

Committee Meeting

of

SENATE ENVIRONMENT AND ENERGY COMMITTEE

“The Committee will meet to hear testimony from invited guests on actions the State could take to foster a circular, clean energy economy”

“The Committee will also take testimony, for discussion only, on Senate Bill 426, which requires producers of packaging products sold in New Jersey to adopt and implement packaging product stewardship plans”

LOCATION: Committee Room 6
State House Annex
Trenton, New Jersey

DATE: June 13, 2022
1:00 p.m.

MEMBERS OF COMMITTEE PRESENT:

Senator Bob Smith, Chair
Senator Linda R. Greenstein, Vice-Chair
Senator Fred H. Madden Jr.
Senator Edward R. Durr Jr.
Senator Jean Stanfield



ALSO PRESENT:

Eric Hansen
Office of Legislative Services
Committee Aide

Tom Little
Senate Majority Office
Committee Aide

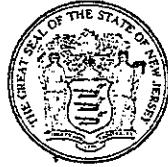
Rebecca Panitch
Senate Republican Office
Committee Aide

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

Bob Smith
Chairman

Linda R. Greenstein
Vice-Chairwoman

Richard J. Codey
Edward R. Durr, Jr.
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NEW JERSEY STATE LEGISLATURE

SENATE ENVIRONMENT AND ENERGY COMMITTEE

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**R E V I S E D
C O M M I T T E E N O T I C E**

TO: MEMBERS OF THE SENATE ENVIRONMENT AND ENERGY COMMITTEE
FROM: SENATOR BOB SMITH, CHAIRMAN
SUBJECT: COMMITTEE MEETING - JUNE 13, 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 Crocrot, Secretary, at (609)847-3855, fax (609)292-0561, or e-mail: 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 will meet on Monday, June 13, 2022 at 1:00 PM in Committee Room 6, 1st Floor, State House Annex, Trenton, New Jersey.

The committee will meet to hear testimony from invited guests on actions the State could take to foster a circular, clean energy economy.

The following bill(s) will be considered:

S287 Greenstein/Singleton	Provides CBT tax credit for certain deliveries of low carbon concrete and for costs of conducting environmental product declaration analyses of low carbon concrete.
*S1311 Turner	Establishes NJ State Parks and Forests Foundation.
S1476 Beach	Increases dedication of certain revenues to "New Jersey Wine Promotion Account."
S2734 Codey/Stanfield	Appropriates funds to DEP for environmental infrastructure projects for FY2023.

(OVER)

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S2735 Codey/Greenstein	Authorizes NJ Infrastructure Bank to expend certain sums to make loans for environmental infrastructure projects for FY2023.
S2739 Pou/Smith, B	Requires submission to DEP of consequence analyses by employers regulated under "Worker and Community Right to Know Act"; requires municipal and county Emergency Operations Plan consider local risks and hazards.
SCR117 Smith, B/Greenstein	Approves FY 2023 Financial Plan of NJ Infrastructure Bank.

FOR DISCUSSION ONLY:

S426 Smith, B	Requires producers of packaging products sold in New Jersey to adopt and implement packaging product stewardship plans.
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Issued 6/6/22

*Revised 6/13/22 – S1311 added for consideration. S2449 removed from consideration.

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SENATOR BOB SMITH (Chair): Welcome to the most interesting Committee in the Legislature.

We have a very, very interesting day today, and another interesting day Thursday.

So first, you will note on my left is Senator Madden, who is substituting for Governor Codey today. And the news -- not of today's meeting, but on Thursday -- we're taking up the Liberty State Park Bill. So, if you have something to say about it -- this is Senator Stack's bill; Senators Stack, Cunningham, and Sacco -- that will be Thursday, special meeting, 10 a.m.

And, today we have some great stuff on the agenda. But, before we get to the agenda, we have Mark Jacobson, a professor at Stanford University. And we're wiring him in from where?

MR. HANSEN (Committee Aide): Palo Alto.

MS. PANITCH (Committee Aide): California.

SENATOR SMITH: What's that?

MR. HANSEN: Palo Alto, California.

SENATOR SMITH: Palo Alto, California. So, don't you ever say that the West Coast doesn't care about the East Coast.

Is the Professor on the line?

MS. PANITCH: Yes.

SENATOR SMITH: Okay.

M A R K Z. J A C O B S O N, P H.D.: Yes, hello.

SENATOR SMITH: So, Professor, while the screen is getting set up, we have been starting every meeting of the Environment Committee in New Jersey with a recognized expert on global climate change, trying to find

what the solution is. And, we understand you are very highly thought of in the scientific community, and you have a unique point of view.

So, with that, maybe you can tell us what that unique point of view is.

(Dr. Jacobson refers to his PowerPoint slides in his presentation)

DR. JACOBSON: Yes; thank you very much. And, I appreciate the opportunity to talk about New Jersey's potential to transition entirely to clean renewable energy.

And, I'm going to go through a slide presentation. I'll try to go pretty quickly. I have, I'm told, about 20, 25 minutes.

So, I'm going to talk about transitioning New Jersey -- and not only New Jersey, but the U.S. and the world -- to 100 percent clean renewable energy and storage. And, we actually just completed new a paper at the end of last year on transitioning each of the 50 U.S. states to 100 percent clean renewable energy. And, I'll talk about that as well as a paper that's coming out pretty soon on transitioning 145 countries to entirely clean renewable energy.

Next slide, please.

So, I'm looking at this from three problem points of view. One is, air pollution; another is climate change; and a third is energy security. I mean, my work-- I've been working for over 30 years on trying to understand and solve large-scale air pollution and climate problems through clean renewable energy. Worldwide, 7 million people die prematurely each year from air pollution, the second-leading cause of death worldwide; about 1,100

per year in New Jersey from air pollution. Worldwide, it costs about \$30 trillion per year, based on statistical costs of life.

Global warming is a rising and serious problem that is estimated to cost on the order of \$30 trillion per year, as well, by 2050. We can already see the consequences of that in terms of enhanced wildfires, enhanced storminess, heat stroke, heat stress, loss of agriculture, drought, floods, more severe weather, and also increased air pollution.

Our third problem is that fossil fuels are limited resources; and, as they dwindle over time, their costs are going to go up. Right now, we see the cost of gasoline going up significantly; natural gas is also rising in costs. This is due to another type of energy and security as well, which is basically the fact that when you have some countries controlling the energy of other countries, and one country then uses that energy as a weapon. You can see how costs can go up significantly.

There are other types of energy and security issues as well, but I don't have time to go into them.

Anyway, these are three drastic problems that require immediate solutions.

Next slide, please.

So, our solution is to electrify all energy. And, while I say *electrify* -- almost all energy, maybe 98 percent, will be electricity -- there might be a little bit of direct heat as well -- and then provide the electricity and the heat with entirely clean renewable energy which we call *wind, water, and solar power* because the energy is, primarily, wind, water, and solar.

So, for example, for transportation we'd go to all electricity; so either a battery-electric or hydrogen fuel cell electric vehicles.

Now, the hydrogen would be used primarily for long-distance heavy transport -- like long-distance ships and aircraft, trains, and trucks -- but not for passenger vehicles. Even though hydrogen -- if it's what's called *green hydrogen*, which is hydrogen produced from renewable electricity -- even though that's clean, it's not as efficient for passenger vehicles that are just pure battery-electric vehicles. It will take three times the number of wind turbines, for example, to run a hydrogen fuel cell passenger vehicle, compared with a battery-electric passenger vehicle. However, when you get to heavier long-distance transport, the tables turn and hydrogen actually becomes more advantageous at some point.

For aircraft, that point is for aircraft flights longer than 1,500 kilometers. For shorter flights, you'd want to use battery-electric; for longer flights, hydrogen fuel cells. In fact, we found-- We did a study recently that looked at all transportation in the U.S. military -- that's air, land, and sea -- and, we found that you could use either one. Batteries and hydrogen fuel cells could be used for short-distance forms of military transportation including tanks, armored vehicles, aircraft, and ships. But, for the long-distance heavy, you can only use hydrogen fuel cells, based on published technology.

For heating and cooling, we'd go to electric heat pumps which use one-fourth the energy as natural gas heaters. And, heat pumps run on electricity, and we provide the electricity with wind, water, and solar.

There would be something called *district heating*, where you'd have centralized heaters and coolers for urban areas – with dense urban areas. And 7 percent of the U.S. is under district heating. So, that's when you have centralized heaters and old pipe hot water, for example, in buildings, and you

then heat the buildings with the hot water. And, then we'll have some geothermal direct heat and some solar direct heat as well.

And, for industry, we would electrify industry as well with existing technology -- electric arc furnaces, induction furnaces, resistance furnaces, dielectric heaters, and electron beam heaters. And, in all cases, the electricity, or direct heat, will be provided with just wind, water, and solar. So, that's onshore and offshore wind, solar photovoltaics on rooftops and in power plants, concentrated solar power, geothermal electricity, hydroelectric power, and small amounts of tidal wave power.

Next slide, please.

So, everything will be electrified, but we will need storage as well for this complete system because the wind doesn't always blow, and the sun doesn't always shine.

So, there is a large-- There are a lot of storage options available already and being implemented. Concentrated solar power is associated with storage. There's pumped hydroelectric power; it is actually the largest type of storage installed in the world right now, except for existing hydroelectric dams which are basically big batteries. Batteries themselves-- The costs are coming down and are being implemented widely in the world today for stationary electricity storage.

And then there are flywheels, compressed air storage, and what's called *gravitational storage*. Anyway, these are all existing technologies, and they're becoming more and more viable in terms of cost. And, pumped hydro is already relatively inexpensive, as it is concentrated solar power.

For heating and cooling, we'll also need storage. The types of heating and cooling storage options are water tank storage, which is widely

available already; ice storage, which many stadiums and hospitals have ice storage; and then underground seasonal storage of heat in boreholes, water pits, and aquifers. There are many examples of these already installed in, for example, Canada and the Scandinavian countries.

Then storage of heat in building materials, as well as storage in hydrogen. Again, we'd only use hydrogen for limited purposes, I should stress. We only advocate for green hydrogen, not the blue hydrogen or gray hydrogen, which are both from natural gas. In our systems, we do not include any natural gas; we do not include any carbon capture; we do not include direct air capture; we do not include bioenergy; we do not include nuclear power. Our plans call for all wind, water, and solar power in the whole world, for all purposes. And, there's a reason we don't use direct air capture or carbon capture, that's because they basically allow the fossil fuel industry to persist. They do not work very effectively, and they increase air pollution because you need 25 percent more energy. If you put carbon capture on a coal plant, you then need 25 percent of the energy from the coal plant just to run the carbon capture equipment. That increases the air pollution from coal burning. There's 25 percent more mining of coal, and the amount of carbon dioxide that's actually captured is relatively small compared to what's emitted in the mining, transporting, and burning of the coal.

Anyway, that's another story; but, we do not include those technologies because they incur an opportunity cost. It's much more efficient to replace a coal plant with wind or solar than to try to spend more money on carbon capture and allow that coal plant to persist. The same with natural gas with carbon capture.

So, the hydrogen we do not include for the same reason we don't include hydrogen produced from natural gas, or hydrogen produced from natural gas with carbon capture. It just requires too much energy, too much infrastructure, allows natural gas to continue, allows natural gas leakage upstream to continue, and more mines. There are 1.3 million active oil and gas wells in the U.S., and there are 3.2 million abandoned wells. The entire fossil fuel industry takes up 1.3 percent the of U.S. land area. And, there are 50,000 new oil and gas wells drilled in North America alone every year, and we would need to continue that forever if we want to stay on natural gas. The goal here is to eliminate all fossil fuels from buildings, from pipes, and electric power, from everything, and just transition to clean renewable energy.

Next slide, please.

Before I talk about the plans for New Jersey and the world, I just want to briefly talk about electrifying individual homes. Because ultimately, that's what we need to do. And, I want to talk about my own home very briefly--

Next slide, please.

--which is all electric. I built it five years ago from the Stanford University campus in California. There's no natural gas on the property. There's solar on the roof -- 13.6 kilowatts. There are four Tesla first-generation wall-mount batteries in my garage that cost about one-fifth or sixth of the cost of the solar, so it wasn't very expensive. So, I provide all my electricity from solar; that's more than enough that I need. I store the electricity for use at night so I can run 24/7 on solar, plus batteries, for about three-quarters of the year. I have two electric cars.

Next slide, please.

For heating, I use air source heat pumps. Hopefully, we're on the heat pump slide; I can't see which slide is being shown. If not, you'll need to change the slide. I use ductless mini-split heat pumps. Heat pumps use very little energy. They use one-fourth the energy to heat a home, compared with natural gas heaters or even electric-resistance heaters, because they don't create heat, they just move it around from outside the house to inside the house. Or, you can have a ground source heat pump that takes heat from the ground and moves it to your house.

And, the same thing with air conditioning because heat pumps run in reverse as air conditioners, and they're very efficient.

Next slide, please.

For water heating, I use an electric heat pump water heater. Again, this uses one-fourth the energy of a natural gas heater, and, it works just as well, and heats the water perfectly. It takes up very little space, just like a normal water heater.

Next slide, please.

For cooking, I use an electric induction cooktop stove. Most people do not like electric resistance stoves because they don't burn as well as natural gas. However, that problem goes away with electric induction cooktops that boil water in half the time as gas. They cook very evenly, and the temperature can be controlled very well. And, when you touch the stove, it doesn't burn your fingers because it's not actually heating the stove. It's heating the pot, not the stove.

In any case, induction cooktops are widespread. There's an individual burner you see on the left. I show that because, at the beginning, I mentioned that many people die from air pollution each year, including a

couple of million from the indoor burning of fuel in homes in developing countries, all due to home heating and cooking. You can replace burning fuel in your home with a single induction burner that costs \$30 to \$50, and that eliminates pretty much all the air pollution from your home. But in those villages where people are burning these fuels, we need electricity. So, we need some solar and batteries to be used in remote microgrids for individual communities that don't have electricity. Those can really go a long way toward reducing air pollution problems.

Next slide, please.

So, over five years of energy use in my home, I generated 120 percent of all home and vehicle energy requirements. I had no electric bill, no natural gas bill, or gasoline bill for five years. The extra electricity I was able to sell to my community choice aggregation utility, which is called *Silicon Valley Clean Energy*, and they pay for the extra electricity at the same price that I would have paid for electricity at the same time of day. And, so I have received an average of \$860 per year from my community choice aggregation utility for the extra electricity.

So, by having an electric home, a new home, I avoided a gas hookup fee, in my case, of \$6,000 from that utility, Pacific Gas and Electric. I'm showing an average here for typical new homes. The hookup fee is about \$3,000 to \$8,000, for the gas. I avoided about \$10,000 in gas pipes; and, again, I'm showing a range of different cost of pipes. And, I avoided an electric bill, gas bill, and gasoline bill. And, the actual avoided gasoline bill would be much higher than I'm showing here.

So, up front, the average person will save about \$5,000 to \$23,000 for equipment, hookup fees, and another \$3,000 to \$10,000 per

year; plus there are subsidies on this. With subsidies, the payback time is five years; without subsidies, it's 10 years. And, New Jersey has really good solar, so I would hope that would be similar. And, the solar there is warrantied for 25 years, so, this is really a cost-effective way for new homes. It's also cost-effective for existing homes to retrofit, but it's more expensive than for a new home because you're not getting enough savings eliminated in the pipes, etc.

Next slide, please.

I just want to show one example of the hottest day of the year in my area, which was in 2020 on September 6. What happened? The green here shows the solar production on that day. The blue during the day is the solar production being used, mostly for home cooling for air conditioning, to maintain the temperature inside the home at 77 degrees Fahrenheit. The outside temperature was 106. So the difference-- Had to keep the home cool with the heat pumps (indiscernible) energy. The blue at night is when the battery kicked in, but then the batteries ran out; and then the red is when the grid kicked in. But, even on that hottest day of the year, I produced 14 kilowatt-hours more than I consumed, and I sent that back to the grid to help the grid to keep the grid stable.

The point is, if everybody has an energy efficient home -- we have solar and some batteries -- we don't have blackouts. We can keep the grid stable even on the most extreme temperature days of the year.

Next slide, please.

So, I'm going to talk now about transitioning New Jersey, and the world, to 100 percent renewable energy.

As I mentioned before, we did plans for 145 countries, and we've done all 50 states. And, I want to show the summary of those plans.

Next slide, please.

For all 145 countries, in 2018, the end-use demand for energy among all the countries was 13.1 terawatts, or trillion watts. That's expected to go up to 20.4 terawatts in 2050. But, if we electrify all energy, and provide the electricity with wind, water, and solar, that goes down by about 56 percent to 8.9 terawatts. And that's for five reasons. One is the efficiency of battery electric -- vehicles primarily, but also hydrogen fuel cell vehicles, versus internal combustion engine vehicles. That eliminates 20.5 percent of all energy worldwide by just converting everything to electric-type vehicles. A 4.3 percent reduction of energy is due to the efficiency of the electric industry. A 13.6 percent reduction of energy requirements is due to the efficiency of heat pumps. Eleven point three percent is due to eliminating the energy that goes into fuel mining. Because 11.3 percent of all energy worldwide is used in mines, transport, and refined fossil fuels in uranium, as we eliminate all that energy. And then 6.6 percent energy efficiency improvements beyond what's expected in business as usual.

So, we reduce energy requirements 56 percent, without changing our habits, essentially by going to wind, water, and solar.

Next slide, please.

Now, this shows a transition timeline. If we don't do anything on the top, we'd go from 2020 to 2050. We'd increase to 20.4 terawatts in electric power demand worldwide. But, if we electrify all energy as I just described, we'd go down those five shades of color to the 100 percent WWS line down to 8.9 terawatts. And, when we provide that, the resulting energy

that we'd need with just onshore and offshore wind, geothermal, CSP, rooftop PV, etc. And, I should point out our proposed timeline is 100 percent transition by 2050, with 80 percent by 2030. However--

Next slide, please.

--we actually think that it is technically and economically feasible to transition -- maybe if not all sectors, but most sectors -- by 2035. So, this shows a 2035 timeline for all energy sectors. This, again, is 80 percent by 2030.

And, whether it's 2035 or 2050, the endpoints here are the same in 2050. But, we do have 95 percent of all the technologies we need right now to transition the world to 100 percent clean renewable energy.

The ones we don't have include the long-distance aircraft and long-distance ships primarily, and some industrial technologies. We're not quite there yet. But they're on the drawing board, and we don't see a reason why they can't be implemented.

Next slide, please.

So, this shows a percent distribution, once we've electrified everything, one set of numbers in terms of how much of each wind, water, and solar energy option can be used either worldwide, or in the U.S., or in the RFC grid, which New Jersey lies in. And, when we did a plan for New Jersey, we looked at the grid's stability in the grid that it actually exists in right now, and that's what we summarized here. So, if we just focus on the RFC grid, our 100 percent renewable grids would be powered by 21 percent onshore wind; 14 percent offshore wind; 15 percent rooftop solar PV; 49 percent utility PV; no concentrated solar power because they need more direct sunlight, (indiscernible) available at New Jersey's latitude. And,

(indiscernible) the RFC grid as well. No geothermal electricity, since it's not a good resource in the Mid-Atlantic. A small amount of hydro; there's (indiscernible) existing hydro in all three cases: the world; the U.S.; and the RFC grid. We do not increase the hydro; we're using existing resources. And, then tiny amounts of wave and tidal power. That gets you 100 percent renewable throughout the whole RFC grid with just wind, water, and solar.

Next slide, please.

This shows the land area required -- either worldwide, in the U.S., or the RFC grid to transition entirely to 100 percent clean renewable energy. Worldwide, it's only about 0.53 percent of the world's land. Keep in mind that there is no new land for offshore wind, for tidal, or wave power. We're not adding any new hydro, so there's no (indiscernible) land for that. Rooftop PVs do not take up new land. Geothermal is pretty small and nonexistent in the RFC area.

So, it's just utility, PV, plus CSP and onshore winds, require new land. And, the onshore wind is really spacing in between turbines, and you could put the solar on that land. So, there's more land in the RFC grid than in the U.S. on average. U.S. is less than 1 percent of U.S. land area would need to be powered entirely by clean renewable energy.

And, note: These plans are such that we're encapsulating all the energy that would be provided within our RFC. However, even right now you can get electricity from outside the region, which you'd use less land. You can also put it offshore – more offshore wind, that would take less land.

I know my time is running short, but let me just--

Next slide.

I'll just go really quickly (indiscernible) results.

We looked at grid stability -- not only over the whole world, but in each of the regions of the U.S. -- and we found we can keep the grids stable. This is every 30 seconds for-- This is actually for two years in the RFC grid. And, up on the top and also on the bottom, it's for a 100-day period during those two years; just showing that we can keep the grid stable. It's just intermittent wind, water, solar, battery, and storage, and what's called *demand response*, where utilities give people incentives not to use electricity at certain times of the day. We can keep the grid stable, and everywhere in the world-- We didn't find a place in the world where you can't keep the grid stable with entirely clean renewable energy.

Next slide, please.

This slide shows upfront capital costs. This is the cost of the *Green New Deal*. Worldwide, it's about \$61.5 trillion; in the U.S., about \$9 trillion; and in New Jersey, about \$200 billion -- to keep the grid stable and transition everything to entirely clean renewable energy.

Next slide, please.

And, just briefly, more important are the annual costs. Worldwide, we have \$17.8 trillion per year for the energy costs in 2050; another \$33 trillion for health costs; another \$32 trillion for climate costs. So, the total of social costs is \$83 trillion per year. But, we eliminate health and climate costs by going to wind, water, solar, and we reduce our energy costs by 63 percent because we have a 57 percent lower energy demand, plus, about a 15 percent reduction in the cost of per unit energy. And, so, that translates into a 92 percent reduction in social costs and a 62 percent reduction in energy costs.

Next slide, please.

Same thing with the U.S. We go down 63 percent energy costs, 86 percent social costs per year.

Next slide, please.

For New Jersey -- this is New Jersey-specific -- similarly, we go down 65 percent in energy costs and 86 percent in the social costs of energy in 2050. So, it's really an obvious financial benefit. We find we create many more jobs than are lost.

And I'll skip-- I think I'll skip-- I have a lot of stuff on policies. I'd be happy to show these if I had more time, but I think I'm out of time.

So, let me go all the way to the second-to-last slide, which has the summary of the transition in New Jersey.

For transition in New Jersey, we found that we create 144,000 more jobs than are lost. We'd avoid 1,100 air pollution deaths per year. We'd reduce the direct energy costs by 64 percent. The upfront capital costs would be about \$200 billion, but it will pay for itself through energy sales. And then we'd reduce the energy, health, and climate costs by 87 percent. and keep the grid stable.

So, that's all I have. If you want, you can go to the last slide and you have more-- There are websites for more information. But otherwise, I'll open it up to questions.

Thank you very much.

SENATOR SMITH: So, a lot of your assumptions are that all of these multiple sources of energy will come online, including things like capturing wave energy, etc. If you were to give us the best advice you could, what would be the top three things that New Jersey could do in order to try to deal with some of this global climate change?

DR. JACOBSON: The top three things would be heat pumps for buildings. So, electrifying buildings as much as possible. So, all new construction buildings; no gas. (Indiscernible) heat pumps would be like-- All the stuff I had mentioned, like induction cooktops, energy efficiency in buildings. Yes, just a simple heat pump reduces energy by a factor of four, compared to any type of other heating. Heating is the biggest source of energy use in your home.

The second thing is, going to electric vehicles. Passenger vehicles should be battery-electric. Long-distance heavy transport could either battery-electric or hydrogen fuel cells.

The third thing -- and not necessarily in that order -- is just more energy generation from wind and solar, primarily.

The tidal and wave (indiscernible) a very small percentage. So, we're not assuming-- So, we could even assume that they don't take off in terms of reduced costs. So, it's really existing technology that we're focused on. It'll be 90 percent of the solution plus will be solar and wind in one form or the other, and there'll be a couple of hydro, in your area. But, it could be up to 98 percent solar and wind. You have a huge amount of offshore wind. This is what our focus should be on: offshore wind and especially rooftop PV- - are the two areas where you can grow substantially without increasing land use at all.

SENATOR SMITH: All right. Our normal staff aide is at home with COVID, and he texted in a question for you.

"How much might the water part of this -- of your wind, water, solar plan -- how might it impact local ecosystems?"

DR. JACOBSON: Well, in New Jersey and the RFC area, not very much, because we're not talking-- There's not a lot of hydro, for example.

In any of our plans, we're not increasing hydropower at all. And, the water part -- water includes hydropower and geothermal. Because we had to pick a simple acronym, we're including *geothermal* as part of the *water*. And, that wave and tidal -- that's part of the water. Wind -- offshore wind -- is part of the wind.

So, it won't affect global ecosystems at all because we're not-- Compared to how they are right now, because we're not increasing the hydro. We're not increasing conventional hydro at all. There could be some increase in run-of-the-river hydro, and, so, we have no new dams in our plans. And, especially in New Jersey, there's not going to be any-- The amount of hydro is pretty small right now, and it's not going to increase a lot.

SENATOR SMITH: Okay, so the answer is *minimal*, in your view.

Are there questions from other Senators? (no response)

Okay, Professor, thank you very much for your contribution today. If you have any of your written materials, please send them out because we'd like to-- These are very interesting topics that you brought up, and we'd like to look into them further.

But, thank you very much for your participation today.

DR. JACOBSON: Yes, thank you again for having me.

SENATOR SMITH: Thank you so much.

Bye, now.

DR. JACOBSON: Goodbye.

SENATOR SMITH: Now we have a business calendar to get to.
(confers with staff)

First, let's take a roll.

MR. HANSEN: Senator Smith.

SENATOR SMITH: I am present.

MR. HANSEN: Senator Greenstein.

SENATOR LINDA R. GREENSTEIN (Vice-Chair): Here.

MR. HANSEN: Senator Madden was substituting in for Governor Codey.

Senator Durr.

SENATOR DURR: Here.

MR. HANSEN: And, Senator Stanfield.

SENATOR STANFIELD: Here.

SENATOR SMITH: Okay, so let's get our agenda done expeditiously so we can get to our hearing on producer responsibility as it relates to packaging.

The Committee releases Bills

S-287, S-1311, S-1476, S-2734, S-2735, S-2739, SCR-117

Our last Bill, for discussion only-- The number of the Bill is S-426. It requires producers of packaging products sold in New Jersey to adopt and implement packaging product stewardship plans.

So, first, this is for discussion only. It's not being released today, not being released during the summer. The next time we're going to take this

up is in the fall, after we've had a chance to chew on all your comments today, all right? And it's a very important Bill.

The point of, in effect, producer responsibility is to reduce the waste stream. Let's have less packaging, more effective packaging, or different packaging, so it has less impact on the environment. In the rest of the country, other states are in process of also doing producer responsibility bills.

So, with that in mind, it's discussion only. Let's not hurt each other. (laughter) Let's get some testimony--

(confers with staff)

And Judith Enck, former Region 2 Administrator, is present and is considered a pretty strong expert on this topic. We'd appreciate it if you'd come forward and give us a little insight.

J U D I T H E N C K: Good afternoon; thanks so much for having me.

The most terrifying thing is the technology; so the substance is fine. (laughter) (referring to the microphones)

(Ms. Enck refers in her presentation to her PowerPoint slides)

Senator Smith and colleagues, it's a pleasure to be with you. Thanks for taking a deep dive on this issue. It's really important and really complicated, so I think you're approaching it the right way with a discussion.

My name is Judith Enck; I served as Deputy Secretary for the Environment in the New York governor's office, then EPA Regional Administrator during the Obama Administration. That was when I visited the Cornell-Dubilier Superfund site in South Plainfield. I spent a lot of time at Federal Superfund sites, and now I'm a visiting professor at Bennington

College in Vermont. And because of my incredible concern with the crisis of plastic pollution, I started a new organization called *Beyond Plastics*.

And, this was the major reason: We are turning our oceans into a landfill. Between 9 and 15 million metric tons of plastic enter the ocean every year. About 90 percent of that comes from the land. It's not from ships dumping anything.

And, it's great that your Committee deals with both environment and energy because plastics is very much a climate-change issue. *Beyond Plastics* issued this report last fall called *The New Coal: Plastics and Climate Change*. We did the first analysis looking at greenhouse gas emissions from plastic. And, unfortunately, found that plastic is on par to emit just as many greenhouse gases as coal plants by 2030; because coal plants are shutting down and plastic production is on the increase. Our report looked at the 10 high-impact stages of plastic production and disposal.

All of this is in my testimony, but I thought I would spare you dealing with my very detailed testimony and give an overview. But, I'm happy to take questions on that.

So, historically, plastic was made from chemicals and oil. Now it's made from chemicals and ethane, a byproduct of hydrofracking. So, you see that flare? (indicates) That is being captured and sent to new facilities called *ethane cracker facilities* that exist simply to produce more single-use plastic.

This is a picture of Sharon Levine. (indicates) Sharon lives in St. James Parish in Louisiana. The most important thing I want to say today is that plastics is an environmental justice issue when you look at production, use, and disposal. The production is mostly happening in Pennsylvania,

Louisiana, and Texas. Sharon lives in a part of Louisiana that's actually called *Cancer Alley*. And, it hurts my heart to even say the phrase, *Cancer Alley*. It's because the cancer rates are so high, and where there's a concentration of petrochemical facilities -- much of it to make plastic. Sharon is opposing two ethane cracker facilities proposed by Formosa Plastics.

It's good that you're looking at this issue, because the public is really paying attention. You go to any American supermarket -- it's really hard to find products that are not made of single-use plastics. I've not been in the baby food aisle lately, because my baby's an adult now. And, I made a wrong turn recently into the baby food aisle, and there's so much plastic pouches, multi-material plastics. And, consumers are not asking for this; in fact, consumers are asking for the opposite. Seventy-five percent of people want single-use plastics banned globally. And, the same polling firm, Ipsos, did a poll for the national group Oceana. Over 80 percent of American voters want policies adopted that provide less plastic packaging. What I love about that poll is the support for reducing plastics was bipartisan. Republicans, Democrats, Independents want less packaging.

One way to get that is to adopt a comprehensive Extended Producer Responsibility, which is a little complex to explain, but not really. It's basically putting the responsibility for the cost of disposal and recycling on packaging companies, rather than you and me. Because, we don't get to vote on what is in packaging; it's the engineers that design packaging. So, they need to be incentivized to give us more environmentally sound packaging.

The risk, which is very real in every state, is if you adopt weak or ineffective programs, we won't see the progress that we need.

I see two big priorities from the plastics industry. One is-- Well, the most overriding thing is, they don't want to see less plastic. It kind of makes sense. They make plastic; they want to keep making plastic. We don't want our oceans to be turned into a landfill, so that's why we need legislative intervention. The plastic industry is promoting very weak extended producer responsibilities -- not with goals, lots of loopholes. I've seen these bills all over the country. And they're also promoting something called *chemical recycling*, which I think is a mistake.

SENATOR SMITH: (off mic) Who has the best proposal?

MS. ENCK: Who has the best proposal?

SENATOR SMITH: What state?

MS. ENCK: Well, the best proposal is by Assemblymember Steven Englebright of New York. And, I attached his Bill to my testimony. I think that's a model for New Jersey. It's not a law, it's a proposal. There are only three states that have laws on the books: Oregon, Colorado, and Maine, and I think they're all not comprehensive enough.

So, that's our risk. So, what I mostly want to talk to you today about is, the three key elements of how you do a good Extended Producer Responsibility program.

So, let me rapidly go through each one.

First, we need you to adopt a bill that actually reduces packaging. And, the way that happens is when you put that requirement in your bill. Assemblymember Englebright of New York-- His Bill requires packaging to be reduced -- all packaging -- 50 percent over a period of 10 years; incremental, every two years.

And, what I'd invite you to do is think about fuel efficiency standards for cars. When I worked at the EPA, fuel efficiency standards -- which we're all happy to have today with the price of gas -- made cars and trucks more efficient. This wasn't voluntary; this was the law. We have efficiency standards for appliances. If you buy your refrigerator today, it's much more efficient than even if you bought it five years ago.

So, I invite you to think about this issue as environmental standards for packaging. Building in rates and dates in the statute; not just general plans, but-- "Okay, companies, you want to keep selling in New Jersey? You need to help us out with all of this waste. Here's your proposed strategy. Reduce by 50 percent over 10 years, and then we'll get into recycling and composting."

But, we need mandatory targets. And, that will prompt the redesign of packaging.

Second -- and missing from this Bill -- is we need to reduce toxics in packaging. And, the Englebright Bill has a list of toxic chemicals: PFAS chemicals, some heavy metals, some phthalates. Because we have to get toxics out of packaging, particularly food packaging. And, particularly, if you want to get higher recycling rates, you don't want to keep recycling packaging if it has toxins in it.

Third, no burning. The plastics industry is finally admitting that plastics recycling has been a failure. Other parts of recycling are working beautifully. I mean, as a volunteer, I designed my town's recycling program in upstate New York. I love recycling. Paper and cardboard -- 66 to 67 percent recycling. Metal recycling works. Glass markets are a little shaky, but that can improve. You can use glass for refillables.

I just had an article published in *The Atlantic*, which documented the plastic recycling rate is 5 to 6 percent; and, it's never topped 10 percent. So, the pivot from the plastics industry now is to burn plastics. They don't call it *burning*, but it's *pyrolysis*, it is *gasification*, it's *solvolysis*, it's different technologies. And the most important thing to know is, that those technologies typically don't work. They've been trying it for decades. There are only eight or nine facilities in the whole country; they're mostly waste-to-fuel. They provide a very small amount of low-value fossil fuel, and they emit a lot of pollution. And, they're almost always sited in environmental justice communities. Also, they're an emitter of carbon. So, that is not the direction to take. So, strong legislation would exclude any kind of burning or chemical recycling.

This is the hardest part -- strong oversight and accountability. You don't want to hand the keys to the car over to the packaging industry because they created the problem in the first place. They obviously have to be engaged, but they need some direction. So, just like we wouldn't expect the tobacco industry to develop anti-smoking programs, you can't entirely depend on the packaging industry to develop packaging-reduction programs. But they can work in partnership with your State agencies.

SENATOR SMITH: (off mic) In the Bill, the New York Bill--

MS. ENCK: Yes?

SENATOR SMITH: --Instead of the packaging people forming a committee and deciding policy, how do they do it in New York, or how are they planning to do it in New York?

MS. ENCK: Well, Assemblymember Englebright's Bill interestingly is silent on the issue of setting up a PRO council or a stewardship

association; a PRO. They leave it to the industry to figure out, "Do they want to cooperate or not?"

SENATOR SMITH: What would be your recommendation?

MS. ENCK: I'm not sure.

SENATOR SMITH: Okay.

MS. ENCK: I want to think on that a little bit more. I can see the value of PROs with efficiency, but they have to have strong oversight. As long as you have environmental standards in the law, then they have the ability to be in compliance. But, you don't want the PRO developing the standards or figuring out the fee schedule. And, that's been the problem around the country.

SENATOR SMITH: Okay.

MS. ENCK: So, I am unbelievably flexible on this important point.

And, again, we as taxpayers have no real control over packaging decisions.

And, we have an opportunity to get some real taxpayer relief and more investments, especially-- not just investments in recycling. Because remember, if you want to fix the plastic pollution problem, recycling isn't going to do it. We're only at a 5 to 6 percent recycling rate. We need to get serious about waste reduction, reuse, refill; and I'll show you some examples.

Of course, the best example of EPR is a Bottle Bill. Ten states have it. It reduces litter at no cost to taxpayers. It keeps recyclables source-separated, so it actually gets recycled. And, it creates jobs. Please consider a Bottle Bill as part of these discussions.

And, a modern Bottle Bill puts deposits on soda, beer, but also non-carbonated beverages -- bottled water, wine, and liquor. Things that you regularly see littered. When I worked at EPA, my office was in Lower Manhattan. You never see soda and beer bottles on the streets because people pick it up, even at just a nickel.

So, voluntary programs aren't cutting it. We need a strong EPR law at the State level.

And, I want to take a moment going through this chart. These are promises made by really big companies just, for instance, to use more recycled content. The red chart-- The red bar is what they said they would do, and the blue bar is what they've actually done. So, enormous room for improvement. And, what's weird is, like these announcements are made with great fanfare, but they don't get there. That's why we need a law.

Let me just give you a couple of examples of what I'm talking about. So, these are soap bars that skip the packaging altogether. And that's a great example of reduction; just skip the packaging.

I want to share this example with you.

No one should open or eat that candy (indicates), because it's my only example from Europe. (laughter) You know when you buy a pouch of M&Ms, it's kind of slippery and waxy. Take a close look at that -- Smarties candy. Sure, it's delicious. It's made from recycled paper, and when you're done with it you put it--

SENATOR SMITH: (off mic) You're talking about the packaging.

MS. ENCK: The packaging, not the candy. (laughter)

The packaging is made from recycled material, and when you're done with it, you put it in your recycling bin. So, on a certain level, this is pretty basic. Why can't American candy companies produce packaging like that? They will when you have a strong EPR bill.

These are refillable shampoo containers. (indicates) You often buy berries that come in clear plastic. You can sell them with compostable alternatives made from things like hardened palm leaves.

This is a little bit of a *Portlandia* episode if you've ever seen that show. But this is soap. (indicates) When you're done with the bottle, the bottle is soap. So, you use the bottle as the soap so there's no packaging at all.

And this is more mainstream -- reuse and refill. Dove launched a new refillable deodorant line. You buy the container once, and then you purchase the refills afterwards. So, you don't get a new plastic coating, or carton, or cylinder every single time. You just buy the new deodorant.

This is Unilever, a very big company, that's launching a reuse and refill system in England. Now, the way I typically do refilling is, I shop at a food co-op, and I bring empty jars, and you get there, and the jar gets weighed. Then you fill it with whatever food -- back and forth. It's a couple of steps. What Unilever is doing is, you buy the product, and then when you go back to the store, you just give the empty container back and they sanitize it. You don't keep reusing it. It's efficient and it's innovative; and this is the future.

This is a company called *Plain Products* (indicates). If you want to buy online, they sell body care in reusable and refillable aluminum containers that just get refilled over, and over, and over again. And, I spoke

to the President of this company. She had absolutely no supply chain problems during COVID because she just keeps sanitizing and reusing the same containers.

A company called *Blueland* does the same thing with soap. I have a glass container at home. When the soap is done, I just purchase a little tablet, and you add water, shake it, and there's your soap. So, you're not buying water all the time, and it's a reusable container.

And, we're seeing more and more of this innovation in Europe because they have laws and requirements. And that's what we need here.

This is a Kit Kat bar's recyclable paper (indicates) that you can then turn into cranes, if you are artistic. But when you're done, it goes in your recycling bin.

You probably enjoy a good Mentos, from time to time, if you have breath problems. It doesn't have to come in plastic, it can come in cardboard, truly recyclable.

The examples go on and on. Paperboard packaging for lip balms, craft paper for berries. We're only going to see this innovation if states pass strong EPR laws. I don't think it's going to happen anytime soon at the Federal level. So, having New Jersey, New York -- big states -- take this on would be enormously helpful in reducing the amount of waste going to garbage incinerators in New Jersey and landfills in New Jersey, which are almost always sited in low-income communities of color.

SENATOR SMITH: Sure.

So, did I hear you say that Europe has pretty good standards?

MS. ENCK: Yes.

SENATOR SMITH: And that would be under the EU?

MS. ENCK: Yes.

SENATOR SMITH: So, staff, if you would, let's take a look at the European standards, okay?

Thank you for the comment.

MS. ENCK: I'm done.

SENATOR SMITH: Are you done?

MS. ENCK: Yes.

SENATOR SMITH: Oh, perfect timing.

Any questions for Ms. Enck? (no response)

You sound like the start of the revolution; really good.

Thank you.

MS. ENCK: It starts in Trenton.

SENATOR DURR: Watch that word.

SENATOR SMITH: That's true.

Thank you so much.

MS. ENCK: My pleasure.

SENATOR SMITH: All right; so we have Brennan Georgianni, American Cleaning Institute, ACI, seeking amendments. And, you submitted written testimony.

Are you here, Brennan?

B R E N N A N G E O R G I A N N I: (off mic) Yes.

SENATOR SMITH: All right; well, we're going to just look at the written testimony.

So, a couple of things for the record.

Mike Egerton, New Jersey State Chamber of Commerce, opposed, no need to testify; Anthony Reznik, Independent Pharmacy

Alliance and Omega Pharmacy Group, opposed, no need to testify; Laurie Clark, Garden State Pharmacy Owners, opposed, no need to testify; John Holub, New Jersey Retail Merchants Association, opposed, no need to testify; Eileen Murphy, New Jersey Audubon, in favor, but no need to testify; Arthur Garst, Coalition for the Delaware River Watershed, in favor, no need to testify; and Hilary Chebra, South Jersey Chamber of Commerce, opposed, no need to testify.

Okay, let's try Bree Dietly. Bree, are you here?

B R E E D I E T L Y (off mic): Yes.

SENATOR SMITH: All right; Bree is neither in favor nor opposed. And Bree is from Breezeway Consulting for American Beverage. Is that right?

MS. DIETLY: That's right.

SENATOR SMITH: Okay, take it away.

MS. DIETLY: Thanks, Chairman, and members of the Committee.

I'm Bree Dietly; I work for Breezeway Consulting in Somerville, Massachusetts. I'm representing the American Beverage Association. Like the contractors earlier, I am in that third box of somewhere in between support and oppose.

We have spoken on this issue -- on Extended Producer Responsibility as an industry -- around the country. The beverage industry is supportive of well-designed, Extended Producer Responsibility laws. We have a strong position on what we think works for Extended Producer Responsibility. We've been active in the passage of the law in Colorado, for example, which we view as a model. To the extent Ms. Enck pointed to

Assemblyman Englebright's as her model, I would point to Colorado House Bill 22-1355, which is cross-referenced in my testimony along with a summary, as our model.

SENATOR SMITH: (off mic) So, let me ask you a question--

MS. DIETLY: Of course.

SENATOR SMITH: --About the two models.

Ms. Enck said the entity that's doing stewardship -- we'll call them a *council*, for the moment -- I've seen two models-- Well, I've seen actually one model; the one model is, that the industry are the members of the council, and they'll figure out what's right. But the model in Colorado doesn't have specific standards for reductions in packaging.

MS. DIETLY: It does not have standards for the reduction of packaging.

SENATOR SMITH: All right. Will that be something that the American Beverage Association could live with?

MS. DIETLY: We have a very hard time with standards for reduction because of the problem with measurement and with the problem with baselines. We're negotiating having this discussion right now in California--

SENATOR SMITH: Right.

MS. DIETLY: --Senate Bill 54, which is an attempt to circumvent a rather Draconian ballot measure that's going to be on the ballot potentially this fall -- charging fees on plastic packaging.

The attempt to try to sort of say, "This is what the reduction should be" sort of belies the question of, "Where do you start?" and, "What's a unit; what's a unit of packaging?" So, if you have a company like our

companies that, for decades, have been source-reducing their packaging, versus a company that maybe hasn't-- Has bulky packaging, has inefficient labeling, has glues that aren't recyclable. They're going to have their come-to-Jesus moment, get their source reduction because they're just starting. We've already done that. So where does that leave us as an industry?

And, we, too, have issues with-- We don't just serve products in bottles and cans. We serve products through fountain outlets, we have innovative new packaging that's coming down, we have cardboard bottles that are coming. We have a lot of new kinds of packaging. So, sort of knowing, "How do you measure it?" You know, we sell--

SENATOR SMITH: Yes, but you understand the problem that Ms. Enck brought up -- which is, fox-henhouse. You know, if we say, "Here's the council that should make the decisions," but we don't give them any direction, it's the fox guarding the hen house.

MS. DIETLY: Sure; and I would argue that it's not a lack of direction. What we don't want to see are arbitrary numerical targets stuck in legislation because they sound right.

SENATOR SMITH: (off mic) So, we don't want to be arbitrary either.

MS. DIETLY: All right. So what--

SENATOR SMITH: --Is it possible for your Association -- or for anybody else here who is planning to testify -- to send us what you think the standard should be, and your reasons why. We're not going near this until September or October. And we actually do read the mail we receive. So, if you'd send in your recommended standards, that would be a big plus.

MS. DIETLY: And, let me talk due process on that.

SENATOR SMITH: Sure.

MS. DIETLY: Because we're not asking to guard the henhouse. The principles and the argument that we're trying to make here with the Colorado Bill, or with other models that we put forth, is to say that the reason the producers are responsible for these systems-- And this isn't new. The OECD in Europe defined EPR, in 1992, as producers taking responsibility for the end management of their material. So, this isn't new.

EPR is only recently being understood, and only really being understood in the U.S., as a form of packaging regulation. EPR was established to fund and improve the operation of recycling systems. That's what it was for. It was not meant to have standards to change toxic levels or do-- So, this is sort of a fusion of packaging standards, which typically come from a Federal level; and recycling funding and operations, which typically comes from the State and local level.

SENATOR SMITH: So, one comment on that.

The people who you represent -- do they do business in Europe?

MS. DIETLY: Oh, absolutely.

SENATOR SMITH: Are they living with the standards in Europe?

MS. DIETLY: They're living with EU standards, yes.

SENATOR SMITH: Why can't they live with the EU standards here?

MS. DIETLY: Because the people in the systems in the EU are much more well-established than they are here. They have better infrastructure for the-- See, where I want to get here is what we're trying to do, and the reason that the producers need to have a role in this. The only

people in this system who have an incentive for the system to actually work
are the producers--

SENATOR SMITH: Absolutely.

MS. DIETLY: --because we need the material back.

SENATOR SMITH: So, you know the unintended--

MS. DIETLY: I mean, if I--

SENATOR SMITH: Do you remember Jim Florio?

MS. DIETLY: Yes.

SENATOR SMITH: Congressman Jim Florio?

MS. DIETLY: I do.

SENATOR SMITH: He did the--

MS. DIETLY: --Superfund bill.

SENATOR SMITH: Well, not just Superfund, but also the law
-- I want to say Tosca (phonetic), but I'm not sure it's-- The law that required
companies to report -- they didn't have to do anything, but they had to report
the annual emissions of toxic materials. And the net result of that was,
companies looked at their processes and said, "Holy God. Not that we're
polluting, but that we're wasting all these chemicals." And, as a result, you
saw dramatic decreases in the emissions of American industry because they
were realizing they were throwing money down the sewer or up the stack.

And I see EPR the same way. You're going to have companies
saying, "We could do this a lot smarter and a lot cheaper."

MS. DIETLY: That's right.

SENATOR SMITH: All right.

MS. DIETLY: Because they're going to be paying the cost of
recycling materials. And what they want back on the other end is the material

to put back into the packaging to meet, for example, your minimum recycled content standards from the bill that you enacted last year.

So, what we're-- Ms. Enck put up the chart that showed company commitments over the years. A lot of companies have made a lot of way out their commitments. But, now we have statutes in a number of states that require companies to put material back in. So, our members have a vested interest in making sure that the material *a*) comes back, *b*) is of sufficient quality, and *c*) we can get our hands on it. We don't want glass downcycled to be something like landfill. We don't want our PET bottles downcycled to be the back of a Shaw carpet. We want those back into the bottles and cans because we've made-- We're legally on the line to put that material back. If producers are not accountable for and engaged in the funding, design, and operation of that system, and it doesn't work-- Say, DEP is in charge of it, and the system doesn't work -- the recycling rates don't change. The amount of recycled content available in New Jersey to the producers doesn't go up. Who do I sue? Who do we blame? How can the producers be held to standards, and, in fact, face penalties for not using recycled content if they're not given the ability to make changes to the system that is fundamentally not performing?

SENATOR SMITH: You're predicting gloom and doom before it happens.

MS. DIETLY: That said, the problem with the system we have today is a lack of accountability. Why do we have stagnant recycling rates in this country? Because there's no one responsible for the performance of our recycling system.

SENATOR SMITH: Well, because we have no national leadership; that's the real reason--

MS. DIETLY: Well, and all your--

SENATOR SMITH: --Between you and me.

MS. DIETLY: --That we're talking about EU standards, Canadian standards--

SENATOR SMITH: So, let's talk about EU standards.

You know what would be a great homework item for you? And, you can go back to the people who you represent and say, "This guy is really driving us crazy." Send us the EU standards, and tell us the ones you can't live with, and why. Because that's a starting point. You're telling me we have 500 million people there using, and the companies in that jurisdiction that are doing producer responsibility. And, you've made a point -- they have different infrastructure, yada, yada, yada.

Let's use that as a starting point. Tell me what you can't live with in the European standards.

MS. DIETLY: They're on about their fourth generation of standards.

SENATOR SMITH: Which is great. They've already made a lot of mistakes, and they fixed them. That's a good thing.

MS. DIETLY: But, they started at the beginning. They didn't start at the fourth generation.

SENATOR SMITH: Tell us why there's a standard in the EU that we can't use. What I'm saying is, this will not be a waste of your time.

MS. DIETLY: I think that what the process that has been established -- and it's done a lot of places that we recommend in our

testimony, that we recommend in conversations -- is that New Jersey needs to understand what it has today in terms of programs, capacity, systems; and then set goals that are relative to that. What do we have, what can we achieve, at what cost? And, then set a timeline for doing that, and measure the producers against that timeline, against those goals. It's the DEP and a public advisory committee of stakeholders who would judge whether the producers are making adequate progress towards that goal. That is exactly the way Europe and Canada started. They started with general directives, they got general legislation. You read the EPR legislation for a province in Canada -- it's about six pages long. They're not elaborate.

The detail comes in what the producers do. The producers are the ones who go out and do these needs assessments, "Here's where we are; here are the gaps; here's what we need to close. Here's our proposal for doing that; over five years, we can achieve this, this, and this. You evaluate us relative to that; at the end of it, if we haven't done it, you fire us." And the producers have to form a new organization; write a whole new plan; and come back to the state with a new strategy.

The other thing that's happening all the while is that the producers are investing in expanding the scope of materials that are recycled in New Jersey. They're expanding access to recycling in New Jersey beyond those who have it today, and beyond the materials that are being recycled today. They're doing comprehensive uniform advertising, promotion, and education of the recycling system across all platforms in the state. So, all municipalities -- it doesn't matter if you're in Mercer County or-- It doesn't matter what county you're in, you're getting the same sort of messaging about recycling. You're seeing it in public spaces, you're seeing it at home. That's

one of the critical things that the (Indiscernible) organization can provide and does provide in these systems.

So, there's a-- Jersey has a lot of individual communities that run programs. And, it's going to take a long time for them to sort of come into some level of synchronization and standardization. But, that's the only way we're going to be able to ultimately make improvements, do education, and raise the overall level. I mean, that's what we need to do; raise the overall level of collection and processing. Make investments in the MRFs -- some of which haven't been invested in since they were built – and, ultimately provide that material to close the loop with a system. That's the model we want to follow; that's the model that was followed in Europe. The funding mechanism that the producers use will incentivize packaging changes. Because if you sell something that isn't recyclable, you're going to pay a lot of money. If you sell something that is recyclable, and uses recycled content, and is recycled at a high level, you will pay less money. So, the system will incentivize producers to use those materials. But they won't, as the Assembly Bill in New York does, say that 10 years from now you can only sell half as much as you sell today. That's a bridge too far for us.

SENATOR SMITH: I appreciate your comments. And, if you'd send in that information, we'd really appreciate it.

MS. DIETLY: All right; thank you.

SENATOR SMITH: The next witness -- Greg Costa, from Consumer Brands. Neither box is checked, in favor or opposed.

Greg, are you here?

G R E G C O S T A (off mic): Yes.

SENATOR SMITH: Okay.

MR. COSTA: I'm only a little bit more ambivalent than AJ, as he--

SENATOR SMITH: (off mic) He was pretty ambivalent.
(laughter)

MR. COSTA: We really appreciate this, Senator.

My name is Greg Costa with the Consumer Brands Association.

Thank you for the opportunity to comment on the Bill.

Just a little bit about the Association. We wish, first of all, to engage with you, the Committee, and the Legislature to address New Jersey's recycling needs -- and we do support the concept of Extended Producer Responsibility. It's our goal to assist in the enactment into law of a policy that has a complementary funding mechanism that brings maximum benefit to consumers and taxpayers and is a sound blueprint for recycling success here. And we want it also to be a model for other states. As you've heard testimony today, there are laws now in Maine and Colorado recently, and Oregon. And, frankly, our fondest wish on this is that if we can have a successful stakeholder process and figure something out, we'd like one of these states to emerge as a model for something that can be done across state lines so that it is absolutely as similar as possible from here, to New York, to Connecticut, and through the Northeast, at the very least.

Consumer Brands Association represents the world's leading consumer products packaged goods companies. In the State of New Jersey, the CPT industry contributes \$56.6 billion to the GDP; \$35.1 billion in labor income; and supports 515,000 jobs. So, we're heavily engaged here. We have a huge presence in manufacturing, but also obviously in distribution and

sales. But there's quite a bit of warehousing, and a lot goes on at the Port as well.

As part of the shared responsibility in improving end-to-product life systems, Consumer Brands can support a well-designed EPR program that's intended to improve municipal recycling and other important components. We really want to do that across the board. And I think our biggest problem with the Bill, as we see right now, is that it's so focused on the consumer-packaged goods industry, and we think that this should be broadened out and that there should be--

SENATOR SMITH: What do you think should be included?

MR. COSTA: You know, I think anything that is going to generate waste, and at all levels. Meaning, the packaging material that's delivered to the warehouse, the packaging material that's in the so-called *back room* at the retail store -- you know, that kind of thing. And, it should be for everything that is coming in and going out of the consumers' homes. We think that that's the most efficient and effective way to do this, the most comprehensive way, and the way that it's going to get the most material back into the hands of the manufacturers that need it.

When Ms. Enck -- who we have tremendous respect for her and the work that she does. Her work at the EPA was exemplary; and, of course, Beyond Plastics-- I mean, what great ideas. You know, one of the things that she put up there, though, showing what industry said and what it's really done. Those are goals. I mean, industry is working toward achieving the high levels that were in one color, and, of course, the levels that are here right now. Some of the hurdles to getting there, of course, involved how easy it is to get this material back. And, this is why the evolution of the industry has been

such that we've gone from 10 years ago opposing EPR, to having a set of principles that are in favor of EPR and just trying to get there in a way that is good, obviously for the bottom line of industry. They're there to make a profit -- but for the taxpayers and the consumers. No matter what we do, there are going to be costs involved. And, those costs need to be managed so that-- Especially at this time of inflation. And, you have, on your Bill, Mr. Chairman, you have a pretty aggressive timeline. And, it's sort of in the middle of what is currently a very difficult period of time for manufacturing, both in supply chains and just in costs. So, that's another consideration.

The fundamental principles and elements that we think should be included, is to allow for an empowered industry-funded and run Producer Responsibility Organization to assess the fees, unpackaging to determine where and how those funds are spent. This is diametrically opposed to what I think we heard Ms. Enck describe. And, I don't think that her notion is entirely inapt. I understand what is meant when you say, you can't have the fox guarding the henhouse. I take a little bit of exception to that because, our companies are working very hard to recover as much material as possible; to use material that is economical; and that can be recycled. So we're on the same page on that, but we do think that industry can manage this appropriately-- And, by the way, with as much oversight as you would always have from the Department of Environmental Protection on any law that's passed. They wouldn't be just left-- The folks running the PRO wouldn't simply be left to their own devices. Of course, there are going to be things in the law that are basically the guidelines, and then, of course, regulatory oversight from the DEP. So, it's not entirely -- I don't envision something that's entirely autonomous. It's certainly with oversight, which the

Legislature obviously can exercise every year as you see how things are working out.

The definitions of *recyclability* should also, we would hope, not be set by law, but should be determined by the PRO and approved by the appropriate regulatory agency; I assume the DEP. This allows for flexibility as you move forward in new types of packaging being introduced, used, coming into use increasingly. That's the reason for that.

Funds should be dedicated to recycling improvements, and not funneled into State government general funds.

Policy should be based on accurate data, including regular State needs assessments with clear financial and performance targets.

Recycling programs should be standardized across the state or at least across regions. That's a lot easier to do in New Jersey. I grew up in Camden County, and I defy people to drive from one end of Camden County to the other and tell when they left one town or borough and go into another. I currently live in Upstate New York where things are just so -- it can be so rural, and the different needs in my tiny little town, versus the village, and the city that's further away in our county. It's hard. But, here in New Jersey, I think, with the exception of our friends up in the hills and so forth-- But, I think that you have the ability to put together a really comprehensive system that can be a model for other states. I think that you have that in your grasp.

And then, finally, the funding from the consumer packaged goods company should be additive, as I said before, to existing recycling programs, and also include contributions from other sources. We'd really like to see that.

And, we think that the EPR program should be implemented using the best available data gathered through a vigorous needs-assessment program.

So, I think that-- There's more in my written testimony -- you have-- And, what we really, really want to see is the kind of stakeholder process this fall that I think we talked about when we were on a call together back in February.

SENATOR SMITH: Yes, let's do it in the summer -- let's not wait until the fall -- right after July 4. Call my office and we'll get together.

MR. COSTA: If you promise to do it at the beach, I'll be there every day. (laughter)

SENATOR SMITH: I don't know if I can make that promise.

MR. COSTA: Great.

SENATOR SMITH: But, anyway, thank you for your comments, Greg. We appreciate it.

Gary Sondermeyer, Association of New Jersey Recyclers, commonly called ANJR.

Gary.

You're also a former Assistant Commissioner at DEP?

G A R Y S O N D E R M E Y E R: Chief of Staff

SENATOR SMITH: Former Chief of Staff.

MR. SONDERMEYER: And, an Assistant Commissioner.

Well, thank you very much, Mr. Chairman, and esteemed members of the Committee.

Gary Sondermeyer; I'm Vice President of Operations of Bayshore Recycling in Woodbridge Township, and I'm here representing the New Jersey Association of Recyclers.

I have prepared remarks that I did submit for the record. So, I'll just paraphrase very quickly and generally our comments.

ANJR very enthusiastically supports the legislation. We think it's a critical next step towards sustainable packaging management and, really, towards sustainable living, which is what we need to evolve to in response to the climate crisis.

We have been involved, for the past couple of years, in the national and regional discussion of EPR through the National Recycling Coalition; regionally, the Northeast Recycling Council and the Northeast Waste Management Officials Association.

We wish to applaud many of the aspects of the Bill. And, I just will shotgun through some that I would like to highlight.

First, we very much appreciate the scope of the covered materials, which goes well beyond plastics, and deals with paper, plastic, glass, metal, and any mixture thereof. Really, anything that represents packaging. Similarly, the inclusive nature of covering the entire supply chain -- primary, secondary, tertiary, through manufacturers, distributors, exporters, and importers. The architecture of Section 3, which deals with the stewardship plans and how that is laid out. Section 4, in particular -- I want to highlight the performance goals that are articulated. The minimum 75 percent post-consumer requirement for all single-use packaging by January 1 of 2027. The standard for all single-use packaging is readily recyclable and compostable by

January 1 of 2030, and at least 25 percent reduction of all single-use plastic packaging by January 1 of 2030.

Perhaps the most important aspect of the Bill to the recycling industry -- and I think, arguably, the solid waste and the recycling industry in the state -- is Section 3a(5), where it's addressed that producers need to describe how they'll utilize the existing municipal solid waste collection and recycling infrastructure to implement the stewardship plans. This is absolutely critical. As you all know, we have an exceptionally mature collection processing and disposal system in a state that simply must be utilized for this to be workable.

Section 3a(6) amplifies this point, and explicitly says that producers need to work with existing waste haulers, storage, and recycling facilities, counties, and municipalities throughout the state to effectuate the collection, transportation, reuse, and recycling or disposal of packaging products.

We like to recognize the teeth that are set out in Section 6. Really, they're unequivocal -- that non-participating producers shall not sell, offer for sale, distribute, or import for sale or distribution any packaging products unless a producer is participating in an implementation of a packaging product stewardship plan. It brings back in my memory -- I've been working in the field for 42 years -- of the 1991 Toxic Packaging Reduction Act, where we had similar types of provisions on the manufacturers at the time. I distinctly recall them saying it couldn't be done; and yet, we did it. They did reduce lead, cadmium, mercury, and hexavalent chromium in packaging sold in the State of New Jersey. And, hopefully, we'll have that same outcome.

I want to recognize the enforcement provisions of Section 8 for civil administrative penalties.

And, finally, I want to recognize the living nature of this planning process in Section 4e, which to maintain an ongoing focus on the stewardship plans, they need to be updated at least every five years. We particularly like the provision in Section 4e(2), where the DEP, at any time, can come in and review a stewardship plan on an as-needed basis.

So, enthusiastic support; just a few items I'll mention on an ongoing basis.

One -- and I think everybody's sort of in this same position of trying to understand the mechanics of implementation -- as Administrator, Ms. Enck mentioned conceptually EPR is pretty straightforward. But, when you get down to how you actually implement a system, I think there's a lot that we need to figure out. And, we can do that with discussions like this, that we're starting today. You know, the system is complicated. The last metrics I saw from DEP, about 40 percent of our municipalities have Department of Public Works collection for solid waste and recycling. About 40 percent have municipal contract collection with private haulers. Private haulers do the servicing for most of the commercial, institutional, industrial accounts, and then about 20 percent are subscription services with individual homeowners making their own arrangements. So, at least 80 percent were dealing through the tax base. And, the mechanics of how payment takes place, the market share-- And we worked through a lot of these in the Consumer Electronics Bill, so we know we have some experience in this State in doing that.

But, certainly, the devil's in the details of figuring out how it will work.

Again, I mentioned sort of our biggest concern of using the existing system. And, if producers are paying, what rights or authorities will they have, or any? That's something that we think needs to be thoroughly vetted. I had a chance to participate in a national conference a couple of weeks ago. They had sessions on Extended Producer Responsibility. They had very distinguished speakers from the manufacturing industry from Coca-Cola, Dr. Pepper, Clorox, and The National Packaging Association. And they made the point that if we're going to be paying-- Because as you know, there's different payment schemes in the bills that have been passed. Maine has one payment percentage; Oregon has a different percentage; Colorado just passed, within the last month, how that actually is going to work in terms of what abilities or rights the producers have in working with municipalities and the private sector is of great importance to us. Basically, the folks from the manufacturers were saying, "If we're going to pay, we want a lot to say." And we need to understand what that means and have a very thorough discussion to talk through that.

Just two more very quick points.

The timeframes in Section 4 for DEP to perform their reviews-- This is a DEP thing they need to comment on, but we do express some concern with that timeframe being tight. There's no expertise, or very limited expertise within the agency to review plans of this complexity.

And, finally, we do recommend a side-by-side review of S-426 next to the Recycled Content Bill that was passed earlier this year, which is so significant. And, from a public policy standpoint, it would seem to make

sense to do that side-by-side review, both in terms of the goals, and objectives, and the timeframes.

So with that -- again, enthusiastic support. Thank you very much, both Mr. Chairman, for sponsoring the Bill, and the Committee for entertaining it, and for beginning a very important discussion.

Thank you.

SENATOR SMITH: Thank you, Mr. Sondermeyer; most appreciated.

Our next witness, Tony Russo; checked neither box, in favor or opposed.

Tony Russo, are you here?

TONY RUSSO: (off mic) Yes.

SENATOR SMITH: Please come up.

MR. RUSSO: Yes; thank you, Mr. Chairman, and members of the Committee.

Again, Tony Russo; I'm the president of the Commerce and Industry Association of New Jersey. Thanks for the opportunity to weigh in on this.

The reason why I didn't check the box is because it's discussion only, and we have a couple of members in this space who are actually producers. And, after listening to some of the testimony today, I think I would be remiss if I didn't remind everybody that plastics are good. I mean, for example, one of our members makes plastics for medical devices, medical syringes, and medicines, and they have to make them in plastic packaging. So, it serves a purpose.

But, the issue is on the pollution side, right? And, like the Administrator said, where you have to reach that happy balance between what we produce and how we dispose of it and handle it.

Again, we haven't really done a deep dive into the Bill, but I could tell you the initial response that I've gotten back -- and Senator Greenstein, you're working with the manufacturing caucus -- a few of these members actually employ hundreds of people; generational businesses that produce plastic packaging. And, they're good stewards of the environment and they want to do the right thing. The first question that we had, after looking at this Bill is, how much would something like this even cost, and can we pass those costs on? Maybe, maybe not.

But it's a major undertaking. The breadth and scope, Mr. Chairman, of the Bill is something that I think you appreciate that it's going to take some time to kind of work through the details -- that this is something that we do have to engage in a stakeholder process. We do have to sit down and kind of go through the data. Where's the plastic going? But, I just want to make sure that we all can appreciate that plastic serves a vital purpose in industry, in business, and in our personal life.

So, we look forward to working with everyone on the Bill. But, I just wanted to get on the record to say that the first take -- the breadth and scope is pretty large.

Thank you.

SENATOR SMITH: Thank you for your comments.

Eric Benson, Clean Water Action, in favor.

Eric, are you here?

E R I C B E N S O N: (off mic) Yes.

Good afternoon.

Eric Benson, Clean Water Action.

I'll be brief.

Clean Water Action is in support of S-426, requiring manufacturers to pay for the collection and recycling of their products; encourages good design products that are less toxic, more durable, more recyclable.

Producer responsibility makes our waste stream more cyclical. It allows flexibility for manufacturers to decide how to best implement the recycling programs given their individual business models and practices and products; and it creates an even playing field for them.

So, who's benefiting from producer responsibility? Businesses. When their products are designed with EPR in mind, they have a competitive advantage in the marketplace. Taxpayers. The role of government is significantly reduced, which translates directly into savings for taxpayers. Job seekers. More products are managed by manufacturers. There are new markets recycling has created, stimulating small businesses and growth creation. And, of course, our favorite topic, the environment. When less toxic products are made, there's less to clean up later. When more products are recycled or when they're designed to last longer, less trash has to be burned or buried.

Producer responsibility is happening all around the world. Industries have already made some of the changes we're seeking.

We've made a lot of steps here in New Jersey in the last couple of years to reduce pollution. We're ready now to tackle one of the biggest sources of pollution in the state: packaging.

To make sure we have the strongest and most effective EPR Bill moving forward, we support the technical and strengthening amendment proposed by our hero, Ms. Judith Enck, and we'll be following this Bill closely as it moves along.

Thank you.

SENATOR SMITH: Thank you, Eric.

Lew Dubuque, National Waste and Recycling Association, opposed.

Lew.

L E W I S D U B U Q U E: Good afternoon.

SENATOR SMITH: Good afternoon.

MR. DUBUQUE: Chairman, my name is Lew Dubuque. I want to thank you for the opportunity to speak today on behalf of the New Jersey chapter of the National Waste and Recycling Association.

The collective work of our New Jersey members is responsible for 46,000 jobs in the state, a payroll of \$2.3 billion, and \$8.4 billion in annual State revenues.

NWRA recognizes and applauds New Jersey, in particular, for its long-standing role as a leader on sustainability solutions. NWRA and its members are similarly committed to supporting the development of safe, economically sustainable, and environmentally responsible recycling programs benefiting communities throughout the state.

However, a statewide EPR program for all packaging materials and paper products has the potential to upend New Jersey's existing recycling program. It may have a lasting impact on innovation and investment and

can do even more harm than good when not enacted in a thoughtful manner that accounts for system-wide effects and marked considerations.

SENATOR SMITH: We only do thoughtful legislation.

MR. DUBUQUE: Okay, then we're good. (laughter)

We think it's vital for an EPR program to succeed in the state, it has to take into concerns and objectives of all relevant stakeholders, including counties, municipalities, residents, and private recycling collection and processing service providers.

Accordingly, any EPR legislation to create an advisory committee representing a variety of stakeholders' interests. The committee should be involved in crafting the State's EPR program from the onset by providing feedback regarding statewide recycling performance goals. The advisory committee should be empowered to provide feedback to the PRO before the new, updated, and revised PRO plans are submitted to DEP for review. Producers and PROs should be required to respond in writing to the advisory committee's comments and recommendations during the plan creation and implementation process to ensure that stakeholders' input has a real role in shaping the State's EPR efforts to inform DEP's understanding of how the comments and recommendations affected the submitted plans.

Two, a comprehensive statewide needs assessment must be conducted prior to the enactment of an EPR program. A fully funded needs assessment is a prerequisite to any effective EPR legislation in order to identify strengths and gaps in New Jersey's recycling system.

Determining the EPR for packaging materials and paper products is the solution to New Jersey's recycling challenges before determining the

cause and scope of these challenges. And, without considering alternate strategies is akin to putting the cart before the horse.

An extensive needs assessment would be necessary to inform funding strategies and reimbursement rates supporting an economically viable EPR system.

EPR legislation must recognize and protect New Jersey's existing recycling infrastructure. New Jersey's recycling systems have benefited from significant investment in processing facilities and other assets, and those investments should be expanded upon and improved, not abandoned for the cheapest possible alternative. Abandoning the State's existing infrastructure in the name of cost savings for PROs will strongly disincentivize future private investment, and undercut the State's goal of improving recycling rates, increasing recycling capacity, and improving access to the service for its residents.

Thus, while providing funding to strengthening the recycling and reuse infrastructure's important goal for EPR producers and PROs should work with existing haulers, recyclables, handling, and recovery facilities, recyclers, and municipalities to operate or expand current collection programs. PRO funding must prioritize improvements to existing infrastructure, rather than the creation of new, duplicative facilities and programs.

Four, local governments and residents should retain control over local recycling solutions. New Jersey is unique that a significant percentage of its residents currently receive recycling-collection services through subscriptions with private haulers. Any proposed EPR programs should ensure that New Jersey residents do not lose subscription recycling-collection

services if they desire. Additionally, PROs should reimburse municipalities for the cost of providing recycling services to their residents as established through the needs-assessment process.

Local governments are in the best position to determine which services are most efficient and convenient for the residents, and which strategies had the best chance of succeeding.

EPR legislation should not encourage municipalities to turn over control of their recycling programs, particularly curbside recycling programs, to PROs which are neither elected nor accountable to local taxpayers.

Any EPR legislation should focus strictly on residential service. Commercial and industrial programs should not be covered by a mandatory statewide EPR program. Including commercial and industrial customers and statewide EPR programs would hamper private recycling entities' ability to continue operations throughout the state.

It is unclear whether the legislation is intended to cover recycling collection for non-residential sources other than schools or public agencies. But, to the extent the legislation is intended to cover recycling programs for commercial and industrial customers, NWRA opposes the inclusion of those programs in Bill.

New Jersey's recently passed post-consumer content law looks to create more robust markets for materials recovered throughout recycling programs, thereby supporting their use for manufacturing into new products and packages. It is vital that the State gives time for this new law to have an impact before branching off into something else.

I appreciate the opportunity to speak to you today, and look forward to working with you in the future on behalf of New Jersey's waste and recycling industry.

SENATOR SMITH: Lew, will you give us a copy of that?

MR. DUBUQUE: Yes, will do.

SENATOR SMITH: Well, FYI, for future testimony, if you have a prepared statement, give it to us, make copies, and then just do a summary with bullet points.

MR. DUBUQUE: Okay; I got it.

SENATOR SMITH: It's a better way to do it.

MR. DUBUQUE: Thanks.

SENATOR SMITH: Jennifer Coffey, ANJEC -- Association of New Jersey Environmental Commissions, in favor.

J E N N I F E R M. C O F F E Y: Good afternoon. It's good to see everybody.

Jennifer Coffey; I'm the Executive Director of ANJEC, the Association of New Jersey Environmental Commissions.

Thank you, Chairman and Senators, for being here today.

First, I want to start off by saying, ditto to everything Judith Enck said, and ditto to everything that our good friend, Gary Sondermeyer, said-- from the recycling community.

I'm not going to get into the details of our feedback on this Bill. We will send that along. I know the day is long, the hearing is long.

I do want to set context and respond to a few of the comments that I heard.

First of all, to recap why we're looking at this Bill. You have all heard me say, time and time again, that the World Economic Forum has produced a very comprehensive study, backed by global data, that shows that if we don't take action with the way that we are using single-use plastics, by 2050 we will have more plastic than fish in our ocean. And, I challenge you to think about the children in your life. And, so my niece, Giselle, who will be here this fall, so maybe I'll drag her to one of these hearings.

SENATOR SMITH: Absolutely.

MS. COFFEY: She will be-- She's now 13, and, so, she will be about my age in 2050. And, I do not want to leave her an ocean that has more plastic than fish. She can tell us about the Great Barrier Reef and all the impacts that we're seeing down in the Southern Hemisphere.

I also want to talk a little bit about a recent Yale study that shows that 14 percent of fossil fuels go to make plastics; 14 percent. Plastics are fossil fuels, period. Fossil fuels are plastics. What's more concerning is that the same Yale study says that, by 2050 -- so that the same year we're looking at, unless we change the way we do things -- more plastic than fish -- by 2050, plastics will drive 50 percent of fossil fuel increased demand; 50 percent.

This is a system we can change; and we're doing it right here in New Jersey. New Jersey is leading the way. And this EPR Bill builds upon the Plastic Pollution Reduction Act, so there are no more bags, no more polystyrene, the moving straws to upon request. It builds upon that post-consumer recycled content law where we are setting standards to make packaging using recycled content.

I heard from some of the business and industry advocates a willingness to include post-consumer recycled content into their packaging.

That's great. What we need to look to do is, yes, shift our recycling rates up, we need to increase recycling so that the product base is there for them to use. And, we need to attach some responsibility to business and industry for the amount of pollution and human health impacts that they are creating in our society. Right now, we, as human beings -- most particularly, human beings who are Black, and brown, and low-income -- are shouldering the burden of the impacts of toxic plastics and packaging.

And, so, we need to shift away from putting the burden of packaging and plastics on human beings and put it back on to the business and industry who are using and putting these products out into our environment. As we heard from Ms. Enck, it's not consumers who are asking for this giant volume of plastic packaging; it's industry because there's fossil fuel money there. That's the driver.

And, so, we know that plastics -- as Judith has told us, and so many studies have told us -- is a climate change issue. We know it's an environmental justice issue. We know it's a clean water and healthy habitats issue. We also know that we can fix this. New Jersey's leading the way. I'm looking to California and trying to find the right people who lovingly taught there to tell them to come up to the Jersey standard and follow what we're doing here on the East Coast.

This Bill will move towards reduced packaging, increased recycling. We're very, very excited, very willing to participate in any conversations. We will send around comments and input.

Just a quick response to two comments I heard from Commerce and Industry.

We're not talking about surgical supplies here. I'm not trying to stop anybody's bypass from happening, any medical supplies that are wrapped in sterilized plastic. That's not what we're talking about here. We're talking about the mass volumes of plastic that you get in a candy bar or a soda. So, we're not talking about medical and surgical supplies here.

Also, when I hear we need an extensive needs assessment from industry -- that sounds like a lot of delay. We know what the need is. We know we need to reduce the amount of plastic packaging; we know we need to increase recycling rates, and we know we need to create a closed-loop system that's cradle-to-cradle so that we are not depending on virgin plastic and supporting the fossil fuel industry anymore for disposable plastics.

So, thank you, Chairman; I appreciate it. Thank you, Senators, for the opportunity to speak today.

SENATOR SMITH: Thank you, Jenn.

Ray Cantor, seeking amendments.

Ray, what amendments do you want?

R A Y M O N D C A N T O R, E S Q . : I don't know yet, sir, but I'm-- Let's talk about that.

SENATOR SMITH: Well, you said "seeking amendments."

MR. CANTOR: Well, okay. This gets back to your checklist of having a forum of *for* or *against*.

So, what we know we need is a modified bill.

So, let me just start. Ray Cantor, NJBIA. Thank you for allowing us to speak here today.

My colleagues -- who have spoken before me and who will speak after me -- are much more familiar with the details of EPR legislation and

how to craft the right program. I just want to talk a little bit more about process and timing. What we need is not, in our opinion, not in crafting the EU, or the New York, or the California standard in New Jersey. We need a New Jersey-specific law that's going to work in New Jersey and increase recycling here in New Jersey.

Business is in favor of EPR, but we want to make sure that we do it right. It's extremely complicated when we're talking about processes of thousands upon thousands of different products. And, I know, Mr. Chairman, this Committee and you like to be very aggressive, very aspirational. Try to push those boundaries to make sure that everyone gets to the place where you think we can and should be. But, sometimes we-- Again, we need to make sure we do it right. So, I would just suggest that we do-- That those stakeholder meetings that we had all talked about-- If we begin this summer, that is fantastic. I think everyone here in the audience is ready to come in and have those conversations.

But, again, we should not be rushing to, in my opinion, adopt a law or a bill as soon as we can. We need to adopt a bill as soon as that bill is ready. You had mentioned before-- I think we're all aware that the Department of Environmental Protection is understaffed, particularly in the solid waste program. They've had retirements; that program has not been rejuvenated in quite some time. Just over the last few years-- they are behind in even proposing regulations for any number of bills that this Committee has voted on. They have not proposed-- Dirty dirt, food waste, the bad bills, and now recycled content. So, I would just suggest, this is not--

SENATOR SMITH: How about Flood Hazard rules?

MR. CANTOR: I'm talking about just on the solid waste side.

SENATOR SMITH: Okay.

MR. CANTOR: You know--

SENATOR SMITH: So, did you go to the budget hearing and say that the DEP is short personnel, and the New Jersey Business and Industry Association suggests a budget increase for personnel?

MR. CANTOR: Well, we always want State government to work better. But, when you're given three minutes at the budget hearings, we have--

SENATOR SMITH: Other things to talk about?

MR. CANTOR: --more global issues to talk about.

But, we do support-- And, we told the Commissioner that we support staffing up so they could do their job appropriately. It does no one any favors when DEP is understaffed and can't get permits out, can't get the regulations done appropriately. Won't be able to do the waiver process of the recycled-content Bill if and when they ever get the regulations done.

So, again, our suggestion is, let's stakeholder this; let's bring in the best minds to make sure that we get the right solutions; let's do it right. And then I think industry will be firmly on board and we can have a solution that helps everybody.

SENATOR SMITH: Thank you for your comments.

MR. CANTOR: Thank you.

SENATOR SMITH: Doug O'Malley, in favor, Environment New Jersey.

Doug, are you here?

D O U G O' M A L L E Y: (off mic) Yes.

SENATOR SMITH: Okay. I thought we might have worn you out.

MR. O'MALLEY: Wait another hour. That's why I have a CLIF Bar in my pocket.

But Chairman, I wanted to start off by thanking you and Vice-Chair Greenstein, and all the members of the Committee for being here. This is an incredibly crucial topic to be having an extended hearing, and then, obviously, a stakeholder process, which you've encouraged, Chairman.

Once again, my name is Doug O'Malley; I'm the Director of Environment New Jersey.

And, I wanted to start off by saying the future, as Dustin Hoffman liked to tell us in *The Graduate*, it *was* plastics, so it's more than 50 years ago. We are now at a moment, as Mae West would say, where we have too much of a good thing. And, the MetLife Stadium is filled -- this is rhetorical -- but MetLife Stadium could be filled every 11 hours with the amount of plastic pollution we create in this country. So just kind of imagine that visual. Obviously, it's a little less here in New Jersey, but it's still a lot.

And, we really have a failure of a system where we are creating plastic pollution, and then we're not having incentives or mandates on the producers to be able to reduce that pollution in the first place. And, that has huge environmental impacts.

I submitted testimony to the Committee that outlined some of this. And, I want to just to kind of remind Committee members that many of New Jersey's Superfund sites are landfills. Some close to you, Mr. Chairman, the infamous Kin-Buc landfill in Edison. That was a massive landfill. There's another site up in Byram; essentially a town dump.

So, we have struggled with our waste-production system for a long time. As we heard from former Administrator Enck, New Jersey is one of the states that does not have a Bottle Bill. And, really, the original extended producer responsibility legislation was bottle bills. We don't have that, and that's something that we should explore. We heard that a little bit in the testimony from ANJR. And, certainly, there are others who will testify to that as well.

I wanted to also remind Committee members that this conversation is kind of a great opportunity – and, I'm sure representatives from ANJR would be more than happy to entertain this -- to visit a recycling center. And, I had the good fortune of going on a tour recently at Mazza Recycling out of Eatontown on the Shore. It was headed by TOMRA, which we'll hopefully hear from in a little bit. And, it was eye-opening because if the only time you've ever seen a recycling center is through Toy Story 3 (laughter) -- which, let me tell you, that's a kind of combination of a landfill, incinerator, and recycling center -- it's eye-opening because what you see is a lot of technology and a lot of manpower to remove plastic pollution from the conveyor belts. So, even though-- And, remember, this is not the waste stream; this is the recycling center. So, there's a lot of *wish-cycling* that happens; and literally, recycling centers are forced to deal with this. And, so, this is after the work to ban the use plastic bags, that was a huge step forward. But, it's not as if we've reduced all plastic, and we're still seeing way too much plastic be produced.

And, in terms of this legislation, Chairman, I want to thank you again for having this conversation, for introducing this Bill. We heard from former Administrator Enck -- the model bill in New York is that of

Assemblyman Englebright. That bill has a lot of good things in it, and we would strongly encourage that you look at that. We'll also pass along-- This is included in my testimony, but I can include this as well to the Committee members -- our report from a year and a half ago, *Breaking the Waste Cycle*.

I also wanted to highlight just recent polling that was just released last week by the World Wildlife Fund, which kind of backs up the reality of where we are from a public perspective right now. And, the fact is, the public is losing faith in recycling. More than 75 percent said they believe that none or only a small fraction of plastic waste in the U.S. actually gets recycled. And, the reality is, they're right. Because whether you agree with the 9 percent recycling factoid, or the Beyond Plastics recent analysis of only 5 percent of plastics gets recycled. That's an atrocious number. That means 91 percent to 95 percent of plastic does not get recycled. That's clearly a market failure.

What we also saw in that polling -- which I reference in my testimony -- is that 78 percent said they would prefer reusable to this reasonable disposable plastic products. And, 75 percent said they'd prefer to buy things with minimal plastic packaging. And then, finally, more than 52 percent said that businesses should be responsible for the plastic they produce. And, that is notable; that has increased. Because as the plastic pollution problem has gotten worse, we need to do more.

In terms of the legislation that's in front of you, I just wanted to outline some of the recommendations, then I'll conclude my testimony, because there are plenty of others who want to speak, including a colleague of mine who can speak about what the public is saying about this issue at their doorsteps.

First, that mandatory reductions need to be in the statute and through reduction or use by 50 percent over a 10-year period. Two, as Administrator Enck testified, the need to eliminate toxic chemicals in plastic products. We increasingly have seen a PFAS crisis in the state. We want to ensure the plastic products aren't exacerbating that problem.

Three, we want to ensure the recycling is defined as such, and does not include recent attempts to include a waste-to-energy incineration or "advanced recycling." That should not be defined as *recycling* and needs to be clearly defined in the legislation.

Four, we would encourage direct funding to cities and towns for waste reduction, which is clearly critical for environmental and economic reasons.

And we also-- Five, we want to ensure the certitude for accountability of the packing industry with clear standards, auditing, and independent oversight. And again, this is something that former Administrator Enck testified. We need to ensure there are clear standards that are set by an independent agency, and that have accountability tracked.

Six, as I mentioned before, the original EPR were Bottle Bills. New Jersey should consider including a Bottle Bill provision in this. It works, and it's clearly a solution that other states have adopted decades ago.

And, then, finally, we need to ensure that the environmental standards for packaging to ensure the use of truly recyclable materials.

And, I'll just conclude my testimony by saying that we know that recycling alone can't deliver all the environmental protections we need, especially when we're dealing with plastic waste. We have to prevent the waste at the source, and the first of the 3 Rs in the recycling mantra is reduce.

And, that's what strong EPR should get to. Because, if your bathtub is overflowing, you don't start by bailing out the water; you start by turning off the tap. And that's what we need to do with the massive explosion of plastic pollution in our state and country.

Thank you, Chairman.

SENATOR SMITH: Thank you for your comments.

Next, Ed Waters from the Chemistry Council.

Ed, are you here?

E D W A T E R S: (off mic) I'm here.

SENATOR SMITH: Come on up.

Senator Greenstein is going to take over for a couple of minutes.

MR. WATERS: Good morning -- or good afternoon, Chairman Greenstein and members of the Committee.

My name is Ed Waters; I'm the Senior Director of Government Affairs for the Chemistry Council of New Jersey.

We're seeking amendments. We have two amendments we're looking to have, at least. I agree with a lot of what other members of the business community had testified to earlier today.

But, we'd like to see an exemption for federally regulated packaging, like packaging for pharmaceuticals and other packaging that they have to meet regulations from the FDA. And, so that would make it very difficult for them and put them in conflict with this law. So, an exemption for federally regulated products would be good.

And, one of the concerns that we have identified with this Bill is that there are plastics that aren't currently being recycled. Those plastics end up in the landfill because there is no marketplace right now for those plastics.

And, currently this Bill -- what it would do is, it would shift the responsibility of putting those plastics into a landfill from the consumer to the producer. And, this is why we're requesting language be added to make it easier for us to site advanced recycling facilities in the State of New Jersey. Advanced recycling is a manufacturing process, which is different from the traditional recycling of plastics. And, what it basically is, is we take plastics, we break them down to the molecular level, and reconstitute them into a feedstock, which replaces natural gas and the byproducts of natural gas, which we're currently using as a feedstock.

And, I think Mr. Russo aptly said that there are a lot of great beneficial uses for plastics, whether it's medical devices, it's fuel-efficient cars. You can't have a fuel-efficient car without plastic. So, there's a lot of beneficial use for plastics

And, plastics aren't the issue; it's the fact that as someone who represents the manufacturing of plastics, the issue is that when plastics were developed, there was no good end-of-life plan for plastics. And, that's where we're getting to now through recycling, and now, through advanced recycling, where we can now take those plastics -- that there's no marketplace for -- and we can turn them into a feedstock to create plastic. So, it is truly the circular economy; we are turning plastics back into plastics, and it just keeps going around. And a piece of plastic that is recycled through the advanced recycling process can be recycled tens of thousands of times. There's small degradation, but because you're breaking it down, you're bringing it down to the molecular level, you can continue to use that piece of plastic over and over again.

Eighteen states have enacted laws that allow for advanced recycling. These bills have passed with overwhelming bipartisan support and have been signed into law by Democrat and Republican governors alike. We are hopeful that it will soon be 19 states, as a bill in New Hampshire has been sent to the governor's desk and is awaiting action.

I want to point out that the Commonwealth to our west, Pennsylvania, has an advanced recycling law on the books. If advanced recycling facilities can't be sited in the State of New Jersey, then I suspect we will see one sited right across the Delaware River in Pennsylvania, where materials, that the bill is requiring producers to collect, can be loaded onto trucks, trucked over the bridge into Pennsylvania. Pennsylvania will get all of the economic benefits of an advanced recycling facility -- tax revenue, fees, direct and indirect job creation -- and New Jersey will get more truck traffic and more mobile emissions.

Plastics are not burned during the advanced recycling process, as was stated earlier. Advanced recycling technologies, like pyrolysis and gasification, use thermal energy but take place with little to no oxygen; unlike incineration, which uses a lot of oxygen.

There is no legal or technical support to regulate pyrolysis or gasification as incineration of solid waste. And both the EPA and chemical handbooks define *pyrolysis* and *combustion* separately, and, to argue that they are the same ignores the principles of thermodynamics.

Also, as was stated earlier, they create a lot of emissions. These facilities create little to no air emissions. They basically create the same amount of air emissions as a college, a university, or a hospital.

They don't create any significant amount of hazardous waste, especially compared to other manufacturing processes.

Federal law sets health and safety standards for all air emissions with facilities much adhere to and report on. Like other regulated entities, these facilities are subject to fines, permitting revocations, and closure if they exceed air emission limits.

And, so, basically, let me just finish this. I don't want to ramble on here.

These facilities are recycling facilities -- that we're going to make sure that the plastic is going from plastic to plastic, and it gives us an ability to recycle plastics that aren't currently being recycled.

And, don't take my word for it. If any of the members of the Committee would like to virtually tour an advanced recycling facility in another state, we're certainly offering that out. Reach out to me; I'll take you on the virtual tour and you can see, you can ask questions, you can talk to the people who run the facility and see that they're running a very good operation.

Are there any questions? (no response)

SENATOR GREENSTEIN: Thank you very much. We appreciate it.

MR. WATERS: You're welcome.

SENATOR GREENSTEIN: The next person is Isaac Bearg, New Jersey Composting Council.

I S A A C B E A R G: So, Senators, thank you for your time today.

I'm Isaac Bearg; I represent the New Jersey Composting Council. I want to thank you for your time today, as well as the invitation just a couple

of weeks ago, to highlight how important organic waste management and composting is to meeting our climate goals.

With that in mind, I want to say the NJCC supports this Bill, but, would just ask for some minor modifications to ensure compostable products and packaging and the composting industry are properly accounted for.

First, while the Bill mentions compostability, there's no definition of *compostable* in the Bill. So, we just referred to the recently enacted post-consumer recycled content Bill, 2515, which defines *compostable* and the need to meet certain ASTM standards.

Similarly, that Bill provides an exemption for compostable products from post-consumer recycled content. We would ask that this Bill also do the same as post-consumer recycled content for compostable products; isn't that compost?

Additionally, we would ask the Committee to ensure that compost infrastructure is included in the plan. As written, producers of compostable packaging will pay fees towards the plan. But, to remain consistent with the spirit of product stewardship, those fees should support infrastructure to manage the compostable products. Those fees, however, shouldn't be expected to cover the full cost of collecting and processing commingled food waste and yard waste, along with the compostables. So, in other words, we would ask that the plan should include "solid waste collection," recycling, and end compost infrastructure throughout the document.

You will receive similar comments from the Biodegradable Product Institute, who represents compostable products manufacturers and

certifies they're compostability. They also support this Bill, as it is critical for compostable packaging to ensure that there's proper infrastructure for composting their products.

And, finally, we would just ask that any funds that are collected from this Bill, if they're collected by the State, would go to a dedicated fund so they would ensure that they go to funding much-needed recycling infrastructure, and not swept into the General Fund.

So, with that in mind, compostable packaging producers and composters both support this Bill. We would just ensure that composting is properly addressed.

SENATOR GREENSTEIN: (off mic) Thank you.

Any questions? (no response)

Next, we have Carol Katz and Abigail Sztein, American Forest and Paper, opposed.

C A R O L K A T Z: Thank you very much, Senator.

Thank you, Senator Greenstein, Senator Stanfield, Senator Durr of the Committee, and staff, for having us here today.

I'm Carol Katz, with Katz Government Affairs. I'm delighted to be here today with Abigail Sztein, from the American Forest and Paper Association, to discuss our concerns about the Bill.

A B I G A I L S Z T E I N: All right; good afternoon, members of the Committee, and thank you all so much for allowing me to be here today.

I'm with the American Forest and Paper Association, which is the national trade association representing the forest product manufacturing industry. In New Jersey, that includes nearly 13,000 individuals with an

annual payroll of nearly \$1.13 billion, and a manufacturing output exceeding \$3.35 billion annually.

Extended Producer Responsibility policies are most effectively applied as a solution for hazardous, hard-to-handle materials with low recycling rates. The paper industry has a demonstrated measurable record of success in making paper-based packaging more circular and sustainable through market-based approaches, so we must respectfully oppose this Bill as drafted.

There's been a fair amount of mention of paper, and, so I appreciate some of the positive comments that were made. And, I want to give a little bit of additional detail.

Sixty-eight percent of paper was recovered for recycling in 2021, and we have met or exceeded 63 percent since 2009. In fact, according to the U.S. EPA, more paper by weight is recovered for recycling from municipal waste streams than plastic, glass, steel, and aluminum combined. The recycling rate, specifically for corrugated cardboard -- which is obviously one of the ones impacted by this Bill -- for 2021, is 91.4 percent. We have some concerns about what exactly this Bill might achieve for us.

Recycling is integrated into our business. Our members own 114 materials recovery facilities, including one in New Jersey; and 80 percent of paper mills use some amount of recycled fiber. An impressive 91 percent of New Jersey residents have access to curbside recycling. So, that's-- You can put it out at your house or your apartment building, whatever the case may be.

The industry is also planned to announce around \$5 million in manufacturing infrastructure investments by 2023. That's going to result in

an additional 8-million-ton increase in capacity of percent recycled fiber. So, that's in addition to what's already out there -- we're going to be able to use that much more.

So, for highly recycled material, like EPR, we're concerned that, like paper, EPR could disrupt efficient and successful paper recycling streams in an attempt to improve the least effective ones. Without sufficient protections, there's a strong likelihood that fees paid by highly recycled products will subsidize the low-performing products. This will result in certain producers contributing fees with little benefit to their own products; but, rather, support infrastructure improvement for competing materials -- direct competitors, in some cases.

We believe the Bill should focus on problematic materials in commingled residential collection streams. Paper recycling has enjoyed decades of success because of the industries' investments, consumer education, the wide availability of recycling programs, and the efforts of millions of Americans who recycle at home, at work, and school every day. The industry is proud to be a part of the recycling solution by providing renewable, sustainable, and highly recycled products for consumers.

EPR fees and mandates or performance goals for the already successful paper recycling streams stand to redirect private sector funds away from investment in recycling infrastructure. The paper industry supports economically sustainable residential collection programs by purchasing and utilizing the materials that they collect to manufacture new materials.

So, I direct you to my written testimony for more detailed information and for sources of the data that I've cited. And, I want to thank you all for your time and consideration.

SENATOR GREENSTEIN: Thank you very much.

Any questions? (no response)

Okay; thank you so much.

MS. KATZ: Thank you very much.

SENATOR GREENSTEIN: Next, we have Sameka Ferdous, Environment New Jersey, in favor.

S A M E K A F E R D O U S: Hello, everyone.

My name is Sameka Ferdous. I am from North Brunswick, Central Jersey, which -- and I'm hoping Chairman Smith can vouch for me -- does exist.

SENATOR SMITH: It does. (laughter)

MS. FERDOUS: I am honored to represent Environment New Jersey today as our Canvass Campaign Coordinator.

In 2018 and 2019, Environment New Jersey knocked on more than 100,000 doors and talked to 40,000 New Jerseyans to help build public support which culminated in the passage of the nation's strongest ban on single-use plastics in September 2020, which was implemented last month.

This summer, we have already spoken to more than 3,100 New Jerseyans and collected more than 1,250 petitions to urge action on S-426 and Extended Producer Responsibility.

Currently, as I speak to all of you now, our New Brunswick office is getting ready for the day to speak to even more constituents. We canvass rain or shine and receive support from the 7-year-olds, who are eager to make a difference, waiving their allowance, to the 89-year-olds, who still believe it is possible to purify our waterways and surrounding areas.

I joined Environment New Jersey to bring forth my passion for environmental justice. When we started, it was me and my two directors, Caleb Haddad and Ben Rowley. We have grown exponentially and found like-minded individuals who are as dedicated to the mission of defending New Jersey and its environment.

I joined Environment New Jersey because I recognized the lie that average citizens reckoned with to be told that their recycling of plastics will save the environment. The sentiment that recycling takes care of the problem is perpetuated through decades of marketing; but, it is not true. As testified earlier by Judith from Beyond Plastics, only 5 to 6 percent of plastic actually gets recycled, and our Jersey Shore is still littered with plastic.

It's time for major plastic producers to be held accountable for their lack of action. It is long overdue for consumers to have access to affordable and sustainable materials. And, it is time for New Jersey to lead by example and pass S-426.

The overwhelming support from the community shows that New Jersey's residents are expectant of change. Our canvassers hear repeatedly from residents who are concerned about microplastics and their impact on human health.

Environment New Jersey will continue to raise awareness for this Bill. And, of course, I am confident that after hearing from the experts assembled here today, the Committee will come to a sound decision to work to strengthen this legislation and do what is right.

Thank you.

SENATOR SMITH: Thank you for your comments.

Chris Tandazo, New Jersey Environmental Justice Alliance, in opposition.

C H R I S T A N D A Z O: Thank you.

Good afternoon, and thank you for having this hearing today, which includes accepting comments for Senate Bill 426.

And, just to clarify, we do support EPR; we just don't support this Bill in particular.

SENATOR SMITH: (off mic) Why?

MR. TANDAZO: I can go into it in my--

SENATOR SMITH: (off mic) Please, sir.

MR. TANDAZO: I am pleased to be here with you today.

My name is Chris Tandazo, they/them pronouns, and I am the Community Connections Program Manager at the New Jersey Environmental Justice Alliance; as well as someone who calls New Jersey their home.

The New Jersey Environmental Justice Alliance is the only statewide environmental justice organization in New Jersey, and we are the first statewide organization created for and by people of color.

NJEJA works in coalition with other groups to identify, prevent, reduce, and/or eliminate environmental injustices that exist in communities of color and low-income communities.

NJEJA, alongside other environmental justice advocates, collectively advocated and led the way in the passage of the landmark Environmental Justice Bill, S-232. The EJ law, and recently proposed rules, would direct the NJDEP to deny or condition certain permits due to cumulative impacts of pollution from industrial facilities in overburdened communities.

As we await the final set of rules to be adopted by the end of the year, we hope that NJDEP and other elected officials will act in the spirit of the law and protect our communities from currently proposed projects to site polluting facilities in our communities, adding a threat to our health and well-being.

We also hope the State holds its promise of ensuring environmental justice for every New Jerseyan and upholding Executive Order No. 23.

For environmental justice groups on the East Coast, Extended Producer Responsibility has become an important area of work. NJEJA sees it as imperative for environmental justice voices to be present in this area, as we have been at the front line and backend of the plastic crisis and have directly experienced the harms of the entire life cycle of plastic, from the extraction of fossil fuels for plastic production, to the exposure of toxic chemicals when using plastics, to the disposal of plastic waste by burning it at incinerators.

Our Black and indigenous environmental justice partners in the South and the Gulf Coast are actively fighting against the petrochemical industries sited in their communities. This is where the plastic crisis starts, in places like Cancer Alley, as mentioned before, in Texas, where the presence of petrochemical industries has exposed Black communities to high rates of cancer-related illnesses and deaths. This crisis expands as less and less plastic is made to be recycled, increasing plastic waste generation and disposal. At this stage, the plastic crisis arrives at our front door, in communities like Camden, Rahway, and Newark, where plastic waste is burned, alongside all other types of waste, at incinerators located in these communities.

Burning plastics exposes us to toxic ash and other chemicals and increasing the risk of cardiovascular and respiratory-related illnesses to our communities, which are already overburdened by other socio-economic challenges. And this toxic ash doesn't stay in these communities. The air doesn't have any physical borders, and this pollution is carried to other communities in New Jersey and neighboring states.

The current disposal of plastic waste in our communities in New Jersey is a continuation of the environmental racism and injustices that allows for the siting of incinerators and petrochemical industries in communities of color and low-income communities throughout the country.

Reducing plastic production is in everyone's best interest. NJEJA strongly recommends adopting a comprehensive Extended Producer Responsibility law for plastic packaging. And, within this law, environmental justice advocates urge lawmakers to, one, encourage producers to influence the packaging industry in pushing for the reduction of plastic packaging, removing toxic materials, and having more diverse plastic materials that increase the recyclability rate. Producers should encourage the rethinking of the design of plastic packaging, taking into consideration the materials used, and the life cycle of the product, and rethink how we dispose of the packaging by implementing reuse or deposit-return systems. By rethinking the design of packaging, we can reduce the amounts of plastic waste that get discarded and burned at incinerators.

Two, ensure the definition of *recycling* prohibits -- and this one is important -- any burning, waste-to-fuel or waste-to-energy, chemical recycling, or so-called *advanced recycling* to count towards recycling targets. This is called *chemical recycling*. Chemical recycling is a false solution to the

plastic crisis. Heating plastics generates toxins that pollute the air. The impacts of chemical recycling would be similar to the impacts of burning plastics at incinerators. A chemical recycling plant would likely trigger the EJ law; however, and given that the EJ law rules will not be adopted until later this year, we do urge Lawmakers and the State to act in the spirit of the law and prevent any plans of chemical recycling plants to go any further.

As someone from an environmental justice community, I have a crude feeling that if a new chemical recycling plant comes into existence, it would most likely be sited in our communities. And, to be honest, we do not need any more pollution; nobody does.

Therefore, separate legislation that promotes chemical recycling, such as Assembly Bill 5803 introduced by Assemblymember John McKeon, should be rejected.

Three, eliminate toxic substances from packaging. All the chemicals used to produce plastic are highly toxic and not diverse, which makes the plastic product harder to recycle. These chemicals leach in our food, our waterways, and our air, thereby increasing the levels of pollution and toxicity that environmental justice communities are already exposed to on a daily basis.

Following the recommendations from Beyond Plastics, we also encourage lawmakers to include in the legislation a ban on the sale or distribution of any packing, including reusable packaging, that contains the chemicals or chemical classes mentioned in Judith Enck's testimony.

Thank you for your time and attention to this critical issue that affects communities throughout New Jersey and the world. We have the tools, knowledge, and resources to address this crisis. And, as my colleague,

Judith, mentioned in her testimony, with some critical changes, Senate Bill 426 could be a tool to support New Jersey to address this crisis. A reduction in plastic pollution would mean a breath of fresh, non-polluted air, for our communities here in New Jersey, on the Gulf Coast, and throughout the country.

Thank you.

SENATOR SMITH: So, why are you opposed to the Bill?

MR. TANDAZO: Because the Bill does not-- The Bill doesn't-- The definition of *recycling* in the Bill includes chemical recycling or advanced recycling.

SENATOR SMITH: I don't think so. But, if it does, we'll take it out.

MR. TANDAZO: Thank you; I appreciate that.

SENATOR SMITH: All right? And, at that point, you're in favor, correct?

MR. TANDAZO: Of course, yes. We--

SENATOR SMITH: Yes; because everything you said you wanted is in the Bill.

MR. TANDAZO: Yes.

SENATOR SMITH: You know, other than the chemical recycling, which, if that's in -- I don't know why that got in -- but--

MR. TANDAZO: But it--

SENATOR SMITH: And also, too, you should know McKeon's Bill doesn't have a Senate companion bill.

MR. TANDAZO: Thank you for that.

SENATOR SMITH: I think you know that.

MR. TANDAZO: Yes, it's just the chemical recycling, which is the critical aspect. Because now it goes by different names, such as *advanced recycling* or *waste-to-fuel*. And these are considered false solutions that are perpetuating just more pollution in our community.

SENATOR SMITH: Right, that point I got. All the rest-- When you said you were opposed to the Bill, I said, "Why? We're doing everything that you--" And after listening to your speech, it's everything that's in there. That's what's in the Bill.

But, thank you for your comments. We do appreciate it.

MR. TANDAZO: Thank you.

SENATOR SMITH: (confers with staff) Is it in there?

UNIDENTIFIED COMMITTEE STAFF MEMBER: (off mic)
No.

SENATOR SMITH: So, anyway, staff says there's nothing in there that says *chemical recycling*. There's a generic definition of *recycling*. I don't think any chemical recycling could occur unless there was actually legislation to permit it. DEP people, or former DEP people can confirm that, but I don't think it's possible to do without legislation allowing it. And, this legislation doesn't allow it.

Anjuli Ramos, who regrets to this day becoming Co-Chair of the Forest Task Force, in favor, from the Sierra Club.

A N J U L I R A M O S - B U S O T: (off mic) I do not regret it.

SENATOR SMITH: She doesn't regret it yet; (laughter) okay.

MS. RAMOS-BUSOT: Good afternoon, Chairman Smith, Vice-Chairman Greenstein, and members of the Committee.

My name is Anjuli Ramos, and I'm the New Jersey State Director for the Sierra Club.

I would like to start by thanking Senator Smith for your leadership on this very important topic, and for this discussion and conversation. And of course, for the Bill.

New Jersey has been a leader when it comes to reducing plastics, with our newly implemented plastic bag-ban law and recycled-content law. Extended Producer Responsibility, otherwise known as *EPR*, is now the next logical step in order to reduce plastic packaging in New Jersey. States like Maine, Colorado, and Oregon have passed effective EPR legislation; and other states like California, New York, Illinois, Maryland, Massachusetts, and Hawaii have already introduced EPR legislation.

Senate Bill 426 is a great start to develop a dynamic and effective EPR bill for New Jersey.

In general, we believe an EPR bill should provide a broad definition of producers who are tasked with formulating new packaging designs and changes in the volume of virgin material content. And that producers will research, create, and finance changes impacting, therefore, removing the rising cost of waste currently burdening our municipalities. A strong EPR bill should incentivize producers with monetary rewards for the reduction of overall package materials used for increased recycled content, reduce the use of virgin materials; benefit the environment by decreasing toxins in the air and water; benefit environmental justice communities that are disproportionately overburdened with pollution from incinerators and landfills; and will enforce reduce, reuse, recycle in a circular economy.

Ultimately, a strong EPR bill focuses and pushes for circularity, and it transfers their responsibility for managing packaging waste to the companies that have caused the packaging waste problem, shifting the burden away from taxpayers.

In terms of recommendations, Senator, the Sierra Club echoes former Administrator Enck, and all of our environmental advocate communities, for Bill S-426. But, I do want to stress some of our recommendations that are very important for us that have been mentioned, and others that have not been mentioned, but, I'll try to keep it very brief.

So, to start, we recommend to explicitly mention in the Bill for producers to eliminate known toxic substances, like PFAS, which has been stressed earlier, making packaging safer for consumers and viable for recycling. Because you cannot really recycle plastics that have toxins.

Another recommendation is to incorporate a fee structure, based on the environmental impacts of the packaging. The higher they impact, the higher the fees. Suggest that packaging categories could include highest fee set for packaging waste going to landfills or incinerators; lowest fee set for packaging with high post-consumer recycled content; and, no fees set for packaging of containers and bottles that are reusable. This creates a reward system that focuses on circularity. We recommend using these fees to support local governments for recycling and waste disposal.

We recommend that this Bill should initially allocate funds to the New Jersey DEP -- as we all know has had a flat budget for a long time -- to essentially get the ball rolling by creating the team and logistical resources before the Department may be able to start collecting the fees. For the data collection and the evaluation and approval within the 120 days of the

proposed stewardship plans submittal. So, essentially helping DEP to get the ball rolling, because as suggested in the Bill, they would collect fees, but the fees come later, not at the beginning where they need the team to get everything started.

We recommend to specifically exclude advanced recycling and/or chemical recycling, and plastic burning, and waste-to-fuel processes from the definition of *recycling*, providing protection from new sources of pollution that disproportionately impact environmental justice communities.

And, lastly, but not least, we recommend, in addition to how to discard or recycle -- which is already included in this Bill -- we recommend S-426 should mandate a robust labeling to identify the percentage of recycled content and toxin-free status.

Again, S-426 is a great start to develop a dynamic and effective EPR Bill for New Jersey. And, thank you for your leadership, and, thank you for the opportunity to speak today.

SENATOR SMITH: Thank you for your comments.

Chloe Desir. Are you here, Chloe?

C H L O E D E S I R: (off mic) Yes.

SENATOR SMITH: Chloe, would you like to speak? You're from the Ironbound Community Corporation, opposed to S-426.

Same comment I made to Chris. It's like greatest bill since sliced cheese for the environmental justice community.

MS. DESIR: (off mic) I'm coming.

SENATOR SMITH: So, I want to know why you're opposed.

MS. DESIR: Hello, my name is Chloe Desir, and I'm an environmental justice organizer with the Ironbound Community Corp. in Newark.

To give a simple and brief introduction, you can view us as a vessel fighting for things that are taken for granted by others like clean air and the urge to keep toxin-producing facilities away from our communities.

I'm here to emphasize the danger of running plastics, which is ultimately chemical heating or burning. It's imperative to be more proactive and cautious in our actions when it comes to the detriment of the environment. But, more importantly, shifting the narrative of that responsibility from being on the individual and on to the industries that are the greater contributor of the toxic air.

SENATOR SMITH: (off mic) But, you do wonder; you do understand-- And, I didn't get this from Chris' testimony either -- we're talking about reducing plastics.

MS. DESIR: Right.

SENATOR SMITH: The whole point of the producer responsibility programs is to get more plastics, more carbon, more everything out of the waste stream so that there's less impact on any community.

MS. DESIR: Yes, but we definitely want to make sure that we're specific in our wording when it comes to these bills to make sure that they're--

SENATOR SMITH: Well, we can always do better; there's no question.

MS. DESIR: Yes.

But to continue-- Essentially cities, such as Newark, that have suffered the brunt of the damage from these plants, that are doing chemical recycling and such -- are doing their best to advocate for themselves. And, with Bill 426 we should be able to have a bill that doesn't encourage a false narrative -- that chemical recycling is a justifiable method in getting rid of plastics that are filling up the planet.

The real solution is to bear the responsibility on corporations to reduce their use of toxic plastics in their packaging and distribution processes. We should also be investing money into our communities, especially those overburdened with the consequences of irresponsible choices made without their input in placing these disaster sites on to where people live, giving them the resources they need to drive waste reduction, such as which we want to do in this Bill, and reduce toxics in packaging and prohibit burning plastics under the guise of chemical recycling.

SENATOR SMITH: (off mic) Thank you for your comments.

MS. DESIR: No problem.

SENATOR SMITH: Mary Ellen Peppard, New Jersey Food Council, opposed, and with concerns.

Mary Ellen.

MARY ELLEN PEPPARD: Thank you so much, Chairman and members of the Committee.

I know we've talked about this a little bit with you, Chairman, but not-- I don't think with the other members who are here today, representing the New Jersey Food Council.

Chairman, we certainly appreciate the intent of this legislation, as others have said before. New Jersey Food Council members are working

towards sustainable packaging, innovative packaging, the circular economy. But we do have specific concerns with this Bill.

I did provide written testimony, so I won't go through the exhaustive list at this hour.

One of our key concerns--

SENATOR SMITH: Well, if you give us your printed testimony, we actually read it.

MS. PEPPARD: Oh, no; I know Chairman; I know you do. I'm aware; thank you.

Just some key points, I think, of concern.

One is that the producers are solely responsible for the collection, transportation, etc., of recycling and waste disposal of all discarded packaging. To us, it's not appropriate to make the producers solely responsible for all of these activities, including waste disposal. We would like to see the waste disposal piece be removed from that, because obviously that doesn't incentivize recycling or waste reduction.

SENATOR SMITH: (off mic) Which waste disposal piece?

MS. PEPPARD: I'm sorry, Chairman--

SENATOR SMITH: (off mic) Which waste disposal piece?

MS. PEPPARD: I'm sorry, I don't have the Bill in front of me. But one of the definitions early on in the Bill talks about producers are responsible for collection, transportation, reuse, and recycling or disposal of all discarded packaging. And *disposal* is included a couple of times in the legislation. I just don't have the Bill in front of me; I could--

SENATOR SMITH: So, we should switch it from *the producers* to the people who market it.

MS. PEPPARD: I'm sorry, Chairman; to the--

SENATOR SMITH: Well, for example, you have a package in a supermarket, for example. And you take the packaging off and you then put it into your Dumpster, or whatever. But what you're saying is, it shouldn't be the producer of the product that's responsible; it should be the supermarket that's responsible.

MS. PEPPARD: Chairman, I think that it should be-- We think that it should be a shared responsibility. So, there are a lot of different players in the system. So there's-- Obviously, there are producers, there are retailers--

SENATOR SMITH: Would you give me a letter that says how you think that responsibility should be shared? Who should be paying for it?

MS. PEPPARD: I think we also think that should be a combination of the producers and manufacturers, as well as the-- You know, the current system has, obviously, your waste haulers, your recyclers--

SENATOR SMITH: Give me a letter on how you'd like to divide it up. How you would like the cost divided up? Okay?

MS. PEPPARD: Thank you, Chairman.

So again, talking about the shared responsibility-- I think just one more note on that. I think it's also important to kind of incentivize and make sure that everybody has some skin in the game.

SENATOR SMITH: Yes, but wait a minute.

Isn't the skin the capitalistic profit that comes from selling the goods? I mean, you're not going to sell something at a loss; you're going to

sell it, and you're going to make a profit. So, why wouldn't you put the cost of disposal in that profit?

MS. PEPPARD: I just think, Chairman, it's a very small profit margin and we're not able to recoup-- Our members would not be able to recoup those costs entirely. They couldn't possibly raise the costs so much.

SENATOR SMITH: Then how do you figure it should be divided up?

All right?

MS. PEPPARD: Thank you, Chairman.

A few more points.

Again, I know this has been brought up by some other people, but the current legislation does not match, it's not consistent in terms of the recycled content requirements with the new recycled content law. So that's something that we need to be--

SENATOR SMITH: We're going to compare the two bills.

MS. PEPPARD: Okay, thank you.

Actually, one piece that I do like about the Bill is the focus on -- and this is in my written testimony--

SENATOR SMITH: Anybody have those paddles? (laughter)

MS. PEPPARD: --is the focus on consumer education and prioritizing consumer convenience. I do think that is really important.

We did talk a little bit, as some previous people have mentioned, needs assessments. I do agree that that's something that we ought to have in this legislation.

We also think that the way the Bill is currently written, I think there is an awful lot put on DEP. And, we would prefer to have a more, I

think, market-based, incentive-based type of system, as opposed to a government-run or a DEP-run system. So maybe some of the wording--

The implementation-- I mean, obviously, it's very crucial how you're going to go about doing this and creating these types of programs. It could take quite a while, it'll take a lot of coordination between the different stakeholders to create these systems, to implement, to assess, to measure in the consumer education piece. So, I think that the timeframes in the Bill -- 180 days to create a plan; DEP only has 120 days. We don't believe these are feasible timeframes to create a good, well-thought-out system. So, that's something that we'd really like to work on.

I'll wrap up soon, I promise. I know it's getting late.

One other thing that I'll mention is that our members are struggling right now with the implementation of the new-recycled-content law. So this Bill is sort of a complete overhaul of the system. We would rather be more narrowly targeted and focused on helping our members reach those recycled-content goals. Some people before me testified about having a New Jersey-specific bill. I do think that it's very important to take into account. Some of the previous witnesses testified that New Jersey does not have a Bottle Bill; that's true. Instead, we have a very comprehensive litter reduction system through Clean Communities, and we have -- which I know Chairman is a great supporter of -- and we also pay the litter tax. So, I think we have some great systems in place right now.

I'll just end on that. There were some other stakeholders who wanted to be here today but couldn't because of scheduling conflicts. But, I think you probably received some written testimony from them.

One of the areas that I think we would also like some clarification on are the definitions in the beginning of the Bill, particularly the definitions of *producer*. It's a little bit unclear. The Bill includes a lot in that definition, including a person who is selling a product in the state. I'm not sure if that's the intent -- to serve capture and general retailers in the Bill, as opposed to a manufacturer. So, we ask for some clarification around that language.

And, then finally, Chairman, like some other people have mentioned, we are excited and looking forward hopefully to having some comprehensive stakeholder hearings where we can have all the experts together and really focus on this and spend some on this.

So, thank you so much.

SENATOR SMITH: Thank you for your time.

MS. PEPPARD: Thank you.

SENATOR SMITH: Sarah Bloomquist, our last witness, from TOMRA, T-O-M-R-A.

So, your first job, Sarah, is to tell us what is *TOMRA*?

S A R A H B L O O M Q U I S T: Thank you all for the opportunity to speak today.

My name is Sarah Bloomquist; I'm the Director of Public Affairs for Recycling and Circular Economy at TOMRA Systems. TOMRA is a pioneer in advanced technology for the collection and sorting for recycling. We have over 50 years experience operating in more than 40 EPR for packaging and EPR for beverage containers' markets -- also known as *deposit return systems* -- around the globe.

Thank you for the opportunity to submit testimony. I'm here in support of the EPR Bill, but with some critical amendments, which are detailed -- I have a more extensive written testimony that I will submit to you all.

We support the components of this Bill, which are designed to increase both the quantity and the quality of recycling in the state, and to add a more climate-resilient future for the state through, for example, the resulting reduction in landfill disposal and in the reduction and demand for virgin resource extraction.

Part of the success of all EPR programs is the setting of ambitious and staggered targets for recycling and post-consumer recycled content. And, to be able to meet those targets, the system must put an emphasis on quality through meaningful definitions and investment in technology that can meet the stringent specifications required for circularity in packaging.

Additionally, we recommend that existing recycling infrastructure is utilized and upgraded as needed to meet the high targets that are critical to this EPR. I believe this was mentioned a few times by other folks from the NWRA and some others.

So, a little more about who TOMRA is and what we do in our presence in the state. So, we provide sensor-based sorting technology, as I said, which includes reverse vending machines for beverage containers and optical sorters at material recovery facilities. So, anyone in the waste space -- hopefully you're familiar with *MRFs*, the shorthand term for where all your curbside recycling goes. Our technology is installed across the state as part

of the value chain that turns your curbside recycling materials into new products, ultimately completing the whole recycling chain.

So, there are approximately 40 TOMRA systems in place in the state sorting that curbside material. So, for example, someone else had mentioned the Mazza MRF in Tinton Falls. We recently red-lit a little study group for some folks interested in recycling to see what these systems look like in practice. And, I'd be happy to organize a tour for anyone else who's interested. They use several of our units to sort all of Monmouth County's curbside recyclables and valuable commodities. And, that's how these materials actually end up being turned into new products.

So, back to EPR, and a little bit about the whole supply-and-demand side, which I think is really critical to EPR.

So, EPR for packaging and printed paper -- it's a proven solution to improve New Jersey's recycling performance, change how the system is financed, and help rebalance the economics of recycling. For example, ambitious recycled content mandates were signed into law earlier this year, as we all know, which is a promising move in the right direction. However, as most anyone in the industry will tell you-- And, I was just at a recycling conference last week in Milwaukee, and this is really the theme for those folks, who are one part of the value chain, but definitely an important part - - and their request is that supply is the key part of the problem. So, you now have recycled-content targets, which really is the driver on the demand side, but, they need that material into the system, and that's how we get-- That's the need for recycling rate targets.

So, if EPR is designed correctly, it includes targets for recycling, as I mentioned, and that drives the supply side of the system ensuring that those recycled-content targets can be met.

So, what does EPR for packaging look like around the world? I think some people touched on that for Europe, maybe Canada was mentioned as well.

SENATOR SMITH: (off mic) By the way, do you guys work in Europe?

MS. BLOOMQUIST: We do; we're global. We're headquartered and founded in Norway.

SENATOR SMITH: So tell me about Europe.

MS. BLOOMQUIST: Europe; where do I start?

So, for one thing, they have targets in legislation. They have ambitious, single-use plastics directives, waste framework directives. A number of these -- which established very ambitious targets for recycling. They have one that's 90 percent for separate collection of containers -- don't quote me on these -- and then they also have a few by material stream, and, to some extent possibly, by source.

SENATOR SMITH: How is it working?

MS. BLOOMQUIST: How does it work?

SENATOR SMITH: No, no, no. How *is* it working? Is the system working, or is it dysfunctional?

MS. BLOOMQUIST: I think the reality is that overall it works, but there's room for improvement. And, as I think Bree had mentioned, there's been a number of iterations. So, right now, what they're currently

work-- They basically have been making it more ambitious. So right now, they're working on--

SENATOR SMITH: They started slower, and they're now being more aggressive?

MS. BLOOMQUIST: Yes. So like, for right now, they're working on their recycled content targets. So that's something New Jersey is ahead of, but they're looking into what that will look like. So, they have targets for recycling of materials and by streams, like I mentioned. But recycled content targets they only have for beverage containers. So, they're now looking at expanding those to other materials and product categories. I mean, they have landfill bans, they have fees on landfills or bans, so, the whole system is driven towards recycling and reduction because it costs so much to landfill it or burn it, which is totally different than here.

So, a lot of the conditions are very different, but that doesn't mean we can't all be shooting toward those types of targets.

SENATOR SMITH: Who makes the decisions on the targets? Is it governmental or is it a--

MS. BLOOMQUIST: That is a great question.

SENATOR SMITH: --separate producer group?

MS. BLOOMQUIST: Yes, that's a great question, and I wish I had a really astute answer. I will follow up with you.

SENATOR SMITH: So, you'll follow up, yes, and find out.

MS. BLOOMQUIST: Yes, I'll follow up. I don't want to answer incorrectly--

SENATOR SMITH: Okay, that's fair.

MS. BLOOMQUIST: --so, I won't. (laughter)

SENATOR SMITH: Okay, thank you.

MS. BLOOMQUIST: But yes, so EU is definitely an example to look at.

But, as someone else had mentioned eco-modulated fees -- they might not have used that term, but, again, that's kind of like a sophisticated aspect of EPR where not only are producers paying into the system at some base level, based on the materials in the packaging they use. So, for instance, if you use a HDPE, like a shampoo container -- that's one material, and it's easy to get through the system, and there's a high-end market-- You're going to pay less for that package into the system. Whereas, if you're using something that has many layers, there's not a good end market, and you're going to pay a lot more. Hopefully, I just explained that right.

So eco-modulation, as on this next level, where you're incentivizing to producers to really make well-designed packaging that moves through the system so that packaging can be collected, can be recycled, can be turned into new products.

So, I just wanted to end with that.

SENATOR SMITH: In New Jersey--

MS. BLOOMQUIST: Yes.

SENATOR SMITH: --when you talk about *sorting*, are you getting from the municipalities-- You're in Monmouth County you said, right?

MS. BLOOMQUIST: It's not my-- Our machines are in the Monmouth County facility, yes.

SENATOR SMITH: So, do they get mixed waste into their facilities, or is it source-separated when the waste comes in?

MS. BLOOMQUIST: It's source-separated curbside recycling. And, then they have a number of things going there, as well as, like, mulch, and they might have construction stuff that has something mixed. I wish -- I can't really speak to that, but the recycling that we're talking about is all curbside source-separated recycling.

SENATOR SMITH: Got it.

MS. BLOOMQUIST: Okay, so just to continue a bit.

If I were to highlight a key point from our perspective, it's that well-designed EPR does not only shift the cost of recycling, rather, it also improves the overall performance of it through an emphasis in increasing the quantity and improving the quality of what is recycled.

So, hopefully, you've heard a theme so far. Really, our emphasis is on quantity, getting more material into the system--

SENATOR SMITH: And quality.

MS. BLOOMQUIST: And then that material that comes in, that there's high quality systems, so it can be circular into new products.

SENATOR SMITH: All right.

MS. BLOOMQUIST: As other folks have mentioned, EPR is not new. In the States it's more common for difficult-to-recycle materials, like batteries, paint. It's coming more from (indiscernible) in EPR right now, but the idea of EPR as a policy approach is not new. It's just for packaging in the U.S. is where we're seeing it new, and it runs a little bit differently.

So, consumers, producers, regulators have all been operating in EPR systems to some extent. And, as I think you pointed out before, producers operate in global markets, and this isn't new to them.

So, the timing is right to expand EPR strategies to include packaging. Three states, including Maine and Oregon last year, and then Colorado just last week, passed EPR for packaging. Those are all very different approaches, and I could speak in detail later. But, Colorado, for example -- I don't think I would use that as a model because Colorado has extremely low recycling rates. Like, I think it's some of the lowest in the country; I couldn't speak to the exact-- Whereas New Jersey is a little more sophisticated, even though there's room for improvement in both. Colorado is really starting at a baseline. They also have predominantly privately run systems where it's municipal a significant portion, not majority. So, there are a lot of different stakeholders and performance that you're trying to accomplish.

So, I think all of these approaches have something valuable to add; but I wouldn't take the Colorado one as an example, nor the other existing ones.

SENATOR SMITH: What do you think about the New York bill?

MS. BLOOMQUIST: The New York one? I would agree with Judith, largely -- that the Englebright Bill has more promising aspects to it. There's probably a little bit in both, but definitely the Englebright Bill has more that I would support. There are some things there I would recommend to update, too, but they have strong recycling targets and that's what really drives the performance.

SENATOR SMITH: We're going to take a look at the New York Bill, we're going to take a look at Europe.

On the Englebright Bill, you said you had some items that you wouldn't agree with. I'd appreciate a letter from you--

MS. BLOOMQUIST: Yes.

SENATOR SMITH: --Indicating what you think would be a mistake for New Jersey.

MS. BLOOMQUIST: Okay.

SENATOR SMITH: All right?

MS. BLOOMQUIST: You know, I think everyone has different knowledge based on what EPR is, so I apologize if any of this is redundant. But, I have heard in other hearings in other states that there's some misunderstanding of what EPR can mean, depending on the material. So, I just wanted to explain that.

In the current system, producers do not have an obligation to use packaging that can be recycled. There's no prep, no tracking, and no penalties. Under EPR, the types and quantities of packaging will be reported in order to gauge how the system is performing. So, this is something that's completely lacking now; and, this isn't just New Jersey, it's really every state. It's hard to get good data on how recycling is performing. But, we know, to some extent, to some base level, that we can start with some type of target and move up from there. Of course, the challenge is what that number will be, but I think having no targets in legislation would be a missed opportunity for improvement.

So, again, I direct you to my longer written recommendations and details, and I welcome any inquiry or follow-up.

We also recently did a white paper on EPR. We researched the different systems around the world, and really consulted with our global team

on what works well and not and put together what are the best aspects of high-performing systems.

SENATOR SMITH: Did you provide that to us?

MS. BLOOMQUIST: Yes. Well, I will when I send over my testimony; it's linked in there, yes; yes, sir.

SENATOR SMITH: If you wouldn't mind, send it to every--

MS. BLOOMQUIST: Oh, yes.

SENATOR SMITH: Well, you send it to staff--

MS. BLOOMQUIST: Yes; yes, sir.

SENATOR SMITH: --Eric and Tom. If you do that, we'll get it to all the members--

MS. BLOOMQUIST: Will do.

SENATOR SMITH: --so they can read it.

MS. BLOOMQUIST: Okay, thank you.

So, last but not least, I'll just sum up.

However, there are several critical areas that must be revised in order to align with other high-performing systems like we see around the world, including adding a minimum target for recycling, which I think I started with. Adding a precise definition for how recycling is measured, so it's not measuring what comes into the MRF with contamination, other materials. You really want to be measuring what's leaving the MRF and going into final recycling. And, that's one of the upgrades that the EU is also doing -- harmonizing how recycling is measured across their member states. So, right now it's all over the place; and they're currently doing that.

Two more recommendations.

Setting investment thresholds with the focus on quality systems. And, lastly, improving recycling access so that it's widespread and convenient for all residents.

I forget how it's exactly written, but usually I think it's written that access must be the same as it currently was under EPR. And, although that's decent, I feel like a way to improve it would be that you're saying recycling access should be as convenient as waste disposal. So, if I have collection--

SENATOR SMITH: As convenient as what?

MS. BLOOMQUIST: --As the way that you dispose of your trash. That's the way to incentivize participation and to balance out the systems. If I have to drive 20 miles to drop off my recycling; I'm less incentivized to participate, versus if I can put it on the curb like a black bag.

So, I will leave you with that. Thank you for your attention, and I will follow up with those documents.

SENATOR SMITH: Thank you for all the information.

MS. BLOOMQUIST: Thank you.

SENATOR SMITH: And the information you're going to send.

MS. BLOOMQUIST: Yes. You're welcome; thank you.

SENATOR SMITH: And that, ladies and gentlemen, is the end of today's most interesting Committee in the Legislature.

Have a good day.

(MEETING CONCLUDED)

