

TUESDAY, APRIL 20, 2021

11:49 A.M.

ACTING SPEAKER AUBRY: The House will come to order.

In the absence of clergy, let us pause for a moment of silence.

(Whereupon, a moment of silence was observed.)

Visitors are invited to join the members in the Pledge of Allegiance.

(Whereupon, Acting Speaker Aubry led visitors and members in the Pledge of Allegiance.)

A quorum being present, the Clerk will read the Journal of Monday, April 19th.

Mrs. Peoples-Stokes.

MRS. PEOPLES-STOKES: Mr. Speaker, I move to

dispense with the further reading of the Journal of Monday, April the 19th and ask that the same stand approved.

ACTING SPEAKER AUBRY: Without objection, so ordered.

Mrs. Peoples-Stokes.

MRS. PEOPLES-STOKES: Thank you, Mr.

Speaker. Again, welcome colleagues to the Chambers and provide an opportunity to share the schedule of today, and remind colleagues that this is the second Session of the 16th week of the 244th Legislative Session. And it's also for us in this Chamber today Earth Day, even though we know Earth Day's Thursday. Some of us won't be in Albany on Thursday. So I'd like to offer a quote today. Mr. Speaker, it comes from -- it's actually a Native American proverb and it's real kind of basic and simple. It says, *We do not inherit the Earth from our ancestors, we actually borrow it from our children.* With that in mind, Mr. Speaker, our colleagues do have on their desk the main Calendar. And after there are any housekeeping and/or introductions we are going to take up resolutions on page 3. We do have a few colleagues that would like to speak on them. However, our principal work today from our Earth Day package will consist of a privileged resolution by Ms. McMahon which she will speak on at the end of Session, and the following four bills: Rules Report No. 62 by Mr. Cusick, Calendar No. 161 by Mr. O'Donnell, Calendar No. 181 by Mr. Englebright and Calendar No. 204 by Mr. Englebright. We may also take up on debate other bills that are on the main Calendar, including,

but not exclusively, 147 by Mr. O'Donnell.

That's the general outline, Mr. Speaker. If there's any housekeeping or introductions now would be a good time.

ACTING SPEAKER AUBRY: Certainly. We do have some housekeeping.

On a motion by Ms. Bichotte Hermelyn, page 20, Calendar No. 207, Bill A.6047, amendments are received and adopted.

Resolutions on page 3, the Clerk will read.

THE CLERK: Assembly Resolution No. 163, Ms. Walsh.

Legislative Resolution memorializing Governor Andrew M. Cuomo to proclaim April 11, 2021 as Submarine Day in the State of New York in conjunction with the observance of National Submarine Day.

ACTING SPEAKER AUBRY: Ms. Walsh on the resolution.

MS. WALSH: Thank you so much, Mr. Speaker. Today I'm very happy to speak on this resolution that proclaims April 11, 2021 as Submarine Day in the State of New York in conjunction with the observance of National Submarine Day. Each year National Submarine Day is celebrated on the anniversary of the United States government's acquisition of its first modern commissioned submarine, the USS Holland, on April 11th, 1900. The U.S. Navy was born in Whitehall, New York - just outside my district, actually in

Assemblyman Simpson's district - in the summer of 1775 with the establishment of an American fleet. These U.S. attack submarines are named after U.S. cities, such as the USS Albany and the USS Buffalo, among many others. I'm proud to share that the 112th Assembly District is the home of the New York State Submariners Memorial and the Navy Nuclear Power Training Unit, the NPTU, both of which are located in Ballston Spa and in West Milton. I had an opportunity to tour the NPTU with Assemblywoman Woerner a few years ago and have attended several graduation ceremonies at the NPTU throughout my time in the Assembly. I'd like to give a couple of special acknowledgments to some great navy submarine veterans, men I'm fortunate to know including our former colleague and now-Senator Dan Stec, who spent much of his time in the Navy aboard a submarine. And Jim Irwin, who enlisted in the U.S. Navy in October, 1966, and during four years of active duty completed six deployments totaling over one year under the ocean which earned him the Submarine Warfare Medal. Jim Irwin was the inspiration behind introducing this resolution which I proudly sponsor with Senator Tedisco. Mr. Irwin is a member of several submarine veterans organizations, both local and national, and is an active member of our community and the 112th Assembly District. He's received numerous awards in recognition of his courageous effort and willing sacrifice, including the 2010 Robert Link Award for his work in preserving the World War II submarine USS Croaker and the 2012 Silver Anchor Award for local community service, and last, the National 2015

District Commander of the Year Award.

Thank you to all of my colleagues who joined me in sponsoring this legislation and to all who will be supporting it today. This resolution expresses our gratitude to our State and nation's exceptional submarine fleet and to our veterans past and present for their bravery and their service.

Thank you, Mr. Speaker.

ACTING SPEAKER AUBRY: Thank you.

On the resolution, all those in favor signify by saying aye; opposed, no. The resolution is adopted.

THE CLERK: Assembly Resolution No. 164, Ms. Lunsford.

Legislative Resolution memorializing Governor Andrew M. Cuomo to proclaim April 2021 as Child Abuse Prevention Month in the State of New York.

ACTING SPEAKER AUBRY: On the resolution, all those in favor signify by saying aye; opposed, no. The resolution is adopted.

THE CLERK: Assembly Resolution No. 165, Mrs. Barrett.

Legislative Resolution memorializing Governor Andrew M. Cuomo to proclaim April 2021 as Lyme Disease Awareness Month in the State of New York.

ACTING SPEAKER AUBRY: Ms. Barrett on the resolution.

MRS. BARRETT: Thank you, Mr. Speaker. On the resolution. When I first took office exactly nine years ago this week actually, Lyme and Tickborne Disease Awareness Month was in May and Lyme Disease was widely considered to a problem largely limited to the Hudson Valley, Lyme, Connecticut and very few other places. Today Lyme Disease has been reported in every state in the United States. There are more than a dozen tickborne illnesses in the United States in addition to Lyme Disease, and one tick may carry more than one disease resulting in people receiving a coinfection from a single tick bite. Climate change, which we are talking about today on Earth Day, is causing New York to experience longer and more severe tick seasons with the majority of tick-to-human bites occurring in the warmer months when ticks are most active and when more people are enjoying the outdoors. So we are recognizing April as Lyme and Tickborne Disease Awareness Month, though it's important to understand that ticks can be active any time of the year when the temperature is above freezing. Lyme Disease, its co-infections and other tickborne diseases are generally hard to diagnose because their symptoms often mimic those of dozens of other common illnesses and they can present symptoms that are sometimes misdiagnosed as everything from mental illness, depression, nutritional deficiencies or Alzheimer's Disease. There have been several articles recently, in fact, documenting the similarities between the symptoms of Lyme Disease as well as the long-term impacts between COVID and Lyme Disease, and there are an alarming number of similarities. Within

New York State we now have two cutting-edge centers that are working on Lyme and tickborne disease research, diagnosis, education and treatment. One is at Upstate Medical in Syracuse and the other is at Columbia University in New York City. While these are both great additions to the grassroots work being done across the State, if you take a look at the budget we just passed and look for Lyme or tickborne disease, there is barely a mention. It is not a priority of our Department of Health or our leadership and it really needs to be.

Let me leave you with some facts here. Lyme Disease is on every continent including Antarctica. Forty percent of Lyme patients have long-term health problems with symptoms. Fewer than 50 percent of patients with Lyme Disease recall a tick bite. Fewer than 50 percent of patients with Lyme Disease get a bull's eye rash. Chronic Lyme is still not fully recognized by many infectious disease doctors. And here is a visual image for you. Two hundred children get Lyme Disease every single day. That's four school buses of children in a single day. It's time for all of us to hashtag #gettickedoff.

Thank you very much, Mr. Speaker.

ACTING SPEAKER AUBRY: On the resolution, all those in favor signify by saying aye; opposed, no. The resolution is adopted.

THE CLERK: Assembly Resolution No. 166, Mr. Magnarelli.

Legislative Resolution memorializing Governor

Andrew M. Cuomo to proclaim April 18-24, 2001 as Abusive Head Trauma/Shaken Baby Syndrome Awareness Week in the State of New York.

ACTING SPEAKER AUBRY: On the resolution, all those in signify by saying aye; opposed, no. The resolution is adopted.

Page 4, Rules Report No. 62, the Clerk will read.

THE CLERK: Assembly No. A03876, Rules Report No. 62, Cusick, Sayegh, Zebrowski, Simon, Colton, Lavine, Woerner, Glick, L. Rosenthal, Steck, Dickens, Epstein, Cook, Carroll, Seawright, Griffin, O'Donnell, Paulin, Barron, Thiele, Otis, Clark. An act to amend the Public Service Law, in relation to establishing a commercial tariff on certain electric vehicles.

ACTING SPEAKER AUBRY: An explanation is requested, Mr. Cusick.

MR. CUSICK: Thank you, Mr. Speaker. This bill is intended to facilitate the development of additional fast-charging infrastructure for electric vehicles. It would require gas and electric corporations to file tariffs for Public Service Commission approval that utilize alternatives to traditional demand-based rate structures to facilitate such infrastructure development. It would also require an opportunity for public comment and notice prior to PSC approval, rejection or modification of the tariffs to be proposed.

ACTING SPEAKER AUBRY: Thank you, sir.

Mr. Palmesano.

MR. PALMESANO: Mr. Speaker, will the sponsor yield for a few questions?

ACTING SPEAKER AUBRY: Mr. Cusick, will you yield?

MR. CUSICK: Absolutely.

MR. PALMESANO: Thank you.

ACTING SPEAKER AUBRY: Mr. Cusick yields.

MR. PALMESANO: I still don't understand the intention behind this bill but I do have some questions. It's my understanding in 2018 there was some collaboration with the Power Authority, DEC, the Department of Transportation where they petitioned the PSC to look to put in place a mechanism to help with these fast-charging systems, and one of the -- they looked at removing the demand rate from that perspective, but they decided not to do that because of the concerns -- they said it would shift costs to other customers and that it would send the wrong pricing message to the -- to the electric charging companies. And they had said (inaudible) an incentive-based program. Wouldn't this bill basically disregard what was part of that PSC order in 2019 saying (inaudible) the Senate-based model instead of getting rid of the demand rate restructure?

MR. CUSICK: No. It -- it would not. It -- this -- this bill would -- it -- it provides that the utilities, the corporations have you provide a plan for alternatives that the PSC would ultimately adopt, modify or reject all together. It actually gives flexibility for

other plans to look at. They could be rejected. They're also, to your point, Mr. Palmesano, there could be a plan, maybe they come up with a plan that there's a nontraditional demand-based approach that they would like to implement. They would be able to do that under this bill.

MR. PALMESANO: Have you had any conversation with the stakeholders because of the concerns that are raised about shifting these costs? I know there's -- I think one particular stakeholder said this was going to cost ratepayers over a five-year period, all of the ratepayers because of the cost shifts \$475 million. Have you talked to the industry -- do you know how much this is going to cost to implement?

MR. CUSICK: Well, I'll -- I'll be honest, Mr. Palmesano, none of the utilities have issued a opposition memo to this bill, so they -- to -- to us, at least. So, that would not -- you know, if you have one I'd be welcome to see it. But I have not received an opposition to this. And actually I think it was two days before we were -- this went on the -- the agenda we got an e-mail from -- from one of the utilities to -- to discuss. But it's always been out there. This bill -- again, I want to -- I want to just point out, Mr. Palmesano, and I think you understand, this is not mandating that this -- that we're doing away with the demand structure right now. What this is doing is just having the utilities present the plan if there are alternatives. Because in the end, the PFC could reject those alternatives that were put in place.

MR. PALMESANO: I understand that, but I know the language of the bill because we talked about it in Ways and Means a little bit. They said well, you don't have to reject necessary demand but it says they shall file an application with the Commission to establish a -- a tariff utilizing alternatives to the demand-based rate structure. And I guess in 2019 that decision when they evaluated that with the PSC, when all the utilities came together and agreed to it with that case in 2019 for this per-plug incentive to help expand this charging, which I know is the goal of the bill, I just don't understand why we're going away from that model which, again, the PSC itself said this will shift cost to other ratepayers. And -- and that's where we're getting estimates from the utilities that it could cost that much and that's why there's so much so opposition. Because when you say investor utility it -- the ratepayer's going to ultimately pay for the cost of that.

MR. CUSICK: Well, again, I -- this bill does not -- does not do that. This bill will provide that they have to present an alternative that ultimately could be modified or rejected by the PSC. So I just want to make that clear. The passing on -- we all are concerned about ratepayers and we all represent ratepayers. We are all ratepayers. So having the protection and protecting the ratepayers is the number one priority for all of us. The issue for us moving this bill is that there are many people who are providing and they're pushing forward with electric cars, right, many of your constituents, many of mine, and there are no places right now for them to charge.

And we have to, by law, meet the CLCPA standards by a certain time. One-third of the greenhouse emissions right now comes from the transportation sector. So that's why we are just saying let's put this forward, see if there are alternatives -- because some folks say it is cost-prohibitive the way it is now -- in order to have these charging stations available for my constituents and your constituents to charge their cars.

MR. PALMESANO: Thank you, Mr. Speaker --
thank you, Mike --

MR. CUSICK: Thank you --

MR. PALMESANO: I have some other questions for you, I'm sorry. I didn't -- one other question, I'm sorry. Because -- sorry about that.

The other concern I have, too, is we've been talking about the ratepayers, we already know are over \$1.2 billion in utility arrears right now, over \$180 million in LIPA. You know, this proposed cost increase is something we all are concerned about. I know what you're saying, it doesn't happen. But also on the demand rate for commercial and industrial users it's part -- because they need it when they need it, there's a higher demand, there's more people. And if it -- if it needs it instantly, day and night for manufacturing operations it's more expensive which really requires the utilities to have proper equipment. You're talking transformers, you're talking wires, substations in order to build that infrastructure. And they can recoup those costs through the demand rate. And as this bill is taking

the demand rate now they're going to have to try figure something else out. Who's going to -- they're -- that -- that's going to be borne onto the -- to the ratepayer ultimately and -- and instead we're incentivizing bigger for-profit charging stations like Tesla or EVgo. Aren't -- isn't that a concern that you have with this legislation?

MR. CUSICK: Again -- again, it's always a concern for myself and all our colleagues to protect the -- the ratepayer. But I will -- I will repeat that this bill does not do that. It does not raise the rates. Again -- and it does not do away with the demand structure all together. Generally, the demand structure in the -- in the example you gave will stay intact. The issue is these charging stations and the -- it's cost prohibitive right now to have them available for these folks who want to use them for buying cars and want to use the electric vehicles. Again, we are not -- with this bill it's merely having the utilities present a plan that the PSC could ultimately reject.

MR. PALMESANO: I understand that, Mike, and -- and I think part of it is just that we have a plan in place right now so -- that the PSC approved. So, thanks for your time on it. I know we're going to agree to disagree on it. Hopefully there can be more discussion and move -- move forward.

Mr. Speaker, on the bill.

ACTING SPEAKER AUBRY: On the bill, sir.

MR. PALMESANO: I certainly want to thank the sponsor for his time and intention -- I understand his intention, it's certainly laudable. We understand about trying to help on the -- the --

get more electric vehicles on the road for the climate issues. But this issue has been discussed by the PSC a couple of years ago, and where they brought it up and they reviewed the demand-based rate restructure and they -- they said, *We're not going to go away from that*. In fact, what they said in that meeting was, *Demand charges do not send the appropriate price signals to customers to (inaudible) behavior and operate in a manner that benefits the distribution grid. And allowing DCFC facilities to take service on non-demand bill tariffs would shift cost and send the wrong price signals to DFC station owners. The per-plug incentive program which was adopted by the PSC in 2019 provides similar relief while maintaining a rate that reflects cost causation*. We know one utility has already said that this would cost \$475 million over five years to the ratepayers. We know right now we have \$1.2 billion in arrears because of COVID, \$180 million to LIPA alone. This kind of reminds me of -- this is going to hit our low and moderate income individuals more than anyone. It kind of reminds me of the solar -- the solar panels. It's the higher-income people that get the incentives and get the discounts. But it's the lower-income who are paying it on their utility bills. We can do more. We can provide incentives without shifting that cost, that part of that 2019 agreement is working to increase 1,000 plugs to help get that to address that without shift -- getting rid of demand structures. Again, it's sending the wrong message and the (inaudible) prices signal. We know that on consumption and demand choices that out there on every residential utility bill. But with commercial and

industrial it's much more different. It's -- there's a lot of variety and you have to meet the need that's out there, which requires a great deal of infrastructure in place to meet that need that -- whether it's the manufacturing, whether now with the tran -- with the electric vehicle charging. They need transformers, wire, substations. They get that reimbursement through the demand rate structure. And I think what we're going to see now is this is just going to shift this cost inevitably to other ratepayers. The D -- the -- the Public Service Commission has said that. I'm just concerned that's where this is heading. And in taking away the demand rate is going to just shift this cost and is that -- and subsidize, like, Tesla and EVgo. Is that really the right priority at the expense of our ratepayers? Because I believe that's where this is going and what we're looking at. Again, we -- we already collect over \$1 billion a year in taxes, fees and assessments on the ratepayers in this State for clean energy programs. Why are we going to need more? Why aren't we using something that's already there? Again, one -- one provider said \$475 million in additional cost shifts to customers. Again, with \$1.25 billion in arrears out there that need to be made up. This is just going to burden and hurt our ratepayers even further. We already have some of the highest utility rates and electric rates in the country. And I'll be honest with you, they'd be much higher if we didn't have and utilize the natural gases that we are utilizing now. That's helped keep the utility rates a little bit better than what they would be. And quite frankly - I know we talked about the CLCPA which was adopted in I believe 2019 - in 2023 the fact of

the matter is it's going to hit our people in the State very, very hard. They don't know what's coming. When we passed that -- talk about the Green New Deal for New York, the only thing green about it is what it's going to cost in additional taxes, higher utility bills, loss of manufacturing jobs going -- and income going to other states, our farming industry because that only affects New York. It didn't affect China, Brazil or Russia. It didn't affect Ohio or Pennsylvania. So our -- our people in the State don't know what's about to hit them come 2023 when they start implementing these requirements. There are costs -- when there's cost estimates already that's going to cost billions and billions of dollars yearly to comply with the CLCPA. One study from Massachusetts said \$6- to \$8 billion in annualized costs to comply. Think about the homes and the conversion costs that we're going to be looking at for businesses, for manufacturers, for housing residential. Tens of thousands of dollars is -- is what we're looking at to shift costs to ratepayers. So this is just the beginning. I know you're saying that this doesn't shift costs, it shifts costs. But more is coming to the ratepayer when they can't (inaudible) have anymore. That's why we truly need a full cost-benefit analysis of the CLCPA to show true cost, where it's really going to cost them in real dollars. We owe the ratepayers and the people of this State at least that. The fact of the matter, as I said, the CLCPA when we passed it just affected New York. Again, not China, Russia or Brazil. Not Ohio or Pennsylvania. And why? What did we accomplish? New York contributes .5 percent of the total carbon emissions in the world. Just

.5 percent. And 3.3 percent in the United States. When I talk about the energy policy I always talk about a three-legged stool. Sure, clean. Yes, we need renewables, wind, solar. But it also has to be affordable and reliable. It seems like every time we bring up bills in this Chamber, it always focuses on the clean and renewable, but it never talks about affordability or reliability. Because we know with wind and solar if the wind's not shining and the sun's not -- or if the wind's not blowing and the sun's not shining, it's needs backup by conventional means. We need balance. We need diversity in our fuel supply. So, yes, we need wind, solar, hydro, nuclear. But we also need natural gas. You need fuel diversity. Just like your 401(k). You don't put it all in stocks, bonds or cash. You diversify to protect it, to make it more resilient and to make it more reliable. We should be doing the same thing with our energy policy. Yes, keep the clean and renewable. That's part of it. But my goodness, natural gas is a big part of it as well. With stopping pipeline projects and everything else. The fact of the matter is our carbon emissions have decreased over the past 20 years because of natural gas. Whether you want to admit it or not we should be utilizing what we have and doing that. I know oftentimes when we talk about utilities in this Chamber many of my friends on the other side of the aisle often talk about, *Well, it's investors, it's the investors*. And when I talk about utilities I talk about the ratepayers. It's the -- the senior citizen, individual -- a low-income or moderate-income individual who is paying these utility bills, who are getting overwhelmed. We know they're overwhelmed

now. Again, \$1.2 billion in arrears, \$180 million on LIPA alone. They need help. We should be providing help. We should be directing some of these clean energy funds instead of building more projects and providing that direct relief right now. But when I think of times with -- with utilities, we're shifting costs, I think about the ratepayer, I think about the customer out there. That's what I'm concerned about, that's -- I think the intention is behind the sponsor. I have great respect for him, his knowledge on this issue. I'm just concerned what's going to happen with this legislation as we move forward.

So, Mr. Speaker, for that reason, because I'm concerned about the ratepayer and where we're heading with policies in this State and how it impacts them with bill after bill. I'm concerned about the ratepayer and what it's going to do to individual, what it's going to do our businesses, our manufacturers, everyone. So for those reasons, Mr. Speaker, I'll be -- I'll be voting in the negative and I encourage my colleagues to do the same. And thank you, Mr. Cusick, for your time.

ACTING SPEAKER AUBRY: Mr. Goodell.

MR. GOODELL: Thank you, Mr. Speaker. Would the sponsor yield?

ACTING SPEAKER AUBRY: Mr. Cusick, will you yield?

MR. CUSICK: Absolutely.

ACTING SPEAKER AUBRY: Mr. Cusick yields,

sir.

MR. GOODELL: Thank you, Mr. Cusick. I very much appreciate your earlier comments that you did not envision this bill as being a transfer cost to other ratepayers, away from those who operate the charging systems to other ratepayers. But I also was curious because you said right now the current cost structure is cost-prohibitive for some of these charging stations. So presumably, the purpose of this bill is to make it less expensive to operate these charging systems. So my question is, if this bill is effective in reducing the cost to those who operate charging systems - and Mr. Palmesano indicated that that could be much as \$425 million a year - but if it's effective in reducing the cost to the operators of the charging system, who is picking up the lost revenue?

MR. CUSICK: Well, I -- I first would start with, that number I've never heard before that -- that Mr. Palmesano had -- had quoted. Again, that was not presented to me by any of the utilities. The concern right now in -- in many areas of New York State is the availability of these charging stations. And it's been told to us that it is -- under the current structure, the -- the demand based structure right now for these charging stations, it is prohibitive to put as many that is needed in areas like, let's say, in my hometown of Staten Island, to put them in areas that would be needed for folks to use on a semi-regular basis. And that is the -- where I brought up the prohibitive part was it's prohibitive in order to supply those charging stations for the customers.

MR. GOODELL: So if this bill were enacted, how much would you envision the cost reduction or the savings to be on a cumulative level for those charging stations?

MR. CUSICK: Well, the utilities wouldn't be charging as much, you know, with this going forward and that would be -- be, we believe, the -- the result of this going forward.

MR. GOODELL: And how much do you estimate that the utilities would no longer charge for? In other words, what would your estimate be for lost utility revenue?

MR. CUSICK: Right. Again -- again, I'm -- I'm willing to sit down with the utilities and talk numbers, but we have not been given numbers on this and this bill has been out -- out there.

MR. GOODELL: But presumably, you're hoping for a substantial reduction in the cost, correct?

MR. CUSICK: I'm -- I'm looking for a -- for it to be reliable and affordable for my constituents and your constituents who would like to use electric vehicles.

MR. GOODELL: And to accomplish that you are hoping for a substantial reduction in the cost, correct?

MR. CUSICK: That would be nice, yes.

MR. GOODELL: And of course a substantial reduction in the cost means that there's a substantial reduction in revenue. How is the utility to make up for that substantial loss in revenue?

MR. CUSICK: Well, that would be something that

we would work with the utilities when they present an alternative plan, right?

MR. GOODELL: I see.

MR. CUSICK: The alternative -- this bill would mandate or tell the utilities and the corporations to present a plan. In this case we would work with the utilities if they wanted to put that in the alternative plan to address that issue. That's what this bill would do.

MR. GOODELL: Now, as you know, since 2019 the PSC has implemented an incentive program to bring those costs down using a direct financial payment to the utility to prevent any cost shift. Is there a reason why the incentive approach should be changed or abandoned?

MR. CUSICK: No. We -- we are all for an incentive program. And, you know, in this bill the -- the -- any plan or modification that a company presents could include an incentive program. It could be part of whatever new plan they want to present to the PSC.

MR. GOODELL: Now, this proposal doesn't include any budgetary appropriation or any financial support to implement this reduction in charges, correct?

MR. CUSICK: That -- that is correct.

MR. GOODELL: Is there a reason why we don't increase the financial incentives instead of this approach?

MR. CUSICK: Again, that -- that is something that

we -- we would -- you're talking about incentive programs for the -- for the utilities?

MR. GOODELL: Yes, for --

MR. CUSICK: Yes.

MR. GOODELL: Specifically for the type --

MR. CUSICK: I mean, we -- we --

MR. GOODELL: -- of installation.

MR. CUSICK: Right. We -- we are -- we are in favor of helping with incentive programs. And like I said, you know, it could be part of one of the plans that are presented to the PSC based on this bill if this bill passes.

MR. GOODELL: Thank you very much, Mr. Cusick.

MR. CUSICK: Thank you. Thank you, Mr. Goodell.

MR. GOODELL: On the bill, sir.

ACTING SPEAKER AUBRY: On the bill, sir.

MR. GOODELL: A lot of people don't realize that commercial customers, their electric bill contains multiple components. One of the components is based on the amount of energy they actually consume. And another component is the maximum amount of energy that they might demand. The demand charge reflects the fact that for a utility company to deliver a large amount of electricity at any given time, the utility company has to invest in the capacity of the entire system to meet that demand. And that means high-intensity or high-capacity electric lines, transformers and all the infrastructure that goes with it. Many years ago I -- I

worked for a harness track Upstate, and they had a one-mile long track and they ran horse races at night. And when they ran a race for two minutes they had quartz lights on that mile-long track so bright that they could televise the horse race with a camera that was a half-a-mile away. And you can imagine the amount of the electricity that was used for two minutes. And as soon as that race was over, boom, those lights went out. But in order to supply that incredible amount of electricity, even if it was for only two minutes, the utility had to have a massive investment in transmission lines, in transformers and the maintenance that goes with it. And as a result, oftentimes the demand charge for that capacity actually may have exceeded the actual utilization of the electricity in any given day. The same is happening with electric charging stations. If you have electric charging stations and the cars are using a fast charge, the amount of energy they use is very intense while they're charging. And at 4 in the morning if nobody's charging their car the energy use is zero. But in order to supply that charge when all the cars are plugged in with a fast charge, the utility company has to maintain all of that capital investment. And that's where the demand charge comes. Now, to address this the PSC a couple of years ago took what I consider to be the right approach. They said, *We'll help cover the capital cost through a financial incentive program.* And that protects all of the rest of the ratepayers from having to pay higher rates. I appreciate the sponsor's desire to dramatically reduce the cost of these charging stations, but the dramatic reduction in the cost of the charging station is made up

somewhere else in the system. And if it's not made up with a financial incentive, it's made up on the backs of the ratepayers. So who are we talking about? We are talking about all the rest of the commercial customers who already pay some of the highest rates in the nation. We're talking about our senior citizens, our retirees, those on fixed incomes. We're talking about the poor, who rely on electricity. I think the PSC, who are our experts in this area, were correct when they came up with a financial incentive program rather than a cost shift. And I fully appreciate the sponsor's desire to avoid a cost shift, which he and I are 100 percent in agreement on that. But the numbers don't work unless you provide another means of covering that reduction in cost other than the taxpayers. And the only way you can do that is through a subsidy program funded by us, the State of New York, which reflects our public policy. And so, I absolutely agree with my colleague's desire to reduce the cost of these charging stations. I'm with him 100 percent. I fully agree with my colleague's comments that we shouldn't increase the rates on our taxes and our ratepayers, who are already paying some of the highest electric rates in the nation. I'm with you. But unfortunately, you can't dramatically cut costs in one area without providing an alternative means of revenue without forcing the other areas of the system to pay higher rates, and unfortunately, that's what this does. There's just no way around it with the numbers.

And so for that reason I -- while I appreciate the goals and objectives, I think a better approach is through the budget process

for us to increase the financial incentives to offset these capital costs so that we can achieve rate stabilization for all of our ratepayers while encouraging the development of these charging stations. For that reason, while I appreciate the objective, I'm compelled to vote against this approach. Thank you, sir.

ACTING SPEAKER AUBRY: Read the last section.

THE CLERK: This act shall take effect immediately.

ACTING SPEAKER AUBRY: The Clerk will record the vote on Assembly print 3876. This is a Party vote. Any member who wishes to be recorded as an exception to their Conference position is reminded to contact the Majority or Minority Leaders at the numbers previously provided.

Mr. Goodell.

MR. GOODELL: Thank you, sir. The Republican Conference is generally opposed to this particular approach. But those who favor this legislation should call the Minority Office -- Minority Leader's Office so that we can properly record their vote.

Thank you, sir.

ACTING SPEAKER AUBRY: Thank you.

Mrs. Peoples-Stokes.

MRS. PEOPLES-STOKES: Thank you, Mr. Speaker. My Majority colleagues will be recorded in the affirmative on this one. Those who would like to be an exception should please contact the Majority Leader's Office and we'll be happy to record your vote properly.

ACTING SPEAKER AUBRY: Thank you, sir [sic],
very much.

(The Clerk recorded the vote.)

First vote of the day.

Mr. Cahill to explain his vote.

MR. CAHILL: Thank you, Mr. Speaker, and thank you to the sponsor for carrying this important legislation. I'm going to urge my colleagues to disregard their -- their conventional knowledge of our energy systems and to also recognize that there has been a failure on our part in many instances to account for the other costs associated with the use of fossil fuels, such as the pollution that has been the leading cause of asthma in portions of our State amongst children that has resulted in the deforestation of whole parts of our great Adirondack State Park and Catskill State Park. We have to transition to a non-fossil fuel economy, and this is a very important step. But there's another fundamental point behind this. You know, the -- the use of electricity to charge vehicles often occurs at the time that electricity would otherwise have gone to waste. Electricity gets generated 24 hours a day by nuclear power plants, by waterfalls that don't stop at night. By windmills that -- that tend to -- that tend to continue to turn even after the sun goes down. But the cost of that power when it's based upon the peak charges is actually subsidizing everyone else. So if we are in a -- in a position where we can reduce our reliance on fossil fuel, more appropriately charge the uses of that electricity for the electricity that they're using and have it be based on

the actual cost of that production, that is an appropriate thing to do. My one regret, Mr. Speaker, when reviewing this bill is I noticed I have wasn't a cosponsor and I'm going to try to correct that before this bill gets put into the hopper.

So thank you very much, and I withdraw my request and very proudly vote in the affirmative and urge my colleagues to do the same.

ACTING SPEAKER AUBRY: Mr. Cahill in the affirmative.

Mr. Epstein.

MR. EPSTEIN: Thank you, Mr. Speaker. I rise to explain my vote. In the conversation we're having around Earth Day and the conversations we're having about charging infrastructure, we have to make clear that New York has to move forward on this. Where I live, on the East Side of Manhattan, and even in the entire City of New York there are zero publicly available charging stations. Not one. Not a one. We need the infrastructure to make people or help people, to encourage people to move to a greener economy. We need every tool available in our tool belt. What this bill does is allows that conversation to move forward. It allows greater opportunities to ensure we have the infrastructure in place. We talk about short-term cost to ratepayers, but we ignore the long-term cost to ratepayers. We ignore the long-term cost to us with our health consequences. We ignore the long-term cost to the environment. We ignore the long-term cost to our future, for our children and our grandchildren.

We must act, and we must act now.

I applaud the sponsor. I'm proud to support this bill, and on Earth Day I encourage everyone to vote in favor. Thank you.

ACTING SPEAKER AUBRY: Mr. Epstein in the affirmative.

Ms. Woerner.

MS. WOERNER: Thank you, Mr. Speaker, for allowing me the opportunity to explain my vote. You know, with every -- with every challenge there is also an opportunity. And over the course of the last several years I've heard from many of the convenience stores and gas stations throughout the region that I represent that would love to be able to include charging stations as part of their offering. That just as you stop at -- at the local Stewart's to fuel up your car and get a cup of coffee with gas you could be able to fuel up your car up electrically as -- and check your e-mail and get a cup of coffee. Or an ice cream cone. But they can't do it because of these demand charges. It just makes it economically unviable for the small businesses that we depend on to fuel our cars to offer the option for electric vehicles. And if we are ever to move from a -- from early adopters to mainstream adopters we have to have sufficient charging stations throughout our -- our State. This will go a long way to remove one of the impediments to creating opportunity for our small businesses to get into the business of providing EV charging stations for their customers.

And so with that, I am happy to vote in the

affirmative. Thank you.

ACTING SPEAKER AUBRY: Ms. Woerner in the affirmative.

Mr. Goodell.

MR. GOODELL: Thank you, sir. Please record Assemblyman Brown and Assemblyman Walczyk in the affirmative on this legislation. Thank you, sir.

ACTING SPEAKER AUBRY: So noted.

Mr. Burdick to explain his vote.

MR. BURDICK: Thank you, Mr. Speaker, for the opportunity to explain my vote. I wish to commend the sponsor for moving this bill forward. If we truly are going to take the requirements under the Climate Leadership and Community Protection Act seriously, then we have to take bold action like this. There's no way that we're going to meet those ambitious requirements unless we're willing to make these kind of commitments. As my colleague just mentioned, we need to make it easy for people to be able to charge their vehicles either at service stations or other areas. We need to do everything possible to move this forward. We need to do everything possible to wean our State away from fossil fuels.

So I am proud to cast my vote in the affirmative on this, and I wish to again thank the sponsor for his tenacious efforts in moving this forward and I thank the Speaker for the opportunity to explain my vote.

ACTING SPEAKER AUBRY: Mr. Burdick in the

affirmative.

Mr. Otis to explain his vote.

MR. OTIS: Thank you, Mr. Speaker. This is an area where New York State can do a lot more to do something about global warming, to do something about air pollution. This is a very important bill in -- in that effort. We are behind in terms of just the visibility, availability of charging stations, whether they be on the road when people are traveling or in neighborhoods.

And so I vote in the affirmative. I -- I thank Chairman Cusick for his leadership on this issue. There's a lot more for us to do to provide incentives for the private sector to get in this game, to provide advantages for local governments to be doing more. There's just a lot more we can be doing. This bill is an important start. Thank you, Mr. Speaker. I vote aye.

ACTING SPEAKER AUBRY: Mr. Otis in the affirmative.

Mr. Santabarbara.

MR. SANTABARBARA: Thank you, Mr. Speaker. In explaining my vote I want to thank the sponsor for advancing this legislation. This will certainly help our communities and advance our shared mission of creating a more sustainable future. And I can't think of a -- a better way to celebrate Earth Day this month. The dangerous effects of climate change continue to threaten our families and the well-being of our future generations. Which is my -- why we must act now to protect our natural resources and find greener alternatives.

Part of that is advancing the use of electric vehicles. This bill is a pivotal step forward. We just unveiled 25 new charging stations in my district in the City of Amsterdam. It's going to make a difference in providing those alternative options. For me, as a civil engineer, I know that technology like this can help us find those greener alternatives and preserve our community and our national resources. The charging stations providing -- will help boost the economy, protect public health and also reduce our carb -- our carbon footprint. I'm committed to doing everything I can to build a healthier planet and this bill is a good step forward.

Thank you to the sponsor and I vote in the affirmative.

ACTING SPEAKER AUBRY: Mr. Santabarbara in the affirmative.

Mr. Englebright to explain his vote.

You have to unmute yourself, Mr. --

MR. ENGLEBRIGHT: Now -- now -- now I'm unmuted. Yes, thank you.

ACTING SPEAKER AUBRY: (Inaudible) fine.

MR. ENGLEBRIGHT: I just want to compliment the sponsor. This is an important step toward the goals that are outlined in the Climate Leadership and Community Protection Act. The implementation of those goals will of course require that we transition away from the number one pollution source, which is internal combustion engines. The way to do that is outlined in these electric

recharging stations, and it's something that is a journey that we have every indication has begun and needs to be continued, and this bill advances that possibility. This is the future. It is a necessary step that we're taking here.

Again, to my colleague from Staten Island, congratulations on your vision and your foresight. I vote yes.

ACTING SPEAKER AUBRY: Mr. Englebright in the affirmative.

Are there --

Mr. Goodell.

MR. GOODELL: Thank you, sir. Please add the following additional Assemblymembers in support of this legislation: Assemblyman Durso, Assemblyman McDonough, Assemblywoman Miller, Assemblyman Ra, Assemblyman Reilly and Assemblyman Tannousis.

Thank you, sir.

ACTING SPEAKER AUBRY: So noted.

Are there any other votes? Announce the results.

(The Clerk announced the results.)

The bill is passed.

Page 15, Calendar No. 161, the Clerk will read.

THE CLERK: Assembly No. A00903, Calendar No. 161, O'Donnell, Englebright, Abinanti, Otis, Galef, Glick, Gottfried, Epstein, Steck, Reyes, Colton, Griffin, Carroll, Braunstein, Seawright, Simon, Vanel, Kelles, Barron, Burdick, Clark. An act to amend

Environmental Conservation Law, in relation to prohibiting the use of drilling fluids, brine and flowback water from wells, pools or fields on any highway.

ACTING SPEAKER AUBRY: On a motion by Mr. O'Donnell, the Senate bill is before the House. The Senate bill is advanced.

An explanation is requested, Mr. O'Donnell.

MR. O'DONNELL: With pleasure. This bill would require the Department of Environmental Conservation to prohibit the use of drilling fluids, brine and flowback water on highways for purposes of deicing and dust suppression.

ACTING SPEAKER AUBRY: Mr. Smullen.

MR. SMULLEN: Thank you, Mr. Speaker. Would the sponsor yield for a few questions, please?

ACTING SPEAKER AUBRY: Mr. O'Donnell, will you yield?

MR. O'DONNELL: With pleasure, sir.

ACTING SPEAKER AUBRY: Mr. O'Donnell yields.

MR. SMULLEN: Thank you very much, Mr. O'Donnell. It's very good to see you even virtually here on Earth Day in the New York State Assembly. I've got a few questions I'd like to ask you about this -- this particular bill having to do with current regulations that the -- the State already has. In Title VI New York Code of Regulations 360.12, did you know that the road spreading of

drilling fluids and flowback water is already prohibited?

MR. O'DONNELL: It -- yes. They are prohibited since 2014.

MR. SMULLEN: So I -- I would just ask fundamentally, why is this bill necessary?

MR. O'DONNELL: It's necessary in order to assure that the liquid that we spread on -- or the dehydrated liquid that we spread that it is -- does not have certain contaminants, something called NORMS, Naturally Occurring Radioactive Materials, like radium and benzene gets spread on the -- on the highways and byways of New York. Those -- those materials can endanger the health and safety of the road workers and are likely to seep into our lakes and groundwater.

MR. SMULLEN: Okay. Well, I'd like to go back to the radioactive issue in a little bit. But first I'd like to --

MR. O'DONNELL: Okay.

MR. SMULLEN: -- ask you about the current DEC prohibition of -- of salt brine within 50 feet of a stream, a creek, a lake or other body of water. I think DEC and our State Department of Transportation already does a good job, especially where the -- the people are very well-trained and educated. So could you just outline for me, then, the -- the environmental goals of this bill when the salt brine cannot be used near our water resources already?

MR. O'DONNELL: Currently, cities can apply for a beneficial use determination permit for the use of those materials.

And in -- since 1996 they have issued 154 of those permits and they last for five years. Now what they do is they test a representative sample of what they're going to put down. But any sample can vary widely in toxins, and they don't require regular testing of samples. Meaning that if a sample is determined to be safe, they can get a BUD permit and are allowed to use it. But it doesn't necessarily mean that not all the brine from that location is necessarily safe. Additionally, very disturbing to me, it does not -- DEC does not test for toxic materials like arsenic and chromium even when school districts ask to spread it on school grounds. I know a little bit about that because of a fight in my community to prevent a school from being built on property that contained those heavy metals.

MR. SMULLEN: So -- well, thank you very much for that explanation. I know DEC has been working this issue for many years because of the Marcellus Shale coming into New York and the -- the current prohibition on fracking for natural gas in New York State. Why -- in this case, since they're really the technical experts, why shouldn't the rulemaking and processes be left -- delegated to the DEC by having to have specific legislation to which, you know, many -- many people have not a lot of familiarity with?

MR. O'DONNELL: Well, we don't have a legislative ban in the State of New York, which I would be in favor of. Obviously, in 2017 they banned the use from the Marcellus Shale, which is mostly -- a lot of it comes from Pennsylvania. But they can still use roadways for -- from other sources. And it seems to me that,

you know, one of the things -- I don't believe you were here then when this whole thing came up -- the most shocking thing to me to learn was that the companies involved were unable to articulate or release to us what was in the liquid they were shooting into the ground, nor were they able to tell us what comes out after they've fracked with it. And it seems to me that those omissions leave room for danger in this circumstance. Clearly, we've spent a lifetime of using products that we thought were safe at a time and we learned they're not safe. And so since we, in New York State, are essentially a water source for the entire East Coast, I think we should be stewards of that and ensure -- do everything within our power to ensure the safety of our water source.

MR. SMULLEN: Well, you know, I really appreciate the -- the effort towards stewardship. It's something that's obviously -- it's very important to us in the environmental conservation community. But there are always costs associated with -- with these sorts of laws. Currently, municipalities can actually petition DEC if they want to use the salt brine on a case-specific basis. It's certainly more affordable than road salt. Would this bill prohibit municipalities from being able to continue this process?

MR. O'DONNELL: It would prohibit the DEC from issuing BUD permits, which is the way they get to use that. So, yes, that would be ended. Correct.

MR. SMULLEN: So, there is a financial implication to this to -- to public entities. Does this bill offset the cost for the

State to purchase this more expensive road salt now that it will be prohibited for our highways?

MR. O'DONNELL: I don't believe "expensive" is the accurate word. I would use the word "widely-used rock salt."

MR. SMULLEN: And -- and does this bill point the way towards how the -- the brine that's currently produced in the State it should be -- how it would be disposed of since they're -- you know, the alleged nexus for this legislation is the actual contaminants that you've mentioned?

MR. O'DONNELL: No, but I'd be happy to write one. Like, there have been other bills - I don't recall if they've passed - which banned the transport of that, particularly over in Long Island and places where it's basically one big sandbar. And the fear of that liquid getting released into that sandbar is very threatening. I don't know what the answer is to what that is. And maybe you and I should write a bill about the way to do it --

MR. SMULLEN: Well, I -- I certainly --

MR. O'DONNELL: -- safely.

MR. SMULLEN: I appreciate that. You know, I think if -- if the answer is, like you'd mentioned, we -- we're not sure, but DEC should be the one that would be able to figure it out because they're the one to have the -- the water division, scientists, staffing that would be able to do that.

MR. O'DONNELL: Well, I -- I would agree with you, except that they have a process that they use which is severely

limited in its scope in what it doesn't include, and allows that permit to exist for a period of time even when they only use one sample in it. And my recollection is that disposal issues, we passed laws -- we have passed laws about that. So, I don't recall what they are. They were not my bill.

MR. SMULLEN: I appreciate that. So just to go back to the issue of contamination, and particularly radioactivity. What standard are you using to -- to demonstrate that some of these materials that come out of these wells are radioactive?

MR. O'DONNELL: I am not a scientist. I'm -- I'm barely a lawyer. But the entities that I refer to are called NORMS because the radioactivity is naturally occurring. And so they -- it occurs in them. I don't know at what level they occur at. I believe the DEC does and should use a standard measurement. But if you're going to ask me what parts per million, I have no idea.

MR. SMULLEN: Would it -- would it be more or less than the marble and granite that's in the Assembly Chamber produces still after it's been, you know, mined a 100 years ago?

MR. O'DONNELL: No idea.

MR. SMULLEN: Well, I think that's something to find out in case we need to start wearing dosimeters around the -- the Chamber for the naturally-occurring radioactivity in the environment.

Mr. O'Donnell, thank you very much for the time.

Mr. Speaker, on the bill.

ACTING SPEAKER AUBRY: On the bill, Mr.

Smullen.

MR. SMULLEN: Well, I -- I appreciate the -- the sponsor's intent behind this, and I understand the implications of industrial waste and the -- and the products that come out of it. I think this is a little bit of an overreaction in many ways for a problem that's really not prevalent in New York State. But it's also a way to, by a thousand different laws, to be able to hem in the ability in the future if we choose to do so to be able to revitalize New York's gas and oil industry through fracking. I don't believe it's necessary. I think the current regulations that we have in place are very effective. I think that people that use, in this case the salt brine, on some of our roads and for deicing and for dust palliatives for industrial purposes are adequate.

And for those reasons I'll be voting against this bill.
Thank you very much, Mr. Speaker.

ACTING SPEAKER AUBRY: Mr. Goodell.

MR. GOODELL: Thank you, Mr. Speaker. Would the sponsor yield?

ACTING SPEAKER AUBRY: Mr. O'Donnell, will you yield?

I think you have to unmute, Mr. O'Donnell.

MR. O'DONNELL: Well, that's because somebody unmuted -- muted me. I don't know how that happened.

(Laughter)

Yes, Mr. Goodell, I'd be happy to yield to you. But

I'm certain my bill is constitutional. So let's move on.

(Laughter)

MR. GOODELL: Well, why don't we start with the constitutionality since you raised it?

MR. O'DONNELL: Okay.

MR. GOODELL: This bill that you're proposing bans the use of any salt brine, as an example, that's produced from wells on any highways, correct?

MR. O'DONNELL: There -- there is a definition in the Transportation Law of what highways are, so yes, that's correct.

MR. GOODELL: But this bill doesn't prohibit salt brine that meets certain chemical parameters or exceeds certain chemical parameters, it prohibits salt brine based not on its chemical composition but from its source, correct?

MR. O'DONNELL: It does, but I would imagine your side of the aisle would be thrilled if I wrote a bill that required the DEC to test or determine that in all the other products available that are not from the source that I am talking about.

MR. GOODELL: So in other words, under this bill, even if it were to pass and be signed by the Governor, local municipalities that rely on salt brine could make their own using road salt, adding water and making their own and that would be perfectly legal even after the adoption of this bill, correct?

MR. O'DONNELL: I'm not sure what you mean. They make their own?

MR. GOODELL: Correct --

MR. O'DONNELL: If it's derived from the -- from the fracking process it would not be permitted --

MR. GOODELL: No, they take rock salt. They take rock salt, they add water. That creates a salt brine which has identical chemical characteristics of the salt brine that they would otherwise get as a natural byproduct of natural gas production. This bill would only prohibit salt brine if it came from a natural gas well. It would not prohibit identical composition salt brine if it's created from road salt, correct?

MR. O'DONNELL: Well, my favorite line from when I was a practicing attorney was assuming facts not in evidence. So you're assuming that the composition of homemade rock salt is the same chemical composition of -- of hydrofracking fluid. And as I mentioned earlier, even the people who do the fracking process are unable to tell us what is in the fluid they put in the ground, nor are they able to tell us what is the composition of the fluid that comes out of the ground, which is what this is attempting to ban.

MR. GOODELL: So let me be more precise in my questioning.

MR. O'DONNELL: Okay.

MR. GOODELL: The DEC already prohibits the use of flowback water or water used in fracking. It's already banned, it's been banned for years.

MR. O'DONNELL: Since 2017, yes.

MR. GOODELL: This bill prohibits salt brine, which is a naturally-occurring byproduct of natural gas, but would not prohibit salt brine that's created by adding road salt to water, correct?

MR. O'DONNELL: If you're adding it to something that came out of a well, then you're prohibited.

MR. GOODELL: But if you're adding water to salt that comes from rock salt, that's not prohibited, correct?

MR. O'DONNELL: Correct, because fracking fluid is rock salt plus chemicals.

MR. GOODELL: So I know I've asked the same question --

MR. O'DONNELL: Well, I'm interested in banning chemicals.

MR. GOODELL: -- four or five times, but this bill only applies to salt brine that comes from natural gas wells, does not apply to any other salt brine coming from any other source, correct?

MR. O'DONNELL: Correct.

MR. GOODELL: And so just -- I'm just going to mention the constitutional issue and then I'll move on. There is an equal protection argument and a due process argument when we prohibit a product based on its source and not based on its composition. So let's look at the composition. I just raised the due process equal protection argument, but let's look at the composition. Right now the DEC regulations test for 13 parameters. Very detailed, very strict and very tight parameters for any contaminants that might

be in salt brine that comes as a natural byproduct of a natural gas well. Other than these 13 parameters, are there other parameters you think should be tested?

MR. O'DONNELL: Yes. Toxic heavy metals like arsenic and chromium, which as I mentioned to the previous questioner, have become central to a fight in my neighborhood, the chromium, about its location under a school they proposed and the school has now been moved from that location because the people who lived adjacent to it and the people who would send their kids to said school did not want their children to go to a school that's sitting on a bed of chromium.

MR. GOODELL: And did this school that you mentioned, did they use naturally-occurring salt brine on the roadways?

MR. O'DONNELL: No.

MR. GOODELL: So this chromium was --

MR. O'DONNELL: This was on --

MR. GOODELL: -- unrelated --

MR. O'DONNELL: This was on an empty -- it wasn't a roadway, it was an empty lot.

MR. GOODELL: Okay.

MR. O'DONNELL: And there was what the community viewed as too high toxic levels of chemicals in the ground --

MR. GOODELL: And am I correct --

MR. O'DONNELL: -- and they didn't want a school --

MR. GOODELL: Right. Am I correct there are no natural gas wells in your district?

MR. O'DONNELL: You are correct, Mr. Goodell. Yes.

MR. GOODELL: And am I correct that they don't use salt brine from natural gas wells in your district?

MR. O'DONNELL: I am unaware of it if they do.

MR. GOODELL: Or in any neighboring districts?

MR. O'DONNELL: I would hope not.

MR. GOODELL: Right? I mean, you live in New York City. It's -- they don't have any natural gas wells in New York City, the entire City, correct?

MR. O'DONNELL: That is correct.

MR. GOODELL: And they don't use salt brine anywhere in the City of New York, right?

MR. O'DONNELL: I have -- I have no knowledge of that.

MR. GOODELL: I see. I come from a district that has 5,000 wells and several municipalities that do extraordinary testing on a regular basis to ensure the salt brine doesn't have any impurities before applying it to the roadways. Have you talked to others like myself who actually have natural gas wells and actually use this product?

MR. O'DONNELL: On --

MR. GOODELL: Other than today, of course.

MR. O'DONNELL: Other -- other than today, which has been a wonderful use of our time, I spoke since the beginning of this question with Barbara Lifton who, yes, in fact, did have them. And the first public hearing I attended was filled with constituents who had farms and farmland who are very concerned that their designation as an organic farm was under threat if this went forward.

MR. GOODELL: And I'm --

MR. O'DONNELL: She's no longer there, but she's been -- but we -- we talked about it all the time.

MR. GOODELL: I'm glad you raised the issue of farmers. And in my county, of course, many farmers use the royalties from these natural gases to survive. I mean, it's an additional source of income. Is there anything in this bill that would offset the loss of revenues they might if we erase -- the natural consequence of this is to raise the cost of natural gas production in New York State. Is there offsetting benefit to farmers to offset the loss in royalty revenues they might receive?

MR. O'DONNELL: There is no financial offset of any kind.

MR. GOODELL: Now, as you know, natural gas wells are a tax, there's a real property tax that applies to natural gas wells, and that real property tax is based on production. Is there any tax credit or any other financial benefit or offset for local

municipalities that may see a reduction in tax revenue as these wells are forced to be shut in?

MR. O'DONNELL: There is no financial implication as it relates to tax credits or municipalities.

MR. GOODELL: I know you mentioned a concern about the use of the salt brine affecting waterways, and as you know the DEC has strict restrictions on any use of salt brine near waterways. It also has strict restrictions on the application rate. It requires the applicators to be well-trained. It requires specialized equipment that governs the rate at which the salt brine is applied. Are you aware if there's any comparable restrictions in the DEC on the application of road salt which when combined with water is virtually identical?

MR. O'DONNELL: Once again, I vehemently disagree with the word "virtually" and I would say no, I'm not aware.

MR. GOODELL: I see. Why is it that we're banning all naturally-occurring salt brine from being used on any roadways rather than pass legislation adding additional parameters for the DEC for testing?

MR. O'DONNELL: I can only speak for myself and say having been here for 20 years I can assure you that same legislation would be as vehemently opposed on your side of the aisle as this is.

MR. GOODELL: Of course we rely on the expertise of the DEC to come up with these testing parameters and, indeed, as I mentioned, there's over a dozen testing parameters they have. Is it

your view that the DEC is simply not competent in determining which parameters should be tested, and if so at what level?

MR. O'DONNELL: No, I don't believe the DEC is incompetent.

MR. GOODELL: Okay. And I would agree. They're certainly, I will share with you, much more competent on these scientific matters than I am. Like you, I'm also an attorney.

Thank you very much, Mr. O'Donnell. I always appreciate your comments.

On the bill, sir.

MR. O'DONNELL: It's always a pleasure and it's very nice to see you, Mr. Goodell.

MR. GOODELL: Thank you, Mr. O'Donnell.

ACTING SPEAKER AUBRY: On the bill, Mr. Goodell.

MR. GOODELL: So, many of our Upstate municipalities use the naturally-occurring byproduct of natural gas wells, which is salt brine in order for them to control ice on the roads rather than using rock salt. And the DEC requires an annual permit, has detailed specifications on the equipment, how it's to be applied, where it can be applied, the volume it can be applied and a number of other environmental restrictions all designed to protect the health of New Yorkers. Now, this bill doesn't prohibit the use of salt brine as road deicing or dust control. It only prohibits salt brine that's a natural byproduct of natural gas wells. In other words, this bill doesn't deal

with the content of the salt brine, but bans it based on its source. In the process, it once again increases the cost of all of our natural gas producers in the State (inaudible). Which either renders our natural gas less competitive, resulting in lower royalties to all the landowners who rely on it and lower tax revenues for all of our local Upstate municipalities, or it increases the cost to the consumer. Now, even though we have tight testing parameters on over a dozen potential contaminants, this bill doesn't ask the DEC to establish or create testing parameters for any additional contaminants. And there's a great reason why the DEC in my area where we have over 5,000 wells doesn't test for arsenic or chromium, and that's because it's not naturally occurring where these natural gas wells are. So we have a bill that's not focused on the chemical characteristics of what is applied to keep our roads safe for the traveling public, but it's solely focused on the source of the product. And it's part, in my opinion, of an effort to make our natural gas industry less competitive with the unanticipated and unintended consequences of increasing the cost to all of our local municipalities that rely on this source, reducing the revenues to our farmers and everyone else who relies on royalties in reducing the tax revenue to all the municipalities in the sub-State jurisdictions.

If we want to keep our focus on the environment, I'm all in. But if we're trying to use the environment as an excuse to further hamper, impede or shut down our struggling natural gas industry, I'm opposed. And for that reason I will be opposing this bill

and the tremendous additional cost it imposes on all the localities all across the State that rely on this carefully tested natural byproduct to keep our roadways safe for the traveling public.

Thank you, sir.

ACTING SPEAKER AUBRY: Mr. Jones.

MR. JONES: Will the sponsor yield?

ACTING SPEAKER AUBRY: Mr. O'Donnell, will you yield?

MR. O'DONNELL: Absolutely, Mr. Jones. Go right ahead.

MR. JONES: Hi, Danny. How are you?

MR. O'DONNELL: I'm good.

MR. JONES: I broke my record here this year. I said I wasn't going to get up and question anybody, but I just want to make clear about the intent of this bill. And if you would answer a few questions because I got a little confused in some of the, you know, the questions and answers here, which doesn't take much sometimes. But, you are not -- this bill does not prohibit the use of saltwater brine on our roadways?

MR. O'DONNELL: No, it does not.

MR. JONES: Okay. So when you said municipalities can -- they -- they -- they cannot apply for a permit for that saltwater brine, we weren't saying that they can't -- that -- that they can still use it, though, correct? Maybe that was a little more confusing --

MR. O'DONNELL: They can -- yes, they can use it except if it comes from fracking.

MR. JONES: Okay.

MR. O'DONNELL: So the problem is -- you know, the previous questioner used the word "natural." And if --

MR. JONES: Okay.

MR. O'DONNELL: And if you put water in the ground at high pressure and then take it out, there are things besides water in there other than salt --

MR. JONES: Yup.

MR. O'DONNELL: -- and those are the things that I'm concerned about.

MR. JONES: Okay. Thank you. Thank you for the clarity there as well, because many of us in the Adirondacks and such -- I sponsored a bill last year with my friends across the aisle from the Adirondacks that we were -- we were trying to reduce the use of rock salt, road salt, on our roadways, which was getting into our waterways and getting into people's wells and is really creating havoc and a problem. So, one of the alternatives to that -- maybe I should say on the bill. I'm sorry, Mr. Speaker.

ACTING SPEAKER AUBRY: On the bill.

MR. JONES: One of the alternatives to that would be the use of saltwater brine, because unfortunately -- maybe fortunately, I know more about salt and roads than I ever thought I would be. I joined the New York State Assembly to talk about road

salt and rock salt on roads. But one of the -- one of our alternatives to that is to use saltwater brine -- to have our highways use saltwater brine so it sticks to the road, because when rock salt hits the roads it flies off in a lot of instances, gets into our ditches, gets into our waterways and eventually gets into our wells. So, I would hate to have a bill out there that would totally prohibit the use of saltwater brine, so I appreciate those -- those answers. And we are looking for alternatives. First of all, make our roadways safe so our residents can travel safely on them, but to reduce the -- the use of rock salt because it is having such -- it is such an issue in a lot of our areas where it's getting into people's wells, it's getting into our waterways and it's polluting our environment. And we certainly want to keep moving forward in that. So my concerns with this bill was that it was going to totally -- totally eliminate saltwater brine on our roadways, which some of our highway departments are going to, and which they can still make themselves. This is only banning or reducing the use of this from the fracking natural well sources that -- that you were talking about.

So for that reason I can support this bill. Thank you very much.

ACTING SPEAKER AUBRY: Thank you, sir.

Ms. Kelles.

MS. KELLES: Yes, will the sponsor yield for a few questions?

ACTING SPEAKER AUBRY: Mr. O'Donnell, will

you yield?

MR. O'DONNELL: With pleasure.

ACTING SPEAKER AUBRY: Mr. O'Donnell yields.

MS. KELLES: Good afternoon, Mr. O'Donnell. Thank you so much for taking my questions. I have three questions. One, currently is there a system in place for testing the chemicals or compounds in the brine fluid coming from hydrofracking or coming from the oil and gas wells that we're discussing?

MR. O'DONNELL: Not to my knowledge.

MS. KELLES: And my second question is, do we -- are -- are hydro -- are companies that do hydrofracking, are they required to disclose all of the chemicals that they use in their brine fluid to maximize the extraction of oil and gas -- natural gas from their -- from their wells?

MR. O'DONNELL: Well, in fact, when we had the public hearing many years ago, we asked that question. They said that that was information that was private because it's, you know, secret what they do. (Inaudible) the hearing, someone from the public gave them a glass of water that he claimed came out of their well and offered them to drink it, and they chose not to do that. So, no, we don't actually know what goes into the well, nor do we know exactly what comes out of it.

MS. KELLES: Great. And -- and my last question, do you know of -- do treatment methods from hazardous waste

facilities exist that could -- that could, in fact, extract any potential chemicals that are in the byproduct, the brine fluid that could extract any radioactive materials or any -- any chemicals that we might feel are unsafe?

MR. O'DONNELL: Not that I'm aware of at this time.

MS. KELLES: Thank you so much.

On the bill.

ACTING SPEAKER AUBRY: On the bill, ma'am.

MS. KELLES: I think that the most in -- important component of this, and as someone who does have wells in my district and -- and in honor of my predecessor, Assemblymember Barbara Lifton, you know, I'd like to carry this message from -- from this district that the main issue here is that the chemicals that are used in the hydrofracking process are protected currently by case law as proprietary, which means that we do not know all of the chemicals that are in them. We have some examples that there are some chemicals that are used, for example, benzene, which is known to be one of the most carcinogenic molecules that exist on the planet. That being simply one of thousands that we suspect are being used, but again, we do not know.

The second thing I think that is really important is that right now there may or may not be methods to remove all of the chemicals that are in these processes. There are, in fact, some -- some methods in hazardous waste facilities to remove some of them that

could be modified or -- or upgraded to address some of these issues, but they are currently not in place and have not been tested. So until that full process is in place and until we do know the full combination of the chemicals that are in these materials, until we have an agreement that hydrofracking -- that oil and gas companies are willing to disclose all of the chemicals so that we can address and remove them, particularly those that we do know are carcinogenic hazard -- and hazardous both to humans, flora and fauna in the environment as a whole, then our role should be to do no harm. To do minimum harm. And I want to commend the sponsor of this bill for bringing this forward. I think this is the prudent measure, given the fact that we do not have the full information except -- except that we do know that there are some chemicals, at least a few, that are -- are hazardous and carcinogenic that we would not want to be spreading on our roads. Again, I'm speaking as someone who does have wells in my district.

So I stand in support and -- and want to again thank the sponsor for bringing this forward.

ACTING SPEAKER AUBRY: Read the last -- read the last section.

THE CLERK: This act shall take effect on the 180th day.

ACTING SPEAKER AUBRY: The Clerk will record the vote on Senate print 355. This is a Party vote. Any member who wishes to be recorded as an exception to their Conference position is reminded to contact the Majority or Minority Leader at the numbers

previously provided.

Mr. Goodell.

MR. GOODELL: Thank you, sir. The Republican Conference is generally opposed to this legislation. Those members who support it should contact the Minority Leader's Office and we will properly record your vote. Thank you so much.

ACTING SPEAKER AUBRY: So noted.

Ms. Hyndman.

MS. HYNDMAN: I would like to remind my colleagues that this is a Party vote. Majority members will be recorded in the affirmative. If there are any exceptions, I ask Majority members to contact the Majority Leader's Office at the number previously provided.

ACTING SPEAKER AUBRY: Thank you very much.

(The Clerk recorded the vote.)

Mr. O'Donnell to explain his vote.

MR. O'DONNELL: I would like to thank the Speaker and the Chair of the Environmental Committee for sticking with me. This bill was written many, many years ago. There's some misinformation out there. Yes, the DEC does give permits, but they last for five years, not yearly. And they are routinely reissued with almost no question. There's nothing natural about adding dangerous chemicals to water and then saying it's natural. It's not natural. It is water that has been infused with other things. And I have seen some

horrifying pictures of huge vats of this liquid sitting out in an open field. And as it sits there, it dehydrates, the water leaves, evaporates. And I'm fearful for the people who live around that what would happen in an emergency if that water were to leak out. If that water were to leak out and get into the water stream or get into someone's well or get into something else, I am sure that -- I would hope that the State would rise up and assist those people who have been hurt by that and not impose that on the local municipality. And so it's a question of what you fear most. And I would humbly suggest that the fear of contamination from what might be in those liquids is a strong enough reason to stop spreading them on our highways and byways.

So thank you very much. I'll be voting in the affirmative.

ACTING SPEAKER AUBRY: Mr. O'Donnell in the affirmative.

Mr. Burdick to explain his vote.

MR. BURDICK: Thank you, Mr. Speaker, for the opportunity to explain my vote. One of the very first votes that I took as a member of the Assembly was in the Environmental Conservation Committee when in early February we voted to report this bill out. And I want to thank the sponsor for his tenacity, his perseverance in moving this forward. Also, I'd like to thank Chair Englebright for moving this bill forward. I'm a cosponsor of this bill, and one of the main concerns that I have about the topic is that I happen to represent an area in which there are New York City watersheds all around us,

and ground water pollution is a pervasive problem. And one of the key obligations that I feel that I have in representing my district is to ensure that we don't do anything further to exacerbate the problems of groundwater pollution. And while I don't know with any certainty that -- that these byproducts are being used on our -- on our highways or byways in my district, I certainly don't want to see them used, and so applaud the -- the efforts of the sponsor in protecting public health and safety by prohibiting their use.

So I will be voting in the affirmative, and again, my thanks to the Speaker, to Chair Englebright and to the sponsor in moving this forward. Thank you, Mr. Speaker, for the opportunity to explain my vote.

ACTING SPEAKER AUBRY: Mr. Burdick in the affirmative.

Mr. Goodell to explain your vote, sir.

MR. GOODELL: Thank you, sir. Available to all of us at our desks on our computers is a copy of the DEC regulations. So we can all pull them up at any time and review them and see what they actually say. And if you actually pull up the DEC regulations you'll see that the DEC already tests for benzene. They also test for ethylbenzene along with 13 contaminants. You'll also find that while the permit may be issued for a multi-year period, the testing is much more frequent; it's annual. And you'll see that road spreading and drilling fluids and flowback water or anything that's used in fracking is strictly prohibited. So for those who are arguing that we should pass

this bill to prevent road spreading and drilling fluids and flowback, that's irrelevant. That's been prohibited for years, as my colleague acknowledged. For those who are concerned about the use of salt brine on roadways, as my colleague from the North Country pointed out, salt brine is a much, much more efficient way of ice control than rock salt because it doesn't scatter. It can be applied in a very precise manner, and the DEC regulations are very precise in how it's applied, the equipment that's to be used, even the training for operators. So make no mistake about it, this is not about protecting the environment, it's about raising the costs of the natural gas industry in New York State. And every time you turn on your stove or adjust your thermostat in the winter and say a little prayer to God, *Thank you that my furnace is working and I have clean-burning natural gas*, remember, in this State, with this legislation, we do everything we can to shut down our local industry and raise the cost to consumers, and that -- for that reason I will oppose it.

Thank you.

ACTING SPEAKER AUBRY: Mr. Goodell in the negative.

Ms. Kelles to explain her vote.

MS. KELLES: I just wanted to briefly state again my appreciation to all the environmentalists in this group. I do believe this is an incredibly important environmental bill. And the only thing I wanted to add is what my -- my esteemed colleague said and I appreciate. There's a list of 13 chemicals that are tested, benzene

being one, of course, that was an example that I gave. Thirteen. We have been told that there are hundreds to thousands of chemicals that are part of the proprietary blend that are -- is in the solution that is used to maximize the efficiency of extraction of natural gas. So the only thing that I would say is until gas companies are willing to give the entire combination of chemicals that exist in the, quote, "proprietary blends," this bill should stand and this law is important. When we know what chemicals, then we can address those chemicals. If we don't know, and we already know that some that are used are extremely harmful, then it is the prudent step to say that it cannot be used to spread on ground that will guaranteed spread into the entire groundwater system, that it should not be used.

I think this is a prudent step and I support it and I vote in the affirmative. Thank you so much.

ACTING SPEAKER AUBRY: Ms. Kelles in the affirmative.

Mrs. Peoples-Stokes.

MRS. PEOPLES-STOKES: Thank you, Mr. Speaker, for the opportunity to explain my vote. I want to thank the sponsor for this piece of legislation. It's been around here for a while, Mr. Speaker, and I truly hope that this time it's able to get to the finish line. There's no question that -- you know, I think everything that was created in this world when we all arrived here was perfect. And it is here for us to use, quite frankly, including natural gas. Even if it is underground, it is here for us to use. But it's also incumbent upon us

to figure out what do we need to get it out and whatever we use to get that out, how can we make sure that it doesn't harm us in the future. That's the part that we haven't quite figured out yet, and when we get to that part it will be a little easier to use this brine water for whatever reason. But for right now, until the science figures that out I think we're making the right call here. And I applaud the Speaker for bringing this bill to the floor and I applaud the sponsor for putting it before us. And I'm grateful and highly in favor I feel to be able to vote for it.

Thank you, Mr. Speaker.

ACTING SPEAKER AUBRY: Mrs. Peoples-Stokes in the affirmative.

Mr. Goodell.

MR. GOODELL: Thank you, sir. Please record the following Republican members in the affirmative on this legislation: Mr. Ashby, Mr. Brown, Mr. Mikulin, Mr. Miller, Mrs. Miller, Mr. Montesano, Mr. Ra, Mr. Schmitt and Mr. Walczyk.

Thank you, sir.

ACTING SPEAKER AUBRY: So noted.

Are there any other votes? Announce the results.

(The Clerk announced the results.)

The bill is passed.

Page 17, Calendar No. 181, the Clerk will read.

THE CLERK: Assembly No. A04302, Calendar No. 181, Englebright, González-Rojas, Kelles, Griffin, L. Rosenthal,

Simon, Burdick, Colton, Dickens, Cruz, Fahy, Epstein, Glick. An act to amend the Environmental Conservation Law, in relation to providing that 100 percent of in-State sales of new passenger cars and trucks shall be zero-emissions by 2035.

ACTING SPEAKER AUBRY: An explanation is requested, Mr. Englebright.

MR. ENGLEBRIGHT: Thank you, Mr. Speaker.
Can you hear me?

ACTING SPEAKER AUBRY: Yes, sir.

MR. ENGLEBRIGHT: Thank you again. This bill is purposed to decrease greenhouse gas emissions and air pollution from the transportation sector by providing that 100 percent of in-State sales of new passenger cars and trucks shall be zero-emissions by, respectively, 2035 and 2045.

ACTING SPEAKER AUBRY: Mr. Smullen.

MR. SMULLEN: Thank you, Mr. Speaker. Would the sponsor kindly yield for a few questions?

ACTING SPEAKER AUBRY: Mr. Englebright, will you yield?

MR. ENGLEBRIGHT: I yield.

ACTING SPEAKER AUBRY: The sponsor yields.

MR. SMULLEN: Thank you very much. I just wanted to -- to get to the -- the heart of the matter and get your take as -- as the author of this bill on what does zero emissions mean in the context of this bill?

MR. ENGLEBRIGHT: Zero emissions means that we will see electric vehicles instead of internal combustion engine-driven vehicles on our roads.

MR. SMULLEN: I appreciate that clarity, because it also mentions in the bill hydrogen vehicles. Would they be considered zero emissions as well?

MR. ENGLEBRIGHT: Yes. The -- you're talking about a different kind of combustion. The byproduct of combusting hydrogen is water. Water is not a problem.

MR. SMULLEN: Certainly, and I -- and I appreciate it.

MR. ENGLEBRIGHT: It's water vapor. It would not be carbon dioxide, carbon monoxide or any of the host of other emissions that come from the incomplete combustion of -- of fossil fuel.

MR. SMULLEN: So, certainly. So we're mostly talking about electric vehicles, battery-powered vehicles. Because, you know, having some experience in the energy area, hydrogen vehicles have not really taken off. There was a big push about 20 years ago to enable hydrogen vehicles. It's largely not come to fruition. However, there has been large-scale investment in battery technology, which -- which may enable electric vehicles to do that. So, based on that, though, electricity comes from somewhere. Where does the electricity come from in New York to -- that would power the vehicles underneath this bill?

MR. ENGLEBRIGHT: Well, I'm glad you asked that question because this is the other part, really, of the two main thrusts that are derived from the Climate Leadership and Community Protection Act. You know, we have a lot of say over -- because we regulate, we have a lot of say over how electricity is generated. And the CLCPA calls for specific targets for renewable energy production from solar and wind. I got a tickle in the throat here. Excuse me.

MR. SMULLEN: Take your time, sir. I -- I don't mean to get you all choked up about this.

(Laughter)

MR. ENGLEBRIGHT: So -- so we are able to anticipate that electric generation will be coming from renewable sources, and that those renewable sources, in turn, will -- will be the source of electrical power for recharging. We just heard a debate about the need for recharging stations. That is another part of this overall strategy.

MR. SMULLEN: Sure. And I'm certainly in favor of a market-based approach towards a transition towards better technology which uses less energy. But currently, you know, we've got a basket of -- of energy sources in New York. Primarily it's nuclear, which is about 20 percent. And there's hydroelectric facilities, primarily legacy dams that does another 20 percent. And then we've got natural gas turbines which provide quite a bit of it. And then we've got wind and solar which currently don't provide very much, but we're hopeful that they'll get to a higher level. So, you

know, essentially, what I'm -- what I'm questioning on this is the overall strategy to begin with, which is zero emissions means vehicles that don't pollute. But the electricity that comes from somewhere must come from somewhere in order to be useful, to -- to move people and things in their cars. What is the transmission cost in that regard? What is the transmission cost from producing whatever source - a nuclear facility in Oswego - to a car charging station 100 miles away? Is it -- do you lose 30 percent? Do you lose 20 percent? About how much energy do we lose from a carbon standpoint?

MR. ENGLEBRIGHT: I don't have that figure.

MR. SMULLEN: I -- I think it's -- I think it's very important because, you know, some figures -- it's not 100 percent, that's for sure. So what we're doing is we're -- we're -- we're creating energy from some source, including some from some fossil fuels today, and we're trying to get it to be something useful, energy for people to go about their lives, conduct commerce. Because this bill applies to not only commercial cars and trucks, but by 2045 we hope it apply also to heavy-duty trucks. And I'm sure some of my colleagues will -- will want to talk to you about the agriculture implications of that. Why didn't you make this law, this goal, apply to things such as trains and ships, which are very important to New York's commerce?

MR. ENGLEBRIGHT: One step at a time. We, in fact, are starting to move in that direction conceptually. A big story in yesterday's *Newsday* regarding the anticipated move toward battery-

operated trains on the Long Island Railroad. You may also be aware that when the CLCPA was passed that the MTA was -- the Long Island Railroad in specific was in the midst of acquiring 57 new diesel locomotives. We had press conferences indicating that that would be contrary to the new law, and really raised many questions that has helped put the Long Island Railroad on notice that they are not exempt from these same goals that we're speaking of. And to their credit, they're beginning to explore battery-operated trains.

MR. SMULLEN: Sure. And as part of the analysis of this bill, did you include the cost per ton for moving commerce into the equation which, you know, obviously ships are the most efficient because you can fit a lot of stuff in a ship. Railroads are the next most efficient. Trucks are the next most efficient, and then passenger vehicles are, you know, the least efficient from a carbon cost. What is the cost per ton for New York, and what do you expect it to be in 2035 and then, respectively, in 2045? Will it be more or will it be less than it is today?

MR. ENGLEBRIGHT: I have no way of knowing what specific market realities will be in future years. That's a speculation that is intellectually interesting. If you have some figures I'd be interested in hearing your figures. But what I do know is that the costs of doing nothing are unacceptable. The costs to our society of climate change is enormous, and it is paid by costs to our public health, the general environment, and in every way to the operation of our communities. So -- so overwhelming are the negative costs from

climate change that -- that it exceeds our ability to calculate it accurately, even today. We do know, though, that there are storm cleanup costs, extreme weather events, crop losses and public health impacts that are -- that are many tens of billions of dollars per year.

MR. SMULLEN: Certainly. So you described it actually in the bill introduction that this is a goal for New York State. It's not necessarily based on science where there's a hypothesis. How -- how are we going to get from the as is of today to the to be of 2035 and 2045 if the science of battery technology doesn't support your goal or your hypothesis?

MR. ENGLEBRIGHT: Let me be clear. You stated that this was not based on science. In fact, it is based on science. But it is not abusively forceful or sudden. Instead of being a commandment, this legislation is aspirational and gradual.

MR. SMULLEN: I really appreciate that. Because one of the things I noticed that you mention specifically in the bill for the DEC to do is to be to coordinate with the U.S. EPA. I think they already do that today. But why didn't you include a provision to require them to coordinate with the U.S. Department of Energy, which is responsible for energy efficiency, the National Laboratory System, which they have the portfolio in the U.S. Government for these, you know, these sorts of technologies. Why not the U.S. Department of Energy?

MR. ENGLEBRIGHT: They can -- they can coordinate, of course, with any of the Federal agencies. The one that

they are most closely similar to is the Environmental Protection Agency at the national level. There is crossover, of course, as we see even in New York, between agencies dealing with health and parks and energy. So the environment is a topic that is multi-dimensional and, of course, it does make sense, as you rightly suggest, for the DEC to speak to and coordinate with as many sources of knowledge as possible at the Federal level.

MR. SMULLEN: Well, certainly. But I would respectfully submit that the EPA is a punisher, it's a regulator. It compels people to do things, whereas the Department of Energy actually has an innovation arm which could be the -- the key to some sort of more entrepreneurial approach to reaching this goal without being punitive in -- in how we apply the laws in New York State.

Just a couple more questions. I -- I appreciate your -- your forbearance here.

MR. ENGLEBRIGHT: The EPA sets the standard for vehicles. This is a piece of legislation that specifically deals with vehicles. So it is appropriate for the primary contact to be between the New York State Department of Environmental Conservation at the State level and the Environmental Protection Agency at the national level.

MR. SMULLEN: No doubt. We know how regulators regulate --

MR. ENGLEBRIGHT: You know, we -- with air contamination levels.

MR. SMULLEN: Most certainly. And we know how the regulators regulate. We also know how innovators innovate. I -- I would argue that this is a technology problem in need of a very sophisticated solution as opposed to a public policy regulatory scheme. But I -- I only have a couple minutes left and I -- I -- I appreciate it.

How many cars are produced in New York each year?

MR. ENGLEBRIGHT: I do not have that figure.

MR. SMULLEN: I mean, I don't know of any major car manufacturers. So, we're -- we're telling people that they're going to have to have a certain kind of car --

MR. ENGLEBRIGHT: I don't have the exact figures, but I can tell you that there are an awful lot of vehicles that are purchased each year. We can all see them in our own communities. They are mixed in with vehicles from earlier years, but there's a lot of new vehicles on the road.

MR. SMULLEN: There certainly are. The average age is somewhere around 20 years, so we're actually inside the window now for cars that will be on the road today will still be on the road in 2035. And there will always be a various mix of vehicles. And I appreciate your time, Chair Englebright. I -- I thank you very much. I know we're running short on time.

Mr. Speaker, on the bill.

ACTING SPEAKER BENEDETTO: On the bill.

MR. SMULLEN: So I really get and I really understand what the goal of this bill is, and it's -- it's a laudable goal, it's a noble goal. But right now it's not supported by the technology that would allow it to be actualized at the level we're talking about. The CLCPA has targets for electricity generation. Now this target for zero-emission vehicles are extremely aggressive to the point where they're almost not achievable from the -- from the current basis of technology, from the as-is situation where we are now to the to-be where we want to be in the future. And that's a -- that's a bit worrisome because it sends a wrong signal to the market. Not only to the people who buy vehicles, but to -- but to the companies that create those vehicles. And I know the hope of it is that there will be a technical breakthrough to enable this. And I'm hopeful as well. But I was also in the Marine Corps where hope is never a course of action, especially when it comes to where I am today in the New York State Assembly where good public policy should be set on -- on -- on the factual basis of what not only the industry but the -- the -- the State, what it is today. And for that reason I'm not very hopeful that this bill is anything but an aspirational document and it won't become anything but a dusty tome on a shelf some day if there's some other technology that can then change the equation for us that we would -- so hope for to reduce our carbon footprint in New York to be able to allow us to go about our business. To use energy as efficiently as possible to do all of the things that we, as New Yorkers, we, as Americans, what we choose and what we want to do with our lives in the 21st Century.

So for that reason, I appreciate the sponsor's intention but I urge all of my colleagues to vote against this bill because it's not going to meet the long-term aspirations that it intends. Thank you.

ACTING SPEAKER BENEDETTO: Well-timed, sir. Thank you.

Mr. Manktelow.

MR. MANKTELOW: Thank you, Mr. Speaker.
Would the sponsor yield for just a few questions, please?

ACTING SPEAKER BENEDETTO: Will you yield?

MR. ENGLEBRIGHT: I yield.

MR. MANKTELOW: Thank you, Mr. Englebright.
Just a couple questions. I've looked over the bill and I'm -- I'm getting more and more familiar with solar power as it's being put up in our -- in our local districts back home. One of my thoughts here is I see nothing in the bill that's going to address the infrastructure, but what is the plan for the infrastructure?

MR. ENGLEBRIGHT: The infrastructure for what?

MR. MANKTELOW: Well, if we're going to need all this power for these vehicles --

MR. ENGLEBRIGHT: If you're talking about the generation of electric power, the plan for that infrastructure is outlined in the Climate Leadership and Community Protection Act with a series of goals that are now black letter law that we will achieve by certain dates, and that is intended to replace fossil fuel sources.

MR. MANKTELOW: And -- and I thank you for that

answer.

MR. ENGLEBRIGHT: (Inaudible).

MR. MANKTELOW: And I agree with that as we try to move forward. But -- but you haven't answered my question. My question is, what is -- how are we going to fund all this infrastructure? How are we going to get the power to the locations that need it?

MR. ENGLEBRIGHT: Are you talking about recharging stations?

MR. MANKTELOW: No, I'm talking about the solar projects, the nuclear plants, the -- the wind turbines. You're going to want all this power to go to where the charging stations are. How (inaudible) are we going to get the power to those locations, and then who's going to fund that?

MR. ENGLEBRIGHT: We already have a distribution network of electric capacity throughout the State. We would -- we would continue to use that distribution network, and I believe that we will see many of our places such as stops on the Thruway and gas stations and parking areas next to municipal buildings wired into that same existing network so that electric vehicles can be quickly recharged.

MR. MANKTELOW: And -- and I applaud you for that. I think that's -- that's very appropriate to the bill. But going back to my question. I know that even in my local municipality when I was a town supervisor, we tried to site a solar project on one of our closed

landfills, and there was no three-phase wiring along the roads to do that. And the cost to get the three-phase wiring there, to get it back to the municipalities that use electric was astronomical. Just trying to put Internet access in Upstate New York in the rural areas is at least \$20,000 a mile. That's for one small line. And here we're talking about a huge expansion of -- of moving of electricity. And in my home district a week ago I was out at one of the locations. It's approximately 2,400 acres of farmland, produceable farmland that they're using right now that will go into a solar project that's -- that will be done in a few years. And they're looking to expand that. We have the 345 high power lines going through our district, and that's how they're siting them, along those lines to get that power to move, and that power will be going Downstate. Some of the concerns that we have locally is as we site these solar projects, you know, the runoff of these solar projects, we talked on the previous bill about, you know, some of the contaminants. And I know in talking with the residents, they're concerned with miles and miles and acres and acres of solar panels, what contaminants are going come up to those solar panels? Where is that water going to go? Is it going to contaminate their water? And their bigger concern is they're going to have to deal with looking at these huge solar farms and the power is going Downstate. If they had some power coming to them that would be somewhat acceptable or at least considered, but it -- but it's not happening. And I just think that we're putting the -- the cart before the horse here. We need to make sure that we're able to put the infrastructure in place to

get the power to move.

Another question, being -- being a former farmer, and I know that in this bill we're talking about, you know, off road down the road. But what are your thoughts on -- on agricultural equipment? How do we handle that?

MR. ENGLEBRIGHT: I think the market will bring electric vehicles into the realm of farm vehicles. Just as I mentioned a short while ago, there's discussion, very serious discussion about moving toward battery-operated locomotives. It is not at all difficult to imagine that on a much smaller scale, battery-operated farm equipment, combines, harvesters and tractors will also be very -- very competitive. I just want to also while I'm answering this mention that General Motors and Volkswagon and Daimler, the parent company of Mercedes-Benz, these -- these are all giant vehicle manufacturers. They have all announced that they will begin manufacturing zero-emission vehicles exclusively. And so it will be to their interest to provide similar availability of electric power and farm equipment as well. Your -- your point as to whether the electricity can get to the site where it can be absorbed into a battery for use is a -- is a good question, but this isn't 1920. We're not anticipating the need to build out an electric grid before there was a Tennessee Valley Authority, for example. And we -- we now have a large part of that grid. Will it need to be added to somewhat? No doubt, yes. But the -- the core of the grid is already there and we can continue to use it.

MR. MANKTELOW: So you don't see any huge

expansions of power transmission lines in New York State?

MR. ENGLEBRIGHT: I didn't say that. I said that we have the core of a system that is far advanced. I mean, if we were having this conversation, you know, in 1920, it would be a very different level of uncertainty. There's a great deal of certainty as to the availability of electricity flowing to our communities. The question of whether that electricity is generated by renewable sources is a question that we've already begun to answer very specifically with the CLCPA, the Climate Leadership and Community Protection Act.

MR. MANKTELOW: You keep going back to that Act, and -- and in that Act, does it talk about providing funds to build any of the infrastructure?

MR. ENGLEBRIGHT: It doesn't provide funds. It's not a bill that provides funds. It's a bill that sets goals and targets.

MR. MANKTELOW: Okay. Thank you, sir. I know many of us travel up and down the New York State Thruway coming to and from Albany, and on our Thruway I'm so thankful for the -- the truck drivers and the people that move our products up and down the Thruway. I see in the bill also we're looking to -- look to address this with heavy trucks. Are you looking to go completely electric with heavy trucks as well in New York State?

MR. ENGLEBRIGHT: Yes. The bill anticipates that by the year 2045 that we will have trucks, including the larger trucks that we see on the highways, using the same basic modality of power generation. That is to say electric vehicles will be scaled for the use

for those larger workhorse kinds of vehicles as well.

MR. MANKTELOW: Will the conventional diesel engine be -- still be allowed to be sold in New York State in 2020 -- or 2045?

MR. ENGLEBRIGHT: After 2045, all new in-State sales would be electric vehicles.

MR. MANKTELOW: Okay.

MR. ENGLEBRIGHT: By that year it would be all passenger cars and all trucks.

MR. MANKTELOW: Okay. So --

MR. ENGLEBRIGHT: It doesn't mean, though -- just to be clear, it doesn't mean that if you have a vehicle that you bought in -- in an earlier year that you could not use it. But when that vehicle would be worn out over its useful life it would be replaced when you buy a new one with an electric vehicle. And so that's the purpose of the bill. No pun intended, but in a gas pedal and clutch kind of way, we would ease in the use of electric vehicles and ease out the dominance that we see now of internal combustion engine-driven vehicles.

MR. MANKTELOW: So, companies coming from other states would still be allowed to come into New York State with their conventional trucks?

MR. ENGLEBRIGHT: That's correct. We cannot at the State level regulate interstate commerce like that. But we can set an example for our neighbors, and over time I think that it will

become increasingly clear that despite the fact that there is an upfront purchase price for electric vehicles, at least in the present market that is somewhat higher, over time there are huge cost savings. You don't have to buy gasoline, for example. It's a lot cheaper to recharge the battery than it is to buy a tank of gasoline.

MR. MANKTELOW: Okay. And I don't know how much time I have left, but one of the last questions I have is, you know, talking with some of the trucking industry -- trucking companies, and one of my concerns is if we transition over to only selling electric trucks in New York State, heavy-duty trucks, that what I think will happen is you'll see these companies go out of State, buy their vehicles out of State, send their business out of State. Register -- register and plate those vehicles out of State and do business in New York State. So we could have the possible lost revenue of other registrations, the licenses and all that moving forward. And any good business person is going to transition very slowly. So I can see that happening as we do this. But again, just like in the military, just like my colleague said earlier as a Marine, me as an Army guy, we're only as good as the people behind us bringing us the supplies, getting the -- the main gun rounds to us, getting our food to us, our water, our fuel. But we -- I see this being the stumbling block here. And the other thing that I see is, again, the industries, as you said, GM, Cadillac, Tesla, they're already moving forward with electric vehicles and making that happen. So why on Earth do we need another piece of legislation to make sure this happens? It already is happening. And

again, I think sometimes we, as government, send the wrong message, overstepping our bounds when our -- our private industries and our businesses are already doing this. Let them grow. Let's offer them tax incentives to produce electric vehicles in ways in the future instead of coming up with a way that they're going to have to do it.

So, I thank you for your time, sir, and Mr. Speaker, on the bill.

ACTING SPEAKER BENEDETTO: On the bill, sir.

MR. MANKTELOW: As we've talked a little bit here this morning, I'm all for the electric vehicles. I love the clean energy. I love how quick they are. I think two years ago there was electric dragsters down on the Concourse that were on display, if I remember right. And I really wanted to get in one and go down the Concourse, but that probably wouldn't be a wise move. But anyway, we are moving forward as a society. We are moving forward as a country. We are moving forward as -- as a world, Mr. Speaker. And we are making this happen without pieces of legislation to do that. And I just, again, have concern that we've tightened up the parameters so quickly and do not have the infrastructure there and it's going to be over cost. You can't afford to do this. And again, I just think we are -- we are moving in the right direction. And let's let our private industry do this. Let's -- let's give them incentives to do this and we can accomplish this in a different way and in my eyes a better way.

So thank you, Mr. Speaker, for allowing me to expand on the bill. I'd love to support this bill, but it's -- it's a little too

gray right now for me. So I'll be asking my colleagues not to as well.

Thank you, sir.

ACTING SPEAKER BENEDETTO: Thank you, sir.

Mr. Goodell.

MR. GOODELL: Thank you, sir. Would the sponsor yield?

MR. ENGLEBRIGHT: I yield.

ACTING SPEAKER BENEDETTO: He yields.

MR. GOODELL: Thank you very much, Mr.

Englebright. I know that you stated that this bill is aspirational, and indeed, the first paragraph keeps saying it's the goal of the State to be 100 percent zero emission. It's a further goal for not only cars but for medium- and heavy-duty trucks. But I'm more concerned with the language in the bill that starts on page 1, line 16 which says that the DEC shall develop and propose passenger vehicle and truck regulations requiring increasing volumes of new zero-emission vehicles offered for sale or lease or sold or leased for registration in New York State. And the word "requiring" is not aspirational, right? It's a -- it's a mandate.

MR. ENGLEBRIGHT: It is a requirement. We are anticipating that there will be a need for some oversight. This isn't just a hope, but in fact, is a -- a program that moves toward goals that are, indeed, aspirational but that they are prodded along. This is a multi-year, multi-decade, really, commitment. And the role of the Department is important to the eventual outcome that allows us to

have less vehicle emissions.

MR. GOODELL: I appreciate that -- the desire. Now this says specifically that this would apply to vehicles sold or leased for registration in the State. So is it your intent that this should apply to vehicles, say, purchased in Pennsylvania and New Jersey, Connecticut or any of our neighboring states if those new vehicles were subsequently then registered in New York State?

MR. ENGLEBRIGHT: No. That -- that is convoluted. My goal is very specific. It's outlined clearly. It is for sales of passenger vehicles and trucks in our State.

MR. GOODELL: Now, the latest data I saw indicated that New York State currently has about 11.3 million cars. And an analysis based on current manufacturing requirements would indicate that if we were to convert all 11.3 million cars to electric vehicles, we would need to use 60 percent of the world's entire production of cobalt just for New York State. Thirty percent of all the neodymium - I think I mispronounced that - 25 percent of the world's entire production of lithium, 15 percent of the world's entire production for copper. Do you have any idea how it is that those supply chain restrictions can be accommodated if New York isn't the only one that's moving toward all electric vehicles?

MR. ENGLEBRIGHT: Clearly, there's going to be a transition that will take place. The mining activities that are required, the sourcing of the rare earth and minerals is something that will be done gradually. Fortunately, time to accomplish that is allowable

within the time frame that is outlined in the bill.

MR. GOODELL: Currently, as you know --

MR. ENGLEBRIGHT: The market will respond.

And there are sources, if this was something that we had to have ready by tomorrow morning, it would be impossible.

MR. GOODELL: Certainly. Certainly, environmentalists are also deeply, deeply concerned over the horrific environmental damage that's caused by the mining of all these materials. Does this bill contemplate or evaluate or quantify the incredible environmental footprint that's involved in converting 11.3 million cars to all electric vehicles? Is there anything on that -- in other words, is there any requirement that the rare earths, some come almost exclusively from China, be mined in a zero-emission manner or consistent with U.S. environmental standards?

MR. ENGLEBRIGHT: The manufacturers that I mentioned before, General Motors, Volkswagon, Daimler, et cetera, they know their markets. They have already indicated that they're going to be manufacturing zero-emission vehicles exclusively. I anticipate that that is because they know that they will be able to access these materials for the batteries. I should also point out that the evolution of our knowledge of how to generate and store electricity evolves. I anticipate that we're not dealing with a -- a static reality in terms of inventiveness, either.

MR. GOODELL: This bill -- just to be clear. This bill doesn't purport to require that the electric vehicles that are sold in

New York State be produced in a manner that has zero emissions, correct? It only requires that the vehicle itself have zero emissions, correct?

MR. ENGLEBRIGHT: It doesn't require that for the current automotive hardware that's on our streets and highways and it doesn't anticipate it for the next generation.

MR. GOODELL: Now, I saw a report --

MR. ENGLEBRIGHT: What is in --

MR. GOODELL: Oh, I'm sorry.

MR. ENGLEBRIGHT: -- (inaudible) that we will be replacing all of the vehicles that are on -- except for collectible vehicles, all of the vehicles will be replaced. And all this bill is attempting to do is say replace them with zero-emission vehicles.

MR. GOODELL: Now, I saw a report that indicated that if Texas were to convert to all electric vehicles they would need 110 terawatt hours of additional electricity. That's enough to power 11 million homes. In New York State the number would be lower because we have fewer vehicles than they do in Texas. Do you have an estimate of how many terawatt hours of additional electricity we would need to convert all of our vehicles to electric-powered vehicles?

MR. ENGLEBRIGHT: I don't have that figure, but I do know that we are in the process of initiating the first offshore wind farms and that they are being paid for by entrepreneurs in the private sector. There were some questions earlier about whether, you know,

there was enough money to do this. Well, the money is being put up by private entities and they're going to be responding to the market demand, and that market is -- and the market development strategy is something that we're asking in this bill for the Department of Environmental Conservation to monitor and encourage quite closely.

MR. GOODELL: Well, as you know, Texas has about a third more residents than New York State and, of course, that gap continues to grow as people flee New York State and move to Texas, but even using that as a rough estimate, it would look like we would need somewhere between 70 and 75 terawatt hours of additional electrical capacity in order to power these electric vehicles if we were to do the full conversion. Do you an idea of how many additional electrical plants, generating plants, that would be required in order to meet that electrical need?

MR. ENGLEBRIGHT: I've already indicated that offshore wind sourcing for renewable energy is beginning in earnest and is going to grow and as earlier in the debate, there was discussion of solar energy being an additional renewable source that is really taking off and growing. I should also point out that there are conversations with our neighbor to the north with significant renewable energy available from electric projects that have been overbuilt in Ontario.

MR. GOODELL: Of course a lot of folks --

MR. ENGLEBRIGHT: We may end up importing some of this power. We're certainly going to have the ability to

generate it, as well.

MR. GOODELL: I appreciate those comments, and I appreciate your optimism on bringing power, but a lot of consumers don't realize that because of the unreliability of wind and solar, which produces zero power on a cold, still night, in order to maintain grid reliability, the grid requires almost an equal amount of traditional backup power. So separate and distinct from the variable green energy that we hope will power an increasing portion of our State's electrical needs, how much base generation would we need to produce 70 to 75 terawatt hours of additional electricity?

MR. ENGLEBRIGHT: I'll let you do that calculation. I can tell you though that this isn't something that we are going to try to convert to in the next 15 minutes. This anticipates a gradual, market-based response to the need for electricity to power what is presently the primary source of air pollution. Some estimates indicate that 40 percent of the air pollution in our State and nation is from vehicles. And so addressing that is going to give us a big head start on answering the larger question of whether or not we can get ahead of the -- of the negative effects of climate change driven by air emissions.

MR. GOODELL: And I appreciate the fact very much that this bill provides for a phase-in with all passenger vehicles, all new sales of passenger vehicles to be zero emission by 2035, or roughly 14 years from now. Can you give us a sense of what the lead time is in order to design, obtain all the permits, get Article X

approval and construct a major generating facility? I mean, we're talking years if not more, right?

MR. ENGLEBRIGHT: Depends upon the facility. We start with the reality that for solar you can actually install the solar generator on your roof or for community solar in a matter of weeks, not years. Planning for large, offshore wind power is something that would be measured in years, but not decades.

MR. GOODELL: Gotcha. Thank you, Mr. Englebright.

On the bill, sir.

ACTING SPEAKER AUBRY: On the bill.

MR. GOODELL: I appreciate the desire of my colleague to have zero emission vehicles, but the reality is that these so-called "zero emission vehicles" are anything but zero emissions when you look at the entire environmental picture. I had a friend and colleague who was very proud that he just bought a zero emission Prius and could drive to work and back based on the plug-in, and I didn't say anything because he was really proud of his investment, but I was thinking to myself, your car is burning on about 30 percent coal and about 40 percent oil and the rest is natural gas, and my car just uses regular gas. So when we're looking at the big environmental picture, we have to look at the fact that an electric vehicle uses tremendous amounts of cobalt, lithium, copper and rare-earth. And we need to recognize the fact that those rare-earths are mined in a horrifically environmentally destructive manner primarily in China.

And we need to recognize that if you're not looking at how the power is going into the vehicle, the electric generation, you're only looking at a little myopic segment, a little segment of it.

In my county, we had a coal plant that wanted to convert to natural gas. It was a 98 percent reduction in all air emissions even after the scrubbers were installed. That couldn't make it through the bureaucratic challenges of New York State. And so now Western New York, by the way, is powered by one of the nation's worst coal-produced power plant in the nation in Homer City. But this bill does nothing to address all that environmental damage that's occurring outside of New York State in order to meet our pure, myopic, happy-to-be environmentalist requirements that the vehicle we're driving doesn't produce any emissions even though we are causing worldwide environmental damage in mining the rare-earths even though we are creating massive amounts of emissions from electric power plants in order to power this. And since all of the people that drive vehicles want to be able to charge them every night, even when the sun is not shining and there's no solar power, and even when the wind's not blowing and there's no wind power, they want to be able to charge their electric vehicles so they can get to work the next day. We have to have backup generation and backup distribution, and we're talking in the range of 70 terawatt hours of electricity. So somewhere in the State or in our neighboring state, there's going to be a lot of power plants built to meet this requirement with corresponding environmental damage.

Thank you, sir.

ACTING SPEAKER AUBRY: Mr. Walczyk.

MR. WALCZYK: Thank you, Mr. Speaker. Would the sponsor yield?

ACTING SPEAKER AUBRY: Mr. Englebright, will you yield?

MR. ENGLEBRIGHT: I yield.

ACTING SPEAKER AUBRY: Thank you, sir.

MR. WALCZYK: Thank you, gentlemen. Mr. Englebright, how much energy do emissions-producing vehicles in the State of New York use approximately right now?

MR. ENGLEBRIGHT: How much energy? I -- I -- I don't have that figure.

MR. WALCZYK: Okay. This -- this bill is addressing --

MR. ENGLEBRIGHT: I can tell -- I can tell you that in dollar amounts that New Yorkers are presently spending between \$25 and \$30 billion a year on motor fuels that are carbon-based, and I can tell you that about 85 percent of that amount of money flows to out-of-state oil interests, but if you want to actually calculate the energy, I would let you make the conversion from those dollar expense figures.

MR. WALCZYK: I actually, since you brought up the dollars and cents, you did make a claim earlier that it's cheaper to charge your vehicle than it is to fill it up with fuel. My understanding

is, I mean, gasoline, while we might not like the emissions or the energy impacts or the out-of-state dollars there, is one of the most energy dense fuels. Do you have a cost comparison for what electric versus gas in either BTUs or pick your unit, what that -- what that cost comparison would be?

MR. ENGLEBRIGHT: I can tell you that of the -- every dollar that a gasoline vehicle has -- makes use of as it's burning gas only returns about 25 cents of energy value and that the other 75 cents is wasted on heat and exhaust and the emission of greenhouse gases. And that by comparison, an electric vehicle provides about 90 cents of dollar energy value. So it's much more efficient.

MR. WALCZYK: Okay. I've got from the -- from the EIA here that in motor gasoline, New York State uses about 650 trillion, they use BTUs, British Temperature Units. Is that -- is that your understanding, about 650 trillion BTUs annually?

MR. ENGLEBRIGHT: I will take your word for that. I -- I don't have that figure before me.

MR. WALCZYK: Appreciate it. Do you know what the total -- if you were to continue with that metric in BTUs, do you know what the total energy production in New York State, and I appreciate you not only wanting to address an environmental issue, but also the, you know, the import of fuels from outside, supporting other economies outside of New York. Do you have any idea how many trillion BTUs we currently produce?

MR. ENGLEBRIGHT: I am not familiar, and I don't

really believe that it is relevant to the purpose that we're trying to achieve here. I know that it is necessary to have energy; I acknowledge that. What we are also finding to be necessary is to decrease greenhouse gas emissions and air pollution and the impact that tailpipe pollution is having on our health and the well-being of our citizens.

MR. WALCZYK: Thank you. I appreciate that, and I'll address the relevance when I go on the bill. But I've got a couple more questions here. How many amp service -- so when you think about homes across New York State, many in aging infrastructure. At the last end user at the home, some may be as low as a 30 amp service, it was very common for a long time to have 60 amp service to a home. Modern code is required, 100 amp service to -- to homes which may or may not support all electronic devices. We may require 200 or 400 amp service. If we have under -- under the New York's Green New Deal, in addition to this bill, if you've got a two-family home or a two-car family that is also completely converted to all electronic devices, how many -- how many amps in service is that home going to require?

MR. ENGLEBRIGHT: I don't anticipate that there is a need to change the building requirements or the number of amps that a household presently has. If they are at the 100 amp level, they would be able to have an electric vehicle fitted into their lifestyle and not have to make major changes to the infrastructure of the house or the neighborhood or the community. And the reason I can say that is

because we have already seen installations in some homes and they are compatible with the rest of the electrical infrastructure serving that home.

MR. WALCZYK: So you don't anticipate that New Yorkers are going to need any electrical upgrades to their homes.

MR. ENGLEBRIGHT: I didn't say that. I said that for the most part, things are going to be compatible if you have 100 amp service to your home. And I didn't say that no one would need to make upgrades. You mentioned 60 amp service, 60 amp service is pretty weak right now for the use of modern refrigerators and freezers, for example, within the home. So some upgrading that would logically be necessary I anticipate will be taking place.

MR. WALCZYK: Thank you, Mr. Speaker.

On the bill.

ACTING SPEAKER AUBRY: On the bill, sir.

MR. WALCZYK: So Mr. Speaker, the -- the relevance in doing a comparison, and you can pick your metric whether it's megawatts or in trillions of BTUs, when you compare the total production in BTUs for example, of 800 trillion BTUs in our current production, and just this fleet in gasoline, which is about a third of our energy portfolio, we're going to require 650 trillion BTUs, almost the whole of our current production just to run the fleet that we're requiring is going to be electrified. And look, I'm not an electrical engineer, but I'm playing one on TV today and I can tell you, 30 amp service is completely unacceptable. You're talking about

a lot of poor homes, homes in poverty that have that 30 amp service that are going to need an upgrade in order to comply with this, and reach one of the largest hurdles out of poverty in Upstate New York, and that is transportation to a job. So consider that before casting your vote.

Mr. Speaker, furthermore, 60 amp service doesn't run electronic appliances, let alone charge cars for a two-family home, and neither does 100 amp service. We can get into the phases and, again, I'm not an electrical engineer, but the idea that you can just pass a bill like this with a hope and a wish and throw it out into the air and make it a law, we've done this before. There's no plan to get those homes in poverty to the proper service that they need to be so that they can charge the electronic vehicles that we required them to purchase.

I hope that all the members in this Chamber consider the efficiency of refrigerators, the efficiency -- and, look, New York State, we're the 5th largest consumer of petroleum. Can we do better? Yeah. We are actually top in the nation -- look, this -- I want to announce this to the Chamber because I think this is great. I don't usually say we're first in the nation in something and we say that it's good news, but in petroleum products per capita, we have the lowest in the nation. That's a good thing. We're not science deniers, right, we understand that we need to do better. But we also need to base some of these policies in reality.

This one right now is going to have an adverse impact on the poorest New Yorkers, there's no question about that,

and it's not based in -- we hear and you've heard it through all of the discussions today, the big picture production, how many solar fields are we going to need, how many wind turbines are we going to need? What hydro upgrades are we going to need? How much hydropower are we going to have to buy from Canada? A lot of talk about the backbone, but not a lot of talk about the end users that are going to be impacted by this legislation. I'll tell you what it looks like, maybe you're not going to be sitting in this chair anymore, but your children and your grandchildren are going to be impacted by this when they get their first car, or they're trying to get to work and they're struggling to survive and stay in New York. They're going to be impacted by this. Because when you're not -- not only have to buy a more expensive vehicle, but then your utility comes to you and says, *Yeah, we can -- we can attach you to a 400 amp service so that you can have all electronic appliances in your -- in your home.* Well, today an upgrade from 200 to 400 amp might be \$10,000 with your utility. How many New York families that are struggling to elevate themselves out of poverty have \$10,000 kicking around just so that they can afford to charge the electronic car that you forced them to purchase. That's something to consider before you cast your vote.

Thank you, Mr. Speaker.

ACTING SPEAKER AUBRY: Thank you, sir.

Ms. Kelles.

MS. KELLES: Thank you so much. I -- I'd love to ask a question of the sponsor; would he yield?

ACTING SPEAKER AUBRY: Mr. Englebright, will you yield?

MR. ENGLEBRIGHT: I would be pleased to yield. I yield, yes.

ACTING SPEAKER AUBRY: Mr. Englebright yields.

MS. KELLES: I have one question specifically that was brought up earlier and I think that -- that is really important to clarify, specific to the electrification of the grid. So this is a two part question. One, we have our existing transmission lines throughout the entire New York State. That would be the system that would be used to transmit electricity to homes and, of course, to electric vehicles, correct?

MR. ENGLEBRIGHT: Correct.

MS. KELLES: We do have significant funding, if I recall, in the budget that we just passed for upgrades to the transmission lines and expansion; is that not correct?

MR. ENGLEBRIGHT: That is my understanding, yes.

MS. KELLES: And -- and the third piece to this is, you know, there -- there is, in fact, as has been noted, loss in energy through transmission of electricity through transmission lines, which -- which is correct. Does this have any impact on greenhouse gas emissions?

MR. ENGLEBRIGHT: Well, if we had more

efficiency we would have an easier time of transitioning, but there is a falloff in power as you transmit it over distance.

MS. KELLES: Absolutely. So there's the -- the greenhouse gas emissions are -- are produced from the production of the energy itself, whether it be from gas, coal, fire plants, obviously a significant reduction if you're using renewable, but the actual transmission through the lines, the loss of electrons, my understanding is that that in and of itself does not release or create an increase in greenhouse gas emissions, correct?

MR. ENGLEBRIGHT: That is correct, yes.

MS. KELLES: Okay. So it really is just the production component that's important.

MR. ENGLEBRIGHT: That is correct, and that's why the CLCPA focuses on the production as the beginning of our quest to discipline our -- and reduce and decrease our greenhouse gas emissions.

MS. KELLES: Right, and I appreciate --

MR. ENGLEBRIGHT: We're transitioning away from fossil fuel sources and toward renewable sources.

MS. KELLES: Exactly, and I appreciate you bringing up the CLCPA in particular because it's important to note that the CLCPA, one, is now law; two, establishes goals; and three, specifically and explicitly states that there will be a scoping plan that outlines the strategy that we will use to -- to reach those goals, as well as mechanisms to -- to reach those goals; is that not correct?

MR. ENGLEBRIGHT: That is correct.

MS. KELLES: Okay. I think that it's really important to make that -- that distinction. And so thank you for answering my questions.

On the bill.

ACTING SPEAKER AUBRY: On the bill, ma'am.

MS. KELLES: I think that it's important to note that we are using policy that acknowledges that we all need to set GHG emissions reductions as our priority, meaning we all need to do this as our priority if we are to reach our Climate Leadership and Community and Protection Act, and this is the exact purpose of policy itself, the protection for the public good. And sometimes leaving actions exclusively to the market will simply not address our -- our mandate that we have in the time frame that we need, which we have recognized that we have run out of time. And, therefore, leaving it exclusively to the market without any policy I believe is -- is seriously irresponsible. This bill is to create a net reduction in greenhouse gas emissions. I also wanted to note that estimates being used in today's discussion are based off of today's technology. I will repeat: The estimates being used today, in today's discussion, are based on today's technology, which we know is changing and improving at a rapid pace.

And as everyone knows, I love looking at studies, I love referring to studies, so I highly recommend a study that came out from -- it's called *2035, Report 2.0* from the University of California

in Berkeley: Predicts major economic benefits from going electronic. I know that was a big topic of discussion today. It would save households \$1,000 annually over the next 30 years and support a net increase of over two million jobs in 2035 according to the study. The study claims to be, quote, "The first study to show how improvements in battery technology, cost, manufacturing, scale and industry ambition will accelerate electrification of cars and trucks," meaning that there will be a positive feedback loop of all of these factors increasing the speed at which we improve the technologies in all of these components. It's finding predicts a much quicker rate of electrification of the U.S. vehicle fleet than previously analyzed, and I believe that this is part of the data that was the impetus for some of the major companies not only predicting, but guaranteeing they will set that goal of converting all of their vehicle fleets, cars to electric by 2035. Last quote from this, "By 2030, the U.S. could make all new car sales electric, along with over 80 percent of new truck sales, and power them with 90 percent clean electricity," the study said. This widespread electrification would also reduce U.S. economic wide emissions by 35 percent, according to the study.

So I just want to end by saying just because a bill does not address every single environmental issue or crisis that we humans have established, is not justification for not passing a bill that is a step in the right direction. So I stand in support. I want to honor and thank the tremendous work and resolve and determination of the sponsor of this bill. You are an inspiration to us all and I stand in

support. Thank you so much.

MR. ENGLEBRIGHT: Thank you.

ACTING SPEAKER AUBRY: Thank you.

Mr. Lawler.

MR. LAWLER: Thank you, Mr. Speaker.

On the bill.

ACTING SPEAKER AUBRY: On the bill, sir.

MR. LAWLER: Thank you. Believe in the science.

That is what we are always told. It is the common refrain, believe in the science. On what basis does the science say that by the year 2035 100 percent of medium-duty and heavy-duty vehicles will be zero emissions? On what basis does the science or the technology say that by 2045, all operations, where feasible, will be zero emissions? It's not based on science. As the sponsor said, it's based on hopes and dreams and aspirations. That is not the way to legislate. That's not the way to make policy decisions in the State. The reason we continue to see people leave this State in droves is because we continue to make horrendous policy decisions out of this Chamber and next door.

When you look at this, today, 60 percent of New Yorkers rely on natural gas, 60 percent. So the objective, as this bill and some of our prior bills does, is to get us off of fossil fuels. Sixty percent. Can anyone in this Chamber tell me who is going to pay for every New Yorker to convert their home, to change their heating system from gas to electric, to change their stoves and their ovens

from gas to electric? Who is paying for that? When we're making these policy decisions, we should be looking at affordability, accessibility, reliability. That's not what we're looking at here. Look at what happened in California last year when they were facing blackouts and brownouts. Why? Because they're making energy policy based on hopes and dreams and aspirations and not "the science" and technology. So they experienced a really dire situation. We've had situations in this State when storms have come through and people have been without power for days on end. Why? Because we're not investing in our infrastructure. We want to make the whole system electric, yet we have some of the oldest and most unreliable transmission lines in the country. We are not investing in the infrastructure and, yet, we're making policy decisions as if that infrastructure is there, as if the technology meets what we are trying to accomplish. It doesn't. I'll be the first one to say I want renewables. I want to limit our carbon emissions, but let's actually rely on the science and technology rather than our aspirations and our hopes.

Over the last 15 years, natural gas has reduced carbon emissions 57 percent more than renewables. I'll repeat that: Natural gas has reduced carbon emissions more -- 57 percent more than renewables over the last 15 years. So when we're making these policy decisions, I understand we want to reduce carbon emissions, but let's actually base it on science and fact. We're shutting down Indian Point. Nuclear power is clean, zero carbon emissions. Interestingly, we're keeping power plants Upstate open, so I'm not really sure the

contradiction between the policy decisions where we're shutting down a power plant that is responsible for 25 percent of our energy production in the region, and then paying billions of dollars to keep power plants in Upstate New York open. We're not making sound policy decisions. So I implore everybody, when we're voting on these bills, which are well-intentioned, that we really look at the science and the facts and the information, and not just do things based on hopes and dreams and aspirations.

I'll give you some more statistics to make the point. Today, only 30 percent of New York's electricity comes from renewables. So getting from 30 percent to 100 percent zero emission by 2040, just for the energy we presently consume, is a massive and incredibly expensive undertaking that will use enormous amounts of land, carrying its own environmental impacts that could be minimized by using existing gas infrastructure in concert with renewables and our electric grid. Let's focus on putting together a real comprehensive energy plan that actually meets the objectives, that actually gets us where we want to go.

And I'll make one more point about the cost. Many of my colleagues from New York City often talk about the need for affordable housing, they talk about the delapidated NYCHA buildings. Well, NYCHA's going to have to be converted. We're going to have to convert from natural gas to electric. As we're building new affordable housing, it's going to be more expensive to shift from natural gas to electrification. So as many of you talk about the need

for investments in NYCHA and the need for investments in affordable housing, just understand bills like this that are not based in science will increase the cost, which means it's less money, not more, less money to invest in these important housing units.

So I just encourage everybody, let's not vote on these things blindly, let's actually follow the science as is so often stated. I vote no.

ACTING SPEAKER AUBRY: Ms. Glick.

MS. GLICK: Thank you, Mr. Speaker. Obviously I will be supporting the measure, but unlike some of my colleagues, I guess I have a stronger belief in American can-do spirit and know-how. Research continues every day, materials research, and new materials may be replacing what has been a more antiquated use of rare-earth minerals. There certainly has been dramatic changes in nano materials. There's very interesting work being done on the ability of graphite to transmit electricity with less resistance, making it more efficient.

So New York State is a wealth, a wealth of research universities that are doing incredible work in these areas. I heard one of my colleagues try to compare the reduction in emissions from renewables versus gas over the last 15 years. Well, in the last 15 years we've done very little in terms of expanding renewables. So you can manage statistics to make it sound one way that supports your thesis unless you look a little bit deeper and understand that you're comparing something apples to oranges.

But I am glad to hear that there is strong commitment and support for improving our infrastructure, and I look forward to peoples embracing the Federal infrastructure bill that is being discussed now in Washington. Not everything has to be a major expansion of power plants. What we really need is more personal energy independence. Fifteen years ago, driving around Long Island, you never saw any solar panels anywhere. Now even in very, you know, sort of working, middle-class neighborhoods there are lots of solar panels because people are recognizing that it's lowering their energy costs and making them more energy independent individually. Not everything is going to be a major power plant. We need to be using geothermal, which incidentally the Science Building at Oswego is geothermal heated and cooled; very, very cutting edge. And that may be where we need to go with retrofitting NYCHA. Heat pumps are a very efficient way of heating and cooling.

So I believe that we have the capacity and the intelligence to look further. One of my colleagues referred to brownouts in California. A lot of that had to do with the fact that their electrical infrastructure was very poor and was, in fact, creating forest fires that became these enormous, enormous problems. And so they were cutting power in part to minimize fires. I love the comparisons to Texas. They didn't have a shared energy grid with their neighboring states so when they went down, everything went down, except in El Paso where they had been a little more thoughtful. So people were without water, air conditioning, electricity for weeks. So

I'd rather be in New York than Texas. I appreciate the concern for people who are in poor communities and in poor parts of Upstate New York. One of the reasons we should be expanding our broadband is to ensure that they have access to better jobs. But it's also possible that if we are upgrading our energy capacity in different ways that there will be better jobs and people will be able to come out of poverty as a result of having better income.

And I just want to note that if you look on the John Deere website, they are talking about in the next decade being -- having their farm equipment, tractors fully electrical. So -- and there are some other companies that are moving aggressively in that direction. Not everything. We don't have to wait until we have everything in place in order to make policy. We can look ahead. We can say this is where we need to be and this is how we're going to get there. And I have absolute confidence in our ability to do so. Now I'm not -- I'm not a beef eater but, you know, ten years ago you did not actually have the Impossible Burger, which is using science to create meat in the lab, which apparently a lot of people like. Not my thing, but science, if we're going to follow the science, we have to understand that we may not know all the things that are underway. But there is research being done. Ten years ago, we never would have been talking about renewables in the way we are now, and had we been -- Jimmy Carter put solar panels on the White House. If Ronald Reagan hadn't ripped them off, this country would be in a much better place when it comes to emissions and our creation of renewable

energy.

So it's not all going to happen all at once, but you have to have a vision. This bill is about a vision and I thank the sponsor. I thank the Speaker for having today's debate and I wholeheartedly support New York looking forward and setting a plan. Thank you, Mr. Speaker.

ACTING SPEAKER AUBRY: Thank you.

Ms. Niou.

MS. NIOU: Would our Chair kindly yield to a couple of questions?

ACTING SPEAKER AUBRY: Mr. Englebright, will you yield?

MR. ENGLEBRIGHT: I yield.

ACTING SPEAKER AUBRY: He yields.

MS. NIOU: So I'm going to ask a couple personal questions, if you don't mind. How long have you been Chair of the Environmental Committee?

MR. ENGLEBRIGHT: It's four going on five years.

MS. NIOU: Yeah. So during that time, how many bills have you actually put out, you know, to really be able to help with the huge global warming issue and climate change issue?

MR. ENGLEBRIGHT: We've only been able to move bills in both Houses since we've had a change in the composition of the Senate. We've been able to move bills in our House each and every year. The Speaker has been enormously

supportive each and every step of the way, even setting up a special study group made up of members to deal with climate change, but it's only really since we've had symmetry of purpose in both Houses that we've been able to make new law that is setting us in the direction that this measure is very much an important part of.

MS. NIOU: And -- I mean, but you have obviously put together a whole package of different bills, right, to basically battle some of the big environmental needs that our State and our country has and our world has, right?

MR. ENGLEBRIGHT: Yes. This is a journey and it's a journey that involves taking many separate steps.

MS. NIOU: And this is just one of those bills.

MR. ENGLEBRIGHT: It is an important one, but it is one of those bills, yes.

MS. NIOU: So I mean, this is probably also -- maybe this wasn't that long ago, I mean I remember it, but do you remember when safety belts were mandated for our State?

MR. ENGLEBRIGHT: I remember.

MS. NIOU: Do you remember when, you know, people were arguing that maybe it did not cause less vehicular deaths?

MR. ENGLEBRIGHT: I remember.

MS. NIOU: And now I'm sure that the numbers show that we have a lot less vehicular deaths, right?

MR. ENGLEBRIGHT: This is absolutely true, yes.

MS. NIOU: And it wasn't that long ago that we

banned smoking indoors, in restaurants and places, right?

MR. ENGLEBRIGHT: Not so long ago.

MS. NIOU: Yeah, but -- and people were also then saying that there weren't going to be better health outcomes, correct?

MR. ENGLEBRIGHT: People argued against it as an invasion of personal privilege and private decision-making.

MS. NIOU: Right. And yet, people's health outcomes were a lot better, right, after we passed that bill?

MR. ENGLEBRIGHT: Much better.

MS. NIOU: And I guess in that way, we're all very interconnected, correct?

MR. ENGLEBRIGHT: Correct.

MS. NIOU: My health is impacted by your health, and your decisions impact my decisions.

MR. ENGLEBRIGHT: We have seen that, in particular, during this pandemic. And I'm glad you brought up the question of the interaction of all of us. I will just point out that dirty air, which is part of what we're trying to correct here, is statistically strongly associated with COVID-19 deaths and the disease having a greater impact, and those communities that have had the unfortunate reality of greater amounts of air pollution due to tailpipe pollution have suffered greater mortality, greater levels of death. So there is a part of our present pandemic reality that we're all in that this bill speaks to, as well, and I'm glad you brought that up. Thank you.

MS. NIOU: And I'm glad that you said what you just

did, because that is exactly what I wanted to bring up, as well.

On the bill, Mr. Speaker.

ACTING SPEAKER AUBRY: On the bill, Ms.

Niou.

MS. NIOU: It's so interesting that, you know, NYCHA was brought up in these arguments. You know, NYCHA was actually built next to -- a lot of our public housing in the City was actually built next to highways for a reason, because they wanted to, you know, put people who couldn't fight for themselves next to highways where there was a lot of air pollution, and they knew that there would be poorer health outcomes for those children. There is a huge amount of asthma in children who live in our public housing, and that is not by chance or circumstance. There are huge outcomes that are related to infrastructure to where we are allowing, you know, families to live and play and where we build our highways and where we actually have our vehicles, you know, travel.

And, you know, what our Chair just said is -- is, in particular, very important because of the significance of what we're debating but also, I mean, let's remember, air moves, water moves. We are all interconnected in those ways. And so, you know, this is just one bill out of many, many bills that will help us to get towards our goals to -- to basically protect our environment, protect our families, protect people. And, you know, there have been many times when we have had bills that, you know, have been in front of us where we know that there's going to be direct impact on all of us, and this is

-- this is a bill that actually is only about new sales. I would argue that we actually should -- I mean, this is coming from somebody who used to be a car mechanic, you know, I would argue that we actually should be working on, you know, regulating deeply some of the emissions impacts of older vehicles. But, you know, we have other bills for that.

Today's bill is about new vehicles and I think that it's really -- it's really, really important and I think that this technology, you know, the tech that we used to use, you know, so much before and that we didn't think to use when it was available to us has now become the main tech, you know, that is now desirable and is actually deemed desirable even by our own marketplace. You know, like, we're seeing the stocks, we're seeing how, you know, electrical vehicles are now starting to take over our market. You know, we know that, you know, people also desire to leave a much smaller carbon footprint. You know, we are seeing in our City right now a lot less usage in cars. We are seeing exactly what our Chair had just said which is that, you know, the -- the impacts of COVID-19 have shown us a very different way of living and also a very different, you know, way of recovering. And I think that right now, this is the bill that is so needed for our -- our State to take very seriously and we have seen, you know, time and time again, you know, when we're talking about safety belts, when we're talking about banning smoking indoors, when we're talking about very, very basic things now that we look back, *Wow, hindsight is 20/20. That was really good legislation to make. That was really good policy to make. That was saving people's lives and also making*

it so that people can live healthier. This is one of those bills. This is going to make it so we are actually going to be able to not just save people's lives, make it so that we have healthier, better health outcomes, but we are also going to make it so that, you know, we have, you know, a goal of -- meeting our goal of saving our environment, as well.

This -- you know, this is actually, to me, you know, I'm looking at the date and I'm like wow, it's already anticipated that by 2030 we are going to be irreversible, on the path of irreversible when it comes to our impacts on the Earth. So I just wanted to say thank you to our amazing Chair of, you know, En Con, and also just to say that, you know, I really do commend our Speaker for, time and time again, actually working on these environmental protection bills. As somebody who also worked for the EPA, I will say that you are correct in saying that, you know, this bill is absolutely supposed to fall into the EPA's, you know, purview. So I wanted to thank you for that, and also to thank our colleagues today for a very robust debate, because I think that because we are debating these issues, these are the issues that are going to actually, you know, we're going to be able to ask these correct questions. I really appreciated, also, the speaker who spoke before me in really being able to analyze some of these very large pockets of questions, and I'm going to say this also: A lot of our Upstate farms have had huge, you know, sustainability pushes and we are actually now, within the City and within the Upstate farming, you know, community, we have partnerships that are making it so there's

farm to families. You know, huge groceries output, you know, really beautiful, you know, farmers markets that are happening so that we can actually have the kind of sustainability that will make it so that we're actually eliminating a lot of the large need for huge box produce grocery stores to -- to -- to actually move so much stuff going into our City. So I actually think that these are ways that we can actually continue to eliminate, you know, our huge dependence on fossil fuels and really be able to push for the growth and the changes that we need right now. So thank you so much.

ACTING SPEAKER AUBRY: Mr. Zebrowski.

MR. ZEBROWSKI: Thanks, Mr. Speaker. Would the sponsor yield for a couple questions?

ACTING SPEAKER AUBRY: Mr. Englebright, will you yield?

MR. ENGLEBRIGHT: I yield.

ACTING SPEAKER AUBRY: Mr. Englebright yields.

MR. ZEBROWSKI: Thanks, Mr. Englebright. Good afternoon. Certainly share many of the same goals that are expressed in this bill. I do have a couple questions that I have a little bit of confusion on. I guess succinctly, is this a goal or a requirement that all new sales be zero emissions by 2035?

MR. ENGLEBRIGHT: It's -- it's both. Because it is 14 years in the future, it is both -- both of those things. But when we arrive at that moment in time, it will be a requirement, from that date

of 2035 and 2045, respectively, for cars and trucks, then it will be a requirement.

MR. ZEBROWSKI: So I'm trying to understand --

MR. ENGLEBRIGHT: It will help us move in that direction in something that is not heavy-handed as we go through a transition.

MR. ZEBROWSKI: So I guess that's what I'm trying to understand is -- is the -- how the bill will work, you know, Section 1 talks about the goal of the State and Section 2C talks about strategies and coordinating with other State agencies to achieve the goal. But Section 2A talks about the Department to the extent consistent with Federal law developing and proposing regulations that require increasing volumes of new zero emission vehicles offered for sale or lease or sold toward -- towards -- and I skipped a couple words, towards the target of 100 percent in-State sales 2035.

So I'm just a little confused. How would the Department do that? You know, I guess it's back to my -- my question of goal or requirement. I'm not sure where in the bill it says that, you know, come January 31, 2035 or January 1, 2036, not exactly sure how the time frame would work, that no more sales will be permitted? I mean, what -- what is the regulatory authority of the Department to require that? I mean, will they just have the regulatory authority to cut it off wholesale? Will they be empowered to increase the cost of gas-powered vehicles, to require them to gradually increase their sales? Like how will that work?

MR. ENGLEBRIGHT: I don't have an answer to all of the subtleties of what the regulations that will be developed will look like. I can tell you that the goal is very clear and that the ability of the Department to influence that goal by encouragement is -- is also a part of the power that, if this passes, we will be giving to them. But it is not that the Department will be taking over the market. Rather, I think the market is already moving in the right direction and that manufacturers such as General Motors and Volkswagon will regard this as an endorsement of direction that they have already decided to move toward. It will reinforce that market and manufacturing driven reality that the future is going to be electric vehicles.

MR. ZEBROWSKI: Yeah, and I hope -- I hope that's the continuing trend. It certainly does seem like we've had some major breakthroughs in the past few years and if -- you had announcements from major car companies and car dealerships of going, like you said, all electric. Being somebody with, you know, small children and space requirements and representing a district that is the west side of the Hudson, so most of -- most of my constituents or many of my constituents, you know, have vehicles because they have to have them, there's not, you know, in-district transportation, let alone transportation across the Hudson River to get down, you know, to get over to Westchester or down to New York City for those that commute, and there certainly still is a -- a monetary barrier to purchasing all electric vehicles, also, you know, certainly if you have children, too, and you have to deal with those, you know, I guess the

toddler size car seats for parents out there, which are monstrosities in a lot of ways to get in the back seat of a vehicle.

So you know, we're moving in the right direction. I guess what I'm trying to understand is how -- so when you look at, you know, goals and strategies and things like that certainly, you know, issues that we've dealt with, and attempting to get charging stations, tax incentives, all those things that we can help to push along the market I think are all vital. I guess, you know, my question is I don't really know what 2033, 2034, 2035 are going to look like. I hope we're in a much different place than now and I'm trying to understand what this bill requires and what it sort of attempts to incentivize. So you believe that, you know, come 2036, come hell or high water, no more sales of new -- of new gas-powered vehicles at all, is that correct?

MR. ENGLEBRIGHT: Because of hell and high water, yes. Literally the climate change is hellish. It is bringing great harm to our communities in the form of extra tropical hurricanes and storms with high water, and flooding both along our coasts and in our interior. So yes, it is appropriate that you use that image because that is what we are experiencing now and it is accelerating. And if we don't take action and set the stage for New York leading the way among our sister states, or helping to lead the way, then by the time we get to 2033 and '34, we will be having a climatic impact that will make some parts of our State almost unlivable.

MR. ZEBROWSKI: Yeah, I share those concerns.

MR. ENGLEBRIGHT: So this is vital that we are setting and we will work toward it in order to help avoid hell and high water.

MR. ZEBROWSKI: Yeah, I share those concerns, but I guess my question is is it -- but it's not just a goal, it's a requirement?

MR. ENGLEBRIGHT: No, it's a goal. It's a goal.

MR. ZEBROWSKI: Okay, it's a goal. So if we get to 2030 or 2032 and we find that somehow the market hasn't changed and it hasn't come down to where there's affordability for families, it's not that we're just going to -- it's not that there's an automatic set date, right? We had the goal, maybe we got 70 percent of the way there and we'll keep at the goal? What if, you know, the market point at the time has for part-electric, but there's a fuel reserve. You know, the technology hasn't gotten to the point, but you can travel still only about 250 miles or so, but these cars are hybrid and they have a fuel reserve if you get above that. Would those be allowed to be sold if we're still at that point in 20 -- 2035?

MR. ENGLEBRIGHT: Yes. This is not a mandate. You know, dealers will be able to sell non-electric vehicles, but by setting the goal, we're moving in the direction of coordinating really with what is being manufactured and what the market is demanding. When we say "the market," we're really talking about what our constituents would prefer. Electric vehicles are increasingly chic and cool and stylish. Some of the styles, in fact, are just beautiful vehicles

to stand next to or to even drive. I would hope -- and so I anticipate that we are reinforcing and hopefully helping to move the expectation and the desire of our communities and their residents towards something that will benefit all of us.

MR. ZEBROWSKI: Yeah, I agree with you. I want one. I was hoping the last family vehicle we could get was that, but the price point wasn't there yet, which is, you know, where sort of my questions are. I have I think one other area I want to go to. So I represent Rockland County, it borders New Jersey. What is the -- how will this work in terms of border counties? Will that be taken into consideration? Obviously folks can, in a hop, skip, and a jump get over to New Jersey, they'd either -- could be one mile away or even at the most point, you know, ten or 15 miles away from New Jersey. Will the Department be able to take that into consideration that, you know, in border counties people would just go across the border and buy a car in New Jersey if their regulations are different?

MR. ENGLEBRIGHT: The bill would allow the Department wide discretion as it sets up its regulations. I have not heard -- your question is, I think, a very good one. I have not heard a definitive strategy for dealing with people who want to run across the border, be it to New Jersey or to Canada or Pennsylvania. You know, the DEC will have the flexibility to address this, and this is an ongoing process of adjusting to the market, as well. Again, I anticipate that the signal being sent by passage of this legislation is that the future is electric vehicles and that it's -- it's part of being a good citizen to drive

one. And people will take pride in saying, you know, *I'm doing the right thing*. People have -- have done that with other environmental initiatives and they like to be a part of the solution, particularly if it's in their own best interest and the best interests of the people in their families and the people they love.

MR. ZEBROWSKI: I 100 percent agree with you. I just want to make sure that they can get there. You know, I don't -- I honestly don't think all families can get there right now because the price point of -- of some of the all-electric vehicles, certainly the all-electric larger vehicles, so just --

MR. ENGLEBRIGHT: That was the case a couple of years ago with solar panels. They were super expensive. The market has adjusted and economies of production, as well as inventiveness has made it so that you can go to Home Depot now and buy a solar panel. So the prices have come down. I remember when computers were impossibly expensive, prices have come down, the market has adjusted. I think the same thing will happen here.

MR. ZEBROWSKI: Okay. All right. So just to -- just to conclude, Mr. Englebright, you think there's enough leeway or regulatory authority within this bill so that in the next 14 years we will be able to, or the Department will be able to analyze what's going on in the market, analyze what's going on in the country, analyze what's going on in the region, set goals and incentives so hopefully we can get there, but if somehow there's circumstances by which we cannot, they also have enough regulatory power and leeway to extend that and

make sure that, you know, vehicles are still available and still affordable if somehow - you know, hopefully this doesn't happen - but somehow we're not all the way there in 2035. This is, once again, it sets goals and incentives, but there's not a hard and fast requirement that would suddenly, you know, if somehow we're not there, put us really behind an ability to, you know, adapt for our residents; is that -- is that a fair analysis?

MR. ENGLEBRIGHT: That is fair and a very articulate summary. This is just a goal, there's plenty of flexibility and plenty of lead time. And I believe that we will see many of these goals achieved if we define them and make them something that everyone in the State is aware of.

MR. ZEBROWSKI: Okay. Thanks, Mr. Englebright.

ACTING SPEAKER AUBRY: Thank you.

Mr. Tague.

MR. TAGUE: Thank you, Mr. Speaker. Would the sponsor yield for a couple quick questions?

ACTING SPEAKER AUBRY: Mr. Englebright, will you yield for a couple of quick questions?

MR. ENGLEBRIGHT: I yield, Mr. Chairman.

MR. TAGUE: Thank you. First of all, I appreciate all your hard work for the environment, Chairman Englebright. Although we do differ on opinions with some things, I appreciate your dedication and commitment to the things that you believe in. But just

a couple quick things --

MR. ENGLEBRIGHT: Thank you.

MR. TAGUE: -- is this bill going to affect motor sports in the State of New York?

MR. ENGLEBRIGHT: I believe motor sports are going to move toward electric vehicles, also. Some of these have 0-60 numbers that are, you know, really astonishing, faster than most comparable gasoline-powered vehicles. They're very powerful, but we're talking about competition there. Off-road vehicles, I should point out, are also a part of the goal and part of the development strategy that we're asking the Department to embrace.

MR. TAGUE: Well, I think that, you know, this, again, is another reason that could hurt New York State. As you know, there's a NASCAR track in Upstate New York. There are many speedways across the State and there are competing speedways in adjoining states, unfortunately, that many divisions in dirt racing, you actually have to have a car that's 25 to 30 years old to race in certain divisions with stock motors. So are we going to say to the people in New York State that you can't compete in New York State anymore unless you have a battery-operated race car?

And I would argue the fact, Mr. Englebright, as you know, I was a dairy farmer. I've also spent 30 years as an -- in upper management in a heavy highway construction company. The reason for diesel-powered engines isn't for speed, diesel power produces horsepower and in many instances, you cannot compete with the

diesel engine with regards to horsepower. Now if you're combining 20,000 acres of corn, or you're plowing 20,000 acres of field, you want a machine that's all-terrain, that has horsepower, that's going to be able to get the job done. Now earlier, one of our colleagues discussed that John Deere had been talking about something a decade from now. Well, that doesn't help in the agricultural business. We need to know now. You know, many of our colleagues from the City were talking about how Upstate New York, you know, that's a collaborative effort now between people in the City and Upstate New York, we're feeding people, we're bringing the food to the people. Well, if our farmers don't have the proper equipment to feed the people, again, that puts New York farmers at a disadvantage because we'll just be bringing the products in from -- from another state.

MR. ENGLEBRIGHT: Was that a question?

MR. TAGUE: Yeah, I guess.

MR. ENGLEBRIGHT: Okay. Look, I anticipate that we're going to have to work toward answering the questions that are implicit in what you just said. And I agree with the -- the urgency. Perhaps we come at this from different directions, but there is an urgency to answer ways to have very powerful trucks that are able to replace diesels for reasons that relate to air quality and climate change. And so, we've given an extra ten years for transition to occur for the heavy -- heavy vehicles. And now back to your original question about stock car races. The bill does not address stock car races at all, and it's an interesting question as to whether or not people

will come to watch electric vehicles as they -- once they're on the market for a while, they'll be near the end of their useful lives and they'll be coming in as demolition derby vehicles, as well, perhaps. I can't predict exactly what's going to happen in that regard.

MR. TAGUE: If you don't mind --

MR. ENGLEBRIGHT: It's not a part of the reach of -- of the purpose of the bill.

MR. TAGUE: Right. Well, again, you know, again, my concern is as part of -- with regards to motor sports, you know, electric cars, part of competition with a stock car is, you know, having someone in your crew being able to do different things to the engine to make your car a little bit faster than the other guy. If you're all using the same electric battery, then you've got a bunch of cars going around the speedway at the same speed. There's no ingenuity, there's, you know, there's nothing there.

MR. ENGLEBRIGHT: Well, wait a second there. Some -- sometimes the driver is an important part of why one vehicle is able to cross the finish line first. All things being equal in terms of the power of a vehicle, the skill of the driver is also an important variable.

MR. TAGUE: Well, yes, I wouldn't disagree with you there, but I -- but again, on the -- again, thank you very much, Chairman Englebright. I always appreciate --

MR. ENGLEBRIGHT: My pleasure.

MR. TAGUE: -- talking to you and have a great deal

of respect for you, and thank you.

On the bill, Mr. Speaker.

ACTING SPEAKER AUBRY: On the bill, Mr. Tague.

MR. TAGUE: I just want to kind of repeat what was said earlier by one of my colleagues. Be careful what you wish for and be careful exactly how quickly we put these things out there and put our State at a disadvantage while we're thinking we're doing the right thing. I think holding back and listening to, as many said, what the science has to say, the professionals and experts in every industry that this -- that a bill like this is going to effect I think is the way we should be moving forward.

You know, for the reasons that I discussed here with the sponsor and a few others, I, like everybody else, love to breathe clean air, would love to see something like this bill work. I just think that we need to put better -- a better effort towards we need to have all the answers. And for those reasons, Mr. Speaker, I will be voting in the negative and I do urge all my colleagues to do the same. Let's work on something better with -- with more answers and more finality towards the bill.

Thank you, Mr. Speaker.

ACTING SPEAKER AUBRY: Thank you, sir.

Ms. Byrnes.

MS. BYRNES: Thank you, everybody. Will the sponsor yield?

ACTING SPEAKER AUBRY: Mr. Englebright, will you yield?

MR. ENGLEBRIGHT: I yield.

ACTING SPEAKER AUBRY: Mr. Englebright yields.

MS. BYRNES: Thank you, sir. Thank you, gentlemen. This I think will be a pretty short question. We've been talking a lot about cars and about trucks. Does this legislation have any effect on other forms of street legal vehicles, for example, motorcycles, ATVs, UTVs that may be street legal or may be used off-road, or is it confined to the common definition of a car or a truck?

MR. ENGLEBRIGHT: Well, I don't think it's limited just to cars and trucks. The zero emissions goals are really directed toward replacing -- or seeing a replacement over time of all internal combustion motors. So off-road vehicles are included within the scope, as well as street legal vehicles that may have three wheels or two wheels. Everything -- if they're -- if they're -- if they're making use of an internal combustion engine, they would be within the scope and interest and purpose of this legislation.

MS. BYRNES: All right. So it doesn't have to necessarily be a vehicle that is, again, literally street legal. I mean, if people own or are going to be purchasing UTVs or ATVs, you consider them to be within the purview of this statute?

MR. ENGLEBRIGHT: The Department is asked to develop a strategy that enables the market to accommodate our need

to decrease greenhouse gas emissions and protect our citizens from air pollution.

MS. BYRNES: Well --

MR. ENGLEBRIGHT: So --

MS. BYRNES: Apologies.

MR. ENGLEBRIGHT: -- within that context, the vehicle, you know, the color of the vehicle, the design of the vehicle or even the number of wheels on the vehicle is not as important as finding a way to propel it without using internal combustion motors.

MS. BYRNES: Would this stretch to even lawnmowers, then? Are we talking about internal combustion lawnmowers, u-turns, things of that --

MR. ENGLEBRIGHT: That's not a vehicle -- this particular bill deals with vehicles.

MS. BYRNES: But they don't have to be necessarily roadworthy?

MR. ENGLEBRIGHT: The main emphasis here is roadworthy, although this does also deal with off-road vehicles. I'm presuming that this would deal with vehicles that are roadworthy or can be taken on to a public highway.

MS. BYRNES: All right. So at least in your opinion as the sponsor --

MR. ENGLEBRIGHT: I don't think -- I don't think it's your lawnmower.

MS. BYRNES: So, but you would say that if it is a

vehicle that is not legal to be on the street and is just being operated through trails in the woods, you know, that -- including snowmobiles, ATVs, UTVs, that they are not part of this package.

MR. ENGLEBRIGHT: I believe that the main thrust is for vehicles that go on to public roads. Some of the vehicles that go off-road are also eligible to go on road, so...

MS. BYRNES: Well, I understand --

MR. ENGLEBRIGHT: To a certain extent here, we're going to have to let the Department work out some -- some regulations in this regard.

MS. BYRNES: My only -- but as the sponsor, what is your intention?

MR. ENGLEBRIGHT: My intention is to reduce greenhouse gas emissions.

MS. BYRNES: Type of vehicle, on or off-road?

MR. ENGLEBRIGHT: Both, both on and off-road vehicles. If it's carrying a person, it's a vehicle unless it's --

MS. BYRNES: But that, sir, would also be --

MR. ENGLEBRIGHT: Unless it's a very small lawnmower that you use only (inaudible) garage and house.

MS. BYRNES: Yeah, but that would also be -- people get arrested for DWI on riding lawnmowers, so are we -- are they falling into that category, sir? Because it's propelled other than by muscle power, so it constitutes a vehicle.

MR. ENGLEBRIGHT: I don't think people who take

lawnmowers on to public highways are all that common. I really find that an interesting question, but I don't -- I don't -- it's certainly not a primary part of the reach or intent of the bill.

MS. BYRNES: I'll have to send you all of the court cases on people riding other types of vehicles, because a vehicle has a very broad definition under the Vehicle and Traffic Law. But thank you, sir, I appreciate the answers.

MR. ENGLEBRIGHT: Well, this legislation makes no distinction about on or off-road vehicles, but if it's a transporter of a person, it could be within the reach of the intent of the legislation. And so that -- I don't eliminate the possibility that riding mowers might actually be something that the DEC would want to address. Over time, if it's an internal combustion motor, we would like to see it replaced for the well-being of our communities, for the well-being of the health of our people.

MS. BYRNES: Thank you for your time, sir.

MR. ENGLEBRIGHT: You're welcome.

MS. BYRNES: Thank you.

ACTING SPEAKER AUBRY: Mr. Cahill.

MR. CAHILL: Thank you, Mr. Speaker. In the interest of full disclosure, in those times when I do get out and cut my grass, I do use my battery-operated electric lawnmower and my neighbors are thrilled with the idea that I can do it pretty much from 7:00 in the morning on without disturbing them. It's clean, it's quick, it's need and guess what? It's cheap. It's less expensive than

maintaining a smelly old gas mower, so I'm very happy with it. This bill doesn't include that, but if it did, I'd be fine with that, too.

Steve, I want to ask a few questions because I -- I feel a fog in the room, in the virtual room, from many of the points that have been made on this bill and I was wondering if maybe you'd be willing to -- kind enough to answer a few questions. Mr. Speaker, will the sponsor yield?

ACTING SPEAKER AUBRY: Mr. Englebright, will you yield?

MR. ENGLEBRIGHT: Mr. Speaker, I yield.

MR. CAHILL: Thank you, sir. Thank you, Mr. Speaker.

Steve, I've been reading this bill off and on for a while, but in particular as this debate was going on when I heard points being raised, I was surprised to hear that you are mandating electric vehicles. That doesn't appear to be what this bill says, and that you are doing so without regard to cost, without regard to technology, without regard to, you know, even safety. But, Steve, doesn't your bill say the exact opposite?

MR. ENGLEBRIGHT: It does, and I'm glad that you have read the language of the bill. Again, this is a velvet hand, this is not the heavy hand. This is a way for us to reinforce a particular strategy that the market is already beginning to react to that is in the best interest, really, of all of us to encourage. And this is a bill that does set goals that are in the direction of -- of being able to encourage

rather than to come in and command. So I'm glad you picked up on the actual language, because some of -- some of those who have been debating this apparently didn't read it as closely -- read the bill as closely as you did.

MR. CAHILL: Thanks. You know, I also want to disabuse anybody if they -- in case they think otherwise of -- you're being a little portrayed here as a hater of the internal combustion engine. I happen to have personal knowledge of the exact opposite about you that, in fact, you're a car enthusiast, are you not?

MR. ENGLEBRIGHT: I am. I have a great admiration for the internal combustion engine and I own several collector vehicles, including an original 1956 factory Hemi in my '56 New Yorker, appropriately enough, convertible. A very rare car. So this fortunately would -- would avoid legacy vehicles being demonized. But overall, the impact of internal combustion is -- is something approaching demonic. It is destroying our atmosphere, our health, and our Earth. And so if I run my collector car for an hour or two per year, that -- I feel a little guilty, but I'm not using it to excesses.

MR. CAHILL: Well, I would never feel guilty, Steve, except maybe for when you do pull into the Assembly parking garage and you park that monster and you take up your neighbor's parking space along with your own. That might be something you have to apologize for, but it is a thing of beauty and, quite honestly, a relic of its time that I'm very grateful to you and others who do all they

can to preserve those relics and remind us of a different time. We look at that car, and I've seen it, it's a beautiful, beautiful automobile. It looks like a giant flat plane. As I said before while you were talking, I think it is has its own zip code.

(Laughter)

I'm not sure if it has factory installed seat belts, I'm fairly certain it doesn't have disc brakes or anti-lock brakes. I question whether it is has airbags, I'm pretty sure it doesn't, maybe the only airbag is on the passenger.

MR. ENGLEBRIGHT: It doesn't have any of those things, but it does have a part of our automotive legacy, which is worthy of being remembered. But it should be, no pun intended, in the rearview mirror, for the most part. The future lies with electric vehicles. The future must be, in transportation -- the transportation sector is the largest single source of greenhouse gas emissions and we really need to address this, and this bill is a part of that overall strategy and an important part of it.

MR. CAHILL: Steve -- and this will be my last question about the New Yorker, but what is the gas mileage in that beast?

MR. ENGLEBRIGHT: Oh, it's probably about 11 miles per gallon, or 12, something like that.

MR. CAHILL: So at 11 miles per gallon, if every vehicle that was built today got the same gas mileage as the vehicle that we're talking about here, how would our fossil fuel situation be?

Forget -- forget the pollution solution, what about the fossil fuel solution issue? Wouldn't that be just as devastating if we kept that 1950s technology today, if there was not an evolution of the development of the automobile to the modern day where I think probably your newer car, my car, gets -- gets 30-some miles to the gallon and probably goes a little faster than the New Yorker and is a lot safer than the New Yorker and a lot more comfortable?

MR. ENGLEBRIGHT: You're absolutely right. And the modern vehicles show the evolution of the technological and creative advances of our society and some of our members have spoken to that during this debate. I believe that that will continue, and it's in the right direction for your daily driver to be increasingly less costly and safer. That's in the best interest of public health, as well.

MR. CAHILL: Steve -- if we could, Mr. Speaker, if I may continue to ask the sponsor a few questions. Steve, the -- the nature of this bill has been described as aspirational and it's been asserted that it's not complete, but here it is. I think it's pretty self-evident, it's part of an Earth Day package. It's not a -- it's not the be all and end all. If anything, the bill we passed a couple of years ago, last year, two years ago was closer to that but that, too, was aspirational; isn't data -- isn't that the case? Aren't we setting our goals?

MR. ENGLEBRIGHT: We are, I'm glad you brought this up because there were some comments that indicated that somehow this was not a science-based bill because it concerned itself

with aspirations and hopes and dreams. Let me be clear, science and technology makes possible hopes and dreams and aspirations. It is through the advancement of science that we make progress toward better health outcomes, more liveable communities, and a chance to pass on to our children a better place to live and a sense of hope for the future. It is a science that makes that possible and science, believe me, is very, very much a part of what underwrites the logic behind this particular measure.

MR. CAHILL: So one last question for you, Steve, because this was also a big focus of people who were, you know, really standing up for the poor and standing up for the environment and standing up for modern technology and science. They said -- they said we can't afford it. Do you have any idea what the cost is, or are there any out -- out there, any reasonable estimates of the cost of climate change to New Yorkers today each year?

MR. ENGLEBRIGHT: It is measured in tens of billions of dollars and, no, I don't have the sum of what those costs are. I can only tell you that the -- there was discussion about Texas, what happened in Texas, for goodness sakes, due to climate change impacting that state. They lost a way of life. They lost their quality -- and many of them lost their lives. We've seen similar, not quite as dire, a circumstance from storms that have crashed into our State with increasing frequency. The 100-year-storm is now about every three or four years. The impact is measured not just in dollars, which is a huge number of dollars, billions and billions of dollars, but it also, in terms

of the people who are directly impacted and the property that is something that they depend upon for a quality of life being damaged. And the health outcome of breathing polluted air with heart attacks and increased COVID deaths and diseased lung functions, how do you -- how do you put a price on that? I mean, you can, I suppose add up the costs of hospital stays and -- and medical treatment, but it goes beyond just the dollars, it's the costs to people's lives and, yes, their aspirations and dreams are being short-circuited by these climate change induced threats, as well.

MR. CAHILL: Thank you very much, Mr. Sponsor. Mr. Speaker, I'd like to discuss the bill for a few moments, if I may, with the few minutes I have left.

ACTING SPEAKER AUBRY: On the bill.

MR. CAHILL: I was, quite frankly, blown away by today's debate. And to our newer colleagues on our side of the aisle, be aware that up until last year, those arguments won the day. That was the majority consensus when -- when the opposite party was in control of the other House and that was the political thinking that dominated the State and kept us from doing so many, many good progressive things. But, quite frankly, the arguments I heard today on the other side of the aisle would have been preposterous in 1970, let alone in 2021.

But let's look a little bit about what they said. They said we don't have the infrastructure. The heck we don't. We have a great infrastructure. It's in horrible disrepair, it's seriously misaligned

and it won't be free to fix it and make it right, but it's also not free to let it sit the way it is right now with a 20 percent loss of power from generation to use in the outlet. They say we don't have the capacity. Yes, we do. We've barely scratched the surface on conservation, barely scratched the service on conservation. If we -- we could add 15 percent to our grid just by requiring our utilities to insulate their lines the way those technological world leaders in England do, that's right, England; they lose 5 percent of their power, we lose 20 percent of our power. They say that the poor can't afford it, but the poor apparently can afford expensive power, they can afford asthma, they can afford pollution and they can afford cars with thousands of parts that wear out and break down, okay, I got it. They say it's aspirational, but every single goal is aspirational. Landing on the moon was aspirational, educating our children is still aspirational. Electrifying our State 100 years ago was aspirational, and now this goal is to stop deadly pollution, that's a good aspiration. That's a good goal.

One colleague pointed out that we're the most energy-efficient state and we should be proud. Yeah, we should, and I'm very proud of New York State and I'm very grateful to our New York City neighbors for giving us that distinction, because Upstate New York, which falls someplace in the second half of -- of -- of that equation. It's the people who live in efficient apartments who take public transit to work or, better yet, walk to work and live very near their jobs, that are saving all the energy and making us look good. So thank you very much, New York City. We should use your example a

little bit more on a lot of other things.

So -- so here was a main point of what was said by our colleagues on the other side of the aisle in that little sliver over there on the other side of Mrs. Peoples-Stokes, how are we going to pay for it? That's a really, really interesting question because, guess what? That's not what this bill is about. This bill is about setting the goal. But there is, honestly, legislation out there and, in fact, oddly enough, I'm the sponsor of legislation that would talk about how to pay for it, and it's called the Climate and Community Investment Act, and I welcome and actually now expect a flood of sponsors from the other side of the aisle for our carbon tax bill, and I would welcome --

ACTING SPEAKER AUBRY: Mr. Cahill, you've worn that time out.

MR. CAHILL: Thank you, Mr. Speaker.

ACTING SPEAKER AUBRY: Mr. Palmesano.

MR. PALMESANO: Yes, Mr. Speaker, will the sponsor yield just for a little bit -- a few questions?

ACTING SPEAKER AUBRY: Mr. Englebright, will you yield?

MR. ENGLEBRIGHT: I yield.

MR. PALMESANO: Thank you, Steve, I appreciate it. I promise you and I promise our colleagues, I know we debated CLCPA a couple of years in a row, we used -- I used, like, pretty much 30 minutes of my time. I promise you I'm not going to be doing that today because I only have 15 minutes of time. I promise I won't

use it. I just had a couple of quick questions, because I know a lot of this debate, I know we're talking about electric vehicles, but obviously it really kind of boils down to the CLCPA and meeting the requirements of that after we passed back in 2019, correct?

MR. ENGLEBRIGHT: This enables part of the premise of the CLCPA, that is correct.

MR. PALMESANO: And -- and, Steve, one of the questions I wanted to ask, I know I brought this up in our debate in the past, I mentioned it earlier on the floor with the other bill we did. I think one of the concerns I have and some of my colleagues have when we talk about the CLCPA, that was just for New York State. It didn't affect Ohio or Pennsylvania, it didn't affect Brazil, China, or Russia who don't have to follow whatever we do here but, at the same time, New York State contributes .5 percent of the total carbon emissions in the entire world and 3.3 percent of the total carbon emissions in the United States. So in all this action that we're taking with the electric station of vehicles with the CLCPA, what significant progress are we going to make here in New York to address the -- this minimal amount that we're really going to impact? What progress are we really making in the big picture?

MR. ENGLEBRIGHT: You know, you're asking a question that is, for a state, for a whole state such as New York, the same kind of question that you could ask for an individual. What difference does it make if just little old me is disregarding of what I can do for the environment? I think it's an -- it's an interesting

question for Earth Day. And the answer is you can do what you can as an individual. You cannot throw plastic into the waterway, you can pick up trash that is caught in -- in the shrubbery in front of your house. You can do your part and it will set an example for others and it will grow as an expectation throughout your community, up and down your block. In the larger sense, that's what we are doing among our sister states. This is a mighty State, large enough to be a -- a country, really, so setting an example for our sister states I believe is an important part of achieving our national goals that will eventually have a greater statistical footprint on the solution. This is a matter of us doing what we can within the scope of our powers. And this is a mighty State, others watch what we do. I believe that setting a good example in New York will have a greater impact than a nominal correction and adjustment as part of -- as a very small part of the global problem.

MR. PALMESANO: Well, I -- I can appreciate that answer, we all have to do our part. I guess -- I guess what I'm looking at is what part are we going to make an impact here in New York on the bigger scheme when we're already contributing just the minimal amounts. So we're already taking action. We know that our carbon emissions have decreased over the past 15 years significantly, primarily because of natural gas. I know natural gas is a dirty word to a number of people here. And I know, Steve, the point that one of my colleagues brought up, a couple of my colleagues, one is the cost of the electrization of the systems to convert, especially when 60 percent

of homes in New York, New Yorkers are relying on natural gas for converting -- you know, the costs amount. You have to admit, moving forward with this there's going to be significant costs. I know you said the CLCPA will pay for it, but to convert homes, manufacturers converting their businesses, tens of thousands of dollars, that's a significant cost, an impact that's going to have to be made up and paid for by someone. And for some individuals, especially lower and moderate income individuals, that's going to be a hefty bill to pay. You will have to admit, there is going to be significant costs with this. We've seen estimates along the way from the conversion costs --

MR. ENGLEBRIGHT: I -- I -- I don't admit to that. I believe that what we're going to see is that the gas range that's in your kitchen will reach the end of its useful life. It will be beat up and dinged just from normal household use, and you'll want to replace it. And it is at the point of replacement that you will then have an opportunity to move, without additional cost, to electric -- an electric stove --

MR. PALMESANO: Yeah but, Steve, you're saying you're going to convert, you're saying well they can just replace it with electric, well, if you have to redo your whole property whether it's a house or whether it's a business from natural gas, if it's manufacturing natural gas or a house that's boiling with a boiler for natural gas, that's -- you have to take out that infrastructure and it's tens of thousands of dollars. You know, that's significant cost. It's not just you want to

swap it out for electric, you have to improve the whole infrastructure for the individual, for the family, but also for those businesses. That's a significant cost. So, you know, I think that's not really appropriate to diminish that impact, and there's a cost to that.

MR. ENGLEBRIGHT: (Inaudible) to make adjustments anyhow. Your furnace will need replacement, your pipes will be corroded, it is inevitable that you're going to make adjustments going forward. I guess my point is this is not something that is going to be imposed upon everybody simply because we've passed this. But I would also point out that this measure before us, using the same logic, is about vehicles. It is vehicles, the transportation sector that is about 40 percent of the greenhouse gas problem. And so this measure focuses in on what would logically be the natural replacement process and to encourage people to move toward an electric vehicle, encourage the market to make those vehicles more accessible at the time when there's a natural transition and replacement anyhow. So I do not accept that this is going to be more expensive; in fact, once you acquire the electric vehicle, it should be significant cost savings. You don't have to worry that the cost of a gallon of gas has gone up 23 cents since Tuesday or something. Things that we see happening now are in that direction.

MR. PALMESANO: Well, Steve, I can appreciate your comments. I know we can agree to disagree on the overall philosophy. So I don't have any questions, but I know the NASCAR track was brought up in our conversation earlier. As the

representative who represents Watkins Glen International Race Track and the NASCAR racetrack weekend, which has an economic impact of \$200-plus million to our State, I certainly welcome you to come up and see it sometime, and many of my colleagues, they would love to showcase what we have and what a gem it is for New York State. So thank you for your time and your leadership. I know this is a very passionate issue for you. I always appreciate our discussions and our civil conversations.

So Mr. Speaker, on the bill.

ACTING SPEAKER AUBRY: On the bill, sir.

MR. PALMESANO: Yes, Mr. Speaker, my colleagues. Again, I think this really kind of just all -- I know we're talking about vehicles, it goes back to the CLCPA which, you know, I've been very critical of, not because I don't think we should be taking action to address our climate issues in the State and this country, I think my criticism has been, of it, doing it alone. Today we talked about, you know, the electrification of, you know, vehicles, the cost from that perspective. We talked about converting people's homes from -- over to electric. That could mean tens of thousands of dollars for families. What's the impact going to be on our businesses who are relying on natural gas for manufacturing. This is significant. These are real dollars. These aren't things that are just going to be made up. When people talk about, well, we pay for it with the CLCPA, that's the ratepayer, that's the taxpayer. That's what I get concerned about.

I -- I think when we passed this bill in 2019, 2023 is

when everything, the hard stuff, the mandates are going to take place. The Climate Action Council is supposed to come through and I know it's often referred to as the (inaudible). The thing that's green about it is the green dollars it's going to cost in higher utility rates, the green dollars it's going to cost in -- in taxpayers. The green dollars it's going to cost in lost jobs in manufacturing and farms that leave our State. Estimates have shown that it would cost -- there was a study out of Massachusetts I cited before when we -- \$6- to \$8 billion a year to comply with this, tens of thousands of dollars to convert our homes from natural gas to all electric with appliances, our manufacturers. And I think the fact of the matter is yes, we have to do our own part, but we are doing our part. We have been doing it. Our carbon emissions have decreased significantly over the past 15, 20 years because of natural gas. And New York contributes just .5 percent of the total carbon emissions in the entire world and 3.3 percent of the total carbon emissions in the United States. But the CLCPA doesn't affect China, Russia or Brazil. They're going to keep burning coal and doing whatever they want to do because they care about them, they don't care about the overall environment. It does nothing to impact -- make a significant impact. It doesn't do anything to affect Pennsylvania or Ohio.

And I want to get back to the fact is, yes, I support green energy. I support wind and solar. I think that's an important part of our portfolio. But again, I would talk about our portfolio like you talk about your -- your retirement portfolio. You don't put it all in

cash, stocks, and bonds, you diversify that portfolio to protect it, to make it more resilient. We have to do the same thing for our fuel portfolio, energy portfolio. Wind, solar, hydro, sure; nuclear yes, but yes, natural gas should be a part of it. I just have been dismayed by the anti-natural gas sentiment of this House and this Administration. It just makes no sense to me whatsoever.

When you're converting boilers in New York City from dirty oil boilers to natural gas, you're going to get away from that, that's problematic. And to have a solid energy policy, yes, it needs to be clean, but it also needs to be affordable and reliable. We focus so much on the clean side of it, but we don't talk about the affordability and the reliability, even with the sun -- solar and wind. If it's not -- if the sun's not shining, the wind's not blowing, you're not producing energy. You still need that backup from that conventional energy resource.

We need to have balance in this thinking. We need to have balance in this policy, and that's what I've been concerned about. This is going to be a significant expense that's going to -- as we move further down the road it's going to have an impact on our economy. Yes, there are going to be some positive things that will happen. I'm not saying that, I'm not saying we shouldn't invest in renewables. It should be a part of our portfolio, but it needs to be balanced. And we also need to look at the affordability and reliability of what we're doing here.

And that's why I really firmly believe, before we fully

implement the mandates of the CLCPA, we should do a full, true cost-benefit study analysis of it to show the residents of this State, the businesses of this State, know what they're expected to do, because I don't think they know what's going to hit them yet. They have no idea what's going to hit them yet. It's coming, and we already know, I already talked -- \$1- to \$2 billion a year, higher taxes, fees, and assessments on their utility bills, more is coming. We've said it, \$6- to \$8 billion a year in annual costs to comply with the CLCPA, tens of thousands of dollars in conversions cost. So we should be doing a full cost-benefit study analysis before we move forward. We owe the taxpayers and ratepayers of the State at least that, especially when they have some of the highest utility rates in the country. We need to be thoughtful in that process.

I appreciate the discussion and the sponsor, I know where his heart is, I know he's committed to this issue, I respect him, and just because some of us vote against this bill does not mean we don't want to take action to improve our climate through resources. It's just how we go about it and some of the all-in approach that we're taking with some of these causes. That's where my concerns are, I have concerns for the ratepayers of this State, I have concern for the taxpayers of this State. I'm concerned about more and more businesses leaving our State. I know we talk about this, *We will lead the nation*, but what we're leading the nation in is out-migration. We have more New Yorkers leaving our State, 1.4 million since 2010. Our businesses are leaving the State, our manufacturers are leaving

the State, our farmers are going to be leaving the State as this gets fully implemented because they're not going to be able to comply; what is going to happen to the car dealers? I mean, there's a lot here, ladies and gentlemen, and that's what I'm concerned about for the overall impact this is going to have on our overall economy. It needs to be a balanced approach. It is needs to be clean, yes, but it also needs to be affordable and reliable. And what I've seen come out of this Chamber is not so much a concern about the affordability and the reliability. And for us to have a solid energy policy that works, we need to have affordability and reliability, as well, and we need to have fuel diversity to make that work, as well.

So for those reasons, Mr. Speaker, I have great respect for the sponsor and what he's trying to do, but for these reasons, I'm going to be voting in the negative and I encourage my colleagues to do the same. Thank you.

ACTING SPEAKER AUBRY: Thank you.

Mr. Burdick.

MR. BURDICK: Thank you, Mr. Speaker. And I'm wondering if I could ask the sponsor to yield to just to answer a few questions?

MR. ENGLEBRIGHT: I yield.

ACTING SPEAKER AUBRY: Mr. Englebright will yield.

MR. BURDICK: Thank you so much. Well, Steve, you and I go back a little ways, so I think that you may recall some

things, probably you better than me, but I'm wondering if you happen to recall back in 1972 when the Clean Air Act and the Clean Water Act were enacted by the Federal government under then -- the lead under that is, if memory serves, was Senator Ed Muskie out of the State of Maine; I'm wondering if you happen to recall that?

MR. ENGLEBRIGHT: I remember the event, you are remembering parts of it that I don't remember, but it was a landmark moment in environmental protection and it followed closely the awareness in public education process brought on by the publication of *Silent Spring* just a decade earlier.

MR. BURDICK: And do you happen to recall that there was, at that time, considerable skepticism about that action and about whether we, as a nation, should be doing this?

MR. ENGLEBRIGHT: There was a great deal of controversy. Any time there's a big change in -- in law, you're going to have varying points of view. It is has proven to be enormously popular and effective. Those are really important landmarks in the history and progress of our -- of our nation.

MR. BURDICK: And do you think it's fair to say that it has a had an enormous impact in terms of cleaning up industry, cleaning up in all aspects of our economy that results in pollution to our air and water?

MR. ENGLEBRIGHT: I think that is a fair and accurate conclusion that you -- that you are drawing based upon things that you can see everywhere. Our streams are cleaner, the rivers are

no longer catching fire in Ohio. We have made -- we've made great progress in terms of cleaning up industrial sites that used to just be places that we would turn our backs on, and we're repurposing many of those sites and they, very often, are in our urban neighborhoods and our waterfront properties that are now becoming park land, yes. Many, many great steps forward have been taken as a result of the passage of those important laws.

MR. BURDICK: And, you know, thinking in terms of our Upstate colleagues, and I think of the Adirondacks and I recall reading about acid rain and the impact that it had in -- to trout that were in lakes that were in the Adirondacks. And do you think it's fair to say that the Clean Air Act did have some impact on that since so much of that occurred from mid-Western coal burning plants? Do you think that that might have had some kind of impact in terms of reducing acid rain in the Adirondacks and for affecting crops and farmlands up there, as well?

MR. ENGLEBRIGHT: I know it has had an impact. We haven't totally solved that problem yet, but certainly we have moved in the direction of beginning to solve it, yes.

MR. BURDICK: And, you know, I don't know whether you recall, as well, another controversy that was the California Air Resources Board which, to some, you know, was just considered the devil incarnate and interestingly, it was actually, and this was before my time, but it was created in 1967 under a law that then-Governor Ronald Reagan had signed. But then, you know, it

wasn't that long afterwards that they issued standards for vehicles that had to be sold in the State of California with respect to fuel efficiency. And I'm wondering if you happen to recall that controversy?

MR. ENGLEBRIGHT: I recall, and when California, a sister state that is a great trendsetting state like New York, when California took that step, the manufacturers adjusted and the California standards became national standards. I'm glad you're bringing this up because the impact that we might have has a great state on the other side of our nation on the East Coast with this measure and with our other efforts to clean up air, I believe it could have the same impact that the California air standard that you, quite correctly referred to as landmark and important, we could -- we could see a similar -- similar reaction from our sister states. And that is, indeed, part of -- of what I hope happens.

MR. BURDICK: You know, I'm also wondering -- very interesting what you had said a few moments ago about the popularity of taking these steps which at one point were regarded as visionary, but I think really have become mainstream. And as I understand, there was a -- I think it's a Siena poll that just was published and over 60 percent of New Yorkers feel that what we're doing to protect the environment is actually not harming the economy. And as I also understand, so much of what we're doing, and maybe you're familiar with this, I think you probably would be, that the green industry here in New York is one of the most vibrant industries in the economy and one of the fastest growing. And I'm wondering what --

whether you might have any knowledge of that or thoughts about that.

MR. ENGLEBRIGHT: Well, yes, I have some insight into that. I was the original prime sponsor of several pieces of legislation that helped launch the -- the solar industry in this State. And I'm -- I'm -- I'm pleased to see that that industry is thriving and growing. At the time that we passed the Solar Choice Act and the Net-Metering Act for Wind and the Net-Metering Act for Solar, those were bills that I had championed and sponsored, and it seemed far-fetched that we would have, you know, a -- a vigorous response in a short number of years, but that is, in fact, what happened. I thought it would take longer, but the public was enthusiastic and it continues to be. And now we also have the increased knowledge based upon our science that indicates that -- that moving toward renewables is vitally important for the health of not only individuals, but for the health of the planet.

MR. BURDICK: Well, I couldn't agree more and, you know, I have to thank you for your leadership in this area and that finally, you're seeing now that legislation that you had championed for years, thanks to a change in the composition of the State Senate now has the prospect of becoming law. And, you know, I share your view about our colleagues on the other side of the continent, perhaps if we here in New York can take a similar leadership and visionary role, then that can create a national standard, that can make what now may be aspirational and make it actually something that becomes reality. And I actually think that I can understand your hesitancy of not

making this mandatory. I would have voted for this if it were mandatory, to tell you the truth, because like our colleague, Deborah Glick, I happen to have a great deal of faith in the ingenuity and entrepreneurial spirit in this country and the ability that we have in order to meet these goals -- more than goals. I mean, I understand, by the way, the Climate Leadership and Community Protection Act not to be goals, but requirements and that we should be doing everything that we possibly can.

You know, the whole debate almost seems reminiscent to the debate that's gone on in Washington where colleagues, the counterpart of our colleagues across the aisle had been trying for so many years to repeal the Affordable Care Act, and now it's become mainstream and now so many Americans have seen this as something that's essential. And, you know, I have to go back to the conversation about cost, because I think you put your finger on it, Chair Englebright, and that is what is the cost if we don't do this? What is the cost if -- the billions, I actually think it's probably closer to trillions, with the rising in the sea level and, you know, are we going to find that in 15, 20 years Manhattan Island is under water? What's going to become of this State if we don't take action? And, you know, I kind of look at our planet and all of us who live on it almost as -- I think of the frog, and apparently - I wouldn't try this, but I understand it's true - that if you take a frog and you put them in boiling water immediately, they're going to jump out, that frog's going to jump out. But if you put it in water and turn on the heat and let it heat slowly,

guess what? It's going to die in that water. And I see our planet almost like that, that if we don't do something then the planet and all of its inhabitants will die. And I really don't think that that is anything at this point that people can refute. That's the science, that's the science.

And I happen to be the proud owner of an electric vehicle, and I'd like to address the concern that was expressed by one of our colleagues about cost. Boy, I have to tell you, I have been saving so much money with that vehicle, and not only because of not having to pay for gasoline, there are no moving parts. You know, I feel very badly for my local mechanic because he's a wonderful fellow, we've been bringing him business for years, all the years that we've lived in Bedford, and I -- I haven't been giving him any business for my car because it doesn't need any kind of maintenance. That saves, over the life of a car, tens of thousands of dollars literally. I mean -- and, you know, I would just ask people to take another look. And that's now, that's not looking at 2035. And here we have the headline from *The Washington Post*, when GM said that they were going to discontinue the manufacture of gasoline and light-duty SUVs with an internal combustion engine by 2035.

And so, Chair Englebright, I just have to commend you and thank you for your vision and your leadership, and have to thank the Speaker, as well, for having this come to the floor.

MR. ENGLEBRIGHT: Absolutely.

MR. BURDICK: I'm so excited to be part of this

Chamber when we are taking such important action to move things forward. And I have to admit that I'm absolutely flummoxed by our colleagues on the -- on the other side of the aisle by opposing goals, these are goals, and they are opposing goals. And that's something that's incomprehensible to me.

On the bill, Mr. Speaker.

ACTING SPEAKER AUBRY: I thought you were on the bill, sir, because you certainly haven't asked a question in 15 minutes.

(Laughter)

MR. BURDICK: Oh, okay. I'm on the bill.

Needless to say, I cosponsored this along with Chair Englebright and I'm proudly voting for it. Thank you very much for your patience and, Chair Englebright, thank you for yours, as well.

ACTING SPEAKER AUBRY: One other issue, sir. When you're addressing the Body, you should refrain from using other colleague's names in your statement, please.

MR. BURDICK: I will, indeed. My apologies.

ACTING SPEAKER AUBRY: Thank you very much.

Read the last section.

THE CLERK: This act shall take effect immediately.

ACTING SPEAKER AUBRY: The Clerk will record the vote on Assembly print A4302. This is a Party vote. Any member who wishes to be recorded as an exception to the Conference position

is reminded to contact the Majority or Minority Leader at the numbers previously provided.

Mr. Goodell.

MR. GOODELL: Thank you, sir. The Republican Conference is generally opposed to this legislation. Those who wish to support it should contact the Minority Leader. Thank you.

ACTING SPEAKER AUBRY: Thank you.

Mrs. Peoples-Stokes.

MRS. PEOPLES-STOKES: Thank you, Mr. Speaker. Democratic colleagues will generally be voting in the affirmative on this great piece of legislation; however, should there be members who desire to be an exception, they should feel free to contact the Majority Leader's Office and their vote will be properly recorded.

ACTING SPEAKER AUBRY: Thank you, Mrs. Peoples-Stokes.

(The Clerk recorded the vote.)

To explain her vote, Mrs. Barrett.

MRS. BARRETT: Thank you. Thank you, Mr. Speaker. To explain my vote. Let me say at the outset that I support this legislation and I support the goals that have been set forth, but I really want to make the point that we have to do the hard work in between of ensuring that if we're advancing a Climate Leadership and Community Preservation Act that we also give equity to the community preservation piece. In my district, which is very rural and

has beautiful farmland and great viewsheds and the economy is in large part based on tourism, we are already being overwhelmed by the idea of huge, mega solar fields and other sites that, you know, that if you were looking at this equitably would take up many, many community's versions of, you know, their quota for their share and I just want to make sure that we are cognizant as we move forward of the protections for home rule and for communities to have some autonomy when they're setting zoning policies and equally committed to our goals, but not wanting to carry the full share, the full water for the State of New York and make sure that farmland and wetlands and native habitats and open spaces are also protected and part of the conversation here. I vote in the positive, in the affirmative, but I hope that my words will also reach ears and -- and be taken in consideration, as well. Thank you.

ACTING SPEAKER AUBRY: Thank you. Mrs. Barrett in the affirmative.

Ms. Rajkumar.

MS. RAJKUMAR: The climate crisis is a reality and it is our responsibility as citizens and government leaders to address it for the sake of our children and our children's children. Young people in recent years have been the leaders on climate justice, because it is about our future. The destructive effects of the climate crisis are readily apparent around the world, with increasing violent hurricanes, cities facing drinking water shortages and more extreme weather events which have displaced millions of people. The transportation

sector emits more carbon pollution than any other sector of the economy and today, we will commit to restructuring to change the situation. It is our moral obligation to do so.

Addressing the climate crisis is a life or death challenge for our generation. By setting ambitious goals for zero carbon emissions today, New York State is leading in the race towards a zero-carbon world. We challenge other states and countries to set goals as bold as us. Today, New York State makes a commitment to being on the ground floor of the exciting and growing green energy economy. This legislation will spur investment in electric vehicles and in renewable energy sources; indeed, the number of electric vehicles on the road has increased by four times in the past four years. It's estimated that half of all buses in the world will be electric within the next five years. The burgeoning green economy has the potential to create hundreds of thousands of jobs. It's a sustainability revolution and today, we are committing to help lead it. I proudly vote in the affirmative.

ACTING SPEAKER AUBRY: Ms. Rajkumar in the affirmative.

Mr. Steck.

MR. STECK: Thank you very much, Mr. Speaker. I want to express my extremely strong support for this legislation. I often talk to my more moderate political friends and tell them that how is moderation going to solve the problem of climate change? It's not. Sometimes I feel like the voice of one crying in the wilderness

when I talk about the need to raise revenue to fund green energy. Aspirational bills are great, but we really need to do things that are more real. With that, I vote in the affirmative.

ACTING SPEAKER AUBRY: Mr. Steck in the affirmative.

Ms. Glick.

MS. GLICK: Thank you, Mr. Speaker. To explain my vote. I'm reminded, one of our colleague's admonition that we maintain a commitment to open space, farmland, our forests. We "paved paradise and put up a parking lot" is what comes to mind. So we need fewer parking lots, but we also need to have renewable energy. And one of our colleagues did refer to the fact that if it's cloudy, you know, solar energy doesn't work. Well, it's much less efficient, for sure, but we also -- there are battery storage capacity that can leave your -- can maintain your energy for anywhere from one to five days. So as we improve our science on battery storage, we'll solve many of these problems. I withdraw my request and vote in the affirmative.

ACTING SPEAKER AUBRY: Ms. Glick in the affirmative.

Mrs. Griffin.

MRS. GRIFFIN: Thank you, Mr. Speaker, for permitting me to explain my vote. I appreciate the stewardship, foresight, acumen, and aspiration of our Environmental Chair and sponsor of this legislation. If we don't begin to initiate provisions now

to preserve and protect our environment, when will we? Our children and grandchildren are counting on us to act. It is key to note that this scientific, fact-based approach is goal-oriented and remains flexible based on the progress and development of sustainable vehicles that are affordable. Thank you to our Speaker for bring this ambitious bill and the entire Earth Day package to the floor. I am proud to cosponsor this important legislation and I vote in the affirmative. Thank you.

ACTING SPEAKER AUBRY: Mr. Walczyk to explain his vote.

MR. WALCZYK: Thank you, Mr. Speaker. To explain my vote. We know that there's economy deniers within this Chamber acting like Elon Musk would have never brought Tesla forward, we wouldn't have electric vehicles today if it hadn't been for the New York State Legislature and we won't have them in the future unless we put legislation forward like this. This -- this legislation and the idea that we need to micromanage the economy that's already moving in that direction is going to ultimately hurt poor families in New York State. In the economy, this is going to help Vermont, it's going to help Pennsylvania auto dealers sell more vehicles.

I heard this is a technology that doesn't exist yet; let's not be science deniers while we're being economic deniers. I mean, it's science fiction when you say we want to vote on a policy for a technology that doesn't exist yet. If you truly believe in it, all right. Start with a pilot program. Say in New York City we're not going to sell gasoline anymore. Say in New York City, we're going to

eliminate gas stations, we're going to start requiring -- or say that we are going to start requiring New York City's fleet to be 100 percent electric before everybody else's, but don't bring it to the poor families of Upstate New York and require this for them. I vote no, Mr. Speaker.

ACTING SPEAKER AUBRY: Mr. Walczyk in the negative.

Any exceptions?

Mr. Goodell.

MR. GOODELL: Thank you, sir. Please record the following Assembly members in the affirmative: Mr. Brown, Mr. Durso, and Mr. Gandolfo. Thank you.

ACTING SPEAKER AUBRY: Are there any other votes? Announce the results.

(The Clerk announced the results.)

The bill is passed.

Page 20, Calendar No. 204, the Clerk will read.

THE CLERK: Assembly No. A05082, Calendar No. 204, Englebright, Simon, Epstein, Cook, Steck, Aubry, Niou, Seawright, Fahy, Thiele, Abinanti, Gottfried, Galef, De La Rosa, Barron, L. Rosenthal, Weprin, Griffin, Woerner, Reyes, Paulin, González-Rojas, Pheffer Amato, Kelles, Gallagher, Cruz. An act to amend the Environmental Conservation Law and the State Finance Law, in relation to restricting hotels from making available to hotel guests small plastic bottle hospitality personal care products.

ACTING SPEAKER AUBRY: An explanation is requested, Mr. Englebright.

MR. ENGLEBRIGHT: Thank you, Mr. Speaker. This bill would prohibit hotels from distributing certain small plastic bottles that are used for personal care products such as soaps, lotions, and shampoo. The goal is to help reduce the proliferation of single-use plastic products and to keep them from polluting our environment and -- and making a -- a cleanup problem along our shores.

ACTING SPEAKER AUBRY: Mr. Smullen.

MR. SMULLEN: Thank you, Mr. Speaker. Would the sponsor yield for a few questions, please?

ACTING SPEAKER AUBRY: Mr. Englebright, will you yield?

MR. ENGLEBRIGHT: I yield, Mr. Speaker.

ACTING SPEAKER AUBRY: Go right ahead.

MR. SMULLEN: Thank you very much, Chair Englebright, I appreciate your -- your fortitude being here today debating these bills. I think we have kind of a curious dichotomy here. We went from zero emission vehicles in New York State going forward to shampoo bottles in hotels. I know it's very important to think globally and act locally, but I just wanted to ask you, why do we need to legislate on this topic?

MR. ENGLEBRIGHT: Because the - you ask a very good question - because the bottles that are being given away or come

along with your overnight -- overnight room rental costs are polluting the environment. They're just an awful lot of them that find their way into the environment.

MR. SMULLEN: Well, thank you. I appreciate that. I just -- you know, I have some questions regarding its application in New York State. Of course, you know, on the surface of it, it seems very easy. No hotel, motel can have these things. That seems to be a little bit easier for a chain operation where they have a very sophisticated system of corporate governance, like Marriott. And I think, in fact, right now at this point, the Marriott International, your memo says, that they're already replacing single-use plastic bottles with a dispenser instead. So I'm always one to take a market-based solution. If the market is already doing this, shouldn't we just allow it to play itself out instead of micromanaging such an industry?

MR. ENGLEBRIGHT: Well, I'm not sure we're micromanaging the industry. The -- the proliferation, though, of personal care product bottles in small sizes, I don't think it controls the industry, but it is something that is causing expenses to the public at-large. And so our interest here is to minimize the cost to taxpayers and local governments that have to do the cleanup.

MR. SMULLEN: Okay, I appreciate that. So now, we've been in the midst of a pandemic for the last year where sanitation and hygiene has become extremely more important in preventing the spread. And one of the -- one of the concerns and the fears and what's really shut down a lot of the travel industry, airlines

and hotels, is the shared nature of public transport on airplanes, but then also hotels where you're at a conference or a resort where people are using essentially the same rooms over and over again. Are there any studies or is there any information regarding dispensers versus single-use containers as to whether or not they breed any sort of public hygiene issue, whether it's bacteria or viruses?

MR. ENGLEBRIGHT: I am not familiar with such a study. I would point out, though, that just to enter into your hotel room you have to touch a door handle, and it is my understanding that the Center for Disease Control has indicated that this type of touching is -- is not really what is transmitting COVID. COVID-19 is primarily airborne.

MR. SMULLEN: Most certainly, I just mentioned any sort of a disease.

MR. ENGLEBRIGHT: That's why -- that's why you're wearing the mask today, and I'm -- I'm glad to see that you are, and I think that's very responsible. But it's also a response to the fact that this disease is spread primarily by droplets in the air.

MR. SMULLEN: Well, thank you. I wear my mask because it's the rules of the House in which I'm a member, and I say that specifically because I don't want to wear my mask, nor do I think it's necessary, but because I respect the House and because I respect the rule of law, I do so, not for any provision of some scientific credibility of any -- any way or other. So I do appreciate you mentioning that. I choose to debate today in person, and thank you

very much.

So I want to just make sure that I cover all the -- the issues that affect many of the hotels and motels in my area, a lot of them are mom and pop operations. But a big sector of our tourist economy in Upstate New York is actually the shared economy which is Airbnb's. Does this affect Airbnb rentals in New York once it's passed?

MR. ENGLEBRIGHT: Hmm, that's a good question. I think if they meet the definition of hotels that they would be covered. The -- the law is effective in January 1st of 2024 regarding hotels with 50 or more rooms, so in the first year certainly, Airbnb would not be impacted. After -- one year after that, though, on January 1st of 2025, all hotels with 50 or less rooms, and I presume also Airbnb operations that are regularly used for lodging would also be covered, for commercial --

MR. SMULLEN: Certainly, and hopefully we can discuss that going forward before this comes into effect because the next thing I'd like to ask you about is how we're going to enforce this. You know, this seems a trivial matter, but once it becomes a matter of law, it becomes a matter of law enforcement. Now, is it going to be the Department of Environmental Conservation that's tasked with enforcing the provisions of this bill?

MR. ENGLEBRIGHT: Yes, it will be the DEC. Let me just make the observation that I really believe that the primary control on this is going to be an educated electorate, an educated

citizenry, and they will -- they will -- you mentioned the word "respect" a moment ago, it's an important word here, as well. I think that people will feel disrespected if they are in a hotel and the hotel does not, in turn, respect the law that is intended to protect the environment.

MR. SMULLEN: Well, thank you for that.

MR. ENGLEBRIGHT: So just like, you know, you don't have a cop behind every stop sign, people respect what that stop sign is for and they stop, even in the middle of the night, they'll stop at a stop sign with the nearest policeman being miles away simply because they respect what it's intended to do, to protect the -- the individual, to protect people from harm.

MR. SMULLEN: Well, thank you for that. I don't know that this is going to protect people from harm, but I'm always concerned with law enforcement budgets, particularly amongst small counties and their sheriff's departments, also small counties and their Departments of Health which actually inspect some of these facilities and these things. So I'm -- I'm always concerned with the bottom line as to what -- what I feel is an unnecessary regulation has and puts some sort of undue burden on basically law enforce -- law-abiding citizens who are trying to run honest small businesses, it makes it, you know, the regulatory hand be a little bit onerous for them. Just a couple more things --

MR. ENGLEBRIGHT: If I could just address that -- may I address that?

MR. SMULLEN: Certainly.

MR. ENGLEBRIGHT: Thank you. A lot of these small bottles end up going into sewers which, in turn, clog up the -- the sanitary function of the sewer, and that is expensive. And the maintenance of -- of the lines and the pipes that run into sewer districts that are clogged with plastic, both film plastic and small bottles is really problematic. These small bottles are able to slip into the steel grates because of their size, and that's a problem and it's an expensive problem.

MR. SMULLEN: Sure. So are these small bottles that you're describing, are they actually recyclable?

MR. ENGLEBRIGHT: Theoretically, all plastic -- almost -- I shouldn't all, but most plastic is recyclable. The problem, of course, is gathering it into only one plastic species. That is a difficulty. And so we don't know whether this is polyethylene, polypropylene, polyvinyl chloride; you can't mix those and commingle those and expect them to be recyclable. So if one really wants to recycle plastic, it has to begin with the manufacturer, but that's another bill. We'll talk about that one later.

MR. SMULLEN: I was just going to mention, I think we need to talk some more about single stream recycling and what the benefits and the costs are so we can actually have a good policy discussion ahead of time about encouraging more recycling across all aspects of the economy in New York.

So last thing, I just wanted to say -- or ask you, where

did the \$250 fine come up with? That -- that's less than some of the marihuana trafficking fines that we're going to have here. Where did that number come from?

MR. ENGLEBRIGHT: It was advised to me by counsel and based, I believe, on other law and it is something that I haven't really thought in great detail about. If it turns out that -- that it's inappropriate, I'd be willing to revisit the -- the legislation, but for the moment, that is the number that we're working with for a first offense.

MR. SMULLEN: For a first offense.

MR. ENGLEBRIGHT: Following a warning. The warning comes first.

MR. SMULLEN: Right.

MR. ENGLEBRIGHT: And this would be the first offense after the warning would have been ignored.

MR. SMULLEN: Well, thank you very much, Mr. Englebright.

Mr. Speaker, on the bill.

ACTING SPEAKER AUBRY: On the bill, Mr. Smullen.

MR. SMULLEN: So I just would note, we went from a -- what I consider to be a very serious issue of zero emission electric vehicles to a bill on plastic bottles in hotels and motels, which is already being corrected by the industry because they -- they -- they have figured it out from a corporate perspective. And this is just

going to fall on mostly is the hand of the State coming down on small businesses, primarily family-owned motels, it may be not their chief source of income, but their supplemental source of income, many of which support the recreation industry in the areas that I represent, of just the State coming in with what I call a 1,000 mile screwdriver. From way up here, they're going to come in to a little mom and pop motel and say, *You know what? You need to take those plastic bottles out of there* for a supposed public benefit, which may or may not be of great value in the long term as far as recycling. If you do it properly, you actually recycle those products, or some of them are even reusable sort of thing.

So I just think that this is a -- this bill makes people feel good about protecting the environment, but it does very little in the aggregate other than taking and alienating the citizens upon whom this State relies for its goodwill. And that's why I mentioned that it's really important that people realize that layer upon layer of regulation, year after year, time after time simply makes people numb to the ability of the State to govern with good sense and good judgment.

For that reason, I'd urge all of my colleagues on both sides of the aisle in a nonpartisan way to say let's -- let's legislate about important things, but let's leave these smaller things to the regulatory schemes of our departments and allow them for the people to be able to say, *We know what is enough regulation for New York State*. Thank you very much, Mr. Speaker.

ACTING SPEAKER AUBRY: Thank you, sir.

Read the last section.

THE CLERK: This act shall take effect January 1, 2024.

ACTING SPEAKER AUBRY: The Clerk will record the vote on Assembly print 5082. This is a Party vote. Any member who wishes to be recorded as an exception to the Conference position is reminded to contact the Majority or Minority Leader at the numbers previously provided.

Mr. Goodell.

MR. GOODELL: Thank you, sir. The Republican Conference will generally be opposed to this legislation for the reasons stated by Mr. Smullen, and because we all appreciate looking our best in the morning when we stay at a hotel or motel. But for those who don't care or want to support this, please call the Minority Leader's Office and we'll make sure your views are properly recorded. Thank you, sir.

ACTING SPEAKER AUBRY: Ms. Hyndman.

MS. HYNDMAN: I would like to remind my colleagues that this is a Party vote. Majority members will be recorded in the affirmative. If there are any exceptions, I ask Majority members to contact the Majority Leader's Office. Thank you.

ACTING SPEAKER AUBRY: Thank you.

(The Clerk recorded the vote.)

Mr. Abinanti to explain his vote.

MR. ABINANTI: Thank you, Mr. Speaker. Today is

Earth Day 51. Earth Day is probably not the first thing on the minds of most people. Most people are concentrating on COVID-19 and how their lives will be different when we emerge from the pandemic. But one thing that will not be different, climate change will still be happening. And make no mistake about it, climate change is the defining issue of the 21st Century. The bears and bulls will come and go time and time again on Wall Street, but when the polar bears go, that's canary in the coal mine, that the human animal is not far behind.

But this global pandemic dramatically reminds us of how small is our world, how what happens in one place can and will affect everywhere else on Earth. So each of us must do as much as we can to protect our air and water, and foster sustainable land use policies. Today we passed several measures to facilitate the use of cleaner energy cars, keep pollutants out of our waterways, and reduce the plastic trash going to our landfills and incinerators. So we've taken the steps that need to be taken, and I look forward to taking many more. Let us remember, we did not inherit this Earth from our ancestors, we borrowed it from our grandchildren. We are trustees with no right to squander what we are charged with protecting. Together today, we are making a difference. I vote yes.

ACTING SPEAKER AUBRY: Exceptions, Mr. Goodell?

MR. GOODELL: Thank you, sir. I'm -- I'm waiting for the DEC to do a bathroom raid and say, *Hand over that conditioner*, and supporting that initiative are the following

Republican colleagues: Mr. Brown, Mr. Durso, Mr. Gandolfo, Mrs. Miller, Mr. Ra, and Mr. Simpson. And Mr. Lawler, Michael Lawler. Thank you, sir.

ACTING SPEAKER AUBRY: Thank you.

Are there any other votes? Announce the results.

(The Clerk announced the results.)

The bill is passed.

Mrs. Peoples-Stokes.

MRS. PEOPLES-STOKES: Mr. Speaker, do you have any housekeeping? For sure you have a privileged resolution by Ms. McMahon, but is there any other housekeeping?

ACTING SPEAKER AUBRY: We do have some housekeeping.

At the request of Mr. Gottfried, the following bills are recommitted back to the Committee on Health: Calendar No. 32, Bill No. 170, and Calendar No. 87, Bill No. 169.

We have a resolution, 167, the Clerk will read.

THE CLERK: Assembly Resolution No. 167, Ms. McMahon.

Legislative Resolution commemorating the 51st anniversary of Earth Day on April 22, 2021.

ACTING SPEAKER AUBRY: Ms. McMahon on the resolution.

MS. MCMAHON: Thank you, Mr. Speaker, for allowing me to speak ever so briefly on this resolution. It has been 51

years since we, as a nation, first commemorated Earth Day on April 22, 1970. What began as an opportunity to educate Americans on the importance of protecting our land, air, and water, Earth Day has now become a worldwide celebration of the beauty of the natural environment and a challenge to recommit to those actions necessary to protect the planet and its resources.

Sadly in the 51 years since the first Earth Day, our planet has been subjected to the continuing burdens of pollution, population, over development, Ozone depletion, deforestation and species extinction. While we have come to better understand the problems threatening the planet and, by extension, our survival on it, we as a global community have failed to take meaningful steps to shift our behavior and change course. As a legislative Body, we have a particular responsibility to recognize the urgency of our climate crisis and to craft policy solutions to address it.

So while we recognize Earth Day on April 22nd, let's not forget to honor our Mother Earth on the remaining days of the year and commit ourselves to a cleaner, healthier, and safer planet. Happy Earth Day, everyone.

ACTING SPEAKER AUBRY: Thank you. On the resolution, all those in favor signify by saying aye; opposed, no. The resolution is adopted.

We have numerous other fine resolutions we will take up with one vote. On these resolutions, all those in favor signify by saying aye; opposed, no. The resolutions are adopted.

(Whereupon, Assembly Resolution Nos. 162 and 174-179 were unanimously approved.)

Mrs. Peoples-Stokes.

MRS. PEOPLES-STOKES: Mr. Speaker, I now move the Assembly stand adjourned until Wednesday, 10 a.m., Wednesday is the 21st of April. We will be starting at 10 a.m., and it is a Session day.

ACTING SPEAKER AUBRY: The Assembly stands adjourned.

(Whereupon, at 4:48 p.m., the Assembly stood adjourned until Wednesday, April 21st at 10:00 a.m., Wednesday being a Session day.)