ourselves, with the TNC and others, in

partnership. But, to really take advantage of the dollars that are available, take advantage of the moment, they're going to need additional capacity. Both to manage the State lands that we already own for carbon sequestration purposes and resiliency. So, I hope you all will think about that as we go forward on it.

There's a huge need to focus, right? I'm glad to hear Mr. Cantor's recognition that there are places that can't be defended and ought to be reverted back to nature for the capacity that nature can provide us in helping to protect our built communities that are adjacent to it. We've lost over 50 percent of the tidal wetlands base in the state of New Jersey that was here at the time that the first Europeans showed up. That's a tremendous opportunity to go back and restore that for all the values that you heard people explain today.

And then, lastly, this idea of technical assistance. I sit as the Co-Chair of a group called the New Jersey Coastal Resiliency Collaborative. A lot of academics, a lot of practitioners, and the idea is to try to make technical capacity available to, particularly, municipalities, to integrate both risk assessments, adaptation approaches, teach them how to do it, empower them to do it. Because so much of our local control, local decision making, rests there. They don't have that capacity innately. A lot of it can be complex, but, there's a tremendous brain trust in this state that just needs folks -- and broad and made available to folks that are actually responsible, and I think, in most cases, willing to take on this challenge of how do we adapt to the impacts we've already built into the atmosphere and the climate and look to the future to ensure we have a resilient, safe coast that provides us both with

the natural values that we all love and enjoy and gives us a place to live that we're safe and we can use safely.

Thank you very much for your time, I appreciate the opportunity, and I'm obviously available for any questions you might have.

Thank you, Chairman.

ASSEMBLYMAN KENNEDY: Tom Fote. New Jersey Anglers.

**T H O M A S P. F O T E:** My name is Tom Fote, I basically sit as the Governor's appointee to Atlantic States Marine Fisheries Commission. I've done that for almost 34 years continuously, with a few breaks in between. I also serve at MFAC, which is the Marine Fishery Advisory Council, and the Secretary of Commerce on Fisheries issues and NOAA issues.

I spend a lot of my time on climate change and how it affects fish populations and what's going on there, and a lot of the problems we have is in the nursery areas, because we have lost the impact of the way they can basically breed because of loss of habitat -- marshes and things like that. We're seeing that we do the right things as far as controlling fishermen and their fishing habitats and what they can do, but we can't solve the problem.

We put heavy restrictions on summer flounder, black sea bass, I can go on with the list, and it doesn't seem to do the job. We're not getting the recruitment, and that's because the nursery areas are affected by warmer water and loss of habitat. We need to do that to restore the fisheries. You can't do on the backs of fishermen both commercial and recreational, because it's just not working. I mean, I volunteered to do these jobs years ago with the idea that we were rebuilding these stocks and 34 years later I'm fully depressed because I've gone just the opposite way. We're in more and more crisis with every one of the species that we're dealing with.

And, the problem is we're seeing species in New Jersey that we never saw before. You can go out and catch cobia here; you can go out and catch all kind of triple (indiscernible) and your basic catch fish that are supposed to be in Florida. They're now coming up. We've got a manatee that usually makes a tour of New Jersey every year from Florida and goes back. But we should be looking at when (indiscernible) this.

And, I'll just point out two small facts. Surf clam industry in New Jersey was worth \$230-240 million from surf clams we harvested in State waters. That is gone. Because of the warm water, they have moved out of State waters, they've moved north, and farther out to sea. We had a viable lobster industry -- not as well as Maine, but we had a viable lobster industry in this state, and basically we have seen that collapse. I mean, we've gone from-- I get half the number of permits from the last 10 years, and recruitment hasn't been done. We don't see baby lobsters in the last 15 years. If it was managed instead by the Atlantic States Marine Fisheries Commission, by NOAA, we would have shut the fishery down in New Jersey, Maryland, Delaware, New York, and Massachusetts, all the way up to Massachusetts at the southern end.

So, those species are basically (indiscernible), and the recreational industries are saying, "We've lost party boats, charter boats, tackle stores, and the industries they represent." And we need to basically (indiscernible). Recreational fishing is worth \$1.3 billion to the state of New Jersey. We have 800,000 anglers that live in the state, another 400,000 or 500,000 that come from out of state, and the commercial industry supplies fish for all our fish markets and all our restaurants in here, so we need to basically support them.

And, with that, I'll make it brief and get off the table, and thank you for this time.

SENATOR SMITH: Thank you, Tom.

So, the first hour was to be dedicated to climate. I have four other speakers who wanted to speak, and if we can finish the two bills we'll go back. I would point out that we have a very detailed position paper from Doug O'Malley from Environment New Jersey with some terrific suggestions; everybody should read that when they get a chance. And, Doug, you're actually the next man alphabetically, but we have to try and get our job done, so we're going to do the two bills next.

First bill will be the accelerated renewable portfolio standard, which is S2978. In a nutshell, when you accelerate the renewable portfolio standard, you make New Jersey energy generators go to renewable energy and noncarbon energy -- which means nuclear -- faster, and get us out of the fossil fuel electric generation business.

So, a pile of people who signed up. And, for the record, some do not want to speak. Richard Lawton, New Jersey Sustainable Business Council -- in favor, no need to testify. Ben Ghiano, MAREC, Mid Atlantic Renewable Energy Coalition -- in favor, no need to testify. And, then we have people who do have a need to testify. I'd ask you to be brief; we have no more than 30 minutes on this topic, and there's a pile of people who want to speak. So, brevity is the soul of wit.

Fred DeSanti, New Jersey Solar Policy (*sic*) Coalition.

Fred.

**FRED DeSANTI:** Thank you, Senator, good morning. Good morning to Chairman Kennedy as well, good to see you again.

Again, my name is Fred DeSanti, I'm representing New Jersey Solar Energy Coalition. I will be extremely brief.

I would like to start out by saying the first time I read this bill, it really knocked me on the floor. Because I had never thought about the fact that--

UNIDENTIFIED AUDIENCE MEMBER: Speak up.

MR. DeSANTI: The first time I read the bill, it really knocked me on the floor, because I never thought about this in the context of the cost and the logic of why we are buying class one energy renewable credits and forcing people to pay for them at a cost of, you know, \$250 to \$300 million a year when, in fact, there's never been any debate -- nuclear does not produce carbon. So why do we include it? And, when you look at the fact that, right now, the people of New Jersey are paying \$300 million a year for the zero emission credit -- which we certainly support, because we don't want to see these plants close down -- you add that to the renewable energy credit, we're paying over half a billion dollars a year, and there's just no requirement, no necessity, to pay for class one requirements.

Now, I'm going to give you the punchline on this bill. We've done a lot of data mining over the last couple of days, I've worked with some of the folks at Steve Gable's office, NJR, SEIA, and looked at these numbers hard. And, you really can't tell what's happening here until you look at the numbers of what this does to the markets. But, it does two things: One, this bill would save New Jersey ratepayers in excess of \$250 million a year, \$250 million a year that could better be used for things like resiliency that the Commissioner talked about. And, secondly -- which is stunning -- it gets us to 100 percent renewable energy -- clean energy, rather -- by 2035. That's

15 years ahead of the statutory requirement right now. I mean, these are compelling issues.

Now, I'd like to take you through the data very quickly, because I know there's a number of folks in the audience who are concerned about the implications of having a 50 percent requirement on in-state. And, you know, to get to that answer quickly, there is no requirement in 2030 to buy in-state, because we actually flipped to zero. So, I know you've got a copy of this, I would like to very quickly go through the top line of this to show you how it works.

SENATOR SMITH: Very quickly.

MR. DeSANTI: Very quickly.

In 2030, we go from a requirement of 72 million megawatt hours for the class one calculations down to 41,000 because nuclear represents 43 percent of the energy generation in the state. Right now, that mandate is for 50 percent, but in actuality we're well over 60 percent by virtue of the fact that we're going to back out of the nuclear credits. Now, as you know, the way these calculations are made -- first of all, you reduce the SREC credits, you reduce the TREC credits, all the renewables get backed out of that calculation.

And, in here, we have a major impact from offshore wind. Offshore wind by 2030 starts to generate almost 30 million renewable energy credits, class ones -- counted as class ones. They're ORECs, but they're counted as class ones. And, what this does is, it actually flips the numbers negative. So, in 2030, people behind me, a lot of them are concerned that we have to buy 50 percent of our credits. There is no requirement to buy credits, because we now have an excess. And, when you have an excess, the

market goes to zero. So, from 2030, all the way out, we have a zero requirement, it gets up to the point in 2035 where we have an excess of 11 million and when you add that to what will be in the renewable mix at that point in time, we're at 102 percent, 15 years ahead.

Now, there are a couple of things that I think we need to look at in this bill. Number one, this does great violence to the SREC community, and as you know, Senator, you have S419, which is the bill that -- 39, right, thank you -- which is the market balancing bill. This will considerably reduce the SREC requirements so we're going to have to include, I think, the tenants of that bill which already passed the Senate into this bill so it doesn't do violence to that market. Larry Barth from NJR is going to talk a little bit more about that, I think, but that's very important to take into account, otherwise it's going to hit that market hard, and that's all New Jersey.

The second thing is our obligations to the regional market. I mean, PJM class one market is a very important market. This flips it from a positive 12 million -- 90 percent of which is out-of-state purchases, as you know, at the cost of probably a quarter of a billion dollars -- this flips this to zero overnight. That's going to do tremendous-- That's a very abrupt change, as you might expect, and it's going to really, I think, turn a lot of circumstances on their head, particularly with hedges and some things that people already have, financial vehicles.

So, I think what we need to do is think about the impact on the regional PJM market, and you might want to consider some kind of a smoothing over a three- or four-year period where we would be reducing it by that amount, by a certain amount, to bring it to the nuclear 43 percent reduction, to smooth that and give the market a chance to recover. Because

clearly, I don't think by the time we get to 2035 and beyond, we're even going to have a class one market. I mean, with the offshore wind representing 30 million RECs, with people talking in Virginia, North Carolina, and the other coastal states about offshore wind as well, they're going to swamp the market and the market is going to go zero, because everybody is going to be achieving this 100 percent.

As far as this bill goes, saving ratepayers a quarter of a billion dollars a year, reducing by 15 years our ability to get to 100 percent clean energy. I can't see anything wrong with that.

SENATOR SMITH: Thank you for your comments.

MR. DeSANTI: Thank you, sir.

ASSEMBLYMAN KENNEDY: Next, we have Mike Egenton from New Jersey State Chamber of Commerce.

**MICHAEL EGENTON:** Chairman, how are you, sir?

I stepped out. The legislation that you're doing is the renewable portfolio one, right? Okay, I just wanted to make sure.

I appreciate the opportunity. We did not take a formal position, support or oppose, on this legislation, but I wanted to at least take the opportunity to sort of reiterate what I've said probably in the last several iterations of the energy master plan, where the business community is at regarding this legislation.

Reliable, safe, reasonably priced and environmentally sound energy supply is essential for New Jersey's economic progress. The state Chamber supports a balanced approach towards achieving our energy goals that doesn't depend or rely on one method, one technology, one fuel source, or overburdened segment of the economy or group of energy consumers.

Basically, a diversified portfolio. Reliability and resilience of energy are key to our businesses and their operations in the state.

The business community both are industrial and commercial members who have worked diligently over the past several decades to make necessary investments in both state-of-the-art equipment, technology, and energy efficiency. So, when we talk about diversification, when they ask -- when the policy makers asked us, "What is it that you're looking for as far as energy delivery?" We want everything on the table. We've been very supportive of solar and wind, as you all know, as that's been working through the process, but, also continue to be very supportive of our natural gas industry and we thank the Legislature and the Governor for the work that's been done to save down in South Jersey our nuclear provider. I don't have to tell you, we were concerned about Oyster Creek missing from the energy equation. We certainly believe that a lot of this energy supply need to be diversified and everything needs to be on the table.

You've heard me testify before, I take my role very seriously; I'm the longest-serving member on the New Jersey Clean Air Council at DEP, and we've been very supportive in tackling our mobile services. I've been supportive in the legislative process on electric cars and electric school buses, so we thank you for your advocacy there. Energy efficiency is a big component of our members, and they continue to work in that space.

And, finally, just to encapsulate, we're very hopefully optimistic on the future of fuel-cell technology and hydrogen and other sources. With all of these proposals, the state chamber encourages the Legislature and the BPU to continue to analyze and review the cost to implement these energy projects, and then the impact, pro or con, on the overall State's economy.

This oversight will provide a much-needed process to safeguard the interests of the ratepayers, making sure that we avoid any undue economic burden or surprises.

Again, Chairman, we appreciate the opportunity to express our views.

Thank you.

SENATOR SMITH: Thank you for your comments.

Eric Miller, Natural Resources Defense Council.

Mr. Miller.

**E R I C M I L L E R:** Thank you, Chairman Smith, members of the Committee.

My name is Eric Miller, and I am the New Jersey Energy Policy Director for the Natural Resources Defense Council. I'm sure others here today will cover some of the same points that I'm going to, so, I'll try to pare down my testimony quite a bit.

I think before touching on the specifics of the bill, it's just very important to be clear about where New Jersey is today and where we're headed through 2030. So, as of this year, 22 percent of the electricity consumed in the state comes from renewable energy resources. When we count our nuclear fleet, that's 60 percent of our electricity that comes from carbon-free resources. And, because our RPS ramps up year on year, by 2025, we'll be around 75 percent clean, and by 2030 we'll be around 85 percent clean, with 50 percent of that coming from renewable energy resources. If our RPS merely continued to scale up from 2030 to 2035 at the same rate it is now -- around 3 percent a year -- we would achieve 100 percent clean electricity in the middle of the next decade. And, those are just the facts of

the situation; anyone can look at the BPU regulations and net out the math there.

In following a lot of good law and policy that originated in this Committee, both on the Senate side and on the Assembly side, an increasing share of that electricity is going to come from community solar, rooftop solar, utility-scale solar, and our growing offshore wind industry in which we really are in the air. The pending passage of the Inflation Reduction Act, hopefully by this weekend, is only going to make this effort more affordable, and, because of the groundwork New Jersey has already done over the past decades, we are extremely well-positioned to be national leaders in this and provide benefits to all of New Jersey's residents.

So, based on the forgoing and based on how far we've already come and how far we're going to go the rest of this decade, we would recommend that we continue to incrementally increase the RPS post-2030, and also address kind of the gap year that Fred spoke about in the 2030 year when nuclear is taken out of the equation, it will lead to a change in the REC market. It's something we can consider carefully. NRDC has done some analysis on this already, we're planning to do a lot more, so we're looking forward to working with the Committee, but this is a concept we're very interested in and it is very valuable.

Thank you.

ASSEMBLYMAN KENNEDY: Next we have Dennis Hart, Chemistry Council of New Jersey.

D E N N I S H A R T: Good morning, Chairman, members of the Committee. Thank you for the opportunity to speak today.

My name is Dennis Hart, Executive Director for the Chemistry Council of New Jersey. Chemical manufacturing, pharmaceuticals, refining, is New Jersey's largest manufacturing sector. We represent 18 percent of all the manufacturing workforce in New Jersey. Manufacturing, along with construction, has always been the way that citizens in New Jersey have been able to build up their own family wealth and be able to enter the middle class and add to our economy.

I appreciate the opportunity to speak today. One specific thing I wanted to discuss is our manufacturing facilities right now pay 55 percent more for electricity than all our competitors around the country. It's very difficult to encourage companies to invest in the state when they're already paying so much for their current electricity.

One amendment that we would like to see in this bill is to continue-- And I don't know the technical way, the language, but we look forward to working with the Committee and the staff. As many of our manufacturing facilities have combined heat and power plants, they have class two, class three renewable plants, to allow them to generate electricity on site, to deal with the high cost and high peak demand of electric rates in this state. We would encourage the Committee to allow that to continue.

And, why is that important? As I said, we pay, right now, 55 percent more for electricity than competitors around the country, and our sister facilities around. Where does that come from? Well, right now, we categorize our facilities by size. Small, small-medium, large, and then large sites with multiple sites in the state. So, I'm going to just use the large category. The large manufacturing in New Jersey, using maybe 40 million kilowatts of electricity a year. The societal benefit charge for that facility is

\$340,000 per year that they pay for the society benefit charge. You have to remember, we also pay 6.25 percent sales tax on electricity in New Jersey as well. The nuclear credit -- that nuclear credit added \$160,000 per facility to their annual electric bill. Then when we look at the wind projects -- Ocean One, EDF Shell, Ocean Two -- that will add another \$292,000 to that manufacturing facility.

So, all my position is today is, as we go forward, we have to recognize the impact of electricity rates. Not only on our manufacturers, it's the last data I saw that's hundreds of thousands of citizens are in arrears on their electric bills. So, that has to be-- We encourage the Committee, as you develop this language, to take a look at those issues, work with industry, and try and come up with things that industry can continue to work in this State. We are on the cutting edge of reducing our greenhouse gas impacts, we have significant ESG commitments, our facilities have. We have a number of facilities with their own solar generation, and we're committed to our greenhouse gas goals, but we need to do it in a way where we can continue to operate in this state.

I thank you, and I look forward to working with the Committee. Thank you, Chairman.

SENATOR SMITH: Thank you, Dennis.

Next speaker, in recognition of all of his environmental services, Jeff Tittel, *former* Director of the New Jersey Sierra Club. So, he's officially an environmental has-been. Are you here, Jeff?

Oh, he lost his place in line.

Larry Barth, New Jersey Clean Energy Venture -- opposed in its current version.

Larry.

**LARRY BARTH:** Yes, good morning, everyone.

I am Larry Barth with New Jersey Resources Clean Energy Ventures Business Unit. Thanks for the opportunity to speak today. I will cut to the chase, put aside the prepared remarks.

So, I am not here to debate the merits of the proposal in terms of how -- in terms of this bill, in terms of how we are counting nuclear towards our renewable portfolio standard goals. That's an important discussion. We're interested in learning what we can hear from the hearing and the discussion.

What I do want to talk about is one of the unintended consequences that I believe that we see in the bill, which will have some bad ramifications for the legacy solar program. And, I know that we've talked about this program in the past, so, I'll be covering some of the same territory that we've spoken about as it relates to this program.

So, the issue will be that the program, which covers -- the legacy program, which is closed, and covers about 130,000 projects in about 3.3 gigawatts and about 13 billion of investment, still relies on a stable program until it closes in 2035, okay. And, the incentives in that program are based on the supply and demand of renewable generation. Demand is set by policy. What this particular bill will do, properly and consistent with what you would be doing if you're going to include nuclear, is to reduce nuclear generation from the retail sales basis which is used to multiply by the renewable portfolio standard to determine SREC demand.

So, if nuclear is about 40 percent of our generation, it's going to reduce retail sales by about 40 percent. It's going to reduce SREC demand

by about 40 percent in that closed market, which is going to mean that we're going to have a lot less demand for SRECs than is going to be generated in that closed program. According to our calculations, when this starts to happen we're going to have millions of stranded SRECs, somewhere between 3 to 6 million, where there won't be a home. And, that's like saying about one half to three quarters of all the SRECs generated will not have a compliance buyer.

And, even though that wouldn't start until 2030, when the nuclear would be phased in, it would start to have ramifications on the market much sooner. People would be anticipating this and react to the expectation of perpetual oversupply. So, all the folks that have invested in solar in the state of New Jersey to date in the legacy program is about 85 percent of the solar assets invested to date. All took risks and understood there was going to be temporary fluctuations in prices based on supply and demand. We didn't take the risk, though, that there would be -- by policy, there would be an oversupply, a permanent, perpetual oversupply with no demand for SRECs and no expectation of value. That's something that we didn't sign up for, that's something we don't think is the policy of the State.

Now, the good news here is we do think there are some fixes here, some pretty simple fixes that can be done where we can adjust the RPS based on this new proposal. We can do that in a way that does not require a lot of effort by the BPU. We'd be using tools that are already employed to adjust offshore wind, the solar successor program, and the TREC program, and keep those whole. We can do the same thing with the legacy programs, I'm going to put together an industry proposal that we're going to share with this

Committee and make the modifications we need to make sure that this is appropriately covered.

SENATOR SMITH: Thank you for your comments.

Mr. Tittel, who is now in the room.

J E F F T I T T E L: Sorry, I was talking to Frank (indiscernible) about grandchildren, so I kind of -- that's what happens when you retire.

Thank you, Jeff Tittel. And, I just want to thank the Committee for having this hearing. I think it's critical and one of the most important things that the State can do, that has been missing, which is to move to 100 percent renewable. We are not going to be able to reduce greenhouse gases and meet our climate goals and commitments unless we move to 100 percent renewable -- it could just never happen.

The Governor's Energy Master Plan was a step in the right direction, but it wasn't going to get us to 100 percent renewable. His definition of clean energy had a lot of other things in it that were not renewable, including things like biogas and, potentially, renewable natural gas. And, so, you have to be able to-- If we're going to try to meet those goals that we have set of 80 percent renewable, 80 percent reduction across the board from the Global Warming Response Act, we have to be able to get to zero carbon in the electrical sector. We're not going to get there any other way, because trying to get things in the housing sector, as you know, is going to be a tough fight. Transportation is going to take time, and it's also going to be a battle. And, so, that's the one area where we can get to zero carbon, and I think that's the important part of this bill.

I would like to see it be able to accelerate it. I don't know if we can; I think we should be able to, but it may take extra work. Other states

have moved to 100 percent renewable by 2035. I don't know if we can make that goal, but at least try for 2040. We can set the goal if we come a little short. But better to come a little short than to not try to hit the goal in the first place.

I also think that we might want to think about in the past-- I know in this bill it's producing 100 percent, utilities have to buy 100 percent renewable. Before we did the bill, the 2018 bill, solar was considered separate, that SRECs were added to the RPS. You might want to think about doing that again, because solar in New Jersey is a critical part of our economy and green energy, we may end up with utilities purchasing most of the power from out of state, and we really need to make sure that, when it comes to solar, we're still going to have a robust solar program here and, you know, when we worked on solar 20 years ago, that was one of the reasons why this solar was added to the RPS and not included. And, I know in 2018 we combined them, but it's something to think about again.

And I'm just going to-- And then just one other point, because I want to be brief, I want other groups to be able to speak, and I would like to get into your house, too, is that under the definition of clean energy -- and it's the current law because of changes because of a couple of other bills on food waste -- but it includes biomass as part of the definition of class one renewable. And, I think that could be a Pandora's box that either has to be limited very sharply or removed because there's a push nationally by the gas companies, with this kind of oxymoronic term *renewable natural gas* where they take animal waste or sewage sludge and turn it into gas and put it into pipelines and try to burn it in powerplants -- it's very dirty. There's a lot of co-pollutants with it, especially when you're dealing with sewage sludge,

metals, and volatile organic chemicals. And, I understand why we did that in the food waste bill, because we're trying to get food waste out of the waste stream, but we really need to make sure we limit it so that we don't get this push towards renewable natural gas, which is actually a very bad thing environmentally, it takes a lot of energy to create.

And, so, to me, that's a critical change that I'd like to see in the bill. And all in all, though, I think this is important progress for the State. This could be one of the best things this Legislature has done since the passage of the Highlands Act, because this is a kind of landmark legislation that will make a big difference to this state and to our environment, and continue sending a message across the country about how we have to get to 100 percent renewable.

So, I thank you for that, and for your work on this bill.

SENATOR SMITH: Thank you. Thank you for coming out of retirement.

ASSEMBLYMAN KENNEDY: Next, we have Mary Barber from the Environmental Defense Fund.

**MARY BARBER:** Hi, thank you very much.

Yes, I am Mary Barber, Director of State Affairs, New Jersey State Affairs, for the Environmental Defense Fund.

Thank you for the opportunity to speak today. EDF commends the Committee's efforts to accelerate the clean energy transition and the reduction of greenhouse gas emissions in New Jersey.

First, as with every climate and clean energy policy, reducing harmful pollution impacts and ensuring clean energy benefits are realized in overburdened communities must be prioritized. We urge the Committee to

consider incorporating specific efforts in this bill to ensure equitable outcomes.

As EDF analysis as well as many other organizations like NRDC as well as numerous academic researchers analyses have shown, deep emissions reductions from the electricity sector are a foundational part of meeting Governor Murphy's and the Biden Administration's commitments to reduce total emissions by at least 50 percent to 2005 levels by 2030. In addition, deep cuts to electricity sector emissions are a critical part of keeping cumulative emissions, the total buildup of carbon dioxide in the atmosphere, at levels consistent with preventing the worst effects of climate change.

This means not only making sure the State meets ambitious targets in 2030 and subsequently reaches 100 percent carbon-free electricity, but also ensuring the State charts of persistent decline in emissions between now and achieving those goals. Most importantly, hitting these overall targets and keeping cumulative emissions down are critical for keeping climate pollution at safer levels and preventing the worst impacts of climate change.

So, we encourage the Legislature to support requiring deep and persistent reductions and emissions from the electricity sector until 100 percent carbon-free electricity is achieved. This will ensure greater near-term and thus cumulative emissions-reductions, which are critical for reducing the extent of future climate impacts. To do so, we encourage the State to establish frequent interim emissions-reduction targets between now and when the State achieves 100 percent carbon-free electricity, which we, as we've heard, we believe it can and should do well before 2045.

Additionally, one other specific thing. We urge you to remove the section of the bill that permits the board to adjust the class one renewable energy requirement. While cost is certainly important, solutions other than adjusting the renewable energy requirement must be found if the cost cap is at risk of being exceeded.

So, thank you for the opportunity to comment on this draft bill, and we look forward to continuing to work with Senator Smith and the Committee and the rest of the Legislature on this issue.

SENATOR SMITH: Thank you, Ms. Barber.

Last speaker on this topic -- again, so we get to the second bill, and if there's any time left -- and there will be plenty of hearings, so don't anybody feel left out.

Tom Lynch, KDC Solar.

**T H O M A S   L Y N C H:** Chairman, other members of the Committee, thank you for the opportunity to speak.

Just by reference, KDC Solar has been involved in the New Jersey solar markets, predominantly in the legacy solar markets going back to 2010, and have focused on the commercial and industrial segment of the marketplace. And we support S2978, but there are some, what I would call unintended consequences, as the bill is currently drafted. And, that specifically goes to the oversupply that Larry Barth had highlighted.

So, I'm not going to go through and repeat all of the items that Larry went through, other than to say that that situation is unique to that legacy portfolio of projects, both the TRECs, the SUEZ offshore wind. The incentive payments or the RECs that come from those are treated differently than the legacy market. So, there are a number of ways, and as Larry

mentioned, there is legislation in our proposed amendments that the group plans to put forward.

The other thing that I would highlight, and it's come up over the last decade, and it's in this bill -- granted it doesn't start until 2030 -- is that up to 50 percent can be met out of state. The one important thread that we have always had with the solar industry in New Jersey, it was creating jobs, investment, property tax payments, all within the state of New Jersey. We were building projects in the state to meet the State's requirements. As we now look to go outside, and we can go -- the State can go up to 50 percent outside of New Jersey, those jobs will be lost.

We are a developer of large projects outside of New Jersey, and I can tell you that the cost of doing and installing projects in Delaware, Virginia, Maryland, other PJM states, is meaningfully less than New Jersey. It's for a number of reasons, a lot of which is labor-related, but I'm not trying to harp on labor. My only point being is that it is New Jersey ratepayers' dollars that pay these REC payments. Let's make sure that we are getting those dollars the greatest bang for their buck in addition to reducing or increasing our renewable generated resources, our clean energy, but let's also make sure we're getting investment within the state of New Jersey.

Thank you for your time.

SENATOR SMITH: Thank you, Tom.

And, unfortunately, the clock is dictating that we move to the second bill, the divestiture bill. By way of background, depending on how long you've been in New Jersey, you may remember that the Legislature took a position 30 years ago on South Africa. We said we're not going to invest in South African companies because of their policy of apartheid. Recently,

there's been some divestiture movement with related to Ben and Jerry's and Israel. This bill says we should divest our pension funds from fossil fuel companies, as a signal to the world that we've got to change our ways.

So, with that in mind, first witness Tina Weishaus, DivestNJ.

**TINA WEISHAUS:** Thank you to the Chairs for calling this hearing and giving us an opportunity to focus on what we think is a very crucial issue, fossil fuel divestment.

My name is Tina Weishaus, and I am the Co-Chair of DivestNJ, a statewide organization that has been campaigning for fossil fuel divestment from the State pension since 2018 when this bill was first introduced. Our position has been consistent and increasingly compelling.

Continuing to invest in fossil fuels is too great a financial risk for the pension, and too great a threat to humanity. It is time to align our investment strategy with our climate needs and our climate goals. Renewable energy is the future. As we move to a low carbon economy, the declining value of fossil fuel investments undermines the long-term fiscal sustainability of the pension fund, and the dangers from climate impacts such as extreme heat, floods, wildfires, rising seas, brought on by the burning of fossil fuels threatens to destroy peoples' lives while it shrinks the global economy of projected 10 percent by midcentury.

Fortunately, we now have the technology and we have begun the transition to clean, renewable energy, and it is in full swing, and that renewable energy is already cheaper than fossil fuel energy and certainly more desirable. However, it is not enough to only invest in renewable energy. We must also divest from fossil fuels to limit the climate destruction that is threatening life as we know it. Why should we be investing in and

underwriting an industry that is resulting in such human misery, death, and destruction of all kinds? In New Jersey, we are already experiencing the life-threatening climate impacts, and our own DEP put out a report called 2020 New Jersey Scientific Report on Climate Change, in which they warned about the coming dangers -- some of which we're already seeing -- to our health, safety, property, and economy.

As legislators, you have both the responsibility and the power to divest the State pension of fossil fuels. It is your job to protect the health, safety, and security of your constituents. Although this bill has 44 co-sponsors, it has yet to get a committee vote. It has been languishing for the last four years. And during those four years, CO2 levels in the atmosphere, which is a measure of a warming Earth, have risen from 407 to 420 parts per million, and a safe level of carbon dioxide is 350 parts per million. So, clearly, we are going in the wrong direction.

We need you, our elected representatives, to be leaders. We need you to work to pass this bill now, because continuing with business as usual is no longer an option for the rest of us in New Jersey. In the past, the Legislature deemed it urgent to divest the pension fund from doing business with other countries, most recently Russia. We are not questioning these actions, but have to ask: What could be more urgent than what Governor Murphy and President Biden have recognized as an existential threat to humanity?

There will be other people testifying after me in support of divestment from perspectives of business, science, human suffering; young people and retirees. In the end, none of our testimony will mean anything if you don't take action to get this divestment bill passed this session. We

implore you to treat the climate crisis with the urgency it demands. Passing the fossil fuel divestment bill this session would be a big step towards that goal.

Thank you.

SENATOR SMITH: Thank you for your comments.

Just for the record, Mark Longo, Operating Engineers Local 825 -- opposed, no need to testify. Scot Mackey, American Petroleum Institute - - opposed, no need to testify. Chrissy Kosar, DivestNJ-- in favor, no need to testify. Allison McLeod, New Jersey League of Conservation Voters -- in favor, no need to testify. Doug O'Malley, Environment New Jersey -- in favor, no need to testify.

And, our next witness.

ASSEMBLYMAN KENNEDY: Great.

Not sure on the last name here.

SENATOR SMITH: Wengryn.

ASSEMBLYMAN KENNEDY: Ed Wengryn, New Jersey Farm Bureau.

**EDWARD WENGRYN:** Mr. Chairman, members of the Committee, thanks for having this hearing today.

I don't have a strong position on the bill, we just have sort of a word of caution. There are companies that are fossil fuel companies that are making the investments in the renewable energy. I think there needs to be a scalpel approach to this. Investing in companies that encourage the right kind of investment in our future in renewables and those things, instead of penalizing everybody, I think it's-- I get the point of not investing where you don't want to, but I think you need to continue to invest where the

investments align with your goals, and I think you'd want to look at how you treat those companies that are starting to do the right thing and moving in the right direction.

Also, the pension fund in New Jersey -- long underfunded through the tax process. Reducing the return on those investments by making these things, what is the impact to the pension fund and the impact to those people who expect a good return on their investment? So, I think there's a lot to very carefully look at as you consider this issue, and I just wanted to raise those points.

SENATOR SMITH: Thank you for your comments, Ed.

Richard Lawton, New Jersey Sustainable Business Council -- in favor.

**RICHARD LAWTON:** Good afternoon; I'm Richard Lawton, I'm the Executive Director of the New Jersey Sustainable Business Council.

We're a network of businesses, triple bottom-line businesses that cut across all different sectors, but what they have in common is a commitment to integrating sustainability practices into the products, their operations, and their supply chains. But, they also work with the New Jersey Sustainable Business Council to help advance a combination of market innovation and also policy change to create a more vibrant, sustainable, and equitable economy overall.

Also, just on a personal note, my wife is a public school teacher. She's been teaching in Florham Park School District for the past 24 years, and, after next year -- her 25th year -- she'll be retiring. So, the pension plan is obviously a very personal issue as well.

NJ SBC supports divesting New Jersey's retirement funds from fossil fuel companies, and for two basic reasons: One is to reconcile what I'd say is kind of like a policy dissonance, in a way. New Jersey has clear policy (indiscernible) to decarbonize this economy, with the goal of reaching 100 percent clean energy by 2050, implementing a series of policies, laws, and regulations all with this goal in mind. Continuing to invest in pension funds and in fossil fuel companies stands in stark contrast to these coordinated policy strategies. While these policies are based on the common good, fossil fuel companies maximize our profits by systematically externalizing their costs with some of the largest companies funding disinformation campaigns, reminiscent of the tobacco industry's tactics, all in direct conflict with the public good.

I just want to add quickly, I just want to, you know, express appreciations for the ambition for thinking about the renewable portfolio standard beyond 2030. Just one suggestion. Since this transition to clean energy economy presents a unique opportunity to address the systemic inequities and negative externalities of a carbon-based system, we'd like the provisions regarding equity and workforce development to be made more prominent and stronger.

The second main reason to divest is to uphold the State's fiduciary responsibility to pensioners, which includes risk oversight. Holding fossil fuel investments over the long term is increasingly unnecessarily risky, given several clear trends. The first is, fossil fuel companies have contributed to and benefited from a market failure that is now being remedied from a combination of market innovation and bold policy interventions. This is putting increasing pressure on their rent-seeking behavior and the artificially

inflated value of their assets. People, and the roles of citizens and consumers, are demanding a healthy environment for the communities and families as a basic human right, and institutional investors, like Black Rock, have acknowledged these developments and are adapting accordingly to prioritize climate risk and sustainability as key investment criteria.

And, lastly, the increasing level of adoption of ESG, impact investing, stakeholder governance, and the U.N. sustainable development goals, as well as climate-related financial disclosures, all signal a fundamental shift that will leave fossil fuel companies, their investors, and unfortunately New Jersey's pensioners behind if we don't adapt to these new realities.

Thank you for your consideration. Thank you.

ASSEMBLYMAN KENNEDY: Next, we have Dennis Hart and Mike Egenton, Chemistry Council of New Jersey Chamber of Commerce.

MR. EGENTON: Chairman, thanks again for the opportunity to offer some commentary on this legislation.

For the record, Michael Egenton, Executive Vice President, New Jersey State Chamber of Commerce.

Collectively, we all share in the goal of reducing greenhouse gas emissions, particularly in New Jersey. The natural gas and oil industry continued to work on implementing cost-effective and achievable measures that drive greenhouse gas emissions reduction while ensuring affordable and reliable energy to meet our growing energy needs of our state and nationally. They are investing in new technologies and lower carbon energy alternatives.

Large investors are not divesting, but their focus on working with industry to achieve achievable climate goals together. As these discussions take place over this legislation, let us not omit that many of our member

companies provide jobs and ratables to New Jersey, New Jersey's economy, and they have state-of-the-art initiatives that are in place to go green. For instance, Exxon Mobil's global technology center, located in Clinton, New Jersey, since 1985 is a good example. At Clinton, nearly 800 scientists, engineers, and technicians are working to develop the next generation of scalable, lower carbon energy solutions that address the hardest to decarbonize sectors.

We should also learn from other states that have already attempted to address this issue. A report submitted by the Suffolk County Association of Municipal Employees and Foster and Foster actuaries and consultants provided a warning about our neighboring state New York, "Divesting in fossil fuels cost New York State Pension System and taxpayers more than \$33.4 billion over 30 years and lead to steep tax hikes, service cuts, or slashed pension benefits." Statutory restrictions on investment options are bad public and financial policy. In it, they hardwire constraints on fiduciaries ability to adapt investment priorities to changing circumstances.

One of the intriguing areas of vesting in recent years has been ESG, using environmental, social, and governance matrix as ways to assess potential investments. However, the idea that you can make profits with purpose has recently come under pressure. According to the Harvard Business Review, it is long past time we face a hard truth. Despite a historic surge in popularity, ESG investment will not tackle our generation's urgent environmental and social challenges. In their analysis, ESG investing confuses investors, it costs more, and has yet to prove that it delivers better returns.

So, where do we go from here? Let's get behind and support private investment. From the first half of 2020, U.S. investment in climate tech is up over 200 percent year on year, with deal sizing quadrupling investments in essential and unsettled key technologies, ranging from fission to low-duration battery storage to agricultural technology, and they're all accelerating.

Finally, I would heed this warning: The state of New Jersey was extremely fortunate in the last budget cycle to receive American Rescue Plan money. Basically, this was the first budget in all my years that we had this kind of financial support basically placed at our doorstep. However, while the state's environmental issues are very important, we must keep that same level of importance focused on New Jersey's fiscal well-being; especially since many economists are concerned with our next two budget cycles.

We respectfully oppose this legislation as currently written, based not only on the potential impact it will have on our many companies and institutions that call New Jersey home, but also on the devastating impact this legislation could have on the future financial well-being of the state of New Jersey.

Thank you for the opportunity for us to express our views.

MR. HART: Thank you, members of the Committee.

Dennis Hart with the Chemistry Council. I just want to build on my colleague, Mike Egerton's testimony here today, in the interest of time.

I want the Committee to remember that fossil fuels are not just used for transportation or power generation, they also provide the building blocks for most of the products that are manufactured that we all use every

day in our lives, as well as the basis for fertilizers and a lot of other materials. It's not just the transportation and the energy system.

I believe that this legislation is not needed. As a matter of fact, we should be investing more in these companies. It's these companies that are going to come up with the new technologies, and new solutions are going to lead to climate-change reduction; they're going to lead to more advanced technologies that are going to help solve the climate crisis.

As Mike talked about, at the Exxon facility in Clinton where there's over 800 scientists working there, it's New Jersey right now, there's a lot of work going on around the state on carbon capture, under low carbon fuels, under advanced biofuels, natural gas technologies, green hydrogen, blue natural gas. All of these things need to be advanced and not curtailed. So, I would suggest to the Committee that we really think about this initiative.

And finally, on behalf of all those companies, I think it would be good for the Committee to come out, if you haven't already, and come to some of these facilities and see the work that's going on on blue hydrogen, green natural gas, see the work that's going on on all these new technologies.

In the interest of time, I'll stop there.

Thank you.

SENATOR SMITH: Thank you, gentlemen.

Carol Gay, New Jersey State Industrial Union Council -- in favor.

**CAROL E. GAY:** Good morning, and thank you for coming to Toms River, Ocean County.

I am Carol Gay, I live in Ocean County, in Brick, and I am here to urge you to support A1733 and S416, because the climate crisis is real and must be addressed with urgency. I am a retired CWA Communication

Workers of America National Representative, and am now President of the New Jersey State Industrial Union Council, a statewide labor federation representing tens of thousands of union members and their families here in New Jersey -- members and their families who recognize the serious and immediate threat posed by the climate crisis.

That is why we are advocating for immediate and bold action, which includes divestment of fossil fuels. We do not see climate protection as an optional issue for labor. Climate protection and pension protection are strongly linked. Both are necessary to protect workers and their families. Both are necessary for retirement security. Divestment from fossil fuels is necessary both financially and morally. Evidence now shows that fossil fuel investments are extremely risky, and therefore costly. They are losing money and are very much in decline.

Responsible investors do not want to be stuck with stranded assets, and they want a healthier and safer future for their children and grandchildren. With rising sea levels and raging temperatures, more intense and more frequent climate catastrophes are inevitable. Unless action is taken immediately to reverse this trajectory. The window of effective opportunity is closing fast. We have only a few short years to reverse this dangerous path to disaster. Divestment from fossil fuels is the smartest move to reduce exposure to financial risk linked to climate change. Supporting fossil fuel divestment will protect the pension and will save New Jersey workers' pensions from the nose dive most investors know will take place. It is a matter of when, not if.

In addition, renewable energy and new technologies are making fossil fuels obsolete. Sustainable investment opportunities are on the rise,

especially with the new federal legislation, and clean energy sources can offer better, safer, and less costly investments.

Divestment now is the responsible thing to do. Workers' hard-earned money should not be going to make the Earth uninhabitable for humans and other living things. Fossil fuels are burning up our precious planet with serious health and safety consequences for workers, their families, and life as we know it. Especially here at the Jersey Shore.

Fossil fuels are harming our pension and our future right now, but you can protect the pension fund and the future. Make the commitment now to fossil fuel divestment before it is too late. Please, put this out for a vote and get it voted on *now*.

Thank you.

ASSEMBLYMAN KENNEDY: Next, we have John Tomicki, League of American Families.

SENATOR SMITH: You received the Jeff Tittel award.  
(laughter)

**J O H N T. T O M I C K I, ESQ.:** Well, thank you for calling me; sorry I was late.

SENATOR SMITH: It's okay.

MR. TOMICKI: But, I will put a hard stop on myself, as you know.

Relative to the bill on divestment, we were active--

UNIDENTIFIED SPEAKER: Can you speak into the microphone?

MR. TOMICKI: Actually, Senator Smith, it's interesting. It's almost five years to the day that I first appeared at the Committee and I

began to discuss (indiscernible). Since we have a hard stop issue, I'll stay just on the bill itself.

SENATOR SMITH: Please.

MR. TOMICKI: If you're really trying to influence policy, you have to own stock. That's what we did years ago when we were concerned about certain issues. We've bought a block of stock and then you went up to the shareholders meetings and you presented your discussion or your resolutions. To me, it would seem to be more sense than in the pension plan, wherever the stock is held, to join with other states for that agenda that you're concerned about.

So, I believe I would be standing against it. The whole issue relative to even, like, the state of Israel -- I know it's a sidebar on divestment and all the other stuff -- that they try to influence policy. This is the wrong move. I know it's for discussion purposes only, but I think it makes more sense to hold the stock for the benefit of the employees who will get into the pension area, but to work together with other states you'll have a bigger and much larger voice.

I can't get into the other bill because it was too long, too difficult. But, when I talked about (indiscernible), I am still on that issue of regenerative farming, the way we can actually on one part -- I know it's not on the bill -- but the way we can sequester the carbon more efficiently in Jersey than we're currently doing.

But, thank you so much, and I apologize I left.

SENATOR SMITH: No problem, thank you.

Last speaker -- again, running out of time, but not to worry, plenty of hearings coming -- Eric Benson, Clean Water Action, in favor.

**ERIC BENSON:** Morning; afternoon, members.

I am going to preach to the choir. We've heard this over and over again at the previous Senate Environmental Committee hearings, and again from the Commissioner today. Climate change is here and without urgent action, the worst effects will be irreversible. We're already experiencing devastating impacts on property and life. Boiling thermometers, draught, wildfires, COVID, cardiac diseases and cancer, and a struggling economy.

Is there any doubt that we need solutions? New Jersey is doing a lot, but we need to be doing even more. Both bills up for discussion today are two more tools that we need to add to our tool box. I had a couple suggestions on the other bill, I'll get those to you in paper.

I don't have any suggestions for strengthening this bill. I would like to echo Tina's strong testimony, Carol's strong testimony, and my only request is to advance this bill as soon as possible -- it's been kicking around since March 2018, so thank you for the opportunity to comment today.

**SENATOR SMITH:** Thank you for your comments.

And, we are just so grateful to all the people who came today to express their points of view. We have the difficult position of trying to figure out what's right for the State of New Jersey. I recommend to you the movie *Don't Look Up* because we're kind of in that world at this moment.

And, there will be plenty of hearings in the future on this legislation so, please, send in your cards, letters-- Eric, for the people who didn't speak, anybody who said they wanted to have amendments, send them in. Send in e-mails to Joey Gurrentz, who is the Committee Aide on the Senate side, we'll share it with the Assembly side.

We do really appreciate you coming out today, and, on that note,  
Chairman, shall we adjourn?

ASSEMBLYMAN KENNEDY: Sounds like a good idea.

SENATOR SMITH: We're adjourned.

(MEETING CONCLUDED)