- 10:01:27 California will provide you with information about delaware's clean transportation program, and we'll start conversation with you about the development of our regulation, and how we will go about reducing vehicle emissions, with that
- 10:01:41 look with that. Let me introduce to you our delware team I'm Valerie Gray and i'm the program administrator for the division of air quality and i'm responsible for air quality planning and
- 10:01:56 developing policies and regulations that will help delaware meet the Federal health based and environmental, based clean air standards with me.
- 10:02:07 Today. I have Jennifer children's and Lauren Higgins.
- 10:02:09 They are administrative staff. and they'll be helping run the seminar or workshop today, and keeping logistics and keeping our meeting out with me today.
- 10:02:19 I also have Jim Coverdale, he's our program manager, and he is
- 10:02:24 He has programs that include air toxic greenhouse gases.
- 10:02:30 And our mobile source programs also with me today is Kyle Crawl.
- 10:02:32 He is our technical staff engineer, and he is going to be responsible for developing the regulatory documents that will be presented throughout the room making process.
- 10:02:43 We also have colleagues from division of climate, coastal and energy, who are important partners with our clean transportation programs.
- 10:02:52 Susan. Love is the program administrator for the climate programs, and with her is Brand Person, who is a planner with our climate program.
- 10:02:59 And she can answer any additional questions. You might have complementary policies and programs that support clean transportation, and also with us today.
- 10:03:10 We may have some support staff from Delta This is Jim Papa and Stephanie Johnson, and they will be here to hopefully answer any questions you might have on Dot's work to help reduce the impacts of
- 10:03:22 transportation system on our health and the environment
- 10:03:28 So with that hopefully. Zoom! meetings now. our routine and you all know how to manage the features such as raise such as mute Raise your hand
- 10:03:40 Today's we're going to be using the Zoom meeting feature, and this will allow us all to have an opportunity to use our microphones to speak when you're called upon by simply raising your hand.
- 10:03:49 If you're not familiar with zoom, hopefully the the mute button is located in the bottom left hand corner, you could click on that in the camera.
- 10:03:59 Icon is to be located directly next to that and That will help allow us to see you on camera is that we were all in one room together. when we get to the discussion part of Today's meeting I Would really like to encourage
- 10:04:12 you all to use your camera, if you have them so let's go over the race and to speak this should be also at the bottom of your screen.
- 10:04:23 And this will allow you to raise your hand and we'll call on you as as well.
- 10:04:29 Note and allow you to open up your microphone by pressing a mute and speaking In addition.
- 10:04:35 You may have heard at the very beginning of the workshop that will be recording this workshop.
- 10:04:40 This will help us to ensure that we've gathered all your input and feedback regarding this regulatory matter
- 10:04:51 And today we hope as I mentioned, we hope to talk about our clean transportation emission reductions from the transportation sector, and also provides you a high-level overview of what the advanced clean car program 10:05:06 is, and how it will help us to reduce vehicle emissions.
- 10:05:09 We hope that you will assist us with the development of our regulation by providing your input and feedback
- 10:05:22 These are the 4 objectives that we hope to explain today is what Delaware is.
- 10:05:29 Their problem is, or the air quality problem that we're currently experiencing as well as identify any key concerns that you all may have, and any barriers that we have for implementation as well as provides you a very high level of
- 10:05:44 what the clean car program is and what It is not but first let's begin with a quick overview of how the department develops a regulation and present the information that'll find at the final step which is our formal public 10:06:01 Hearing this past march, Governor Carney directed the Department to begin the process for adoption of the advanced clean car amendments which include the 0 emission standards.
- 10:06:14 The department begins all our regulatory processes with the development of what we call a start action.
- 10:06:21 Notice. This is the department's document that provides a brief statement on why a regulation is to be amended or adopted.

- 10:06:30 Once the start action notice is approved by our Cabinet Secretary.
- 10:06:34 It is posted on our Denver website under the administrative law.
- 10:06:38 Tab under the regulations tab so if you go to our website. you'll see the administrative law banner, and you can click on that click on regulations and you can find all our start action notices for any regulatory matter
- 10:06:53 that's currently in progress. Once that start actually notice is approved. The document is then sent to the Den record by the Denmark Register registrar 2 members.
- 10:07:05 Of the House Natural Resources and Energy Committee, as well as the Senate.
- 10:07:10 Environmental Natural Resources and Energy Committee. then our next step, which runs concurrent throughout the entire process, and is the development of technical support, documentation and the regulatory flexibility act and regulatory impact statements.
- 10:07:29 And today's meetings is very important to us because it will help us develop those documents which are expected to be completed in the coming weeks following meetings with our keystakeholders, and these are folks that have identified
- 10:07:43 themselves as either compliance entities or having a keen interest in clean transportation strategies.
- 10:07:48 We will we're holding our public workshops at which you're attending the first one today where we present the program to you to receive public impact input and receive your feedback.
- 10:08:04 The comments received following today's workshop and the rest of this week we will be accepting those through decide.
- 10:08:11 We're also scheduling another series of workshops to dive deeper into the program and answer any other questions that you may have in December, and those will be held on the thirteenth and the fifteenth of
- 10:08:25 December at 6 Pm. and that information is also posted on the direct website.
- 10:08:31 So once we're finished with the workshops the air quality staff, then the documents necessary for the public hearing, which include the proposed regulatory text, the technical support documentation and that includes any comments that we've received prior to
- 10:08:51 public hearing. Then, once we've developed those documents, the regulatory text is then published in the Delaware Register on the first day of the month prior to the public hearing, the administrative procedures act requires the public
- 10:09:08 hearing. we held no less than 20 days after publication in the Delaware Register.
- 10:09:15 So we publish them on February first we could hold a hearing on February 20 first.
- 10:09:23 The public hearing, for this particular regulation is not anticipated to occur until early 2023.
- 10:09:28 So February March timeframe is what we're targeting the comment Period for this regulation will remain at least 15 days after the public hearing.
- 10:09:40 Air quality staff will then prepare a response to comments.
- 10:09:44 Memo, which we call a technical response memo that responds to your comments that we received during the formal public comment process which begins once the proposed regulation is is published, and this is a period of about 45 days that you'll
- 10:10:00 have so from the first, through 45 days after the hearing officer then prepares their hearing report and a recommendation.
- 10:10:09 The Secretary's order. I need to remind everyone that the secretary is the one who makes the final determination on this matter, and he has not done that.
- 10:10:17 So yet. so he will make that deterministic based upon the technical support documentation that Staff prepares for the public hearing your public comments that we receive, as well as the hearing officers report and his decision on This matter is expected
- 10:10:34 to occur sometime in mid 2023. What are the things I need to note that because Delaware incorporates by reference the mission standards developed from California in order to do that we must wait for California to complete their
- 10:10:50 administrative law process. California has already filed their their final regulations with their offices.
- 10:10:57 Administrative law, and they expect that decision to occur sometime this month.
- 10:11:04 They have until the end of november to to make that determination.
- 10:11:12 So Now, if you'll bear with me i'd like to provide you some information about Delaware air quality Delaware's made significant progress toward cleaner air I placing requirements on our industrial and power sector by
- 10:11:28 installing pollution, control equipment, and, as you can see, the industrial sector and our power sector comprises only 18% of our Knox emissions and nitrous oxide is a
- 10:11:39 precursor to ozone. And now our transportation related emissions is a key source of this, not submissions, and

they impact our ability to achieve the clean air standards.

10:11:56 This graphic from real Epa really helps to pick the formation of ozone.

10:12:00 The knocks emissions from our tail pipes, along with volatile organic compounds mixed with heat and sunlight in the atmosphere, to form ground level ozone in delaware our

10:12:12 vehicles remain our largest single source of aissions, performing ground level.

10:12:17 Osm, and, as we may know, ground level ozone results in detrimental health impacts, especially for our sensitive populations. so reducing ozone pollution will result in fewer premature deaths asthma

10:12:32 attacks, especially for children who are more likely to have asthma than adults, and less than the number of hospitalizations for cardiovascular and respiratory illnesses

10:12:48 As I mentioned, by requiring our industrial sources in our power sector to install advanced pollution control equipment.

10:12:54 We've seen a many reductions over the years, but our regional pollution levels remain above the Federal health based standard for ground level ozone, and because these levels continue to exceed the standards.

10:13:09 The American Lawn Association continues to give New Castle County a failing grade.

10:13:14 Year after year. So more reductions are really necessary to protect our health, particularly for those communities that are located near our major highways.

10:13:23 These communities are also likely to experience a higher health burden from transportation.

10:13:29 Related emissions. This slide provides us a snapshot of how ground level ozone forms on a summer day.

10:13:39 It shows where ozone is forming. in our region.

10:13:44 Just this past June. The orange segments are of real interest, because it shows where the air quality is deemed unhealthy for sensitive groups, such as our kids with asthma and our senior citizens may have underlying

10:13:56 health concerns as a required by the clean air act thepa identifies areas or regions in our country where the health based standards are exceeded is not attaining the standard, and they're called non attainment areas

10:14:14 Delaware's new castle county along with Maryland.

10:14:19 Cecil County is linked to the greater Philadelphia area as a key contributor to the region's air pollution. and that's because many folks in Delaware and Maryland traveled to the

10:14:29 Philadelphia area every day for work and they're thereby contributing their emissions to the entire area.

10:14:34 A key source of that pollution is, of course, our cars or transportation, especially along the I.

10:14:42 95 corridor where we see higher emission levels in ozone precursors and particular.

10:14:49 Now let's consider the impacts transportation has on greenhouse gas emissions in 2,017.

10:14:56 Governor Carney committed to reducing Delaware screenhouse gas emissions by 26 to 28% from 2,005 levels by 2,025. by joining a coalition of States in the Us.

10:15:10 Climate, alliance, Delaware Greenhouse Gas Inventory.

10:15:13 As resulted That we do has shown that we've reduced emissions by 18 percent by 2,016 still have more to do so.

10:15:25 This target, which is based upon Our inventory was was used in our climate action plan, and it shows that we've still not ethical.

10:15:36 The plan was released last year, and looks to identify action.

10:15:41 The State can take to ensure that we meet or exceed this target.

10:15:47 And one of those records for us to adopt additional measures to reduce emissions from the transportation sector

10:15:57 So let's consider the impacts our vehicles have on contributing per on contributing to pollution.

10:16:05 We find from a health perspective. Vehicles are now our primary source of small forming nitrogen oxides, and find particular matter that worsen public health impacts, diesel engines, and at high levels of particular matter

10:16:19 which is an airborne particles of soot and metal, and these cost scans and I irritation allergies, and the very fine particles actually launch deep within our lungs, where they cause numerous help

10:16:33 respiratory impacts, harmful levels of these plants, exacerbate asthma, and other cardiovascular illnesses, especially especially in our children and older adults, leading to additional hospitalizations, and premature death

10:16:49 on the environmental side the effects of car pollution are widespread, affecting air, soil, and water quality.

10:16:57 Nitrous oxide contributes to the depletion of our ozone layer, which shales the earth from harmful ultraviolet radiation from the sun oil and feels spells from our cars seep into the soil near our highways

10:17:10 and discarded fuel, and particulates from vehicle Emissions also contaminate our likes.

10:17:15 Rivers and wetlands, our overburdened and under served communities that reside near our major highways, and are disproportionately impacted by pollution from our vehicles.

- 10:17:27 The tailpipe emissions worsen the health of our children, who suffer from asthma, or our elderly, who have copd or other chronic health impacts.
- 10:17:40 So if you'll continue to bear with me just a bit longer, i'd like to provide a very quick tutorial on the clean air act, and what the mechanisms that are in place for us to reduce our
- 10:17:54 tail pipe emissions from our vehicles.
- 10:17:57 Congress established 2 mechanisms for tools for addressing vehicle emissions.
- 10:18:05 One is through Federal action, through mission standards or the adoption of stronger tailpipe emission standards that California has adopted.
- 10:18:15 The Federal mission standards for vehicles, known as tier 3 we're adopted by Epa in 2014, limiting the amount of sulfur and gasoline and further reducing knots and other pollutants and
- 10:18:27 these Federal standards initially covered model years, 2012 through 2025, with the most recent amendment announced last December will include model years, 2,023 through 2,026 Epa announced in
- 10:18:44 march. the reissuance of the California waiver for the 2013 events. clean cart program, including Zeb sales and greenhouse gas standards.
- 10:18:54 And Epa also withdrew the interpreted view of the Clean Air Act Section 1, 77, which included in its 2019 action.
- 10:19:02 It States may not adopt the California greenhouse gas standards for it to section 1, 77, which is in the cleaner app.
- 10:19:11 Even if Epa had granted California waiver accordingly then other States make continue to adopt and enforce california's, greenhouse gas standards, under section 77 State.
- 10:19:22 So so long as they continue to meet the requirements for that section.
- 10:19:26 So who are these ones? 77 States? This is a up graph of the one the 17 States that have selected to adopt the California program.
- 10:19:40 These States in combination represent over 40% of the nation's vehicle market. Delaware and Pennsylvania are the only 2 States that only adopted 2 components of the program which we'll go
- 10:19:54 into, later.
- 10:19:58 So Congress provided us with 2 options. When it comes to reducing pollution from cars and drops, we can either adopt the California program, we can accept the weaker Federal tailpipe emission, standards, by adopting 10:20:11 the California standards, the States can protect themselves from future Federal robots.
- 10:20:18 However, we have to check a couple of boxes. We must establish identical regulations, and we must provide the auto industry.
- 10:20:25 2 years advanced notice. So let's dive into what is the advanced clean car program.
- 10:20:32 So it was first adopted by California in 2012 which was over 10 years ago, and they're currently in place today in California has recently amended those. This program, which the adoption of advanced clean cartoon so it.
- 10:20:49 Has 3 elements. The love program provides increasingly stringent emission standards for both criteria and air pollutants, including precursors to 2 o'clock and greenhouse gas emissions for new passenger
- 10:21:06 cars through model year. 2025 carb adopted new emission standards to reduce the small forming emissions, beginning with model year, 2,015, and implemented. this implementing.
- 10:21:20 This was estimated to result in cars emitting 75% less small, forming pollution by 2025 than the average car sold in 2,012.
- 10:21:34 The greenhouse gas was developed in coordination with the Epi and the National Highway Traffic Safety Administration, and you and they harmonize those with the greenhouse gas emission standards and the fuel economy 10:21:49 standards, Epa doing the greenhouse gas portion and national highway doing the fuel economy standard is that regulation which is in the bottom part of this triangle is designed to achieve this long term emission reduction goals
- 10:22:07 by requiring auto manufacturers to offer specific numbers of the cleanest cars available for sale.
- 10:22:15 These vehicle technologies include full battery, electric hydrogen, fuel, cell, and plug in hybrid vehicles, and, as I noted, Carb first adopted these requirements back in and 1990 as part of
- 10:22:29 their love regulation. So over the past 30 years zoom regulation has been modified to reflect the state of technology modifications adopted in 2,012 along with the other 2 advanced clean car components have set the nation on 10:22:47 a path toward Zeb Commercialization or 0 Mission vehicle.
- 10:22:52 Commercialization with the resurgence of battery technology, enabling autom manufacturers to offer competitively price 0 mission vehicles to our consumers.
- 10:23:03 So the question we have to answer is, What is the best program for reducing emissions in Delaware that will improve our quality.

- 10:23:13 Delaware, and the greater Philadelphia area remain in non attainment for the health based ozone standard, and we're obligated by the Clean Air Act to identify and implement additional policies and regulations to
- 10:23:25 reduce ozone pollution with vehicles, being the largest contributor for that ground Level ozo formation.
- 10:23:33 We believe that additional policies are necessary
- 10:23:45 As I mentioned, back in March of this past year, our Governor directed the Department of Natural Resources and Environmental Control to begin regulatory development for the adding 0 mission vehicle standards to our strategies for reducing and
- 10:24:02 controlling emissions from our vehicles let's Remember that the current vehicle program has been in place for Delaware since model year, 2,014, and continues up through model year 2,025
- 10:24:17 gasoline and diesel power and vehicles on the road will remain on the road, adding the 0 mission vehicle element.
- 10:24:26 Only addresses the delivery and sale of new vehicles in Delaware.
- 10:24:32 So let's talk about the vehicle emission standards and what it means for us in nowhere.
- 10:24:38 Well, let's talk about the who the auto manufacturers hold the compliance obligation to produce and deliver for sale new vehicles that a meet mission standards the What Well, we'll
- 10:24:52 Delaware will we realize real reductions in vehicle missions from delaware's passenger cars, light duty and medium duty vehicles when or the is beginning with model year
- 10:25:05 27 that commences on january the second of 2026, and that's a little confusing it actually commitments with the model.
- 10:25:14 You're 2027 well where well that's the new passenger cars, and like duty trucks will be delivered for sale and delaware and recall that autos have announced
- 10:25:25 numerous products. I don't think you can watch television anymore without seeing a new car.
- 10:25:32 Advertisement. So the Y is really, we need to reduce emissions from transportation and help us to achieve the federally based health based air quality goals
- 10:25:51 So again. this means that you is a vehicle owner.
- 10:25:56 Do not comply with this program. The program does not ban gasoline or Diesel vehicles and recall that overall 0 Mission fleet is projected to be only about 35% of our total fleet by 20
- 10:26:11 35. The compliance obligation is achieved by the auto manufacturers by designing, producing, and certifying their products to meet the requirements before delivering for sale in
- 10:26:23 Delaware, and numerous many of our large
- 10:26:28 Other manufacturers. Forward, Volvo Gm.
- 10:26:30 The already announced their plans develop 0 emitting vehicles to deliver to the market.
- 10:26:37 Hey? So and that's I mentioned you may have seen some of these advertisements.
- 10:26:47 For these new vehicles, and I believe by 2025, they expect to have well over a 100 new vehicle products on the road.
- 10:26:59 So for Delaware. This program would commence with model year 2027, and this is due to the timeline of California's adoption.
- 10:27:10 California's program commences with model year, 26 which begins on January second 2025.
- 10:27:17 And because we have to give 2 years prior notice, our program will be with model here.
- 10:27:27 2027. Hmm. So remember that the advanced clean cartoon requirements only apply to V
- 10:27:53 Just cut off. Okay, salary there's no sound coming from your microphone.
- 10:28:00 Can you go back, up, slide, and start again
- 10:28:07 Can you hear me now? There we go by apologies.
- 10:28:14 Okay, So remember that the advanced clean car program applies to vehicle manufacturers and not vehicle owners.
- 10:28:24 Meaning. If you own an internal combustion engine killed by gasoline or diesel, this program does not apply to
- 10:28:35 This slide picks the transmission of our fleet from an internal combustion engine to a 0 emission fleet.
- 10:28:45 But by the end of the program, in 2035 there will still be numerous vehicles on the road.
- 10:28:50 That will be fueled by fossil fuels so Let's take a quick look at our regulations.
- 10:29:00 We're proposing that we change the title from low emission.
- 10:29:04 The other program to the advanced clean car program We'll also be amending the applicability and add Z requirements as well as incorporating by reference various sections of the California program.
- 10:29:19 They're also numerous flexibility mechanisms that are included. manufacturers can fulfill a portion of their

total annual z requirement with plug-in hybrid vehicles that

10:29:31 are produced and delivered for sale in Delaware.

10:29:35 Manufacturers can also fulfill a portion of their total annual 0 mission requirement with additional vehicle values earned through according to the following provisions: New vehicles news to have electric

10:29:52 vehicles and plugin hybrids provided for the use of community based clean mobility programs.

10:29:59 New, 2024 through 2031 model year, 0 mission vehicles and plug-in hybrid vehicles provided for use and community-based mobility programs vehicles sold at the end of the

10:30:15 lease in participating dealership can also earn credits as well as I.

10:30:23 Manufacturers can provide 0 mission vehicles and plug-in hybrids below. the manufacturers suggested retail price, threshold, and earn some credits.

10:30:32 There, as well as fulfill a portion of their total annual Z requirements.

10:30:38 With early compliance on values earned and in addition There's a program for pooling which allows provides flexibility for our manufacturers from model years 2,026 through 2030 allows the

10:30:54 manufacturers to move specified percentages of excess credit values earned in one state for use in another state, where a short fault as a current relative to the requirement Now let's look at the environmental impact.

10:31:13 The total emission reductions by 2035.

10:31:17 We over realize 541 tons of Knox, Emission reduced as well as 40 tons of Pm.

10:31:26 2.5, and the well to wheels. Estimate for Co.

10:31:29 2 emissions is over 5.7 million tons

10:31:38 The annual health outcomes for dollars adoption of the advanced clean card, 2 estimated using Epa's cobra model.

10:31:46 The cobra model estimates the change in the number of cases and their economic values.

10:31:51 For Pm. 2.5. These are the Associated Health impacts. The aggregated economic values combining all health effects, are summarized here in general, adopting the advanced clean cart 2 reduces on road mobile emissions

10:32:07 from gasoline production and just distribution emissions and the net health benefit of these emission Changes result in an overall 23 million dollar benefit, and looking at the total cost of ownership of a zev in

10:32:31 comparison to gasoline or dieselfield vehicle owning a battery electric vehicle.

10:32:37 You're expected every 10 year life to realize a savings of over \$8,600 during that time frame and that's with the home charger installed with with no home charger installed you're still expected

10:32:53 to realize a net benefit of \$1,500 whereas in a plug-in hybrid.

10:33:01 It might cost a bit more, and it's expected that your overall cost of ownership is \$2,100

10:33:12 So let's do time check work 1030 so I am going to pass the microphone over to Brian person who will give us an overview of the complementary incentives, and programs we have with in the state of

10:33:29 Delaware. Brian. Thanks, Valerie, otherwise I still have my my background on from last night's first.

10:33:39 So let me keep that also. alright, so you can go ahead and get over to the click over to the next slide for me.

10:33:44 Please. Alright, so as Valerie has mentioned, the you know, the transportation sector is the largest contributor to air pollution, and has been for quite some time, and so we know that the pollutants that come from

10:33:57 tail Pipes have all kinds of negative negative effects on the environment and on human health which you saw on that in that slide that that Valerie had, which is why the foundation of the clean air act is to improve public health

10:34:09 models show that 0 emission vehicles have the largest impact on our greenhouse gas.

10:34:14 Reductions or we'll. have the largest impact on our green greenhouse gas reductions not only here in the State, but nationally and and globally.

10:34:22 You know we all. we all share the the air here.

10:34:25 So you know the the techn, the technology for 0 emissions is electric vehicles, the end 2030, 50 years from now that technology might be something different.

10:34:34 But right now it is electric vehicles and that's where our focus has been with the complementary incentives, policies, and programs that have been put into place.

10:34:43 Next, slide, please.

10:34:50 So our most public facing program that has been foundational to our progress that we've made in the clean transportation incentive program.

10:34:59 The program has been in place since 2,015, and it continues to grow and change with the market Our first funding round was in 2,015 to 16 and that program paid out 292

10:35:12 rebates that that during that first funding round and since just July first of 2,021, we've issued over a 1,000 rebates between the 2 programs which are a rebate program for ev's so that's going to be for

- 10:35:25 businesses and residents we and such and that's up to \$2,500 for the purchase release of a plugin hybrid vehicle or a battery electric vehicle with a
- 10:35:35 purchase price of under 60,000 and then there's also a rebate program for the purchase of charging stations.
- 10:35:41 And so that That program supports more public access and workplace athletes, and those who live in multi-unit or multi-family dwellings.
- 10:35:50 And so we do provide more funding to the multi-family dwellings.
- 10:35:54 Since a large portion of people live in those types of housing.
- 10:35:57 Situations. so at her at home charging, and has been quite a barrier for them to purchase an Ev.
- 10:36:05 And so many complexes in the State, particularly in Newcastle County, have started to recognize this and the value of offering this amenity to their tenants, and are beginning to start them installing them.
- 10:36:15 Next slide, please. So to curve some of the range.
- 10:36:21 Anxiety. that comes along with adopting Ebs.
- 10:36:25 Delaware has had a few funding opportunities to expand our fast charging network here in the State.
- 10:36:32 So under the Volkswagen mitigation settlement, Delaware did receive 9.6 million for emissions.
- 10:36:39 Reductions and States were allowed to use 15% of those funds for ev trying.
- 10:36:46 And Deller did choose to choose to use it's it was 1.45 million to expand the charge.
- 10:36:52 The fast charging network here in the State. So through the E competitive Rfp.
- 10:36:57 Process. we received about 8 million in funding requests, so we had some hard decisions to make, But 14 locations were chosen that do include downtown locations, hotels, and traditional gas stations, and even some fast food 10:37:09 restaurants. So one of the many line items under the bipartisan infrastructure role is the national electric vehicle.
- 10:37:16 Infrastructure formula funding. And so over the next 5 fiscal years, Delaware, namely, Del Dot, will receive 18 million for the installation of Dc.
- 10:37:27 Fast charging stations along the State along the States alternative field corridors.
- 10:37:32 And so those are routes one 1413, and the short section of I 95.
- 10:37:39 Here. There are specific requirements for that funding, and there must be at least 4 ultra fast charging stations at each location, and locations must be at least or no no more than 50 miles apart from one another, and no more than
- 10:37:53 one mile off of the highway, and so since delaware is so small that actually is not going to take that long. 10:37:58 And so we'll be first once again. and so We'll be able to expand that network out even further.
- 10:38:04 And Delaware has chosen a goal of a fast charging station.
- 10:38:08 Every 25 miles, so the Navy funds will be, will also be deployed through the competitive Rfp.
- 10:38:14 Process, as the State of Delaware does not plan on going and operating Dc.
- 10:38:19 Fast charging State, they here in the State. We are just simply that on the funding mechanism for that.
- 10:38:27 So once the Us. department of transportation secretary declares that Delaware's outfield corridors have been fully built out, we'll actually be able to use the remaining funds for
- 10:38:35 computers charging so that's going to include rural areas disadvantaged communities, and those who are living in multi-family dwelling communities as well.
- 10:38:44 So the map here that you see, is a quick snapchat of where all the planned locations for Dc.
- 10:38:50 Fast charging stations will be between those 2 funding opportunities.
- 10:38:53 I just talked about. so as you can see eb drivers will have plenty of opportunities to fast charge along their journeys, and we're also paying attention to what the surrounding States are so that we what they're doing
- 10:39:06 and where their plan locations are so drivers. will feel confident that they can travel between the States and get a charge when needed without fear or worry that they're gonna run out of.
- 10:39:16 Choose next slide, please, energized Delaware. Okay.
- 10:39:22 Recently introduced a new brand program that is available for our local and county governments, which provides up to \$500,000 for the purchase of electric vehicles the respective charging stations, electric motorcycles, and 10:39:34 electric lawn equipment. Well, the local and county governments can also use the funds for feasibility studies to help them transition their fleets to 0 emission vehicles and equipment next slide please so
- 10:39:48 more of a power, and the Delaware Electric cooperative offer programs for Eb drivers to save money while charging their vehicles.
- 10:39:55 During off-peak hours. So the electric Cooperative has a program for their customers who install a charge point charger in their home, and can receive a billing credit of \$200 plus an additional 500 or 5
- 10:40:09 \$105 discount a month during the beat the peak months, and so they do require a specific charger, so that the operative can monitor and regulate the energy usage for even charging and assist in that and that

- 10:40:21 off peak beating the peak. So it is only available for those cooperative customers.
- 10:40:28 And for don't have a power eligible del Marva Power residential customers in Delaware can receive a special time of use.
- 10:40:35 Rate specific to plug-in ev charging and that rate does provide the benefit of reduced electric bills for customers when they charge their vehicle during off peak hours.
- 10:40:46 So there's a quick snapshot of those programs next slide.
- 10:40:51 And so over the last few years they heard that there has been an increase in the need to create ordinances and regulations and codes relating to Ev charging.
- 10:40:59 So in 2,019. the Public Service Commission determined that Pb. charging stations are not a utility, and would not be regulated as such.
- 10:41:08 The last year the Newcastle County Government passed a requirement that all new construction, so that includes parking lots, residential housing, commercial buildings, anything being constructed.
- 10:41:18 It needs to be made what they call make ready for ev's, meaning that the sites need to be prepared for ev charging.
- 10:41:26 They don't actually have to put the station. in But they need to make that site available and ready for a station to be installed.
- 10:41:33 So that means the lines run circuits on the panel, and in all of that, So and that's for commercial properties again and residential.
- 10:41:41 The State also recently passed a low, directing the cities of Roman Tim, Dover and Newark to develop ordinances for residential streets, street parking, so that law requires the cities with populations of over 30,000 which is why
- 10:41:53 It's specific to dover New York and momentum so these ordinances will likely be shared and copied by other governments.
- 10:42:00 When to to use when planning these ordinances goes, and regulations for their town next slide.
- 10:42:07 So, as I mentioned, a few slides back, one of the funding opportunities that will be available for charging is through the National Electric vehicle formula funding program, which is a line item line item under the bill bill
- 10:42:20 so States were required to submit a plan to the Federal Government, demonstrating how the Navy funds would be spent, and that plan was submitted and recently approved.
- 10:42:29 So we are waiting on further guidance from the Federal Government.
- 10:42:32 Before we can proceed. we need delta can proceed.
- 10:42:36 We are also developing a Delaware Statewide Ev charging infrastructure plan that Denrack and Del Dot has partnered on and we are consulting with the Eight-com firm to
- 10:42:48 to help us develop that. So this plan is intended to be a living document, and we'll initially initially tell us where charging stations should go and what types and what ev deployment will be over time and the charging station 10:43:00 deployment to match that and to actually focus on disadvantaged communities, rural areas.
- 10:43:05 And those who live in again those multi-family drugs.
- 10:43:09 The plan is also intended to help those who currently have evs, but also preparing areas that do not have high adoption rates.
- 10:43:17 Right now. So part of developing these plans is stakeholder and public engagement.
- 10:43:21 We have had already a couple of public workshops on on our infrastructure plan, and there will be some some feature workshops about when when the plan gets out for a public comment on that and then this past
- 10:43:34 legislative session The governor reinstated the State's energy advisory Council with the directive to update the State's energy plan, and so this plan will include energy needs for transportation and use projections
- 10:43:46 for ev's and models and planning and so this will ensure adequate generation and transmission to meet the upcoming energy transition needs and I think I'm done yep i'm gonna kick this back
- 10:44:01 over to Valerie, and come on so we'd like to open up this portion of our workshop for an opportunity for questions and discussion.
- 10:44:13 We particularly like you to be considerate each other by raising your hands and limit your points hopefully to the program that we're discussing which is clean transportation strategies.
- 10:44:26 So kill, raise your hand, will give it a go, and give people an opportunity to speak.
- 10:44:31 So I see Charlie Garlo, if you would like to speak.
- 10:44:35 Thank you. Hi, Charlie Garlo here from Ro Hope of Beach, Delaware.
- 10:44:42 I am the president of the Delaware Electric Vehicle Association.
- 10:44:45 We call diva. it's a consumers organization nonprofit advocating for more electric vehicles on the road, and

thank you to the Governor for the good steps that he has taken so far and to denreck and Del Dot and

10:45:00 others participating in the process. This process of encouraging more electric vehicles by adopting the California Ac.

- 10:45:10 2 all advanced clean cars to program we're all in favor of that.
- 10:45:14 We've been waiting for a long time for this to come and we'll probably be.
- 10:45:18 We've been advocating we haven't just been sitting there waiting.
- 10:45:20 We've been advocating for this for a long time in 1,987.
- 10:45:24 I had my first electric vehicle it. was a dodge which had been converted from gasoline to electric had lead acid golf cart batteries in it.
- 10:45:32 We've come quite away since then. and the number and quality of the electric vehicles that are on sale and are in my driveway is just marvelous.
- 10:45:42 They're terrific cars, they save us money they clean the air. They reduce our pocketbook costs for maintenance and fuel.
- 10:45:52 They cut down on the amount of oil that our country needs, that producing oil spills in the oceans, reducing the money that we would pay to patrolum dictators all around the world in Russia and Opec and
- 10:46:05 Venezuela and other places so it's good it's a win-win-win process to adopt the California Zev program.
- 10:46:13 I think i'm joined here today by several other officers and members of the Diva organization.
- 10:46:19 But if anybody would like to join our group we're glad to have you on a special give a shout out to Brian and others in the State Government staff, we've been very responsive to the needs and requests and education of our
- 10:46:31 members and others who are excited about this coming revolution of 100% electric cars being sold in our State and around the world.
- 10:46:41 Thank you back to you. Thank you. Susan Vatnik, I believe, is next.
- 10:46:49 Yes, i'm just gonna find my music here
- 10:46:57 Hello! So my name is Suva Nick I live in Northern Delaware.
- 10:47:02 I'm a retired special education teacher and a mother my i'm working with 2 organizations that are trying to put the brakes on climate change.
- 10:47:10 My family lives in a neighborhood very near interstate 95 in Newcastle County.
- 10:47:16 Over the 30 years we have lived here i've worried a great deal about the exposure to air pollution that my family has had.
- 10:47:25 Every time I clean the windows of our car or house I am wiping away black engines.
- 10:47:30 So it the black rhyme is what I can see what isn't visible are the plumes of dirty air drifting over our neighborhood and other neighborhoods in proximity to major
- 10:47:41 highways. These fumes are known to cause increases in the risk of cancer.
- 10:47:46 Asthma, heart disease, and other illnesses, According to a recent report of the American Lung Association, transportation and electricity are the leading sources of unhealthy air and pollutants that are causing climate change
- 10:47:59 transportation emissions was the largest source of greenhouse gas emissions in Delaware in 2,018. As you pointed out, earlier passenger cars and small trucks make up 60% of
- 10:48:10 delaware's transportation. you missions in the American long associations for recent report.
- 10:48:16 It was found that a national shift to a 100% sales of 0 emission passenger vehicles by 2035, and medium to heavy trucks by 2040, coupled with renewable electricity, would
- 10:48:29 Regent would generate over 1.2 trillion dollars in public health benefits between 2020 and 2,050.
- 10:48:38 I care about the health and well-being of my family and fellow, Delawareians.
- 10:48:45 I care about our climate. Clean air is a necessity, and a ripe for all of us.
- 10:48:50 I urge us, as Delawareians to move forward and adopt the Acc.
- 10:48:56 2 program for the Delaware for delaware it's the best tool States have for slashing emissions from the transportation sector.
- 10:49:04 Thank you. Thank you. Next step, I believe, is Mr. Stevenson
- 10:49:14 Thank you. took me a second to get the mute button off.
- 10:49:17 Sure. Yeah, I was many of you know I would. The Caesar Rodney Institute.
- 10:49:23 I have been a stakeholder in this process, and just would like to make it couple of statements here number one.
- 10:49:31 I think Delaware should not adopt the Acc. 2 vehicle permission standards.
- 10:49:37 First of all, it should we shouldn't be adopting this until the legal challenges to the California waiver are the
- California waiver. In the 1990 clean air Act is based on air pollution standards not great house case standards
- 10:49:54 0 emission vehicle program is based on greenhouse gas standards.

- 10:49:58 Primarily 17 States had file with a lawsuit we'll probably wind up at the Supreme Court based on the recently decided West Virginia versus Epa case.
- 10:50:13 I think this will be. This will be discovered as a major issue, and Supreme Court will will knock it down.
- 10:50:21 And that will that will knock down to California program and since Delaware's following California.
- 10:50:28 You you're wasting your time on that until they couldn't tell the case till that legal case is done.
- 10:50:34 Secondly The health improvement in the air quality has been amazing in the United States, and including vehicles, the since 1990 Docs emissions have fallen 83% because of the clean air
- 10:50:58 regulations, low missions, regulations, the Federal Government since 2,017.
- 10:51:05 They've had fallen 40% they're gonna continue falling because we're every year we get rid of more old vehicles, and we've got more of the newer vehicles.
- 10:51:15 We can probably see another without doing anything differently than we're doing.
- 10:51:20 Now we could probably see another 50% decrease in Knox.
- 10:51:25 Same thing with volatile organic chemicals.
- 10:51:30 The mission since 1990, a fall on 91% and 42% just since 2,017.
- 10:51:39 They will also continue to fall. Pm. 2.5 flying particle pollution.
- 10:51:46 Don't wear is way below the national ambient air quality standard, so is nitrogen dioxide to the point where only one of our 10 air quality monitoring stations even measures lectures and
- 10:52:00 dioxide. it's currently this past year was at 41 parts per 1 billion.
- 10:52:06 The standard is 100 parts per 1 billion. we've got natural sources of vocs.
- 10:52:12 And O. 2. In fact, the the standard for ozone is 70 parts per 1 billion.
- 10:52:17 This past year the highest monitoring station was in going to Delaware at 65 parts per 1 billion.
- 10:52:25 That's a 3 year average the epa projects that natural background.
- 10:52:34 Zone is being formed it's about 45 parts per 1 billion.
- 10:52:38 So 2 thirds of our pollution problem is is natural.
- 10:52:42 Trees and other plants. Not only has Delaware met all air quality standards, so have the closest 10 air quality man stations up wind of us, and Denmark has the option of instead of using a false claim that
- 10:53:05 we are not meeting standards. they can go back like they Didn't do 2,017 recommend you declare that we are standard, and that we can be removed from the Philadelphia greater Philadelphia area
- 10:53:19 regional program, since it's obvious it is pollution in Delaware is not what's causing pollution.
- 10:53:28 Upwind in fact, it's the as I said, Those stations are now also meeting all hair quality standards.
- 10:53:36 So you're estimates on the that the economic benefits of this program are way off, base you're saying \$4,500 in premium charges.
- 10:53:48 If you take there are apparently about 9 models that have the exact model in gasoline and we and electric vehicles, they're averaging \$14,000 more per year.
- 10:53:59 There's no way you're gonna make up that cost difference over the life of the vehicle batteries last about 8 years.
- 10:54:08 The only company that says how much the replacement cost is sharing away.
- 10:54:12 And they're saying \$17,000 to replace the battery.
- 10:54:17 Somebody buy or used ebay he's gonna be buying a pig in a coke, So there's a whole bunch of reasons why I think some of your assumptions are wrong.
- 10:54:27 I have written public comments, and we'll write additional public comments as we go forward, get the assumptions right.
- 10:54:33 I get the lawsuit behind us, and you know everything has been done by an executive order from the Governor.
- 10:54:41 That's a week basis for. doing this this is a major issue, even to tell people what they can and cannot buy you're going to buy a force them to buy.
- 10:54:54 And, by the way, when this is a 100% ev's you will not be able to register a new car in Delaware unless it's an eb, you are freezing out gasoline cars when you had a
- 10:55:05 100% of this requirement use. cars Yes, they'll be around for a while, but new cars. but once we get the 2, 100% number.
- 10:55:13 You will not be able to register a an ev anything other than an ebay can Delaware.
- 10:55:21 So I think with something, this, Major, we need legislation.
- 10:55:25 From our Delaware Legislature. I just like to.
- 10:55:29 Epa was challenged at Epa versus west Virginia.
- 10:55:34 You can't do this kind of a major program without the legislature involved.

- 10:55:40 You're you're not providing. enough money for low income people to do it for these things that's money that has to be approved by legislature.
- 10:55:49 So with that I can go on. but I will stop at that point Ev's are great.
- 10:55:53 People want to buy them bye but we're making progress without the bees on air pollution, and everything else.
- 10:56:00 We don't need a a mandatory regulation from doubtful
- 10:56:07 Thank you. I think our next hand raised is tea.
- 10:56:12 Porter. Hi! yes, i'm my name is Tim Porter i'm from the border auto group in New York, Delaware.
- 10:56:19 I just had a simple question. Can you forward these slides to the participants?
- 10:56:24 On our website. Okay, Yep: provide that information awesome. Thank you.
- 10:56:35 But they are available on the website. I appreciate it. Thank you.
- 10:56:39 And then our next one is Ms. Myers, with the Delaware Electric Co-op
- 10:56:50 Alright, I had a couple of questions about the program through a couple of different agencies the first one.
- 10:56:55 Are we looking to move to the to Acc. 2 or Acc.
- 10:57:01 One a Cc. 200% of your vehicles by 2035 that's the goal.
- 10:57:09 Okay, The next question I have is about the funding for electric vehicle charges, including fast chargers.
- 10:57:20 So right now in the State, we gave out 1 point: 4 billion dollars, 1 point, 4 million dollars to rural farms and charge point to install Dc.
- 10:57:30 Fast charges in our State, and we do not have a, and none of those charges now are working.
- 10:57:37 When the next round and funding comes through, are they going to be eligible to reapply from more of our State funded funding for their chargers?
- 10:57:49 I can answer that, cj they those stations would be slated for the Navy funding, so that's the Federal funding in the bipartisan infrastructure.
- 10:57:57 Wall mainly because they're in infrastructure is really kind of there.
- 10:58:02 But it would be up to the private industry to go after those funds to upgrade this.
- 10:58:09 So we did have some interest with the folks. Finding funding did not choose to upgrade those stations with that funding we chose to.
- 10:58:14 But other stations in other locations that they will be selected for the Debbie funding when that becomes available.
- 10:58:20 Yeah, I guess my problem is that we we've already given them 1.4 million dollars, and they've done nothing with it.
- 10:58:27 And now we're left with right now with electrified America at currently being upgraded.
- 10:58:32 The entire State has one fast charger that is not Tesla. one port over the entire state, so it's not possible to drive electric vehicle through our state for fast charging.
- 10:58:47 So you know they've put the they've put us in a situation a year ago, and it you know they're not gonna do anything about it until they get more money from us I just don't see why we forgiving that more
- 10:58:55 money. The next question I have is is also with you know, interagencies mixing in between
- 10:59:04 We currently have the dmv that's currently blocking several audit manufacturers from selling your vehicles in our State that want to sell our State?
- 10:59:13 How does den reckon Dmv. and Bell Dot work together on making sure that vehicles are available in our State?
- 10:59:21 So currently Tesla, the whole star lucid and Rivian all would like to sell vehicles Aren't State, and have requested licenses to sell in our State.
- 10:59:32 But the Dmv has blocked them. I believe that's a legislative matter, and I believe it's being carried on through the General Assembly.
- 10:59:42 Okay, that's all for me, thank you
- 10:59:51 Hi my name's John erwin i'm a resident of Newcastle County, a volunteer this year club, a pair, and a volunteer at a Democratic school Here I urge you to fully adopt the acc to
- 11:00:06 rules is adopted by California. we've heard again at the cop 27 in Egypt, that we're not reducing emissions enough to meet our commitments made in Paris.
- 11:00:14 We need to accelerate our efforts at every level of government to make real measurable changes to turn that around here in Delaware transportation's largest emitting sector the economy.
- 11:00:27 The Acc. 2 rules should be an essential part of reducing our contribution to the greenhouse gas emissions going forward as well as reducing contribution of transportation to our severe air pollution.
- 11:00:42 Problems we've heard today and know from research by the American Lungs Association.

- 11:00:46 We need to improve our air quality here in Newcastle County especially.
- 11:00:50 It all across Delaware Acc. 2 would require healthier standards for tail pipe emissions that would directly improve air quality in the neighborhoods around heavily trafficked areas.
- 11:01:03 I'm lucky not to live near a heavily traveled road, but I care about all the people who do.
- 11:01:08 Delaware has a large problem with asthma it's an injustice that air quality is generally worse underserved communities and communities of people of color.
- 11:01:17 We need to make better electric vehicles and lower mission vehicles, much more accessible to all people in dollar, not being signed on to the Acc.
- 11:01:28 One program fully, we haven't had local access to a full range of clean running vehicles. delhi's often have to buy out of state to find the right car for them.
- 11:01:38 I want to be able to choose from local dealers and be part of the transition to a clean, driving future.
- 11:01:45 We also need to build programs to increase access to people in the communities with the worst air quality, so that all Delawareans have a chance to participate in this transition and improve their local air quality.
- 11:01:59 Fully doctoring Acc. 2 with its health, promoting standards, encouragement.
- 11:02:04 The rapid transition to lower greenhouse gas emissions helps us both locally and globally.
- 11:02:10 Our climate. Scientists have told us that we need to do more to review submissions and do it soon.
- 11:02:16 I wanna pass on a world with a livable client to my son and to all children around the world breaks my heart to look at the young children at the school where I volunteer and think of the challenges they will face
- 11:02:29 we're already seeing the climate disasters let's do everything we can to reduce the severity of those dangerous possibilities.
- 11:02:39 What we do now will matter. Please face the reality of what needs to be done and do it.
- 11:02:45 Thank you very much. Thank you. The next hand raised is Mr.
- 11:02:50 Denmark. Good morning. My name is Clem Dinsmore.
- 11:02:55 Can you hear me? Yes, we can thank you i'm a member of the Delaware Sierra Club and volunteer at the port of Wilmington Seamen Center.
- 11:03:05 I offer 2 points. First, I am a weekly witness to the acute air pollution at and surrounding the port of Wilmington, associated with port operations, including the presence of oil.
- 11:03:16 Few ships decrepit tractors used by the port operator to move many thousands of intermodal containers within the port, and the huge volume of interstate Chup traffic associated with moving bananas other
- 11:03:28 fruit and other cargo from the port to their destinations.
- 11:03:32 This air pollution clearly, adversely affects the communities near the port and the city of Wilmington, generally pending drage and interstate truck tractors becoming less polluting the state of delaware has
- 11:03:45 the immediate opportunity of approving improving the state's air quality by adopting the Ac.
- 11:03:54 2 regulatory standard. Second adoption of the Acc.
- 11:03:57 2 standard will serve the economic self-interest of both Delware consumers and auto dealers who are rapidly adjusting to the transition from fossil fueled autos and light trucks to electric
- 11:04:09 vehicles. Delaware is a small part of the Mid Atlantic economy.
- 11:04:14 It. it's residents, and its auto dealers will benefit from the State adopting air quality standards that are both consistent with those adopted, or being adopted by our immediately neighboring States of Maryland and New
- 11:04:28 Jersey, and allowed Delaware residents to purchase ev vehicles within the State and Delaware audio dealers to participate in the Regional Ev market.
- 11:04:39 Such State action will save residents money while increasing Ev sales of Delaware auto dealers.
- 11:04:47 Thank you, thank you. Our next hand raised is Ms. Peggy Schultz.
- 11:04:58 Hi! My name is Peggy Schultz, and I live in Newark, Delaware.
- 11:05:04 Early this year I began my search for an electric car. I hope to find a new.
- 11:05:09 I called around to several dealers in northern delaware wasn't able to find one.
- 11:05:15 Then I tried to find a good used Ev with the same results.
- 11:05:21 Finally, in March, of friend who lives in rehabilitation, me to tell me he knew of a used electric car in Milford, 67 miles from my home.
- 11:05:32 It was an excellent condition, and the price seemed okay, so I bought it 67 miles away.
- 11:05:39 When I need maintenance, 67 miles away. When I have a question about the car couple of weeks ago, I asked the local Chevy dealer how long it would take to order a new bolt, and he answered that It would be about
- 11:05:53 8 months yet. if we had acc to, I probably would have been able to go to the same dealer and buy a car off the lot, and I could have driven a mile to get answers to my questions about the dashboard display

- 11:06:08 and to get the cars routine servicing done unknown to be tenacious.
- 11:06:14 So I didn't give up when I was looking for an ev but for those who don't have the luxury of patients there isn't much a Delawareian can do to get an ev in a timely manner with acc 2 delaware car dealers
- 11:06:29 would be given a required allotment of zeb's to sell, and my issues would be a thing of the past.
- 11:06:35 But we're not just talking about making things more convenient for a miscellaneous little old lady.
- 11:06:44 I want to do my bit to reduce air pollution and greenhouse gas emissions, and without access to an Ev that gets dicey, I have a tech part of the emissions problem by living in a walkable
- 11:06:57 bikeable community, but making sense and charging facilities widely available, would be a huge help
- 11:07:09 Thank you. Our next hand raised is Paul Johnston
- 11:07:20 Hello, I'm Paul Johnston, I am a disabled veteran, and then that severe asthmatic and a farmer here in Newcastle County.
- 11:07:30 I believe that this is the worst thing could ever happen to us.
- 11:07:33 You guys are talking about supply and demand and changing everything The force people that do not want to go with your system.
- 11:07:40 It's already been proven that we don't need to by changing the emission standards on gasoline powered cars.
- 11:07:50 We have lowered the emissions, we have seen the actual results.
- 11:07:55 If you want to follow science file real science on this and you'll see that the pollution levels are coming down.
- 11:08:02 We don't need to do anything in this actually violates almost everybody.
- 11:08:09 Civil rights in the state of delaware we need a system that works for all of us, not something that's going to force us to follow off a few people's following on their beliefs.
- 11:08:23 We need to have a system in play that will allow us to still buy gasoline engines for the farms to run.
- 11:08:31 We still need to have trucks that can transport the food across State lines, so we could sell our products in other States.
- 11:08:40 Ev. is not the answer for everybody in this state. Yes, it may benefit a couple of people that want them.
- 11:08:47 But it doesn't mean you have to mandate the whole state to have them.
- 11:08:50 It's time that we turn around and drop the California standards We are not California.
- 11:08:56 We are Delaware we could fix the problem properly we don't need California dictating to us somehow. anything's done as an American, and the somebody who fought for our country to make sure that our rights are followed and give it
- 11:09:15 to us. i'm saying, No, let's turn this down, we have seen with the disasters down in Florida There are electric cars are blowing up, because once they get wet they're dangerous so you have a
- 11:09:29 problem with a dangerous product. You have a problem with batteries being made.
- 11:09:36 We don't make them here. We get them from countries that are at war with us, and you turn around and tell us this is the best thing, for us.
- 11:09:45 Let's look at the bigger picture what's going on globally with these things.
- 11:09:50 They are extorting children all over the place to mind the materials that make this Communist countries turn around, and they're producing the system, and could cut us off at any moment.
- 11:10:01 We need to turn around and look what is real and what is real is.
- 11:10:05 We can manufacture safe gas lean engines and to develop other systems through time to produce a safer and more viable Delaware.
- 11:10:17 We don't need to go with the ev trend that you guys are pushing.
- 11:10:23 We need to turn around and have a system that works We also need to have a reliable electric system.
- 11:10:32 You're talking about burning more gas I know you did away with the cold plants.
- 11:10:37 But we need to have more ways of producing electricity.
- 11:10:43 I am myself believe in solar panels and with wind turbines.
- 11:10:46 I have on myself on my farm This is Why, i'm telling you This is not the answer I've seen how this stuff works.
- 11:10:56 We're not going to be able to produce enough energy. to turn around and give everybody the ability to run electric car efficiently and do the businesses that we do today in delaware.
- 11:11:10 So my vote is no my family vote is no do not go to the system.
- 11:11:14 Let's get rid of the California standard and go to a New Delaware standard.
- 11:11:20 What is good for the people of Delaware? What is decided that is based off a real statistics and evaluation.
- 11:11:29 In other words, the real science let's fix what we have a problem with, instead of trying to create a new problem with trying to fix a problem that doesn't really exist.
- 11:11:41 Thank you, thank you. Our next hand raised is Mary Douglas.

- 11:11:50 Yes, good morning I'm a retired environmental lawyer now living in Lewis in my career.
- 11:11:56 I specialized in clear Act Enforcement at Epa.
- 11:12:01 Headquarters in Washington, Dc. and most recently I worked for the National Association of Clean Air Agencies, or Naca, representing the State administrators of the Clean Air Act.
- 11:12:13 My decision to devote my career to improving air quality wasn't random.
- 11:12:19 I was born and raised in Pasadena, California, during the 1,900 fiftys and 1,900 sixtys uncontrolled factory and car emissions blue from the Los Angeles Northeast to
- 11:12:32 Pasadena, blanketing the San Gabriel Valley with smog or ground level ozone.
- 11:12:37 The smog was a huge part of our everyday lives.
- 11:12:42 At dinner my mother might talk about how her eyes were irritated while she was doing errands, and I might say that we children weren't allowed to play outside because it was a smog alert day.
- 11:12:55 I might also note that my father, who suffered from asthma, would use his inhaler in between most of his sentences.
- 11:13:05 But how is the mid-century Southern California smog relevant to Delaware today?
- 11:13:09 Well, it's very relevant as has been pointed out the American Lung Associations. 2,022 state of the Air Report gave Newcastle County and F. for high ozone days and Sussex county where I live
- 11:13:25 received a sea, we can do better adoption of california's advanced clean car, 2 standards would gradually transition the State to a greater proportion of clean electric vehicles.
- 11:13:39 The reductions in internal combustion engines would result in measurable health benefits and reduced health care costs.
- 11:13:50 As we gradually stopped breathing smog, and its chemical constituents Nitrogen, primarily along with carcinogens like benzene, toluene, and formaldehyde the f air quality would
- 11:14:03 improve along with the rates of asthma, copd, and premature mortality of our more vulnerable Delaware residents.
- 11:14:12 We would also be taking a significant step toward fighting the climate crisis by reducing greenhouse gas emissions.
- 11:14:20 Delaware is, on average the lowest state in the country.
- 11:14:24 In elevation we are considered a sea level rise. hotspot by scientists.
- 11:14:29 We must take action to reduce rising speed, level rise, soaring temperatures, and the likelihood of hazardous weather.
- 11:14:36 Events, Delaware needs to clean up its fleet. I urge Dan Wreck not to take half measures, but to fully adopt advanced clean car 2 standards for our health and for the health of our planet.
- 11:14:51 Thank you so much. thank you. our next raised hand is amy K.
- 11:15:00 And I guess it's an fl amy hi my name is Amy Kyle.
- 11:15:04 Okay, Y. L. E. and i'm down here in Southern Sussex County, and you know, I have a couple of comments and a couple of questions.
- 11:15:12 Also. First First of all, I wanted to say, I do support the move of the State of Delaware to look forward and adopt these standards in conjunction with a number of other States and a national movement to address both health
- 11:15:28 and climate. I I think it's, just essential that we'd be forward looking and bring the State along with others who are who are working actively to address those issues, and there are lots of reasons why clean vehicles is a major
- 11:15:44 part of the solution. So I support that I also wanna acknowledge, though people have anxiety about it, and we've heard some of that on the call, and I. And when you talk, ask talk, about obstacles and
- 11:15:56 stuff This issue of charging is a big issue and there's a perception that it there isn't really a good enough charging, and that there's not a good plan to get there, and and so I I think that needs to be
- 11:16:10 actively addressed I I don't know that you can wait around and see if the right people apply for the right grants, and say what's until they do. Gee!
- 11:16:20 We don't know for charging so if you ask about obstacles.
- 11:16:25 I think that's something that the State needs to up to Annie on here a little bit, and a question I have in looking at the charging map is whether anyone at Del Dot or denre is you know aware of the it influx the traffic
- 11:16:40 from from that comes eastward, you know, from the toward the beach communities in the summer.
- 11:16:46 You know you get a huge amount of vehicle traffic that isn't on those North South corridors at all, and it doesn't seem like there's any thought to that in the planning here and I
- 11:16:59 I would think that would be an important thing also to think about and and put into your planning a couple of other com comments.

- 11:17:08 I wanted to make have to do with the health related issues.
- 11:17:12 And you know, I second the comments that others have made on the concerns about ozone and point out. You don't have to be that close to a highway to be impacted by high-level ozone it's distributed
- 11:17:24 sometimes a pretty considerable distance from my ways you know unlike benzene, or something like that that is what really is right along the highway, and a couple of the health impacts of ozone that haven't been mentioned and that will occur
- 11:17:37 at the levels that we see here in Sussex County are reductions in lung function and in children, and long development.
- 11:17:47 And the concern about that is, if your lungs are don't develop.
- 11:17:51 You never get that back it's it's not a passing thing. it's it's your longest develop when you're younger, and if they are less well developed you lose capacity, that you're gonna need
- 11:18:03 later, and similarly, when you're old the higher ozone days.
- 11:18:07 Can kind of push people over into mortality, you know, otherwise might not have have passed, because it interacts with other underlying conditions and pulmonary conditions and cardiac additions to increase mortality in relation to daily
- 11:18:24 ozone. So I I don't think you've really captured the significance of ozone, and kind of the litany of health.
- 11:18:32 Effects. There are serious effects that occur at levels that we see here and of course, down in Sussex, where we don't have much monitoring here and there probably should be more so that people can see that so I I appreciate what
- 11:18:47 you're doing here? i've delaware you know it's a small state it's not going to be able to have the capability to write all of its own standards on everything.
- 11:18:55 And these standards have been well-atted and adopted by a number of entities on it.
- 11:19:00 I think it is a appropriate approach and an important approach for the State to move forward with with the with the the thinking.
- 11:19:11 Across this field. but I do also think that the anxiety issues need to be addressed in terms of the charging, and then also ultimately, the capacity of the grid and the search for clean fuels or clean energy
- 11:19:27 sources to support the grid I know that's not part of this rule.
- 11:19:30 But it does seem like Some dialogue about that needs to come along with this discussion.
- 11:19:37 Thank you, Thank you. Our next hand raised is Michael Smith.
- 11:19:44 Yes, hello my name's Michael Smith i'm the Executive Director of Pine.
- 11:19:48 Our future. a nonprofit focused on reducing air, pollution and energy burdens for Delaware families.
- 11:19:54 That being said, partner, Future is a 501 c.
- 11:19:55 3, and thus I want to specify that i'm Speaking at my individual capacity, and as an eb driver, and not for the organization more broadly, i'll try to keep my comments very brief I just wanted to say that i'm very
- 11:20:05 supportive of this move, and I wanted to echo the statements by my friends.
- 11:20:09 Peggy John Mary Klein charlie and i'm sure, an and dustin will also have very open remarks after me again.
- 11:20:15 I'll also just wanted to thank Valerie and Brian, Susan, and everyone over at Denrack and build up, for that matter.
- 11:20:21 For their towers. Work on this for putting these informative sessions together, or, you know, reviewing all the rules.
- 11:20:28 Thank you for hosting this, and thank you for let me speak.
- 11:20:31 Thank you let's see our next hand raised is in Kirby
- 11:20:40 Yes, my name is Anne Kirby. I live in Wilmington, and I represent Green Building united, and on.
- 11:20:47 I am the private sector chair of the Delaware Energy Services Coalition.
- 11:20:51 On November the fourth, 2,008. At 11 Pm.
- 11:20:55 My brother took his last breath. He was 50 years old. he was a never smoker, and extraordinarily fit, healthy, and vibrant man.
- 11:21:04 Before he started experience symptoms of lung cancer at 47 years old.
- 11:21:10 14 years later, last month a friend of mine also lost her brother to Lung Cancer, and another friend of mine has a brother in law.
- 11:21:19 In his final days of his battle with lung cancer it's offensive to hear anyone speak to a lack of urgency and cleaning up our air.
- 11:21:27 Of course we'll never know for sure why lung cancer invaded my brothers or others victim bodies.
- 11:21:31 But as as november is lung cancer awareness month, we know that risk factors include diesel exhaust and air pollution.

- 11:21:38 After my brother's death I made the decision to be a part of the solution, and made a career change into renewable energy.
- 11:21:46 I inherited my brother's car which I drove until it was 19 years old before I finally took delivery of my Ev.
- 11:21:54 In December, 2,018, nearly 4 years and 75,000 anxiety free miles later.
- 11:22:00 I have a saved and incredible amount of money with regenerative breaks, no fluids, no engine.
- 11:22:06 The maintenance and expenses involved tire rotations and windshield wiper fluid.
- 11:22:12 The cost of charging is a fraction of the cost of gasoline, and even less of you have solar on your house.
- 11:22:19 Yes, the manufacturing emissions from an Ev or higher than an internal combustion engine ice.
- 11:22:24 This is largely for the battery, but that initial greater impact has a short environmental break, even period in Delaware.
- 11:22:32 A 300 mile range. Ev breaks even at 21,300 miles.
- 11:22:37 As the eb industry continues to reduce the environmental footprint of extracting Roman materials and a circular supply chain for battery recycling.
- 11:22:46 The Ev story gets even more compelling in the majority of regions in the Us.
- 11:22:51 And ice would need to get 59 miles per gallon to equal the emissions of an Ev. the greater.
- 11:22:57 The efficiency of the Ev, the greater the divide as the grid increases its percentage of renewable energy.
- 11:23:05 And as Isis age, the divergence will increase. Common talking point from opponents to Evs is our greatest largely powered by fossil fuels.
- 11:23:14 Of course this is true today, but we are talking about the plan for the future.
- 11:23:18 Our grid is transforming to renewable energy, and the transition to Evis logically should occur in parallel.
- 11:23:26 This is just one of many species arguments I had the good fortune to speak with Governor Carney last Tuesday, and he assured me he supports roles and legislation for clean transportation.
- 11:23:36 So let's move forward with cleaning up our air and advancing ev adoption in the first State.
- 11:23:42 Thank you. Thank you. Our next hand race dustin.
- 11:23:49 Thomas
- 11:23:55 Oh, yes, my name is dustin thompson that's Sorry No problem.
- 11:23:59 You got the first name right which is you're ahead of the curve on that.
- 11:24:08 So good.
- 11:24:09 My name is Dustin Thompson. I am the chapter director for the Sierra Club, Delaware.
- 11:24:13 Chapter we've been active in delaware since the 1970 S.
- 11:24:18 But Sierra Club nationally has been around since the 18 hundreds.
- 11:24:22 So we are the oldest environmental advocacy group actually in the nation.
- 11:24:26 I appreciate, den, Rack and Del Dot working so diligently on the issue around environment the environment and public health.
- 11:24:37 When it comes to our transportation emissions the we're happy to serve on the stakeholder groups for the infrastructure, and for for this rulemaking process as well just wanted to comment on
- 11:24:54 a few things today actually my daughter's sick so i'm actually planning to attend a later meeting that i'll i'll make our formal official comments.
- 11:25:04 But did just want to touch on a few things that i've heard recently, and some again today.
- 11:25:10 I think it's important that accc 2 also be taken into the full context of the transition that we're seeing today the auto manufacturers are transitioning to Evs as a matter of
- 11:25:25 internal policy. they're seeing a growing market in other countries and a growing market in the Us.
- 11:25:33 As well, and that's why, you're hearing gm. for example, announce that they are no longer going to be producing gas-powered vehicles after 2,035 but they're not alone.
- 11:25:45 Volvo is also made the same statement as although they're starting immediately to end their production of of internal combustion and engine based vehicles.
- 11:25:59 So we're seeing a huge uptick in the number of Evs that are going to be on the marketplace, and, thanks to the Ira, which also needs to be taken into context, we're seeing that the price shift is
- 11:26:11 going to be dramatically decreasing over the years.
- 11:26:16 Not only just as a matter of supply of materials and manufacturing processes becoming more streamlined, but also to make sure that these vehicles qualify for the Ev tax credits as Well, including
- 11:26:33 now a used Ev point of sale rebate, which will make the used market likely dramatically expand over the years.
- 11:26:41 But which, of course, predominantly helps individuals from low income families that tend not to purchase new

vehicles, but rely heavily on the used market.

11:26:52 In line with the Ira. we're actually seeing a dramatic shift on some of the human rights issues that we've heard about over the years. and in particular with battery.

11:27:07 Technology. it's interesting that we never really hear folks saying they're gonna throw out their cell phones or other things that run on batteries that have been around for a lot longer, and by mass actually make up more of the

11:27:16 battery marketplace, but certainly we hear it a lot when we talk about ev's nice thing is we've already seen a dramatic shift away from cobalt, being used in and lithium

11:27:30 batteries which is great news since cobalt was prominently coming from the Congo, which does have some human rights issues.

11:27:37 So we're already seeing a dramatic transition away from cobalt.

11:27:41 Most new battery manufacturers are not using cobalt anymore. And we're even seeing a lot of uptick in the technology to shift us away even from lithium to provide alternatives to

11:27:52 lithium. I don't think we'll ever see lithium go away.

11:27:57 Certainly not seen car manufacturers commit to that.

11:28:01 But we are seeing an increasing number of them experimenting and setting my on and and lithium alternatives which again will help with our sustainability issues.

11:28:11 And manufacturing issues and we're also seeing a dramatic shift, thanks to the Ira in the market in terms of where the manufacturing and mining processes take place the more that these processes take

11:28:27 place in the Us. the more we can control the emissions and labor rules that go along with the manufacturing processes, and the better that's going to be for us consumers for us workers.

11:28:41 And our planet as a whole. since we do tend to have our mission standards, then developing countries on the front of the batteries, though, good news is, they're lasting much longer than anybody ever.

11:28:53 Thought they would the average now has shown that batteries are actually outlasting the car which is generally not the case for ice vehicles.

11:29:04 The engine engines often go before the car but with battery technology.

11:29:10 We're seeing that it's quite the opposite batterings are lasting longer than the car, and we're now actually seeing, not just for cycling, but because of how efficient the battery still remain after the life of

11:29:21 the car, on average, 15 to 20 years that the batteries are actually just being reused.

11:29:27 They're being repurposed for other things there's plans to create a giga factory with heavy reliance on on used ev batteries that hit the new news a couple of weeks ago, and

11:29:39 we're also seeing recycling technology increase in nations that have long came before us in this ev transition, and we'll likely see that coming to the us as well in terms of and i'll just wrap

11:29:56 up here. in terms of quality. we view this as one of the most, if not the most significant reason why Delaware should move forward with the full complement of Acc.

11:30:09 2 heard and make comments on. the ambient air quality standards in in Delaware and in the air monitoring network in Delaware.

11:30:22 We've heard that everything sounds and looks good on paper with regard to our ambient air, quality, but that shouldn't really be used as a reason not to proceed with ac too, because we're really talking about 2 completely different 11:30:38 data sets. Talk about air pollution in our communities. The ambient air quality network is as our comments on the network.

11:30:49 The return on the comments on our network stated is not really designed to pick up the air quality issues in and individual neighborhood or in in individual communities.

11:31:04 This is checking what is coming in and crossed.

11:31:05 And now of our borders, and that's why these monitoring stations tend to be in places that do not have known excessive amounts of you know, hyperlocal air pollution issues you don't

11:31:21 see these monitoring stations on root 9, for example.

11:31:26 You see them at, You know, lumps, pond killings, pond bell font areas that have tend to have lower the hyper local air pollution issues.

11:31:35 We do and have, and still encourage den rack, and partners to do air monitoring on for these hyper local issues as well.

11:31:46 And I know some groups got some lovely grants that they're going to be working on that issue and hopefully.

11:31:51 Denire can assist but air pollution is a significant concern. and I live in Wilmington.

11:31:59 In most of Wilmington, my area included along root 9 and then other transit corridors around Claymont, and even in Sussex, as we've heard around root one and and beach traffic, issues, and

- 11:32:15 So while our ambient standards may you may be able to argue that they're good, I would argue that there's still not good.
- 11:32:23 I think the data supports that, however, that is beside the point.
- 11:32:29 When it comes to discussing this issue because we're really talking about more very localized air pollution issues that are well documented in terms of health issues that come along with those we are still one of the worst States in the nation for asthma and
- 11:32:45 that is heavily concentrated around, these transit courts that are dealing with this tail pipe pollution.
- 11:32:52 That is why Sierra Club has been, and will continue to push for the first complement of Acc.
- 11:32:59 2 as we have for years. we appreciate den rack putting on multiple of these workshops for opportunities for the public comment at a variety of times.
- 11:33:10 That accessibility is really important, and we want to recognize that.
- 11:33:13 And thank you very much for it. So thank you for the opportunity to comment.
- 11:33:16 We will submit comments and writing, and again have an official statement at a subsequent meeting.
- 11:33:21 Thank you. Thank you, Mallory. before you move forward with our with our next person.
- 11:33:29 Can you clarify that the regulations we are discussing?
- 11:33:34 They are referring to passenger, and light vehicles.
- 11:33:39 Correct not the farm equipment. that is correct. the regulation that we are amending only first to like duty, passenger vehicles and chops and vehicles, weighing up to 14,000
- 11:33:54 pounds. It does not include any off-road equipment which in which would include equipment, operated on a farm
- 11:34:02 This is our passenger vehicles, and, like duty trucks up to £14,000.
- 11:34:12 Thank you so much. Continue, please. I'm. sorry okay so with that I think our last hand raised.
- 11:34:17 Is it's yeah. it's alicia Morgan thank you.
- 11:34:23 I'm just a you know i'm I knew our President, and been driving various Ev.
- 11:34:28 Since for the last 7 years or so. my only comments are number one to echo cj's and some other comments about the issue of maintenance of charging stations.
- 11:34:39 We have a situation where we allocate funds.
- 11:34:47 Contractors promised to do the work and then, when you know we have no, there's no accountability for the maintenance and the continuation of those resources.
- 11:34:56 I don't know what the other answer is either exceptionally high penalties for failure to maintain, or that we just do it centrally.
- 11:35:06 Because I think by privatizing these things doesn't really work so well.
- 11:35:13 Apparently but that's a choice but somehow that's gonna be an issue going forward.
- 11:35:19 My other observation is that We have an issue where people with single family homes, garages, and all that kind of stuff, can more easily access.
- 11:35:28 Charging. Then, apartment and condo dwellers, and that's going to be something i'd like, and I know that's just sort of talked about that in the presentation.
- 11:35:39 But I think that needs to be a very, very clear focus.
- 11:35:43 To enable access to ev's more broadly and then finally
- 11:35:51 I I know i'm excited I hear about programs in among different electric providers in the State of Delaware.
- 11:36:01 Part of me, and wonder is whether we can do something that is available to all residents, regardless of what electricity company you happen to have time of day charging things like that would be great where I am in New York whether
- 11:36:18 I charge my car overnight, or in the morning, especially in the summer, I actually pay higher.
- 11:36:26 Electricity costs so it doesn't seem appropriate that in some places you can get preferential charging time pricing, whereas in other parts you can't So that's something that I would
- 11:36:37 encourage you to look at a little bit I don't not advocating for anybody with myself at this point.
- 11:36:43 So thank you very much i'm glad to see we're doing this.
- 11:36:48 Thank you I don't see any other hands raised and i'll give anyone another couple seconds to raise their hand if they want to make a statement.
- 11:36:58 We are having 2 additional workshops this week, and then another series in December.
- 11:37:06 Well, let's consider I just want to remind you of our regulatory timeline.
- 11:37:13 We are currently at the workshop stage where we're seeking public engagements and comments.
- 11:37:21 We'd like to try to get your comments from this series of workshops in November by the end of the month, and

by December second, if we can, and then we will hold a second series of

11:37:32 workshops, potentially answering any further questions folks might have.

11:37:36 We just wanna make sure that We've allowed for people to ask questions and dive into the regulation, and what it will mean, and that will be on December thirteenth and fifteenth, and those will both be in the

11:37:48 evening, and then after that our staff will be working on developing the regulatory development products and preparing for public hearing, and we will post the proposed regulation after we've considered some of the pre public hearing comments and we'll

11:38:10 publish that in the Delaware Registrar on the first of the month, we're looking at possibly February first, or March first, for hearing following sometime at the end of either of those 2 months we are also

11:38:23 anticipating the secretaries decision on this matter. Sometime

11:38:28 In the middle of next year. So to this slide sorry but anyway, that's our plan.

11:38:37 This program will commence If we adopt next year it will commence with model your 2027, which begins on January second of 2026.

11:38:47 So with that, I recommend you go to our our Den direct website under the Vision of Air Quality Regulations on your development.

11:38:57 The information for all the workshops. and stakeholder meetings will be posted there, and once we've gathered all the comments together.

11:39:04 We plan on posting those as well to submit your comments we'd like you to do that electronically, if you can. to Kyle, crawl our staff engineer who's responsible staff member for this

11:39:19 regulatory matter. and he is available at Kyleed up call at Delaware.

11:39:26 Dot com. So does anyone have anything else they want to add to today's workshop

11:39:36 Well, i'd like to thank you for joining us and we will have a second workshop tomorrow at one Pm.

11:39:44 And the information for joining that workshop it will be identical to today's format with the same presentation at one Pm.

11:39:53 Tomorrow. and then we have another one at 6 0 P. M. on Thursday, and if you have folks that you know that we're not able to join today at 10, we recommend you let them know about the other 2 workshops.