

Legislative History for Connecticut Act

PA 19-35

HB5002

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HOUSE OF REPRESENTATIVES

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NAIL TECHNICIANS AND EYELASH TECHNICIANS. Favorable
Report of Joint Standing Committee on
Appropriations.

DEPUTY SPEAKER CANDELARIA (95TH):

Representative Currey.

REP. CURREY (11TH):

Through you, Mr. Speaker. Mr. Speaker I move
that we refer this to the Committee on Public
Health.

DEPUTY SPEAKER CANDELARIA (95TH):

Without objections so ordered. The Clerk
please call Calendar 238.

CLERK:

House Calendar 238, House Bill No. 5002 AN ACT
CONCERNING A GREEN ECONOMY AND ENVIRONMENTAL
PROTECTION. Favorable Report of the Joint Standing
Committee on Energy and Technology.

DEPUTY SPEAKER CANDELARIA (95TH):

Representative Currey.

REP. CURREY (11TH):

Through you, Mr. Speaker. I move that we refer

this to the Committee on Appropriations.

DEPUTY SPEAKER CANDELARIA (95TH):

Without objection so ordered. [Gavel] Will the Clerk please call Calendar 451.

CLERK:

On Page 39, House Calendar No. 452, Substitute House Bill No. 7070 AN ACT CONCERNING DECEPTIVE ADVERTISING PRACTICES OF LIMITED SERVICES PREGNANCY CENTERS. Favorable Report of the Joint Standing Committee on Public Health.

DEPUTY SPEAKER COOK (65TH):

Representative Steinberg.

REP. STEINBERG (136TH):

Good afternoon, Madam Speaker. I move for Acceptance of the Joint Committee's Favorable Report and Passage of the Bill.

DEPUTY SPEAKER COOK (65TH):

The Question before the Chamber is on Joint Committee's Favorable Report and Passage of the Bill. Representative Steinberg, you have the floor sir.

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CLERK:

On page 65, House Calendar 238, AN ACT CONCERNING
A GREEN ECONOMY AND ENVIRONMENTAL PROTECTION.

HB 5002

Favorable Report of the Joint Standing Committee on
Appropriations.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti, you have the floor, sir.

REP. ARCONTI (109TH):

Mr. Speaker, I move for acceptance of the Joint
Committee's Favorable Report and passage of the bill.

DEPUTY SPEAKER ROSARIO (128TH):

The question is on acceptance of the Joint
Committee's Favorable Report and passage of the bill.
Representative Arconti, you have the floor.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. Mr. Speaker, the Clerk
is in possession of amendment LCO 9844. I would ask
that the Clerk please call the amendment and that I be
granted leave of the Chamber to summarize.

DEPUTY SPEAKER ROSARIO (128TH):

Will the Clerk please call LCO No. 9844 which
will be designated House Amendment Schedule A?

CLERK:

House Amendment Schedule A, LCO No. 9844, offered by Representative Arconti, Representative Ferraro, et al.

DEPUTY SPEAKER ROSARIO (128TH):

The representative seeks leave of the Chamber to summarize the amendment. Is there objection to summarization? Is there objection? Hearing none, Representative Arconti, you may proceed with summarization.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. Mr. Speaker, this amendment extends traditional net metering program in the LREC, ZREC programs, requires PURA to study the value of distributed resources. It increases the virtual net metering base cap and it begins a collaboration of installation of class 1 resources on certain state lands, allows the electric distribution companies to own energy storage systems, expands anaerobic digesters within Connecticut state farms and creates a green jobs career ladder. Mr. Speaker, I believe this amendment will lead to the increase of more deployment of solar energy within the State of Connecticut and have a positive economic and jobs

impact for our state. This has been a great bipartisan effort over the last few months to put this bill together which I am proud of and I urge adoption.

DEPUTY SPEAKER ROSARIO (128TH):

The question before the Chamber is adoption of House Amendment Schedule A. Will you remark further on the amendment? Representative Ferraro of the 117th, you have the floor, sir.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and Mr. Speaker, through you, I rise in strong support of this amendment. Normally I'm pretty reluctant to support big omnibus amendments which become bills eventually, but I have to say the work that has gone into this one has been truly a bipartisan effort. I would like to thank the Chairs of Energy and Technology Committee, namely Representative Dave Arconti and Senator Norm Needleman. They went the extra mile to include everyone's concerns who had a state in this legislation. Their efforts began with changing the name of this bill because many on this side of the aisle were pushing back. They were extremely careful to make sure that the concepts and policies in this

legislation were something that both sides would be able to support. No one is going to like everything in the bill and I'm sure that most could find something that they wish were in the legislation but at the end of the day, we have a comprehensive amendment which will become the bill that sets us up well on our way to achieving our future energy goals.

I would also like to thank my fellow ranking member, Senator Paul Formica for all his hard work and contributions which were instrumental in helping us to get the finished document that we have now before us, and also Vice-Chair, Representative Allie-Brennan and our wonderful staff at Energy and Technology including specifically Lynn Kirschbaum for her numerous writings and re-writings on the legislation contained in this bill. Also, my analyst, Ray Collins, who put in over 100 hours in helping to craft this legislation. With that being said and for the purpose of clarification of the bill or amendment that is before us, I have some questions for the proponent of the amendment, through you.

DEPUTY SPEAKER ROSARIO (128TH):

You may proceed, sir.

REP. FERRARO (117TH):

Thank you, Mr. Speaker. Through you, Mr. Speaker, to the proponent, will this bill with its eleven major categories, actually ten major categories help us lay a strong foundation going forward for our energy policy with regard to the current and emerging technologies?

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Yes, Mr. Speaker, I believe it does.

Through you.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and beginning with sections one through five of the bill, which addresses extensions of our current problems, in section one pertaining to net metering, through you, Mr. Speaker, to the proponent, is it true that net metering has traditionally allowed customers who own certain renewable energy resources to earn billing credits when they generate more power than they use?

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Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Yes, Mr. Speaker, that is correct.

Through you.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and I thank the good Representative. And these credits for their monthly excess generation, they would be at the retail electric rates; is that correct?

Mr. Speaker, through you.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Yes.

Through you.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker. And through you, Mr.

Speaker, this bill would end opportunities to begin this type of net metering for all customers on December 31, 2021?

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. The answer to that one is maybe, not necessarily. So what we did in this bill is address section seven from last year Senate Bill 9 which became, everybody quiet, Public Act 1850 and in that bill, we directed DEEP to begin a successor program to monthly net metering. We gave two options through legislation, a tariff and instantaneous metering. Throughout the summer as the proceedings got going, it became evident that things were moving too fast and one of the EDC's didn't have the ability to fully implement instantaneous metering so in this bill, we give PURA within the docket the ability to look at instantaneous metering all the way up to monthly net metering which is what we currently operate under so PURA can decide to continue the current net metering practices for all customers post

December 31, 2021 if that is what the docket and PURA decide should be the successor program.

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and I thank the good Representative for his answer cause I know how hard he worked and how many late hours he kept in meeting with all the stakeholders and making sure that we had this right. Through you, Mr. Speaker, this bill would essentially extend by two years the sunset for customers who begin traditional net metering before December 31, 2021 from December 31, 2029 to December 31, 2041. Through you, Mr. Speaker, is this correct?

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Yes, Mr. Speaker, that is correct.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and moving on, these dates

for beginning a new net metering contract and for the extension of the sunset date, they would apply to both residential customers as well as for those customers approved by PURA under the LREC and ZREC Programs?

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Yes, Mr. Speaker, that is true and we extend the LREC/ZREC program for another two years to match the extension on the residential side. That was an important part for the commercial side of the solar industry.

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker. And section two deals with the LREC and ZREC programs in 2021 and through you, Mr. Speaker, a question to the proponent of the bill? Could the good Representative from Danbury please elaborate, for the purpose of clarification of this legislation and for those here in attendance and

those watching, what an LREC and ZREC program is?

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. It's a low emissions and zero emissions purchasing incentive program for distributed generation that meets their end requirements.

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and moving on, as stated earlier in this legislation, it would require electric distribution companies to extend their existing requirement to enter into 15-year contracts to procure \$8 million dollars in LREC and ZREC projects per year by two years, expiring in 2021. Is this correct?

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Yes, Mr. Speaker.

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and we're going to move on to section number three. The bill addresses changes in residential solar investment program administered by Connecticut's Green Bank and through you, Mr. Speaker, under the current law, this program just expire on December 31, 2022 or when the program deploys 300 megawatts of residential solar photovoltaic installations. Is it true that this bill merely increases from 300 megawatts to 350 megawatts the megawatt threshold that triggers the program's expiration?

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker and yes, we did increase the megawatts for the residential solar incentive program by 50 which will lead to more solar deployment

within the State of Connecticut, but it no longer triggers the program expiration. That became, that became problematic last summer during the docket proceedings as mentioned earlier, so we decoupled the program expiration from the ending of the RSIT program to the date certain of December 31, 2021. That gives more certainty for the industry and it allows a cleaner time table to move forward into the successor program.

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker. Sections three through six addresses new renewal energy programs as well as a required study. Through you, Mr. Speaker, would the proponent of the bill elaborate on the changes and extensions with regard to PURA's implementation of the new tariff program for new renewable energy programs?

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker and Mr. Speaker, I

remember last year and it even carried over to this year, this big debate on a cost shift, on whether or not people and ratepayers who don't have the ability to use solar are subsidizing those who do. The industry makes the argument that once you get to 10 percent deployment of solar within the state, then the cost shift becomes realistic. We have our professional staff at DEEP who sometimes argue differently so we included in this amendment for PURA and DEEP to study the value of distributed energy resources to truly determine the extra benefits and what else and how deploying solar values all ratepayers of the State of Connecticut. Now this study is due to the Committee of Cognizance which is Energy and Technology by July 2020 and PURA then has to incorporate the findings of that study within the docket for the new successor program.

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and I thank the Representative for his answer. For clarification

purposes, electric distribution companies are now required to offer new tariffs to residential customers beginning January 1, 2022 rather than when the Green Banks Residential Solar Investment Program expires.

Is this true, Mr. Speaker?

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. They are required -- so the docket will determine a new successor program, but they are not required to offer tariffs necessarily. There are, as I mentioned earlier in the dialogue, there are a number of different successor programs that PURA is currently looking at within the docket.

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and I thank the good Representative for his answer. In section seven of the bill, it addresses the issues of virtual net metering and through you, Mr. Speaker, to bring some clarity to this section of the bill, I have a question

for the proponent. This legislation would increase the virtual net metering cap from \$10 dollars to \$20 million dollars. Would the good Representative explain why this is important?

DEPUTY SPEAKER ROSARIO (128TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. Mr. Speaker, this increasing of the cap has been important to members on both sides of the aisle and many people around the building and advocates for a number of years and it's important because it allows the ability for municipalities to save a significant amount of money on their electricity costs and adds more deployment of clean energy and it's a jobs factor. More deployment of, increasing the cap from virtual net metering will lead to more solar projects, i.e. more clean energy jobs.

Through you, Mr. Speaker.

DEPUTY SPEAKER ROSARIO (128TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker. Section eight addresses

land inventory held by the Department of Transportation and will require the DOT by December 1, 2020 to identify any land suitable to cite class 1 renewable energy sources and evaluate its sustainability and submit the inventory to DEEP. Through you, Mr. Speaker, would the proponent explain the criteria that DEEP's analysis will consider during its evaluation?

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker and yes, DOT and DEEP worked very hard on this concept and they will consider a number of things, the environmental factors, setback requirements once the inventory is put on the DEEP's website.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker. And sections nine and ten address our thermal energy portfolio standards and simply requires DEEP in the next integrated resource

plan to include recommendations for rather, excuse me, include recommendations for rather than consider creation of a portfolio standard for thermal energy. Section eleven addresses state building construction standards. Through you, to the proponent of the bill, Mr. Speaker, this legislation requires DEEP's regulations to establish building construction standards based on a nationally-recognized model by January 1, 2020. Could the good Representative give some examples for standards that pertain to high-performance green buildings?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Sure thing, Mr. Speaker. Some of the standards include reduced emissions, enhanced building, occupant health and comfort, a design to conserve water resources, a design to promote sustainable and generative materials, cycles and to enhance the resilience to natural and technological hazards.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

And a tongue twister. Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and I thank the good gentleman for his answer. In section 12, it expands the situations where DEEP can retain consultants. The bill allows DEEP to retain consultants to assist DEEP staff during PURA proceedings as well as for federal communication commission proceedings. Existing law requires that expenses for the consultant be borne by companies that may be recovered through rates by the companies and moving on to section 14, it addresses the ownership of storage facilities by an electric distribution company. Under current law, EDC's or electric distribution companies are prohibited from owning or operating generation assets. This bill will allow the EDC's to own energy storage systems. Through you, to the proponent of the bill, Mr. Speaker, how would the ownership of the storage systems by the electric distribution company be ultimately beneficial to the ratepayers?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Try that again. Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. The benefits of, the energy storage systems can provide, will provide benefits to all ratepayers including charging and discharging optimal times. It's a way for us to meet peak demand going forward.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and it's extremely important as the Representative just said because we are always in search of ways in which we can lower rates for our ratepayers. In section 15, we address the financing of residential furnaces, boilers and propane tanks. This bill would simply extend for five additional years, the duration of the program, that provides financing for furnaces, boiler replacements and for purchases of new or leased residential propane fuel tanks to 2024. To the proponent, through you, Mr. Speaker, is this true and accurate accounting of this section?

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Yes, it is, Mr. Speaker.

Through you.

DEPUTY SPEAKER MORIN (28TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker. And sections 16 through 19 address anaerobic digestion at animal feeding operations. Through you, Mr. Speaker, I have some questions for the proponent of the bill with regard to these sections. This bill exempts certain anaerobic digestive facilities from the requirement to obtain a permit from DEEP to construct and operate a solid waste facility. Thank you, Mr. Speaker, what are the circumstances that would qualify an anaerobic digestive facility to be exempt from the requirement to obtain a permit from DEEP to construct and operate a solid waste facility?

Through you.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. Only a solid waste permit is applicable here. In order to be exempt, such facilities must be co-located with an animal feeding operation which is a facility on a farm other than aquatic animal production where animals have been or currently will be stabled or confined and fed for maintained a total of 45 days within a twelve-month calendar year.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and I thank the Representative for his answer and for the purposes of legislative intent, through you, Mr. Speaker, I have another question for the proponent of the bill.

DEPUTY SPEAKER MORIN (28TH):

Please proceed.

REP. FERRARO (117TH):

I see that we are adding anaerobic digestion to the LREC and ZREC program. Since the language is permissive, if a utility has already done the year eight solicitations, would they need to do another

solicitation for year eight to include anaerobic digestion?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

No, Mr. Speaker. Since it is permissive, there is no need to repeat the year eight solicitation.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and through you, if DEEP determines a facility is found to not be in compliance either as a result of not being co-located with an animal feeding operation or it is found to be processing more than five percent of volume food scraps, food processing residuals, and soiled or unrecyclable paper, what remedies will DEEP seek against such a facility?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. Mr. Speaker, if DEEP determines a facility has violated some of the rules here, DEEP will direct the facility to apply for the solid waste permit within five days and if they do not, then DEEP can take further action such as issuing a cease and consist order.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, and I thank the good gentleman for his answer. So to clarify, once DEEP has been notified that a facility is not in compliance, then that facility will be made to apply for a permit and should they not do that within five days, then they will be closed and that will be the procedure for those facilities that are not in compliance. Through you, Mr. Speaker, what is the maximum aggregate nameplate capacity that the bill allows the DEEP commissioner to select proposals for resources in this regard?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. This AD's on farms will be you know 1 megawatt at most but the commissioner has the ability to issue a 10 megawatt solicitation for anaerobic digesters.

DEPUTY SPEAKER MORIN (28TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and the last section of the anaerobic digestion portion of this bill addresses biogas produced from anaerobic digestion. The bill requires PURA to initiate a docket by 10/01/2019 to define and adopt a gas quality interconnection standard for biogas derived from the decomposition of farm-generated organic waste or from the decomposition of farm, excuse me, or from source-generated organic material that has been processed through gas condition systems to remove the impurities.

And lastly, sections 20 and 21 address a green jobs career ladder. This bill requires the Office of Workforce Competitiveness and Consultation with the Office of Higher Education, the Department of

Education, the Department of Labor, DEEP, regional workforce development boards, and employers to establish a career ladder for jobs and green technology industry by 01/01/2020.

Through you, Mr. Speaker, one last question for the proponent. Would the good Representative explain what items would be on the green career ladder list?

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. Such items would include careers at each level of the green technology industry, green job core certificate and degree programs offered by technical education and career schools within the technical education career system and state higher education systems and jobs available in this said industry.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Ferraro.

REP. FERRARO (117TH):

Thank you, Mr. Speaker and through you, the good Chair and I have for clarification purposes tried to

give a thorough review of the sections in this energy and technology bill and I'm confident that this bill will move our energy standards and policies forward and I stand in strong support of this legislation before us and would urge my colleagues to do the same.

Thank you.

DEPUTY SPEAKER MORIN (28TH):

Thank you, Representative Ferraro. Will you remark further? Will you remark further on the amendment before us? From the 37th district, Representative Cheeseman.

REP. CHEESEMAN (37TH):

Thank you very much, Mr. Speaker and I just have a brief question for the good Chair of Energy?

DEPUTY SPEAKER MORIN (28TH):

Please proceed, madam.

REP. CHEESEMAN (37TH):

Thank you. Through you, the section I think 20 and 21 refer to green jobs and when I made inquiries, I learned that a lot of our state definitions are derived from the Bureau of Labor Statistics definition and jobs and businesses that produce goods or provide services that help reduce energy, conserve natural

resources or help preserve the environment. Through you, Mr. Speaker, is that your understanding as well of these green jobs?

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Yes, Mr. Speaker, that is my understanding as well.

Through you.

DEPUTY SPEAKER MORIN (28TH):

Thank you, sir. Representative Cheeseman.

REP. CHEESEMAN (37TH):

So through you, Mr. Speaker, would that also include jobs in our nuclear industry whereby all means we are conserving the environment, preserving jobs? We know very well that our two nuclear plants provide close to 95 percent of our carbon-free power.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Yes, Mr. Speaker, that is my understanding. There's nothing in this language that would preclude

these types of jobs being listed so I would agree with the proponent.

Through you.

DEPUTY SPEAKER MORIN (28TH):

Representative Cheeseman.

REP. CHEESEMAN (37TH):

Thank you very much, Mr. Speaker and I thank the good Chair for his clarification. I know that certainly the jobs at Dominion, they offer two dozen fully-funded scholarships every year at Three Years Community College along with employer-paid internships and those jobs that do not require four-year degrees result in a salary package that averages \$156,000 dollars and I think we would agree these are great jobs for our state so I want to thank the Chair, the ranking member, and everyone else involved in energy and technology for their work on this bill and I thank the good Chairman for his answers. Thank you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Thank you Representative Cheeseman. Will you remark further? Will you remark further on the amendment before us? From the 136 district,

Representative Steinberg.

REP. STEINBERG (136TH):

Thank you, Mr. Speaker. A few questions for the proponent of the bill?

DEPUTY SPEAKER MORIN (28TH):

Please proceed, sir.

REP. STEINBERG (136TH):

Thank you. I first want to thank the good Chair for addressing the fundamental flaw in what was SB9 last year by creating an appropriate pause in the progress of moving directly to tariffs. I think this is a critical short-term, not a solution, but a step in the right direction so I wanted to start on line 356 of the amended bill. It makes mention of the plan to ask both DEEP and PURA to engage in a value or solar study and sets a date of July 1, 2020. To the proponent of the bill, what happens if either agency or the regulatory authority fail to meet the date of July 1, 2020?

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker and I appreciate my

colleague's question. So through you, since the docket won't be completed until, in the new successor program, won't be chosen until later that year in 2021, that gives us the long session of 2021 if we are lucky enough to return to this Chamber to address the lack of information that DEEP and PURA gave or if they don't follow through on their end of the bargain to conduct this study and implement it in the docket, we can then come back and through the legislative process really amend the docket ourselves and include it and make recommendations ourselves for the successor program.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Steinberg.

REP. STEINBERG (136TH):

Thank you, Mr. Speaker. Through you, so if I understand the good Representative correctly, if they fail to meet deadlines, not that DEEP has ever failed to meet a deadline in the past, that the legislature has recourse to reconsider some of the aspects of this bill such that the intent of this bill to make sure that we have a value or solar study completed and that

PURA has ample opportunity to assess its impact on its rate making structure, that we will be revisiting this in the 2020 session, or 2021 session assuming any of us are here?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Yes, Mr. Speaker, I do have full confidence that the commissioner of PURA will do the duty that we are assigning them within this language, but if they do not, the Representative is correct.

Through you.

DEPUTY SPEAKER MORIN (28TH):

Representative Steinberg.

REP. STEINBERG (136TH):

Thank you, Mr. Speaker. I will now turn the good Representative's attention to lines 430 through 436 which refer to benefits that need to be considered in the event of establishing a tariff. This is a particularly important section to me because it requires them to consider when setting rates, energy storage systems that provide electric distribution

benefits, location of a facility in the distribution system, and time of use rates for other dynamic pricing. These are all things we've talked about a lot which oftentimes seem to not be mentioned as frequently as we talk about ratepayer rates. Could the good Representative explain to me how they're going to use this to establish tariffs in the future?

Through you.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Through you, Mr. Speaker, I'm not a member of PURA so this will be decided through the docket.

Through you.

DEPUTY SPEAKER MORIN (28TH):

Representative Steinberg.

REP. STEINBERG (136TH):

Fair enough, thank you, Mr. Speaker. I will now move on to another section of the bill, section six and I'm going to start I believe with line 508. I understand another Representative did ask him about the doubling of the virtual on the metering cap. Let me just the good Representative, what happens if that

\$20 million dollars becomes fully subscribed within a year's time?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker and there is a successor program in the making to virtual on that metering so the idea was to increase that cap to build a bridge to the competitive RAP process which will be the successor program to virtual net metering.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Steinberg.

REP. STEINBERG (136TH):

I thank the good Representative for his answer. I personally believe there is a tremendous pent up demand for virtual net metering projects. I imagine that once word gets out that we're gonna be doubling it to \$20 million dollars, there'll be lots of municipalities in particular that will be eager to get on the list and I imagine we'll have a new queue for projects as we did in the past when we topped out on

the \$10-million-dollar cap.

Moving along to section 14, I want to start on line 854. Again, the good Representative answered questions with regard to allowing utilities or EDC's to be engaged in creation of large-scale storage. Does the good Representative see this as consistent with the state's deregulation dating back a good 25 years?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

I do, Mr. Speaker and generation is tough, battery storage is tough to define. Many say its generation, others do not. I think deregulation has been successful and failed in many ways, but I think this moves us in the right direction especially going into next year with the integrated resources plan due to us. I think we're gonna do a lot of big things. I know my colleague from the 136th has a great interest in all of this and is someone who I rely on in help, in crafting these policies.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Steinberg.

REP. STEINBERG (136TH):

Thank you, Mr. Speaker. I appreciate the good proponent's comments. I do agree that storage is a critical missed opportunity here in the State of Connecticut and if I were to make any exception from deregulation to allow the utilities to become involved, it would begin with storage though I view this as only the first step and that we need to create all sorts of scale of storage and to create other opportunities, maybe even collating a storage facility near our offshore wind in New London. There are lots of opportunities out there.

Just a couple more questions. When we were originally considering this green economy bill, there was made mention of some sort of successor or compliment to the Governor's climate change council. Is there something in here about creating a new task force or working group that would carry on the good work and help us identify good new green economy and jobs bill in the future?

Through you, Mr. Speaker.

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DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

There is nothing in this current language, Mr. Speaker, but I know this is of great interest and the GC3 is of great interest to the Governor and the Commissioner so I would expect some movement on that in the future.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Steinberg.

REP. STEINBERG (136TH):

Thank you, Mr. Speaker. I'm disappointed by that. It was part of I think our original consideration frame. I think that's a critical aspect of creating an inclusive working group that involves all stakeholders because that's where a lot of the good ideas come from, from a variety of different walks of life, people with different perspectives and interests and I would hope that, even though it didn't end up in the bill which I thought was really perfectly suited for such a working group, that we find a way to get this and I count on the Governor and

the Commissioner of DEEP and the good Representative and his co-Chair to come up with an answer on this sooner than later so we don't miss future opportunities. And lastly, with section 20 on jobs, could the good Representative just quickly explain this concept of a jobs ladder?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Through you, Mr. Speaker, this bill was originally offered by Representative Mushinsky and it went through the Higher Education Committee, but we thought it was important to include in this bill because we're really looking to expand opportunities for young people and I believe young people will be attracted to states that are passing policies such as these.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Steinberg.

REP. STEINBERG (136TH):

Thank you, Mr. Speaker. I have to totally agree

with the good Representative on that point. I think we have just scratched the surface on opportunity for good paying green jobs in this bill. I think it's perhaps unfortunate that we spend a lot more time on the worth of aerobic digesters than we do on creating green jobs which I thought was the original intent of this bill to a large degree, so I'm still hopeful that in the future, we will put a greater focus on this and again, consistent with the Governor's pronouncements in the past, I would expect that there would be a huge emphasis on the economic benefit of green jobs and that if it's not in this bill, that we have something we can talk about next year. So overall, just to conclude, I'm supportive of this bill mainly because it puts a fix on the mistakes of the flawed bill from last year and I think it takes some real steps forward. I like the focus on green building codes and improving those standards and getting the state involved. I like doubling the virtual net metering cap and there are many other aspects that make this bill worthy of support. I just hoped we could have done more. Initially when we started off, I thought we were going to do a lot more but I do support this

bill. Thank you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Thank you Representative Steinberg. Will you remark further on the amendment? Will you remark further on the amendment before us? Representative Gresko from the 121st district.

REP. GRESKO (121st):

Thank you, Mr. Speaker. A couple of questions to the Chairman of the Committee, please?

DEPUTY SPEAKER MORIN (28TH):

Please proceed, sir.

REP. GRESKO (121st):

To the Chairman of the Committee for the integrated resources plan, thank you for including the potential TREC, but I do not see a date for completion of that IRP by DEEP. I see June 14 of last year as the projected date. What happens maybe at the end of 2019 if we have not successfully seen this IRP?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

The IRP is due to the General Assembly, Committee

of Cognizance which is Energy and Technology January 1, 2020 with these recommendations.

DEPUTY SPEAKER MORIN (28TH):

Representative Gresko.

REP. GRESKO (121st):

Thank you, Mr. Speaker and not to reiterate a point made by the previous questioner, but if DEEP does not come across with the IRP in that said time, what are our options?

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

Thank you, Mr. Speaker. And again, I do have full confidence in our agency that they will deliver the IRP for us for the 2020 session, but if not, I plan to draft some pretty significant legislation within the committee with colleagues from both sides of the aisle to begin the good work on this subject matter.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Representative Gresko.

REP. GRESKO (121st):

Thank you, Mr. Speaker. I just want to say thank you for the efforts put forth for this legislation. I look forward to seeing the alternative portfolio standards for the TREC and thank you again for adjusting the net metering and the pause for the LREC and ZREC, a major win at least for a pause at this point. That's all I have, Mr. Speaker. Thank you.

DEPUTY SPEAKER MORIN (28TH):

Thank you, Representative Gresko. Will you remark further on the amendment before us? From the 8th district, Representative Ackert.

REP. ACKERT (8TH):

Thank you, Mr. Speaker and there's been some great dialogue on this amendment and so I don't have a lot to add to it other than I'm in full support of this amendment and the areas that I'm impressed with, you know first you know the jobs component of it. You know looking to make sure that we expand job opportunities in the green area whether it's energy efficiency, solar implementation to a digester building maybe. Also an area that I'd like to make

sure, I mean one of the things that -- and I like the fix, you know part of it, making sure that our solar companies can sell jobs out there and our roofs can still be put solar panels on and largely projects also. The energy efficiency component in our state buildings you know we've had kind of a lead by example and we haven't really led well. I think this sets the standard for our state buildings do be more energy efficient saving us tax dollars. So in full support of this. I want to thank the committee for its efforts on it and I know a lot of work and a lot of headaches and a lot of head scratching went along the way and I think they came to a good piece that will help Connecticut in the future so thank you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Thank you, sir. Will you remark further on the amendment? Representative McCarty of the 38th district.

REP. MCCARTY (38th):

Thank you, Mr. Speaker. Just, I have a very quick questions for the proponent of the bill if I may?

DEPUTY SPEAKER MORIN (28TH):

Of course. Please proceed, madam.

REP. MCCARTY (38th):

Thank you. If you could just tell me in section 20, there's reference again to the Office of Higher Education and the Labor Department putting these jobs on their website which I think is a great thing, but the next sentence talks about the inventory for the Tech Ed and Career schools on green technology equipment that might be the data on the equipment. Could you just give me an example of what that equipment might be?

DEPUTY SPEAKER MORIN (28TH):

Representative Arconti.

REP. ARCONTI (109TH):

I apologize to the good Representative. I'm not well versed in this type of equipment so I don't have an example to give.

Through you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Of course. Please proceed, madam.

REP. MCCARTY (38th):

Well that's fine but in general I'm very

supportive of this amendment and all the work that has gone into with the Energy and Technology Committee and I'm very pleased that my great colleague, Representative Cheeseman pointed out that this will also include jobs that are nuclear industry so I thank the proponent. Thank you, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Thank you, madam. Will you remark further on the amendment before us? From the 92nd district, Representative Dillon.

REP. DILLON (92ND):

Good evening, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Good evening to you.

REP. DILLON (92ND):

I'm speaking in support of the proposal and I really want to thank the house Chair of the Committee for the hard work that he did to pull people together. I'm particularly, as the Chair knows, interested in the virtual net metering which attracted a lot of concern in my own part of the state and it involved jobs. I also am very pleased to see that the green jobs ladder legislation was folded into this, but most

of all I really want to thank you for your work ethic and for your unfailing courtesy at the relentless questions that you got, certainly from me on this and I really want to thank you for a job well done.

DEPUTY SPEAKER MORIN (28TH):

Will you remark further on the amendment before us? Representative O'Dea from the 125th.

REP. O'DEA (125TH):

Thank you very much, Mr. Speaker. No questions, just a comment. It didn't take long for my no-vote on the climate bill for me to get plastered all over social media as being anti-environment. Just for the record, I want to thank the good Chair of the Energy Committee on incorporating a number of bipartisan bills including one of my net metering proposals in keeping the solar industry going at least for the next few years and I am pro-environment and I am very much in favor of this bill and I would ask my colleagues to support it. I want to thank again the ranking member and the Chair of the Committee. Thank you very much, Mr. Speaker.

DEPUTY SPEAKER MORIN (28TH):

Thank you, Representative O'Dea. Will you remark

further on the amendment before us? Will you remark further? If not, I will try your minds. All those in favor, please signify by saying aye.

REPRESENTATIVES:

Aye.

DEPUTY SPEAKER MORIN (28TH):

All those opposed, nay. The ayes have it and the amendment is adopted. [Gavel] Will you remark further on the bill as amended? Will you remark further on the bill as amended? From the 58th district, Representative Arnone.

REP. ARNONE (58TH):

Thank you, Mr. Speaker. I rise in support of 5002, specifically the anaerobic digestion for farms. Digesters provide farms two things, a nice renewable energy source as well as an environmentally responsible way to dispose of cow manure. Runoff from cow manure can cause our waterways to be polluted with pathogens like salmonella and E-coli so anaerobic digestion will help kill those pathogens and this is a great new technology for our farms and I urge its passage. Thank you.

DEPUTY SPEAKER MORIN (28TH):

Thank you, Representative Arnone. Will you
remark further on the bill as amended? Will you
remark further on the bill as amended? If not, will
staff and guests please come to the well of the House?
Will the members please take your seats? The machine
will be open. [Ringing]

CLERK:

The House of Representatives is voting by roll.
Members to the Chamber. The House of Representatives
is voting by roll. Members to the Chamber.

DEPUTY SPEAKER MORIN (28TH):

Have all members voted? Have all the members
voted? Will the members please check the board to
determine if your vote is properly cast? If all
members have voted, the machine will be locked and the
Clerk will take a tally. The Clerk will please
announce the tally?

CLERK:

House Bill 5002 as amended by House A.

Total Number of Voting	146
Necessary for Adoption	74
Those Voting Yea	146
Those Voting Nay	0

Those absent and not voting 5

DEPUTY SPEAKER MORIN (28TH):

The bill as amended is passed. [Gavel] Is there any business on the Clerk's desk?

CLERK:

Yes, Mr. Speaker. Favorable Report of the House Committee on Appropriations, House Resolution No. 34, RESOLUTION PROPOSING APPROVAL OF A MEMORANDUM OF UNDERSTANDING BETWEEN THE STATE OF CONNECTICUT OFFICE OF EARLY CHILDHOOD AND THE CONNECTICUT STATE EMPLOYEES ASSOCIATION (CSEA-SEIU LOCAL 2001) to be tabled for the Calendar and printing.

DEPUTY SPEAKER MORIN (28TH):

Tabled for the Calendar and printing. If not objection, so ordered. Will the Clerk please call Calendar No. 443?

CLERK:

On page 30, Calendar 443, House Bill No. 7401, AN ACT CONCERNING A STUDY OF VICTIM SERVICES. Favorable Report of the Joint Standing Committee on Judiciary.

DEPUTY SPEAKER MORIN (28TH):

Representative Stafstrom.

REP. STAFSTROM (129TH):

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THE CHAIR:

[Gavel] The legislation is adopted. Mr. Clerk. Uh, Senator Duff.

SENATOR DUFF (25TH):

Thank you, Madam President. I move for suspension for immediate transmittal to the House, please.

THE CHAIR:

So ordered, sir. Mr. Clerk.

CLERK:

Page 55, Calendar No. 631, House Bill No. 5002, AN ACT CONCERNING A GREEN ECONOMY AND ENVIRONMENTAL PROTECTION. (As amended by House Amendment Schedule "A" LCO No. 9844).

THE CHAIR:

Good evening, Senator Witkos. Pursuant to Rule 15, I will be excusing myself from the Chamber and the vote.

THE CHAIR:

Thank you, sir. The record will so reflect. Good evening, Senator Kissel.

SENATOR KISSEL (7TH):

Good evening, Madam President. Again, pursuant to Rule 15, I will be excusing myself as well to avoid any appearance of conflict of interest. Thank you.

THE CHAIR:

Thank you, Senator Kissel. Senator Logan, good evening.

SENATOR LOGAN (17TH):

Good evening, Madam President. Pursuant to Senate Rule 15, I wish to recuse myself from the debate and consideration of this bill.

THE CHAIR:

The record will so note, sir. Good evening, Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Good evening again, Madam President. Thank you. Madam President, I move acceptance of the Joint Committee's Favorable Report and passage of the bill in concurrence with the House.

THE CHAIR:

Thank you, sir. The question is on passage. Will you remark?

SENATOR NEEDLEMAN (33RD):

Yes, Madam President. Thank you. This bill is about building a good economy, providing good 21st century jobs for Connecticut. The bill fuels our economic engine and simply makes sense. Let me highlight a few of the key points that will benefit our citizens and stimulate jobs in the economy. Not wanting to bore anybody, but I think there are 19 parts to this bill. I will not go through all of

them. The first part of it is it's going to extend the existing procurements, the LREC, ZREC programs. It's going to continue the virtual net metering program. It's going to do a study on distributed generation so we have new procurement guidelines in the future. We're requesting that the state do a land inventory for DOT property so that we can install class 1 renewables on those properties. We're going to enhance the thermal energy portfolio standard. We're enhancing the state building construction codes for state buildings. We're going to allow DEEP to hire consultants on very sophisticated energy matters where they don't have internal capabilities. We're going to allow some storage of energy by the electric distribution companies. We're going to extend the residential furnace, boiler and propane tank program that allows for more efficient boilers. We're going to provide a procurement for anaerobic digestion at animal feeding operations and we're creating a green jobs career ladder so people can access those green jobs. This is another major economic development initiative on the part of the state. It clarifies some of the issues that came up as a result of SB 9 in the last session so we will be allowing people to continue to work under those procurements for energy for rooftop solar as well as virtual net metering and I think that what we hope to get out of this is a future plan for how the state will procure energy so people will be able to continue purchasing distributor generation on their property. Thank you.

THE CHAIR:

Thank you, Senator Needleman. Will you remark further on the legislation that is before the Chamber? Good evening, Senator Formica.

SENATOR FORMICA (20TH):

Good evening, Madam President, almost morning, good evening. I rise in support of this legislation and to offer a few comments.

THE CHAIR:

Please proceed, sir.

SENATOR FORMICA (20TH):

Thank you, Madam President. Thank you once again to the leadership of the Energy Committee to put this comprehensive bill together. This is a good opportunity to kind of right some of the small problems that we've had in the solar industry over the last year or so and extend out some of the programs until we get into next generation of these energy efficiency programs and I look forward to the opportunity of growing solar in our state. This will give us that opportunity to move forward over the next few years along with a few other of the initiatives that the good Senator has mentioned and I strongly support the anaerobic digestion portion which I think is part of the future and I urge my colleagues to support this legislation. Thank you, Madam President.

THE CHAIR:

Thank you, Senator Formica. Will you remark further on the legislation that is before the Chamber?
Senator Sampson.

SENATOR SAMPSON (16TH):

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Good evening, Madam President. The bill before us has a great many sections and I think the majority of the bill is very well intended and beneficial to our state's future energy needs. I do have a couple of questions for the proponent of the bill if I could on section 15, though?

THE CHAIR:

Please proceed, sir.

SENATOR SAMPSON (16TH):

Through you, Madam President, I'd be curious to ask if under this section, an anaerobic digester on a farm needs a solid waste permit? Through you, Madam President.

THE CHAIR:

Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Through you, Madam President, I'm not sure about that. I would not imagine that they would.

THE CHAIR:

Senator Sampson.

SENATOR SAMPSON (16TH):

Thank you, Madam President. I appreciate that. My understanding is that a solid waste permit is intended to protect ground water among other environmental protections. Is that accurate? Through you, Madam President.

THE CHAIR:

Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Through you, yes, it is, in most cases it would be.

THE CHAIR:

Senator Sampson.

SENATOR SAMPSON (16TH):

Thank you, Madam President. My understanding is that the water that comes out of a digester is known as an industrial discharge. Is that correct? Through you, Madam President.

THE CHAIR:

Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Can you repeat that sir?

THE CHAIR:

Senator Sampson.

SENATOR SAMPSON (16TH):

Thank you, Madam President. The water that comes out of a digester after the process is considered to be an industrial discharge and I guess I'm just asking if that's an accurate statement and I'm

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curious to know because in a typical situation with a discharge like that, DEEP certainly has some requirements about how that water is to be handled. Through you, Madam President.

THE CHAIR:

Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Through you, Madam President. I do believe that this qualifies for the same kind of discharge permit and don't believe that it's the same kind of discharge that you're thinking about with regard to commercial waste treatment facilities.

THE CHAIR:

Senator Sampson.

SENATOR SAMPSON (16TH):

Thank you, Madam President. Yeah, I'm speaking very specifically because I have a significant business located in my district in Southington that is involved in this anaerobic digesting energy producing facility and my understanding is that the water that's discharged for their facility is considered to be an industrial discharge and they have to go through a process through DEEP to make sure that this water is hooked up to the sewer and they can only process certain types of things and I'm just curious if these digesters on farms will be subject to those same requirements. Through you, Madam President.

THE CHAIR:

Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Through you, Madam President. I can't answer that specifically, but given the fact that the animal waste that is on the farm already that may lie fallow in the field, this would probably not be under the same category as a commercial digester that you're thinking about that they have in Southington for food waste and the like.

THE CHAIR:

Senator Sampson.

SENATOR SAMPSON (16TH):

Thank you, Madam President. I don't pretend to know a great deal about this subject but I have been asked to get some of these items on the record and I do want to look after certainly a thriving business actually that's going on in my community and somebody that I know has invested a great deal of energy and effort in complying with all of the requirements that we place on them as a state you know both through DEEP and through other state agencies. And I guess the question is, how do we know that this water, this discharge from the anaerobic digesters on farms is not, that farmers are not just gonna put it back on their crops as water and that it's processed the same way it should be, the way my Southington guys have to do it. Through you, Madam President.

THE CHAIR:

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Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Through you, Madam President. So again, most farms are not hooked up to sewer systems and they manage their own water on their farms and I would imagine that they would be using it locally. I think that this is very specifically directed for farm digesters and although I think that we would like to see more anaerobic digestion happening in the state because we have such a massive amount of food waste, I don't think that the same rules will apply, although I can't speak specifically because that question has not come up.

THE CHAIR:

Thank you, sir Needleman. Senator Sampson.

SENATOR SAMPSON (16TH):

Thank you, Madam President and I appreciate the answer. I know these questions may not be simply defined right before us. So my understanding is in section 15 that farmers are limited to be able to only use 5 percent food waste. Is there a way that that's going to be tracked? Are they going to be required to keep records? Is DEEP going to track this? Are they gonna look at logs, files, records, anything like that? Will there be any sort of testing done to make sure that that is indeed the case? Through you, Madam President.

THE CHAIR:

Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Through you, Madam President. Yes, I believe that is the case.

THE CHAIR:

Senator Sampson.

SENATOR SAMPSON (16TH):

Thank you, Madam President. So we are affording farmers a \$2 million dollar benefit by foregoing the solid waste permit that is required in the similar situation that I already described. Are farmers fined today for over-applying manure to their farms? Through you, Madam President.

THE CHAIR:

Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Through you, Madam President. Can you repeat that?

THE CHAIR:

Senator Sampson.

SENATOR SAMPSON (16TH):

My understanding is that these permits cost as much as a million or two million dollars to be able to process this solid waste and I'm just asking if farmers are fined today for over-applying manure to their property? Through you, Madam President.

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THE CHAIR:

Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Through you, Madam President. I'm not sure that I understand the question about the over-applying of manure; however, again, they're not allowed to use more than 5 percent food waste. They're processing what they generate on the farm for use on the farm.

THE CHAIR:

Senator Sampson.

SENATOR SAMPSON (16TH):

Understood. Thank you, Madam President. And I appreciate the answers to the questions. Was this bill heard in the Environment Committee or was it just in the Energy Committee? Through you, Madam President.

THE CHAIR:

Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Through you, Madam President. Just the Energy Committee.

THE CHAIR:

Senator Sampson.

SENATOR SAMPSON (16TH):

All right. Thank you, Madam President. I appreciate all the answers to the questions. Again, I was given these questions to attempt to get them on the record. My goal here is very simple and that is to try and find the proper answers for the record to make sure that we're passing good public policy there that will benefit our state and when it comes to these anaerobic digesters, I'd like to make sure that the farms are complying with the same strict requirements that my business in Southington is just for the sake of fairness for one thing and also in a way to you know make sure that we're preserving our environment the best way possible. My understanding is that these permits that had to be purchased by my Southington business owner is very expensive to the tune of millions of dollars and they are issued by DEEP so the fact that this bill only went before the Energy Committee and not the Environment Committee, I don't know that it got the right review that would be necessary to make sure that they are in full compliance the way we would like them to be. I'm gonna vote no today. I wish that I was much more aware of this situation before it reached this Chamber today for final action and that's all I can do with it at this moment. Thank you, Madam President.

THE CHAIR:

Thank you, Senator Sampson. Will you remark further? Senator Miner.

SENATOR MINER (30TH):

Thank you, Madam President. I rise in support of the bill. There was a hearing in the Environment Committee relative to digesters on farms and the

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issue is that most of these large farms have either hit or exceeded the federal regulations for phosphorus loading on the land and so that's why it's important to try and create an incentive for digesters on farms so I would appreciate support of the bill. Thank you.

THE CHAIR:

Thank you, Senator Miner. Will you remark further on the bill before the Chamber? Senator Anwar.

SENATOR ANWAR (3RD):

Thank you, Madam President. I also rise in support of this bill. It's important and I have in my district dairy farms and some of the other farms which are looking forward to an opportunity like this. This, if you look at the energy costs as well as the energy challenges that many of these farms have, they will become much more sustainable if we have these opportunities so it is in the best interest for sustainable farming and efficient farming to have a bill like this which will give that opportunity. So I wanted to thank the leadership of Senator Needleman and his team for getting it so far and hopefully, we will move forward and I would encourage everybody to vote for this too. Thank you.

THE CHAIR:

Senator Needleman.

SENATOR NEEDLEMAN (33RD):

Thank you, Madam President. So I want to thank all my colleagues for all their questions and they were

all good questions and I appreciate the comments. So I would like to move for passage of this bill. I think again, it is economic driver in the state. We're looking to do a lot of good things that provide for a more sustainable future for future generations and there are a lot of pieces to this. There are fixes to the prior bill and things to look forward to for the future. So again, like the wind bill, we're looking to build a 21st economy and these are the type of economic development initiatives that we need. Thank you.

THE CHAIR:

Thank you, Senator Needleman. Will you remark further on the legislation that's before the Chamber? Will you remark further on the legislation that is before the Chamber? If not, Mr. Clerk please call the vote. The machine will be opened.

CLERK:

An immediate roll call vote has been ordered in the Senate. An immediate roll call vote has been ordered in the Senate on House Bill 5002. An immediate roll call vote has been ordered in the Senate on House Bill 5002. An immediate roll call vote in the Senate on House Bill 5002. Immediate roll call vote in the Senate.

THE CHAIR:

Have all the Senators voted? Have all the Senators voted? The machine will be locked. Mr. Clerk, kindly announce the tally.

CLERK:

bb
Senate

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June 4, 2019

House Bill No. 5002.

Total number voting	33
Those voting Yea	32
Those voting Nay	1
Absent and not voting	3

THE CHAIR:

[Gavel] The legislation is adopted. Senator Duff.

SENATOR DUFF (25TH):

Thank you, Madam President. Would the Clerk, can I mark an item to go, please. Calendar page 36, Calendar 504, House Bill 5524, and I'd like to mark that item go on our next item of business, please.

THE CHAIR:

So ordered. Mr. Clerk.

CLERK:

Page 36, Calendar No. 504, House Bill 5524, AN ACT
INCREASING THE PENALTIES FOR THE SALE OF FENTANYL.

THE CHAIR:

Good evening, Senator Winfield.

SENATOR WINFIELD (10TH):

Yes, good evening, Madam President. I move acceptance of the Joint Committee's Favorable Report and passage of the bill in concurrence with the House.

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SENATOR NEEDLEMAN (33RD): Thank you, Representative O'Dea. When I get to be old enough, I'll probably join myself [laughter].

REP. O'DEA (125TH): I'll give you the application.

SENATOR NEEDLEMAN (33RD): I'm 20 years away. Next on our list is Commissioner Dykes. Are you here right now? We're gonna move beyond that and, um, Bryan Garcia from the Green Bank? Good morning and welcome. Thank you for coming.

BRYAN GARCIA: Good morning. By the way, it's this gentleman's 44th birthday today so he's not too far away from becoming a member of AARP. Members of the Energy and Technology Committee, good morning. My name is Bryan Garcia. I'm president and CEA of the Connecticut Green Bank. I am joined by Brian Farnen, our general counsel. We are to testify in support of House Bills 5002, 5789, and 6237.

For House Bill 5002, we offer up the three key principles that acted as the guides for Governor Lamont's Energy Policy Transition Committee. These principles provide a guide as to what policies should be included in Connecticut's Green New Deal. First, job creation and economic development must be the plan's top priority by ensuring that we are leveraging payer resources to attract multiples of private investment in our state's growing green economy.

Second, we need to lower energy costs for everyone with an emphasis on underrepresented communities through increased investments in energy efficiency, renewable energy, and cleaner transportation. Beth Galante is here from PosiGen Solar PV and Energy

Efficiency Company that is serving low to moderate income households as well as minority communities.

Third, we must commit ourselves to an ambitious long-term greenhouse gas emissions reduction target that brings us together working towards a sustainable energy future while helping our communities adapt to the impacts of climate change. These principles will help Connecticut's Green New Deal, include policies that propel our state's green economy forward.

House Bill 5789 proposes to set new targets for the state's Lead by Example Program. Alongside it's energy reduction targets, the Green Bank is here to help reduce the burden of energy costs on the state through the installation of clean renewable energy. Working with DEEP and the Attorney General's Office, we have developed a standardized successfully developed a standardized Power Purchase Agreement that was pioneered by the Connecticut State Colleges and University system and is now being expanded to state agencies. We are constructing and developing projects that will save the state more than \$25 million dollars over the 20-year life of these projects and we're only getting started.

House 6327 proposes a study of energy storage and distributed energy resources along with subsequent recommendations on pilots and policy changes. As we work to decarbonize and modernize the grid, it will become increasingly important that we begin to pair battery storage with distributed energy resources including renewable energy generation.

Connecticut has focused a lot of its efforts on reducing the burden of energy costs to end use customers through behind the meter clean energy

major renovation has a floor of \$2 million dollars. New construction is \$5 million. You're to design to this standard so looking at that kind of cap and how that's set, to your point, is an important piece.

SENATOR NEEDLEMAN (33RD): I appreciate your coming and if there are no other questions, I think we're gonna move on. Thank you so much. Happy Birthday! One more time. Oh, sorry, no microphone.

REP. MCCARTHY VAHEY (133RD): Chairman Needleman and ranking members, Senate Formica and the members of the Committee. Thank you so much for having me today. I'm actually here today with Mary Hogue from Fairfield and Diane Lentakis who are going to speak to you today about the Green New Deal Bill, House Bill 5002. So I'm going to let Diane begin.

DIANE LENTAKIS: Thank you so much Representative McCarthy Vahey. I appreciate it. Is the mike on? Thank you very much Representative McCarthy Vahey for letting us have your time. Good morning Senator Needleman, Representative Arconti, members of the Energy and Technology Committee. Please advance a Green New Deal for Connecticut by supporting Proposed Bill HB 5002. Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people. I urge the Committee to draft and support Green New Deal legislation that will include the following: Restoring ratepayer funds designed for energy efficiency and renewable energy; regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids; restoring electric rate equality (net metering)

harmful by 2018 legislation in Connecticut; retiring polluting power plants like Millstone Nuclear Power Station & Bridgeport Harbor Station (Combined Cycle); banning gas infrastructure development and fracked gas waste; requiring government buildings to be powered by clean renewable energy such as solar, wind, geothermal; requiring all new construction in Connecticut to incorporate clean renewable energy; expanding and electrifying mass transit systems to serve the most people and eliminate emissions; expanding the renewable portfolio standard to 100 percent by 2030 or sooner; rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families; upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves, we call that resiliency; making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems; lastly, generating high-quality employment for tens of thousands of Connecticut residents through a clean, renewable energy jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities. Thank you for your consideration.

MARY HOGUE: Hi. I'm Mary Hogue from Fairfield. Thank you, Representative McCarthy Vahey for this time. I'm also co-chair of the Connecticut League of Conservation Voters and our executive director submitted testimony so I'm not going to reiterate that, but I do want to ask you to endorse and support the HB 5002. It's very important for the environment, it's important for our economy, it's

important for equity and I think it will be a very positive thing for our state. Thank you.

SENATOR NEEDLEMAN (33RD): Thank you so much. Does anybody have any questions? Nope? Thank you gentlemen.

REP. STEINBERG (136TH): Mr. Chair. Thank you for being here today. It's good to see. My biggest concern is the Green New Deal is rather amorphous and we're going to need everybody's input to make it practical, something we can actually pass this year. I think it's great to have aspirational goals, but there's so many bills before this legislature, before this Committee and the Environment Committee that easily fit within the context of a Green New Deal. I look for your assistance in making sure we shake something that's gonna pass this year. Thank you.

REP. MCCARTHY VAHEY (133RD): And Senator, may I respond?

SENATOR NEEDLEMAN (33RD): Sure.

REP. MCCARTHY VAHEY (133RD): And thank you for that, Representative Steinberg, and I think this is one of the reasons why I've brought people like Mary and Diane here today. They're the folks who are out in the community and understand the work on the ground level and of course, there are many experts in this room, but I appreciate very much what you're saying. I think this is something we wanna achieve with very specific results. Diane obviously had a number of examples in her testimony but I look forward to partnering with all of you and with folks like Mary and Diane to make sure that we can do just that.

SENATOR NEEDLEMAN (33RD): Thank you for coming today, Commissioner.

KATIE DYKES: Thank you so much for having me and for accommodating of being a little later in your schedule. We had a bit of a snow delay this morning for West Hartford Public Schools so, I'm so pleased to be here this morning to offer testimony. We have submitted written testimony on a number of the bills and concepts that have been raised by the Committee and I'd be pleased to address any questions on any of the written testimony, but I did want to appear in person to offer oral testimony, particularly on House Bill No. 5002, which is AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.

I want to commend the Committee for its leadership in raising this concept and certainly we at the department and within the administration are very focused on the objectives of this bill which are to achieve a dramatic transformation and decarbonization of all sectors of our economy with respect to the way we generate power, the way we heat and cool our buildings and the way that we move in the transportation sector.

We just offered in our written testimony a few sort of high-level principals that have been important to the wide variety of policy and planning activities that we've had underway at DEEP and that we'll engaging in, in the months to come and we offer these as principal for the purpose of this public dialogue and to frame what could be future discussion with the Committee on the shape of this bill, and I just want to speak very generally to them. Equity is certainly an incredibly important piece of a transformative approach to

decarbonization. We recognize through the activities that we undertake in terms of resource planning and environmental protection, particularly with respect to our shoreline communities that many of the most vulnerable populations that are going to be experiencing the effects of climate change are located along the coastal areas and it's incredibly important that our, this transformation, this green economy that we're transitioning to is inclusive of, accessible to, and beneficial for Connecticut's low to moderate income residents, and we also recognize the benefits of an equitable approach can accrue to all ratepayers to the extent that if we make this transition, most of the measures that we have to decarbonize involve electrifying and moving different types of uses over to electric power which means that there will be impacts and implications for the rates that are charged to Connecticut families and businesses. And so with that respect, we know that when rates become unaffordable, the cost of hardship programs or uncollectable accounts are socialized among all ratepayers and so in fact, there is a benefit to everyone to the extent that affordability and equitable participation is at the forefront of the program designs.

Decarbonization has been a very intense focus for our department and in concert with other agencies like DOT, DECD who have been partners with us in the Governor's Council on Climate Change which has been meeting for the last two years, or three years and has developed a climate action plan to help lay out the more specific steps that are needed to meet the state's current greenhouse gas reduction goals for 2020, 2023 and 2050. And so, the details of that plan and that analysis to the Committee, it's been

very important for our work and we've been pleased to conduct that activity through the Governor's Council which is a public participation and interagency coordination.

I spoke briefly to ratepayer impacts. Sometimes these questions about ratepayer impacts are you know perceived as a barrier to making smart investments in decarbonization so I think it's, I just want to take a moment to really underscore how we view the importance of assessing ratepayer impacts, not as a preventative to moving forward, but really as a measure of the degree to which the investments that we are making in transforming to a green economy are providing maximum benefits to customers at a minimum of cost. And we see many opportunities in the implementation, the design of programs to ensure that we are making this commitment to minimize cost of carbon mitigation including through the use of competition. We've seen great results from the competitive RFP's for example that this Committee has authorized the state to undertake over the last eight years. We've been able to capture for customers the benefits of the falling costs of technologies by having periodic competitive RFP's open to a broad range of technologies where developers have really been pushed to sharpen their pencils and bring us their best pricing and so the declining prices that we've seen in the power purchase agreements that our utilities have entered into really reflect the use of the competitive model. And there are so many opportunities to maximize the benefits that the customers are getting from these investments and I think that the continued progress in areas like grid modernization, seeking more transparency from our electric

distribution companies around where there are opportunities in their distribution planning to make sure that the decarbonizing technologies that we're investing in are being placed in locations on distribution grid where they can help to minimize the cost of integration or avoid traditional investments that the utilities may need to make.

These are the kinds of programmatic sort of efficiencies that are critical to make sure that we're not just getting good prices for what we're buying, but we're helping to avoid other kinds of costs, not just in the theoretical assumed way that we often do, but in actuality and so we look forward to continuing to be a partner on smart implementation of these various programs with PURA and with other agencies to ensure that we can achieve those maximum benefits.

I've spoken briefly to the importance of competition which we highlighted in our comments. Economic development and investment are obviously another real key aspect of a Green New Deal and this administration was pleased to, I know the Governor has advanced a bill for example to support investment in offshore wind at a very significant scale. One thousand megawatts when added to the significant procurement authority that we have not yet allocated gives us the potential through competitive procurement, again for the state to be a leader in investing in this particular technology just as an example, which we know can be a great economic driver for our state to the extent that we compare the buying power, the purchasing power of the Connecticut ratepayers with smart investment and cultivation of all aspects of the offshore wind economy including not just the staging and

deployment of equipment, but also hopefully capturing part of the supply chain work that we know other states are competing with us for.

I would also be remiss if I didn't indicate the importance of preserving the funding sources for those parts of our green economy that are already here and thriving in the state and that is with respect to the Conservation and Load Management Programs. The Governor has made a commitment to not sweep those funds, which we know have been vulnerable to legislative sweeps in the years past. The Conservation and Load Management Programs are supported and depend upon a large network of vendors who have invested in training their staff to be able to go out and deliver on critical energy efficiency and weatherization measures for families and businesses across this state. They are not regulated utilities. They have to meet payroll or they don't have a guaranteed sort of rate of return and cost recovery as our utilities do so it's even more important if we're to be successful with this Green New Deal that we preserve the funding streams, the revenue sources that are helping them deliver through their private model the enormous benefit multiplier that efficiency is for the state.

Lastly, it's very important for us to think about other benefits that we can achieve at the same time that we are pursuing decarbonization and fuel security and winter reliability is one that's really forefront of my mind. We know that we have a unique challenge in New England of being, through our deregulated market, increasingly dependent on natural gas-fired power plants to provide our prior generation today, but we have a limited investment in the gas pipeline infrastructure to deliver gas to

those power plants so that they can run reliably all year round especially in the kind of cold, prolonged cold periods that we experience in the winters here in New England. We know also, and I will contrast this to just a few years ago when I was appearing before this Committee to advocate for investment in natural gas pipelines to support the reliability of the grid. We know that there are renewable technologies like offshore wind that have emerged into this market that are complimenting other types of renewable resources and clean energy resources like energy efficiency that can help to reduce our reliance on natural gas in the wintertime.

So it's very important that as we think about where we spend our precious dollars, especially in these early years of this transition of a Green New Deal that we are investing in technologies that provide a benefit, not just in terms of reducing carbon emissions, but also in terms of maintaining the reliability of the grid and helping us address the fuel security challenges that we have in the winter. If we aren't thinking about that as policy makers and as legislators here in the state, then we will be forced by the ISO New England and those responsible just for the reliability portion to continue to make investments in other types of resources in noneconomic ways in order to keep the lights on, so that's a very important sort of win-win opportunity that we see in our department to invest in things that help with decarbonization and fuel security, and we hope that this can be a priority for the Committee as it works on this as well. That's obviously been a key part of our conversations with our other states in New England. We are very focused on ensuring that the ISO market

that we participate in is not a hindrance to or not working at cross purposes to the state's efforts to decarbonize, but is giving credit to the state for the investments that we are making.

And so I obviously could go on for a long time, but there's so much to cover with this exciting venture that the legislature is focusing on and certainly I have to close by echoing really the urgency of this moment, that with the science reporting that's coming out every day telling us that we are, it's later than we think, I commend the Committee for its work on this and I hope that we can really engage the types of investments and the scale of investment and authority that will be needed to make this transition as quickly as possible. So thank you for that opportunity to testify and I'm happy to take any questions on this or any other testimony that we provided to the Committee today.

SENATOR NEEDLEMAN (33RD): Thank you so much, Commissioner. And we have some questions?

REP. ACKERT(8TH): Thank you. Thank you, Mr. Chairman, and congratulations on your confirmation by the way.

KATIE DYKES: Thank you so much.

REP. ACKERT(8TH): Going back to, you know so we're looking at, you know a bill 5002 that's five lines right now.

KATIE DYKES: [Laughs].

REP. ACKERT(8TH): We had a wonderful person testify earlier that probably would have made it to like 100 because she had so much good information. You know, last year, you know we put two pieces of legislation

together, SB 7 and SB 9, kind of essentially Connecticut's Green New Deal in a way and we have some fixes I know in 9, that would be section 7 mainly I hear but, um, and I think we'll look at both of them. Didn't that kind of set us on the path that we're talking about in this legislation? That was obviously a booklet of information on the environmental side. You know I looked at the, uh, the work that was done under the Malloy administration and on exactly the topics that we're talking in this. How do we, is there gonna be some input from your office that will add to those pieces of legislation that will move more in this direction?

KATIE DYKES: Well we would be delighted to be a partner with the Committee on the development of this and beyond the five lines. I will say you know, we, I was so pleased to see the legislature move SB 7 and 9 forward. I mean the increase to our renewable portfolio standard for example was a tremendously important signal to send and obviously a critical piece of the framework for decarbonizing the electric power sector. I do believe that the plan that we've produced from the Governor's Council on Climate Change last year can be very informative as far as additional elements of authority that the Committee might consider authorizing that will help us to ensure continued progress. The good or bad of working on climate mitigation is that there is always much, much more to do and I think that we've focused a lot on the electric sector and we have a lot of tools there. We certainly have a lot of detailed suggestions we could make to the Committee about how to further the impact of those tools and then certainly we face, you know we're farther back

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towards the starting line in decarbonizing transportation and the building sector in terms of the conversion of customers to electric sources of heat. They're highly efficient, for example. So thinking about how to tackle those and if there's an appetite in the Committee to push forward in those foundational tools that we will think will be necess--, we don't have an RPS kind of equivalent for those sectors and so there's certainly been a lot of discussion and concepts that have been considered by the Committee in those areas but we're a long way from sort of the quantum leap in achieving reductions there so we, you know depending on which sector and the level of ambition, we have a lot of ideas.

REP. ACKERT(8TH): Thank you. I look forward to hearing those as we move forward. So in the building sector, I know that we have new building state building codes that came out that really, really have increased the efficiencies of our home and unfortunately, Connecticut really hasn't completely responded from the uh recession if we wanna call it that and I don't think markets are, I know that the Home Building and Remodeling Association, which I'm like hey hang on a little bit here because we just can't afford these efficiencies. They did go through, they passed and we have a new building state building code that has really increased efficiencies and is something that we'll look at on the home side. I don't know about on the commercial efficiency side where we've actually got to that level where the homes operate now, so is there, you know, a thought in terms of commercial? I know the home, the home, the home folks are, you know at a, the R rating of insulation

has really, really increased substantially you know, and I don't know about, and I know that the heating systems now are very efficient. I know that when we talk about the thermal side of things, I think it's a piece of legislation that we really need to start to think more about and for, that's a, well I can talk to Joe afterwards about how we can, that timetable's already in my, I mean that, that formula's already in my head but do you look at us doing something on the commercial side?

KATIE DYKES: It's a great question. I know that there's House Bill 6240 where, where we had come to, we didn't feel that the bill is necessary because we are really moving forward with the adoption on the latest. I think as you indicated or I think as implied in your, in your question you know we don't have a lot of new housing starts in the, in the state and we have a uniquely diverse housing stock in terms of its age so there, as compared to maybe other jurisdictions that do have a lot of growth and construction, the building code is not as transformative, but it is certainly a must do and I do think that we are on good track there, but I would be happy to follow up with you about the latest status in terms of commercial building code.

REP. ACKERT(8TH): Thank you, Commissioner. Thank you, Mr. Chairman.

SENATOR NEEDLEMAN (33RD): Thank you. Senator Fonfara?

SENATOR FONFARA (1ST): Thank you, Mr. Chairman. Welcome, Commissioner.

KATIE DYKES: Thank you.

SENATOR FONFARA (1ST): Congratulations on your recent appointment.

KATIE DYKES: Thank you.

SENATOR FONFARA (1ST): Confirmation. [laughter] Commissioner, I listened to you and others today talking about the challenges and you have a responsibility, the Consumer Counsel Katz has a responsibility to that balance, the Commissioners from PURA will be speaking after you, the balance of addressing the issues involved in these initiatives, now called the Green New Deal. I guess that's the watch word of the day, but people have been working on these issues for a long time and I want to recognize those efforts. It's not just today.

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KATIE DYKES: Well I think and, and you are someone in particular who's been working on these issues for quite a long time particularly with equity in mind and so that, that should not go unacknowledged. [laughs].

SENATOR FONFARA (1ST): So you spoke about energy efficiency, decarbonization, the balance on the impact on ratepayers, fuel security. I think about what happened last winter and I know you're aware and folks from PURA are aware and some of the council when we had a polar vortex event and I follow the fuel mix on a daily basis and for a few days during that cold snap, oil in New England firing generation was 33, 36 percent of the fuel mix. On an average day like today it's zero and I don't, I haven't looked at, but I've been told about the impact of carbon emitted into the air in this, in New England on those days had a major impact. I've heard it wiped out a year's worth of solar benefit. I can't confirm that, but that's what has

been shared with me and I wonder about the opposition to Marcellus shale natural gas being brought into New England which is much, much cheaper just a few states away and the cost of natural gas on constrained days to the system and what ratepayers pay for that. Has there been any thought given to being able to, and by the way, we know that much of the investments made in this state in solar, in New England in solar and energy efficiency is paid for by ratepayers, it's not free, it's part of our bill every month, and so has any thought been given to the grand bargain if you will, short-term pain, but long-term gain of bringing in that natural gas, notwithstanding Massachusetts which is not an insignificant issue, I know, [laughter] but, but --

KATIE DYKES: I'm putting a big asterisk right here.

SENATOR FONFARA (1ST): Right, but, but the opportunity to bring in much cheaper natural gas and putting a Green New Deal tax if you wanna call it that, it's still, the natural gas, I believe the price would still be lower than what we would be paying in general, but tremendous amount of opportunity to invest in renewables that long-term would move our state and move New England further along than we ever would at what we're investing in today and can afford to invest in today.

KATIE DYKES: So I appreciate the, you know, and your particularly lengthy experience with these issues and you know, I think this has been something we've talked about for many years and that the ISO has been very focused on is the lack of pipeline availability to bring Marcellus gas to the power generators that have been built through the competitive market so they can run on days like, I

believe it was two January's ago or last January where we had that really, really cold period and you know, essentially our grid reliability was hanging on the edge of you know how much oil was available in storage tanks to keep things going. It's a really, it's an issue that I think we need to revisit again. The department is doing an integrative resource plan and we issued one in 2015, I believe, where we really went through what the best available information was in terms of the costs and benefits and the need for gas pipeline capacity to address the winter reliability challenge.

You mentioned Massachusetts, or let me not go there first. Let me say that what we didn't have in 2014 that we have now is the prospect of low cost offshore wind, for example, where we see those prices coming down significantly and we know that the capacity factor for offshore wind, meaning how many hours of the 24/7/365 the resource is actually running. That capacity factor is quite high and offshore wind also tends to be producing in those hours, those specific hours where the ISO has identified the real need in terms of winter, during these winter periods. So now, the ISO did a study that they released almost two years ago now where they were working at this issue and having sort of concluded, I think, that pipelines were not going to happen politically in the region and that they needed to assess what level of exposure the region is facing and what the potential resources were that could fill the gap, and so they really concluded kind of two types of things.

One is that there are certain resources that, in the absence of new pipeline build, we can't live without and so there's certainly a lot of time taken in this

committee and a lot of time that we're spending today on the prospect of the future of the Millstone Nuclear Unit and whether or not a contract is needed to support and what price the Connecticut ratepayers would be paying on the retention of that facility because it is one of those facilities that the ISO has identified because it doesn't run on pipeline gas, and it provides so much output that we can't reliably operate the grid in the wintertime without it. The NextEra Seabrook Nuclear Plant is another and a number of LNG import facilities into the region also fall into this category, and then the ISO identified too that there are resources like offshore wind they particularly pointed to, but other types of renewables and energy efficiency that can't fully substitute at scale today for things like a baseload nuclear unit, but the more you dial up those resource, the less of the risk exposure that we have from field security so I think that that's really where our focus is now. The ISO is working on a new market rule design to address fuel security. We've been advocating that they need to make it work for baseload nuclear units to value the fuel security that they provide which is certainly important to the State of Connecticut. And then also ensure that those types of zero carbon resource like the offshore wind that can help to address the problem can also be compensated in this fuel security market design.

Pipelines, you know, we have, and I know that there's a bill and we provided some length testimony on to consider whether to retain the continued authority for the State of Connecticut to contribute its share and investment of natural gas pipeline capacity that electric ratepayers would pay to

ensure that gas generators can get pipeline gas in the wintertime. You know, I think that we know that the state of New York is very opposed to siting new gas pipelines that would reach New England and we have not seen the state of Massachusetts really advancing any legislative proposals to obtain authority for new gas pipeline purchases in that state, and again, we are, I think there are questions about what an investment in gas pipeline capacity that's supporting gas generators, how that investment squares with our carbon goals now that we are several years you know later than we were in 2014 towards you know the outer term sort of carbon you know reduction targets that we need to meet.

SENATOR FONFARA (1ST): If I could just interrupt you just, in terms of the state's commitment towards building electrification, motor vehicle electrification to reduce carbon in that regard, that's gonna take a lot of money to do, particularly building electrification.

KATIE DYKES: Correct.

SENATOR FONFARA (1ST): And where we get the resources to do that is --

KATIE DYKES: If we're seeing price spikes from winter reliability or --

SENATOR FONFARA (1ST): What I'm saying is if, I understand the opposition in other states and here in the State of Connecticut, this bill being one example of that to bringing, having more natural gas being used to, for paying for electricity generation, but the cost to achieve the carbon reductions that we need, the meaningful carbon reductions, are going to be significant and if you

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have a mechanism in which to achieve that goal, I understand the opposition of other states, but just from the standpoint of how do we get there. We can dream, but you know I know that people, that's Connecticut's economy is impacted because of the high cost of electricity in business in particular -

KATIE DYKES: Right.

SENATOR FONFARA (1ST): And so there has to be a recognition of how do we get to where we want to get to in a real world.

KATIE DYKES: Yeah and I guess unfortunately, what we, the challenge that we have is that acting just as Connecticut alone, for example, even if there were political will and we concluded that this is, can be harmonized with, you know that this is tolerable within the, meeting the, you know meeting the carbon goals and so on, we are only 25 percent of the energy consumption, but we would be paying 100 percent of the cost of the infrastructure build and so that's one of the reasons why we didn't go forward with a pipeline purchase in 2015 because without having other states in the region --

SENATOR FONFARA (1ST): I'm not suggesting that Connecticut do anything alone in this --

KATIE DYKES: No, no and I'm not suggesting that you are.

SENATOR FONFARA (1ST): The conversation ought to be had about how to achieve the goals, the significant goals of decarbonization in a manner that will allow us to get there and not just have bills that you know are talked about ad nauseum in this committee

and whether they are ultimately are realized remains to be seen, but --

KATIE DYKES: And I guess I maybe conclude this way, to say that this is where a lot of time has passed since 2014 when the governors were all together talking about gas pipelines and we have new technologies like the offshore wind that can help provide a fuel security benefit so I think the key to, as I hear you focusing on, is decarbonization, but at least cost. It's to make sure that what we're purchasing and investing in to achieve the decarbonization is also going to, we can try to prioritize those investments that also address fuel security and when we do that, then we can avoid having a situation where we've invested in things you know for our policy goals, but then to maintain reliability, we have to make duplicate investments in other things that are conflicting with our policy goals, if that makes sense.

SENATOR FONFARA (1ST): Yes.

KATIE DYKES: Which ultimately will just mean more cost for ratepayers so I think that's been our focus, is try to look at those types of resources that can check both boxes and do more of them [laughs].

SENATOR FONFARA (1ST): Thank you, Commissioner.

KATIE DYKES: If that's helpful.

SENATOR FONFARA (1ST): Thank you. Thank you, Mr. Chair.

SENATOR NEEDLEMAN (33RD): Thank you, Senator. I think Representative Arconti?

REP. ARCONTI (109TH): Thank you, Mr. Chair. Thank you, Commissioner for testifying. No questions, just more of a comment. I just wanted to make public comments on the Green New Deal bill. I know it's in very rough form right now, all five sentences, but in the drafting of the bill, you know my intention is to make it very pragmatic and practical to benefit ratepayers. I want to include as many stakeholders as possible so I look forward to working with you and all members on this committee. My intention is to make this a very broad and bipartisan bill so a lot of members can expect phone calls from me in the near future because I think if we can do this right and include as many stakeholders as possible, we can lead the creation of many green collar jobs as the Governor put it yesterday so I just wanted to get that out there.

KATIE DYKES: I appreciate that and we'll be glad to take you up on that invitation and I should also say I think this is one of the great things about Connecticut is that our focus on cost, our focus on you know the inclusive process, bipartisanship, all of these things mean that the models that we create here in Connecticut are gonna be more attractive and more feasible for other states to follow and that's so important right now when states are really the ones breaking this ground, that we create replicable models across the country so I applaud your leadership.

SENATOR NEEDLEMAN (33RD): Meant to say Chairman Arconti, sorry about that. Representative Gresko.

REP. GRESKO (121ST): Thank you, Mr. Chairman. I have a quick specific question based on your

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right now and move into some of, we're over two hours into this, so is Paul Michaud from REEBA here? Thank you.

PAUL MICHAUD: Well good afternoon. The Renewable Energy and Efficiency Business Association, better known as REEBA appreciates the opportunity to comment in support of Senate Bill 468, House Bill 5002, and House Bill 5789. We did admit written comments so in the interest of time, I'm just gonna hit upon the high points for you this afternoon. Senate Bill 468, AN ACT CONCERNING THE INSTALLATION OF SOLAR PANELS ON STATE LAND NEAR PUBLIC HIGHWAYS. REEBA supports Bill 468, which would open up vast amounts of underutilized state land near public highways for potential solar energy installation. The land near public highways may be more attractive for solar energy investment because it would not conflict with the land conservation concerns that accompany undeveloped land near forests and agricultural areas. Public highway land could be put to good use for Connecticut by installing solar panels that would contribute to the state's energy security and clean energy development. So we support that bill.

REEBA also supports House Bill 5002, AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL. We believe that the bill, again, it's only a few lines right now, but we believe it promises to help Connecticut transition to a clean energy economy and help expand and create new business opportunities for the state. We do have some concerns with current law that we think could be addressed in this bill and we think it could be more effective at encouraging renewable energy if these obstacles for

renewable energy investment in Connecticut are addressed.

So the first one is Public Act 18-50, which was passed in another session, restricts rooftop and ground mounted solar arrays, and I'm almost done, to only meet the onsite load of the customer. We believe this is wasteful when many large building rooftops and unproductive land can host solar arrays that provide a surplus of clean energy beyond the customer's on-site load. We believe that that could be addressed in this bill.

And the second item we think could be addressed in this bill is the restriction on solar on agricultural farmland and core forests, that's in Public Act 17-218. Proceedings before the Siting Council to install solar energy facilities on underutilized land have been slowed or frustrated by this act, by these restrictions, and REEBA believes that the Green New Deal must balance the state's land conservation needs with the need for greater clean energy resources. You know we are strongly recommending that the minimum amount of the solar system be increased from 2 megawatts, which is relatively small, to 10 megawatts when these restrictions would kick in. So I think my time is up and I'm available for questions if you have any and I thank you for allowing me to make comments.

SENATOR NEEDLEMAN (33RD): Thank you, Paul. I just want to thank you for supporting the idea of solar on the sides of highways. I think it's not only important. Half of our streetlights are out on our highways. I might remind people of that and this would be a way to power them, but it also sends a very clear and loud statement to people coming into

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SENATOR NEEDLEMAN (33RD): We'll allow you to summarize [laughter].

MARILYN DIAZ: I will just say the confusion included me and even Representative Meskers eluded to it. It is extremely complicated. We have in fact given you a copy of our PowerPoint which is 34 slides which attempts to kind of give people again the tools that they need to make the decisions. Across the board, people have kind of come to the conclusion on their own that it's better to just stick with in fact the rates from our, from the electric suppliers and not go with third party entities.

Just from heart I tell you this that I myself, despite the fact that I'm an attorney, that I used to work for HUD, was very confused and ended up paying \$250 dollars at least a year more than I should have been and more so, what really concerns me is, as a person that takes care of her mother, I in fact counseled my mother to go with a higher rate and I will forever feel awful about having made that decision so we want you to take that into consideration as you consider all the numerous bills before and I thank you so much for allowing me to continue and finish.

SENATOR NEEDLEMAN (33RD): Thank you so much for coming. Anybody have any questions?

MARILYN DIAZ: Thank you.

SENATOR NEEDLEMAN (33RD): Thank you.
Representative Hughes?

REP. HUGHES (135TH): Thank you, Chairman Needleman and Representative Arconti and the whole Committee on Environment. I am Anne Hughes, Representative of

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the ecosystems and inhabitants the 135th District and co-sponsor and supporter of HB 5002, in support of Connecticut's Green New Deal. As you know, we are a frontline you know state in the front lines of climate change. We are so poised to act in urgent leadership of this crossroads to a transition to a green economy, the build the components and supply chain of offshore wind development, solar energy, other renewable energies and to build a pipeline of talent. We are so poised to have our graduates of technology and innovation be the green work force, that's why I'm wearing my green collar in support of it. This is a future academy. I'm really excited that the wind shore developers are already investing in the leases for offshore wind development because they know this is the future. Commissioner Dykes talked about brownfield land banks and also really talked about centering equity and transitioning to a green economy so I want this bill to really support the flexibility to develop a Connecticut workforce leadership to develop the young workforce in coming back to our state and really putting us on the map of talent and leadership in this urgency of the threat of climate change and the opportunity for transitioning now to renewable energy and decarbonization model for all of New England. I yield the rest of my time to my constituent, Olivia.

OLIVIA GREENSPAN: Thank you. Is this on?

REP. HUGHES (135TH): Yep.

OLIVIA GREENSPAN: Thank you, Representative Hughes.

Good morning Committee Chair Needleman, Representative Arconti, and members of the Energy and Technology Committee, the remaining ones. My name is Olivia Greenspan. I am an alumna of Joel

Barlow High School in Redding and I am currently a senior at Fordham University studying Economics. I am raising my voice today in support of Proposed HB 5002, AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.

I am one of the many young people across the nation working on the frontlines of climate change, not only marching and advocating for change, but also building the real projects and companies that put forth the solutions to decarbonize our atmosphere and oceans, recarbonize our soil, and restore the ecological balance that had already been devastatingly corrupted before I was even born. I personally am very passionate about working on brownfield regeneration in the State of Connecticut. I support Representative Steinberg's comments that we must take practical and disciplined measures. I know you continue to be a critical environmental advocate in the state, Representative Steinberg, and I thank you for that.

We need all of your thoughtful, attentive leadership in leading Connecticut toward a future that returns to me my right to a habitable environment because despite the great work that has already been done, if our current situation persists or and scenario that frankly even resembles our current situation persists, I will not live on an earth that is safe for me and those even younger than me.

I also echo Commissioner Dyke's emphasis that climate projections are getting worse by the day. I know that acting on its longstanding tradition of environmental leadership, Connecticut can become the state that models for our nation unprecedented climate action that many I am sure many will tell

you is not possible or is impractical. I am here to tell you that together, with discipline and attention, it is possible. If Connecticut is a smart and practical leader on this issue, many young almost-graduates like me will move to, move back to or stay in the state, a state that they know aligns with their values, cares about their future, and views our urgent challenge as an opportunity for long-term economic growth and prosperity. Thank you.

SENATOR NEEDLEMAN (33RD): Thank you so much for that testimony and thank you for coming today. I appreciate that.

REP. STEINBERG (136TH): Thank you, Mr. Chair. Thank you for your testimony. I particularly want to thank you, Olivia, you know for being here and I'm not sure you wanna take this on, but representing a generation to which we owe quite a bit of, really an apology to put it mildly and I'm taken by the fact that you're majoring in economics because I think that the green argument and the economic argument go hand-in-hand and we need to emphasize that even more as we go forward. I was just walking back from the Sierra Club presentation over at the Capitol and I was talking to a colleague who said that her children are afraid to bring new children into the world and I think of my three daughters. I don't have any grandkids yet and I don't want them to even be contemplating a choice because of what my generation with all of its ideals have done to this planet so I thank you for your advocacy. I think what we need to do is make sure that all those of the younger generation understand how they can be effective in bringing about change, particularly in the governmental sphere so that we

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have all the momentum we can for this Green New Deal and we actually get something done this year. Thank you.

SENATOR NEEDLEMAN (33RD): Thank you, Representative. Anybody else? Thank you guys so much for coming today. I hope you're enjoying Fordham. I would like to have Mike Trahan come up followed by Representative O'Neill.

MIKE TRAHAN: Mr. Chairman, Noel Lafayette is speaking directly after me, if we could testify together if that's okay with you, Sir.

SENATOR NEEDLEMAN (33RD): Sure. We'll give you three and a half minutes.

MIKE TRAHAN: We'll take it, thank you. Mr. Chairman, Mr. Chairman, members of the Committee, thanks for the opportunity to speak today. I'm Mike Trahan with Solar Connecticut. As the state's solar energy business association, our 40 members are responsible for the lion's share of the residential and commercial projects that have been installed in the state over the last 10 years. We've got four bills we'd like to speak to today. First is proposed Senate Bill 468, solar panels and state lands. We heard earlier the basics from Paul Michaud on why this is a common sense bill. We agree. We would only add that the bill fits nicely into the Governor's plan to increase green jobs in the State of Connecticut so as long as the project work goes to in-state companies. You know we're very concerned that ratepayer dollars go to or at least in-state contractors get a fair shot at the kind of work. Noel is going to speak on Senate Bill 220 which you heard from Senator Osten just a few moments ago.

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financial food chain, this would create a real mess on how that paperwork would work. Two is, you have some communities as she said that have multiple solar funds in them so maybe they already bought power from somebody else and they can't take this 30 percent. Then what? It also creates contractual problems. If 30 percent of the credits have to go a municipality by mandate and that town government can't agree on a contract or two boards are internally fighting, you can see how that would get complicated very quickly. But we agreed to meet and work with her multiple times to get, to resolve this problem so it doesn't happen again. It just has to be designed in a way that doesn't hurt the industry unwittingly but we will work with her and it will occur, as it was unfair and we don't stand by that whatsoever.

MIKE TRAHAN: On the, uh, on the Green New Deal, we obviously support the language that's out. We would encourage all the possible job prospects to come from additional offshore wind and other places. We would very much like to remind and draw attention to the committee that there are 2200 solar jobs in the State of Connecticut right now in the residential and commercial industries. Those projects or those programs that keep those jobs working are about to expire sometime in the next 6-8 months so while we encourage you to pursue green new jobs through the Green New Deal, there are some old green deals that are about to expire and if the legislature does not act in correcting issues with section 7 of SB 9 that was passed last year, those jobs are going to be in peril.

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The last bill is real quickly, Noel is gonna speak to 6237.

undertake direct billing and it's not for every retail supplier just to be clear, so your point is a legitimate concern. I just don't see, you know, 40 or 50 retail suppliers offering that or the kinds of products that I'm suggesting.

REP. MESKERS (150TH): And the only alternative I would suggest is the potential for an insert on a regular basis for those preapproved companies so that the billing remains with the carrier and the marketing material, if they're approved by PURA or that we put it through the regular process.

MARC HANKS: If I may, when you say insert, you mean in the distribution bill, to have an insert?

REP. MESKERS (150TH): Potentially, yeah. It would be suboptimal for the marketer, but it might be the best control function we could exercise.

MARC HANKS: Well I mean that's not the direct billing concept.

REP. MESKERS (150TH): No, I understand that.

MARC HANKS: I mean it's basically a bill insert so I appreciate your point.

SENATOR NEEDLEMAN (33RD): Thank you. Anybody else? Thank you so much.

MARK HANKS: Thank you, sir.

SENATOR NEEDLEMAN (33RD): Paul Peterson followed by Michelle Carpenter.

PAUL PETERSON: Good afternoon. To the Chairs and the members of the Committee, I thank you for this opportunity to present comments today. I will speak primarily about House Bill 6242 and then very briefly about Bill 5002. You have copies of my

and it doesn't make policy sense. Thank you and I'd be happy to answer questions.

SENATOR NEEDLEMAN (33RD): Thank you, nice seeing you again. Anybody have any questions? There being none, thank you so much.

PAUL PETERSON: Thank you, appreciate the time. Michelle Carpenter?

MICHELLE CARPENTER: Good afternoon, Chairmen Needleman and Chairman Arconti and members of the board. First, I wanted to thank you for allowing me to testify during this public hearing. My name is Michelle Carpenter. I run the northeast region for TurningPoint Energy. TurningPoint Energy is a clean tech development company focused on solar energy and specifically community solar and battery storage. We've been an active participant in the development of community solar programs in Rhode Island, New Jersey, Virginia, Maryland, Minnesota and Texas. We're here in support of House Bill 5002 and the opportunity it presents to both broadly implement renewable energy improvements as well as more specifically provide some tweaks to the community solar program.

The community solar program allows urban dwellers, renters, LMI customers to participate equitably in the green new economy and we think that's really important.

First, we wanted to express our appreciation for the fact that Public Act 18-50 did actually enable the creation of the shared clean energy facilities program. It was a step in the right direction, but there are additional tweaks that will be required to make that program really successful. These tweaks

specifically relate to ensuring market viability through program capacity, simplification of bill credits, and creating market continuity.

In terms of a specific request, our thought around the program is that the increase from 25 megawatts to 50 megawatts will send a clear market signal to developers to invest in the program which will result in more developers participating as well as projects that are less likely to fall out.

The second suggestion we would make is that we modify the program to a first come, first serve program instead of the bill process that is proposed right now. That process is focused exclusively on cost and at some point, that can be at the detriment of both equity and flexibility. An example of a project we're developing right now in Maryland is a project we sited on a church that has a large LMI participation. We were able to actually offer the church significant savings and enroll a large number of LMI customers and if that had been a competitive bid situation, we probably would not have competed against some of the larger projects that we're focused on single scale larger customers.

The second place that makes sense is in the context of trying to focus renewable energy on brownfields, landfills and other unused sites which will not typically be cost competitive if you compare them to siting a solar energy project on for example a piece of farm property.

The third program tweak we would suggest is establishing a project queue in a given program year to allow for fallout of projects to be replaced as well as from year to year. If it allows carryover from year to year, developers will be able to

develop projects more quickly and residents will see power savings more quickly.

The last view is that we think that we should simplify the bill credits to match customer rates focused around basically making it simpler, in particular for LMI customers to understand what the benefit is they're receiving from solar. I think OCC commented before that the challenges are in understanding this process. It can be complicated as indicated by the third party supply market and if you simplify it on the community solar front, you may eliminate some of those. And then the final point is that we suggest removing the project attestation requirements that a customer cannot implement solar on their own home because we just view it as an unnecessary barrier to entry that will delay people from enrolling. With that, I'll take any questions you have.

SENATOR NEEDLEMAN (33RD): Thank you. Does anybody have any questions? Thank you, Representative Ferraro.

REP. FERRARO (117TH): Thank you, Mr. Chairman and I just have one question with regard to your third recommendation to go to a first come, first serve versus a competitive bid. Do you think on a first come, first serve basis that the end recipient of the service would be getting the best possible deal so to speak?

MICHELLE CARPENTER: I think they would end up with more savings than in a competitive bid situation because in a competitive bid situation, the developers are both bidding on the front end for the lowest rate and when they bid for the lowest rate, they are in exchange going to have to make that up

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somewhere if these projects only cost a certain amount of money. As the price is driven down, the savings to customers would correspondingly been driven down too.

REP. FERRARO (117TH): So you're saying competitive bidding is encouraging hidden costs with regards of additions and things like that later on?

MICHELLE CARPENTER: Sort of yes I would say.

REP. FERRARO (117TH): Okay. I thank you for your comments and Thank you, Mr. Chair.

SENATOR NEEDLEMAN (33RD): Thank you. Have a lovely day.

MICHELLE CARPENTER: Thank you.

SENATOR NEEDLEMAN (33RD): Next is Amy McLean Salk? Salt? Okay, thank you. Followed by Steve Zuretti.

AMY MCLEAN SALLS: It's okay, my fault. Good afternoon, Chairman.

SENATOR NEEDLEMAN (33RD): Good afternoon.

AMY MCLEAN SALLS: Members of the committee. My name is Amy McLean Salls. I am with the Acadia Center and we are here to, I am here to support a number of bills that are in front of you and I'm just gonna read the ones they are and I'm going to focus on two. We are going to be supporting Proposed Bill 468, AN ACT CONCERNING THE INSTALLATION OF SOLAR PANELS ON STATE LAND NEAR PUBLIC HIGHWAYS, Proposed Bill 5002, AN ACT CONCERNING THE DEVELOPMENT OF THE GREEN NEW DEAL, Proposed Bill 5789, AN ACT CONCERNIGN LEAD BY EXAMPLE PROGRAM, number 6240, AN ACT REQUIRING THE STATE BUILDING CODE TO HAVE REQUIREMENTS TO IMPROVE

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ENERGY EFFICIENCY, Proposed Bill 6242, AN ACT PROHIBITING SURCHARGES FROM BEING LEVIED ON UTILITY CUSTOMERS TO SUBSIDIZE THE INTERSTATE NATIONAL GAS PIPELINE CAPACITY, and the finally, House Bill 7016, AN ACT CONCERNING THE CONSERVATION AND LOAD MANAGEMENT PLAN AND THE INSTALLATION OF HEAT PUMPS. And what I wanted to focus on today was what we feel you have a big task in front of you to populate this shell of the Green New Deal, and we have some suggestions, five reforms that should be included that frame out this Green New Deal.

One is to modernize our transportation infrastructure to improve safety, access, and convenience. Two, transition power generation to cheaper, cleaner, and more resilient local source. Three, improve energy performance in buildings to reduce costly energy use and emissions. Four, change energy grid rules to reduce high energy costs and speed energy innovation and five, give communities and consumers more control over their energy choices.

These are frames. They're for us to try to populate and I think that what you have in the many bills that you have in front of you are the answers and when you pass those efforts, then you put them into those buckets and that's what this is. We want to try make this an overarching, our vision is an overarching effort that doesn't just do this one year, that maybe you do four or five of these efforts strategically the first year and then you have the second year and you have the ones that build off the first year so it's not going to be something that goes away and it builds up, and it cumulatively builds so that you're going to get to the best possible solutions.

none, thank you, Amy, for coming and thank you for your testimony.

AMY MCLEAN SALLS: Thank you.

REP. ARCONTI (109TH): Next will be Steven Zuretti followed by Cindy Arcate.

STEVE ZURETTI: Good afternoon. Thank you to the Co-Chairs and members of the Committee for the opportunity to speak today, specifically on House Bill 5002. My name is Steve Zuretti. I'm here on behalf of Brookfield Renewable. Brookfield Renewable is a global renewable energy company with more than 1300 megawatts of renewable supply here in the New England region. Our New England portfolio consists of small-scale hydropower, wind energy, and our 600 megawatt Bear Swamp Pumped Hydro Facility which is a resource that provides critical reliability services for operations of the regional grid.

Given the limited details that are available on the bill at this time, we're not taking a position; however, we do strongly support efforts to create a more sustainable, a more resilient and a cleaner energy mix. As the bill evolves and advances, we do ask that the committee consider the role that existing small-scale hydropower in particular is playing today to meet the state's policy goals, and we'd ask that the committee work to maintain that eligibility and that participation moving forward.

In addition, we'd encourage the committee to consider policies that can expand that treatment where possible in parallel to, of course, promoting new resource deployment and investment in new technologies. Importantly, and I think sometimes overlooked in the conversation is that by valuing

and optimizing existing renewables, the state has an opportunity to prevent a loss of its baseline of clean energy supply. That creates more efficient policy outcomes and cost saving to ratepayers so again, as we have this conversation, we'd urge your consideration of that.

With that, again, thank you for the opportunity to comment. We look forward to working with the committee this session and happy to answer any questions if there are any.

REP. ARCONTI (109TH): Thank you, Steven. Thank you for your testimony. Are there any questions? Comments from committee members? Seeing none, great. Thank you very much.

STEVE ZURETTI: Thank you.

REP. ARCONTI (109TH): Cindy followed by Pat McDonnell.

CYNTHIA ARCATE: Good afternoon, Chair Arconti and members of the Committee. Thank you for the opportunity to speak to you today. My name is Cynthia Arcate. I'm president and CEO of PowerOptions. I'm here to speak in support of HB 7114 regarding the opportunity for municipalities to participate in non-profit buying consortiums.

PowerOptions is a very large aggregation. We are a licensed aggregator in Connecticut. We've been doing this for over 20 years. We ourselves are a non-profit and we only work with non-profits and government entities. We are very successful. We are the largest aggregator in New England with about 200 megawatts of demand, roughly a billion kilowatt hours in our program and 11 million dekatherms of gas.

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PAT MCDONNELL: Good afternoon Representative Arconti. I'm Patrick McDonnell. I'm the Vice President of Regulatory Affairs for UI and in the interest of efficiency, I've got with me Erik Robie who's the Director of Programs for Products, and oh I'm sorry, Erik Robie and Chuck Eves who's the Vice-President of Electric Operations for Avangrid. I'm going to testify on four bills, 6239, 5181, 6242, 5002. Mr. Eves is gonna testify on Senate Bill 469. Mr. Robie I gonna testify on House Bill 5580. Hopefully we'll make more efficient use of your time that way.

So the first bill is 6239, AN ACT CONCERNING ELECTRIC SUPPLIERS DIRECT BILLING, and you've heard quite a bit about this bill today so I won't go through all my written testimony in great detail, but certainly we have a lot of concerns about the many, many consumer protection aspects of the current bill. Things like winter moratorium, shutoffs, collection service, payment arrangements, hardship customers. We're concerned about the timing of the collection and remittance to the utilities with the various bill components so for those reasons, we're opposed to the bill in its current form and also, also we would be concerned about things such as bankruptcy of the suppliers which we've had happen in Connecticut as recently as last week. The other portion of this bill that I wanna mention is that there's language that would allow for suppliers to own, operate, and sell energy from a clean energy facility and I believe that part of the bill is unnecessary and would be redundant. There's no prohibition currently from a developer building a clean energy facility that generates electricity and sell that at retail through a retail

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winter period so we believe that bill could be very damaging.

And the last bill I'm going to comment on is House Bill 5002, the development of a Green New Deal. I was personally on the Governor's Transition Team, participated in the development of this. Our parent company, Avangrid, is one of the largest owners of wind resources in the nation. We've got a good record at UI of owning solar panels, fuel cells. We're very proud of our energy efficiency programs which are among the best in the nation. We've got a lot of provisions to help customers and there's a lot of great ideas around the New Green Economy. My caution to the committee would be that it's very important, it was part of that deliberation also included concerns about cost of ratepayers. We're a very high cost state in Connecticut and so I think it's very important that we resist the temptation to buy it all and we balance the cost of various technologies against other technologies and pick the ones that provide the most benefit to the residents of Connecticut. With that, I'll turn it over to Mr. Eves who's going to talk about Senate Bill 469.

CHARLES EVES: Good afternoon. Thank you for the opportunity to comment on Proposed Bill 469 that proposes to amend state statutes to address utility response times for restoration and to establish minimum staffing levels. Our focus at UI is to meet the needs of our customers in a cost-effective way. The company maintains a 12-month rolling work plan that we update monthly and we adjust our resources to meet the needs of that work plan. That allows us to cost effectively get the work done we need to, to maintain the system. It also allows us to respond to the smaller and medium-sized events. For large

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that I think the industry is working on. We're involved with our federal industry groups and I know CIMA here is going to testify later and they've obviously put a lot of effort into trying to let everyone know the environmental benefits of bio heat or biodiesel.

REP. MESKERS (150TH): Excellent. Thank you.

SENATOR NEEDLEMAN (33RD): Anyone else? Thank you so much.

ELIAS PETERSEN: Thank you.

SENATOR NEEDLEMAN (33RD): Jamie Dickerson?

JAMIE DICKERSON: All right. Good afternoon everyone. Thank you to Chairman Needleman, Chairman Arconti and members of the committee. Thanks for the opportunity to speak. My name is Jamie Dickerson. I'm a Senior Manager with the Northeast Clean Energy Council, NECEC. NECEC you may know of as the regional clean energy business association for the wide spectrum of the clean energy business community so we represent companies doing solar, doing wind, doing energy efficiency, energy storage, electric vehicles, other advancements to our technologies. We're really pleased to be able to offer some comments today.

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We've submitted written comments which I hope you have in front of you on about half of the bills on the agenda today. I will stick to just a few those, roughly ten bills with some verbal recommendations and reflections here.

I wanted to start with the Green New Deal which I think is a hot topic nationally and certainly in the northeast. Connecticut is not alone in terms of

states thinking of this Green New Deal as a moniker under which to layer on different ambitious clean energy decarbonization-based policies with economic development, clean energy jobs at the center of all of those proposals. Maine and New York are two neighboring jurisdictions that are also looking at the Green New Deal and I think it's exciting that each of the states can calibrate their own Green New Deal package to fit the unique realities of their state, be it their internal resource mix, their economic development priorities, some of their natural resources such as a coastal state like Connecticut. So I think NECEC's recommendation with 5002 here is to go big and to go bold, but to layer all those ambitious things on a foundation of the pragmatism and the practicality that Rep. Arconti mentioned earlier. And for Connecticut, that means a real honest assessment of some of the improvements that are needed from recent pieces of legislation so in particular, coming to mind are the energy efficiency fund restorations, fixing or improving the ratepayer impact statement that was passed in 2017, and perhaps most recently and most notably, corrective action to improve some of section 7 of SB9 which was passed last year, which as you all know relates to the net metering and the solar industry moving forward here in Connecticut.

So I hope that framework makes sense in the sense that Green New Deal is big, it's bold, it's aspiration, but it needs to be layered on a foundation of stability for the two major work horses of Connecticut's clean energy economy which right now are the energy efficiency workforce and the solar workforce, and particularly the residential solar workforce. So to take steps

forward to the Green New Deal without solidifying that foundation would not make sense to us. So we hope we can achieve both this session.

Just quickly, I'll also mention our support for the Lead by Example expansion continuation, a robust offshore wind procurement mandate. I also wanted to offer some quick comments if I was not slightly over time around the bill around energy storage study, that's House Bill 6237. Senator Needleman, you mentioned, you asked a question earlier, is storage here? Is it commercial yet and I think I would say definitively, yes, it is commercial and I might differ with Bryan Garcia from the Green Bank in the sense that the market reality, the market maturity is not there yet along with the regulatory maturity. So the technology is there, everything from residential storage to grid scale storage. We have in fact right now 800 megawatts of energy storage in the ISO New England interconnection queue. So it's here, it's ready to come online, but we're still figuring out how ISO New England treats storage. They're still actually right now in the middle of implementing FERC order 841 and on the residential side, on the commercial side, we're still figuring out the state retail level regulatory changes that are needed to get storage online.

So I will go ahead and wrap up there. We've indicated support for a number of other bills in our written testimony but I will stop there and take any questions from the committee.

SENATOR NEEDLEMAN (33RD): Thank you. Does anyone have any questions? Thank you so much.

JAMIE DICKERSON: Thanks very much.

SENATOR NEEDLEMAN (33RD): Steve Cowell? Welcome.

STEVE COWELL: Hi. Thank you very much to both chairs, David Arconti is not here so I have to say thank you to a blank [laughs] nametag, but just a very quick, quick background on me, why I'm here. I'm the president of E4TheFuture, that's Energy, Economy, Equity and Environment, those are the four E's we're representing. The name of our non-profit used to be Conservation Services Group or CSG. We started that in the early 80's and I was the lead negotiator working with UI and CL&P to design the conservation load management program in the late 80's [laughs] which was a few years ago, but I am very proud. That program has done very good things, very positive things for the State of Connecticut. I also was involved in designing and delivering residential energy efficiency in 26 states, responsible for upgrading and retrofitting 2.5 million American homes using \$3.5 billion dollars and saving a net benefit of \$17 billion dollars in the work the CSG did over those years. We changed, we sold our contracts because we needed more resources to accelerate the clean energy economy and accelerate the policy, the technology, etc, so we're now a much smaller non-profit, but we are investing in both federal, state and local advocacy research and technology implementation, particularly around identifying these things.

HB 5002

First, very quickly, I'll go through four or five points. Clearly, the 2017 diversion of funds from energy efficiency was a mistake in my mind and hopefully, I know that that can be addressed. There were almost 500 jobs immediately lost as a result of that here in Connecticut and that was very unfortunate. I'm very supportive of 5002. I think

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that has a great opportunity to be a platform to address the next generation of clean energy initiatives that can and should be done and certainly, E4TheFuture, our work, we're working very hard to assist in making that effective and helping with that from both a technical point of view and you know, it was great to be involved in the CLM and the Governor, I appreciate his comments yesterday about supporting energy efficiency, and the benefit of the resiliency, etc of doing energy efficiency. It is the resource that helps your neighbor. If you lower your bill, and here's, it helps the economy, it is the one resource that actually feeds back into the economy immediately right? It lowers the peak demands across the board and that lowers the ISO clearing price for everyone, and I think Paul Petersen, a fantastic old friend who testified earlier, talked about that benefit. It affects everyone in New England, not just the people of Connecticut because it is one ISO.

One of the issues that I think is important to raise is the question of rates versus cost. Those are two related, but for example, if you say, okay I don't want to raise my rates, but if your rates went up 5 percent, and your costs when down 20%, which would you take? We don't eat kilowatt hours and we don't eat and play with therm's of gas right? We use it for cooking, heating, cooling, etc. That's what we care about and if you do energy efficiency and we've seen in Massachusetts, we've had a tremendous impact in terms of Massachusetts had the fastest drop in our total energy cost for households. We went from like 15 or 16 down to the bottom 25 percent of states in terms of our cost and that's what we care about is our costs. So in that respect, I would

really look forward to that, the jobs impact. We did a report called EE Jobs and the faces of EE, which is available on our website that talks about what kinds of jobs and we've been working with the Building Performance Institute to set up training and technical support institutions across Connecticut that are ready to go and ready to, when the funds get back and the energy efficiency gets back on track like it should be, we're ready and we have the infrastructure. We've supported that and that is really read to get employees and get folks back to work that should be working.

Jamie, I'm a member of the board of directors and co-chair of the Policy Committee of NECEC so Jamie talked about some of the key priorities that that organization is supportive of and I agree with as well. So, that's very quick. Hopefully I stayed close to my time but thank you very much. I really hope we can get over the line with getting some sort of an improvement on reducing or eliminating the sweep of funds in July and the Governor, I appreciate his support for saying very clearly, no more. We're not going to do this again and I also appreciate the great work he did for me. He was on CSG's Board of Directors for eight years and so I thank Mr. Lamont very much for helping us be successful as a very smart businessman by the way in case you didn't know [laughs].

SENATOR NEEDLEMAN (33RD): So thank you. Anybody have any questions? Thank you so much for your testimony. Leticia? Did I get that right? Are all of those names, it's in two lines, is that all your name?

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LETICIA COLON: Hi, I'm Leticia Colon de Mejias. I'm from Windsor, Connecticut. I've lived in Connecticut most of my life. I'm a nationally awarded building scientist and energy policy expert. I own four businesses in the state, two for profits and two non-profits and two revolve around energy. I'm here today to talk about HB 5030 and 5002. I would like to give my testimony as it relates to those things and then allow time for questions so thank you for having me here.

Energy efficiency is the one resource that we have in our state that allows us to both reduce consumption at the site where the efficiency is performed and also at the demand place where energy is generated. By implementing energy efficiency, we reduce carbon, air pollution, and we help human health along with bolstering our local economy. Energy efficiency in one year provided the State of Connecticut \$1.4 billion dollars in Gross State Product, \$140 million dollars in net tax benefit, \$962 million dollars in lifetime savings, and afforded Connecticut 34,000 local jobs that could not be outsourced because the work has to be done here in our state in the buildings we live, work and play in. Additionally, energy efficiency has provided our state a reduced healthcare cost or avoided healthcare costs of \$8.14 million dollars. Despite this, during an economic crisis, the legislative body had to make a decision to raid those funds and divert them into the general fund. Fortunately, we've had a windfall since then. We've had an economic boom and additional tax revenue, and so I'm here to request that this committee call Bill 5030 which would allow that money to be returned to

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LETICIA COLON: Sure then take my testimony for 5002.

REP. FERRARO (117TH): All right.

LETICIA COLON: Either bill would be fine.

REP. FERRARO (117TH): So stay around and the next time we have a public hearing maybe we'll have that one on.

LETICIA COLON: I hope so.

REP. FERRARO (117TH): All right.

LETICIA COLON: But it certainly does relate directly to the Green New Deal in relationship to drawing down carbon, strengthening our energy grid, lowering energy costs and serving the ratepayers of Connecticut. Thank you.

REP. FERRARO (117TH): And thank you, ma'am.

SENATOR NEEDLEMAN (33RD): Thank you. We have one more for you, I'm sorry.

REP. STEINBERG (136TH): Thank you for your testimony and for being patient today. I was going to make the point you just made that virtually everything fits under the Green New Deal and I think you were totally within your bounds in testifying on that. This committee is taking such a broad approach to many energy and environmental issues that it's very difficult not to touch on something that is before us today so thank you for your testimony.

LETICIA COLON: Thank you, Representative Steinberg. HB 7016. The other thing is that it does relate directly to the ductless mini split which Acadia spoke on earlier. One of the reasons why mini splits do not

sense that team spirit is there amongst those people. And I'm going to leave it at that. You know how I feel.

MICHAEL HAYHURST: Right I just wanna respond just briefly with respect because we had this conversation. Some of what you're referring to, I won't say that you know everyone's happy 100 percent of the time but if you think back a couple of years ago, CL&P had an external workforce on the back shifts as a trouble response organization. For many different reasons, the internal workforce was not used for that position. That has changed 180 degrees. We now have 24/7 troubleshooter or response specialist coverage in the whole State of Connecticut, over 105 soon to be, by the end of this year 126 CL&P employees that are totally dedicated to outage response around-the-clock and that goes along with all the first response type issues wired down so police and fire, etc so that, a couple of years ago, that role was being fulfilled by external contractors. That's all being filled by internal CL&P line workers now.

SENATOR NEEDLEMAN (33RD): And I, and I appreciate that and that model works almost all the time so thank you guys.

MICHAEL HAYHURST: Thank you very much.

SENATOR NEEDLEMAN (33RD): I appreciate you coming. Sorry for using this as a forum to say what I've already said before. So thank you.

BRYAN HULBERT: Good afternoon members of the Energy and Technology Committee. For the record, my name is Bryan Hulbert. I'm the Executive Director of the Connecticut Farm Bureau Association. I'm here to

HB 5002
SB 845

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submit testimony on behalf of SB 845, AN ACT CONCERNING THE PROCUREMENT OF ENERGY DERIVED FROM ANAEROBIC DIGESTION, and included in my written testimony, comments on HB 5002, AN ACT CONCERNING THE DEVELOPMENT OF A Green New Deal. I did submit my testimony in advance and so I would, to the benefit of the committee's time, just run through some of the higher points from that testimony and then I'd be happy to answer questions.

For those who don't know, The Connecticut Farm Bureau Association is a private, non-profit, membership organization representing nearly 3,000 Connecticut families dedicated to elevating the status of agriculture in our state through education, advocacy and market opportunity. Connecticut agriculture is made up of 6000 small business men and women, contributes \$4 billion dollars to state's economy, employees 21,000 people, and works 436,000 acres of land just to give you some context of the industry that we represent.

CFBA has long supported efforts to develop on-farm energy projects to reduce operating costs and provide additional revenue for farmers to help with farm viability and those of you who have been on this committee for numerous years have worked diligently and with a lot of effort to create these market opportunities for Connecticut agriculture.

SB 845

On-farm anaerobic digestion projects in particular have proven to be very difficult to permit, finance, and build and have not been built despite the many economic and environmental benefits and efforts of this committee associated with nutrient management and solid food waste management. CFBA is very

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JOHN HUMPHRIES: Thank you, Chair Arconti and other members of the Energy and Technology Committee. My name is John Humphries. I am the Executive Director for the Connecticut Roundtable on Climate and Jobs and I'm going to speak to Bills 5002, the Green New Deal, and 5789, Lead by Example and touch on 845, anaerobic digesters that we just heard about.

I think I want to start by saying the Green New Deal needs to be a bold vision and encompasses from my perspective three major aspects, achieving our climate and energy goals, creating jobs, and advancing racial and economic justice, and I in my testimony included a significant number of sort of detailed that could be in the Green New Deal. I'm just going to touch on a few of them today.

I want to start with Workforce Development and this touches on both the jobs and equity piece or pieces of the Green New Deal, and we need to be sure that the jobs that we're creating, we need to ensure that they are high quality. We also need to pay attention to who gets the jobs, and one way to do that is on publicly supported projects, to have project labor agreements and community workforce agreements. This will ensure that they are local jobs. It also allows targeted hiring and requiring for specific percentages of the work to be done by disadvantaged and minority workers, and allows new pathways to skill training and careers, and we have a model for that. Illinois in 2016 passed the Future Energy Jobs Act, which was focused on solar, but provided for specific training and apprenticeships for specific groups of workers and so that would be something to draw upon.

I want to touch on offshore wind and as Commissioner Dykes said earlier, this is a critical building block for getting to 100 percent renewable energy. I applaud this committee for supporting a legislative mandate to procure 2000 megawatts of offshore wind which will also position Connecticut to secure significant onshore investment and local job creation, and as before, if we do that right, it can provide new pathways for disadvantaged workers.

I want to touch on fuel cells. Manufactured in Connecticut, they provide good local jobs here in Connecticut and it could become an even more significant tool for meeting our climate goals if we allow for an expanded share of the RPS to be filled by fuel cells that run on renewable gas and biomethane from anaerobic digesters, which would help to reduce the emissions from the agricultural sector as we heard from the last speaker, and I urge the committee to include in that bill a study of the production not only of energy, but of biomethane that can be used as source fuel for fuel cells and it would be another way to create a market for the output of anaerobic digesters.

I want to touch on energy efficiency which is critical for all of our buildings and we certainly support expansion of residential and commercial programs. I want to specifically mention Lead by Example and my testimony includes specific recommendations from when we worked on this two years ago and last, I want to touch on transit and recognize that Hartford ranks as the ninth city of its size in the nation in terms of proportion of households that have zero vehicles, zero car ownership and that's over 30 percent, some neighborhoods close to 50 percent and so expanding

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transit and moving to zero emission that help reduce air pollution in our cities touches all three aspects of the Green New Deal, climate, jobs and equity and we are proposing 30 percent zero emission buses across the state by 2030. I'll stop and I'm happy to answer any questions.

REP. ARCONTI (109TH): Thank you, John. Thank you for your testimony. Are there any questions or comments from the committee? Representative Steinberg?

REP. STEINBERG (136TH): Thank you, Mr. Chair. John, thank you for all the work that you do particularly with regard to what you've been working on with offshore wind and creating really a whole new jobs hub in the State of Connecticut that we hope will grow for years to come. You are a member of the Governor's Climate Change Council?

JOHN HUMPHRIES: Yes.

REP. STEINBERG (136TH): And you heard Commissioner Dykes testify this morning about the need to start to really tie into some of the goals that that Council put together. How do you see the Green New Deal helping accomplish those goals going forward?

JOHN HUMPHRIES: Thank you and I think similarly to, I think the Green New Deal is a really nice way to, a framework for describing the work that the Connecticut Roundtable on Climate and Jobs does in terms of those three areas. Similarly, the Governor's Council on Climate Change, the recommendations that came from last fall put together a whole set, a framework for how to get to the 2030 target of 45 percent reduction in emissions by 2030 and I think that Green New Deal, some of the

things that have been put forward today including offshore wind and transportation touch on the things that were highlighted in the Governor's Council report. They looked at both energy and transportation and buildings and so all of those three components need to be very much highlighted in the green new deal and would be a way to move forward and implement the recommendations from the GC3.

REP. STEINBERG (136TH): It's interesting how it's almost inevitable with any conversation about enhancing Connecticut that we talk about infrastructure and whether it's energy, transportation, you could even argue water infrastructure, we have a long way to go so thank you for also mentioning the equity issue as it relates to transit. We have an opportunity by both reducing emissions to also assure that we have a truly functioning multi-mobile transit system that serves everybody in the state. Thank you, Mr. Chairman.

JOHN HUMPHRIES: Absolutely.

REP. ARCONTI (109TH): Thank you, Representative. Any other comments? Seeing none, thank you, John, for your testimony.

JOHN HUMPHRIES: Thank you.

REP. ARCONTI (109TH): Eva? Following Eva will be Steve Guveyan.

EVA ZIMMERMAN: Hello, Mr. Chair and members of the committee. Thank you for having me here. I'm here not representing any agency or organization, I'm just here speaking on behalf of myself and a couple

of feedbacks from my sister, who is an environmentalist, Wildaliz Bermudez.

Climate change is one of the most critical issues in our time. Severe weather changes, drought, displacement of people, and issues that are affecting everyone are occurring more and more often. Due to choices that we have made and continue to make here in Connecticut and nationwide, these problems are just accumulating. Residents in our state deal with asthma, some of the highest rates in the nation. Residents in our state also have one of the highest carbon footprints and we are attempting to change that, not only with the Green New Deal, but also with House Bill 5002, which I'm in support of. Our expectation now for all citizens is an opportunity to have better air quality, alleviate some of the carbon footprint that's exacerbated by the high reliance on single occupancy vehicles, and also to make sure that the air quality in not just cities, but also in the suburbs, is an air quality that doesn't produce more asthma rates.

With the carbon footprint that we have right now, the Green New Deal gives us an opportunity to remedy some of these problems. It gives us an opportunity to formulate a solution where residents not only try to do more for their environment, but clean up the environment. I remember when I was doing my bachelor's degree in Puerto Rico and my sister was finishing her master's degree in Puerto Rico as an environmentalist. I did an environmental cleanup with her in the community of Yabucoa, cleaning up the water there, and I was frustrated seeing how much plastic was dumped and I tried to explain to her that I'm not an environmentalist, I just care about my environment. And she explained to me that

you don't have to be acquiring a master's degree or a bachelor's degree in environment sciences to know to do the right thing, and the right thing starts with being an activist and making sure that we ask our politicians to be aware of the environment and make changes where we have a sustainable future, where we can still breathe air, where we can still have transportation, create jobs and new opportunities, and where reality is a little greener. So that's what I'm asking as a constituent and I'm asking from all of you to be a little bit more supportive with the creation of a Green New Deal. I know there isn't a House bill attached to it. I know this is a brand new conversation that's starting nationwide, but here in Connecticut, let's be the lead just like we were the lead with the Green Bank when we were the first to create it, and let's take the lead with the Green New Deal here in Connecticut. So thank you so much for your time.

REP. ARCONTI (109TH): Thank you, Eva. Thank you for your testimony. It's always great to see you. Any questions, comments? Thank you so much.

EVA ZIMMERMAN: Thank you.

REP. ARCONTI (109TH): Steve? Following Steve will be Claire Coleman.

STEVE GUYEYAN: Good afternoon. I'm Steve Guveyan from the Connecticut Petroleum Council. We're a division of the American Petroleum Institute, a trade association comprised mostly of major oil companies, refiners, pipelines, and others in the service and supply business. We're testifying in opposition to two bills. The first one is the bio bill and then the second one is the bill that would repeal the current rule on natural gas pipelines.

HB 5478

HB 6242

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The second bill is a natural gas pipeline repeal bill. You dealt with that in 2015 and basically, what that bill or law says is that down the road, we may have the opportunity for more natural gas pipelines. It's not a mandate for more natural gas pipeline, but it opens the door to it if needed. What this bill does is repeal that. It takes natural gas pipelines totally off the table and you heard what Consumer Counsel Katz said this morning, it's a, I think her term was a tool in the toolbox. I think that captures it quite accurately. We are very much believers in all of the above so in our future here in Connecticut, nuclear is part of our future, certainly renewables are, natural gas is, natural gas should continue to be. We strongly recommend not taking it off the table. It's a very low cost fuel. It's not no-carbon, but it's low carbon. It's domestic, it's close by in Pennsylvania, we have plenty of natural gas, it's just a question of getting it here so I will conclude by saying that we ask for you to reject the bill so at least the door stays open down the road in case we need natural gas and natural gas pipelines. Thank you.

HB 6242

REP. ARCONTI (109TH): Thanks, Steve. Any questions from members of the Committee? Seeing none, thank you so much for your testimony. Claire Coleman and following Claire will be Representative

CLAIRE COLEMAN: Good afternoon, Chairman Needleman, Arconti, members of the committee. Thanks so much for sticking out this long day and hearing all of our testimony. I'm very excited to be here. My name's Claire Coleman. I'm an attorney with Connecticut Funds the Environment. Connecticut Funds the Environment is a state-based organization

SB 468HB 5002HB 5787

that focuses on air, land and water. I do our climate and energy work. I'm here to testify in support of numerous bills. You have my written testimony so I'll just use my time to highlight a few key points. Three minutes isn't up yet [laughter]. And I get an extra 30 seconds right?

My written testimony supports seven different bills. I did want to note to Senator Needleman that Connecticut Funds the Environment is in support of Proposed Bill 468. I inadvertently missed that, but we think solar along the highways is a fantastic idea and we've struggled a lot as a state with many constraints around we put solar and there's, you know it's just a sensical move to use that public land space. I'm really glad you put that idea forward.

We are also here in support of House Bill 5002, the Green New Deal. I'm really excited that the leadership of this committee and the House and Senate have identified that we are at a time where we need to take visionary action in response to climate change. We've seen recent international and federal climate assessments that make clear the time is now. We have until 2030 to really have a chance of stemming the tide of climate change enough to avoid some of the most catastrophic impacts so I'm really glad that this committee is willing to dig up, you know roll up your sleeves and dig in and figure out what do we need to do to do our part as a state, and I did appreciate Representative Steinberg's remarks around the work of the Governor's Council on Climate Change which I was also a part of. I do think that 45 percent by 2030, a 45 percent reduction in emissions is a good place to look at planning around what do we need to get to

that 45 percent. The International Panel on Climate Change that came out with sort of the warning that we, we have to reduce emissions sooner and faster than we ever thought also used a 45 percent by 2030 benchmark. But we have a lot of work in this state to actually get to that benchmark and that's where I think the Green New Deal comes in, and I think by working on all these issues, you've heard so much about energy efficiency, cleaning up our transportation sector, renewable thermals, we'll also get those co-benefits of the green jobs and closing our racial equity gaps. So it's exciting to think about all of these things coming together by leading with what do we need to do to reduce our emissions.

A couple of details on that which I think fold in a lot of the other bills that we're supporting here today. For example, you know expanding and supporting our energy efficiency programs which you've heard a lot about how they both you know reduce demand on the grid, they reduce costs for consumers and businesses, they save lives. There's so many benefits to our energy efficiency programs. We can also fold in HB 5787 [alarm] which is the Lead by Example Program into that, not just with energy efficiency, but also thinking bigger with our state can lead also with clean zero emission vehicle fleet mandates, for example. That was a suggestion that came out of the Transition Energy Committee this December.

So I'll just wrap up by saying I think other than reducing reliance on fossil fuels, which needs to be done, you know we've heard a lot about precious ratepayer funds and I did want to echo that I acknowledge the price of energy is very important

and we do have to think about electricity and our high rates, but the overall cost of electricity generation sources, you know the Lazard financial analyst, the levelized cost of renewable energy has been dropping drastically so we don't have to choose anymore between clean energy and cheap energy. We can have both and I think that's a really important starting point for this committee. I'd be happy to answer questions. Thanks.

REP. STEINBERG (136TH): Thank you, Mr. Chairman. Claire, thank you for everything you've been doing on behalf of the state. I just want to focus on one comment you made. You made reference to the Governor's Transition Committees on both Energy and Environment, and I had a chance to look at some summaries of what were pretty thick documents. There were lots of ideas that were recommended to the Governor in terms of both energy and environmental policies. I would hope you would help this committee as we're shaping the Green New Deal pick out some of the more practical ones that would fit into the broader goals we've established because such good work went into it and why reinvent the wheel if there are a lot of good ideas already proffered through that particular exercise.

HB 5002

CLAIRE COLEMAN: Yeah, thank you for that. I do hope this committee will take a hard look at that. That represented a large diverse group of stakeholders from you know environmentalists to utilities to various you know industry groups, and we did come up with this recommendation around a lot of the pieces you're hearing today, energy efficiency investments, making sure our distributed solar, our local solar industry is strong by taking another look at the changes that were made through

SB 9 last year, making sure that our transportation fleet is cleaned up. Right now, 38 percent of our emissions comes from transportation so we have proposed a package around EV fleet mandates, around building codes, around making sure we have sustainable funding for our rebate program to make sure we're propelling our cleaner vehicles, and then also on the public transportation side, that's key to bringing, you know improving our public transit, cleaning it up, bringing in zero emission buses, that's all critical pieces to reducing our transportation emissions as well.

REP. STEINBERG (136TH): You just brought up a point which I had forgotten about is the state just came out with new building codes and I'm very curious to see how well they align with some of our goals. I understand that they're, in many ways they're more rigorous and there are some opportunities there, but I would bet there's still some upside there.

CLAIRE COLEMAN: Yeah, thank you. We are looking forward to the 2020 building code revision because the 2018 building code revision did not have the EV ready wiring infrastructure proposals that are actually on, they are state law right now. In 2013 there was a law passed that said that all new residential should have the electrical capacity to make sure that we're building houses and residences for the future. We'd like to expand that to commercial spaces as well and multi-family dwellings because 90 percent of our charging happens you know where we sleep and it's 60 to 70 percent cheaper to put in that either wiring or conduit as we're building out you know garages or buildings rather than retrofitting so if we're planning for a future, if we want to bring innovative companies to

Connecticut, we want to have modern buildings and that includes EV ready charging infrastructure.

REP. STEINBERG (136TH): Thank you for that. I'll use this as a blatant opportunity to plug a bill I had before the Environment Committee that I tried before, which is to create a green building task force to look at some of these things and to perhaps inform the 2020 code as they come out because there is a lot of upside, not only in terms of energy efficiency and renewables, but also in terms of resilience and given some of the testimony we've had here from the utilities, I think there's a lot of upside as well in terms of creating more resilient, not only residential buildings but commercial buildings as well.

CLAIRE COLEMAN: Thank you. You did just trigger me. I did want to mention resilience because I do think that is a key piece of the Green New Deal, is making sure that we're looking at infrastructure projects and making our coastline resilient. Those projects will also create jobs so it does seem a natural fit for the Green New Deal and hope you'll consider that as well. So thank you for the questions.

REP. STEINBERG (136TH): Thank you, Mr. Chairman.

SENATOR FONFARA (1ST): Thank you, Mr. Chairman. Claire, as I'm sitting here listening to you and all the other testimony today, it just dawned on me. As you're aware, utility rates do not take into consideration one's capacity to pay. It's blind. If you're low income, you're paying the same thing someone else is that may be of better means. So in this process of in social justice and economic justice, one of the major tenants of the effort of

the Green New Deal, have you or anyone that are part of leading this effort considered if rates and costs of moving in this direction are passed on to ratepayers, that those with lesser means, that that is recognized in this effort going forward.

CLAIRE COLEMAN: I do think it's critical that we make sure that those who are struggling to pay bills aren't asked to unfairly bear the burden for this transition that we're making, but I would sort of kind of reframe the question because I do think the testimony of Steve Cowell earlier raised a really good point about rates versus costs. So our energy efficiency programs are the greatest example of that. You know if there is a small rate increase for those programs, but they save ratepayers you know a 7:1 return on investment, so we're seeing hundreds of millions of dollars of savings because of those programs --

HB 5181

SENATOR FONFARA (1ST): There are many of my constituents that don't ever benefit from that.

CLAIRE COLEMAN: Well it is actually across the board. It's all not, you don't have to participate --

SENATOR FONFARA (1ST): But did you hear the testimony about demand?

CLAIRE COLEMAN: Yes, I did.

SENATOR FONFARA (1ST): Demand wipes out almost all energy efficiency benefits.

CLAIRE COLEMAN: Yeah, I was very sympathetic to those --

SENATOR FONFARA (1ST): I'm not talking about just -
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SENATOR NEEDLEMAN (33RD): Representative Mushinsky?

REP. MUSHINSKY (85TH): Mr. Chairman, members of the Energy Committee. I'm Mary Mushinsky from the 85th district of Wallingford and I'm going to speak on just two bills, the other ones I'll send in written testimony, but the first one is 6240 on the state building code, to have requirements to improve energy efficiency. We have a much tighter deadline to improve energy efficiency and switch to clean power now that the IPCC has shortened the timetable for action to reduce CO2 emissions to only 12 years if we are to avoid unstoppable climate change, which will affect all of our children and grandchildren.

HB 5002

HB 5828

The 12-year window is very small while the effort we will need to make within that 12-year window is enormous and if we fail, the repercussions for Connecticut are very severe. They include expensive storm damage, loss of water supplies, increased power demand, the need to move our roads, railroads, highways, and sewage treatment plants, dislocation of residents both rich and poor, increased tropical disease vectors, agricultural losses, and additional world conflicts which will affect the safety of our Connecticut families including our members in military service.

So in response to the shortened timetable, states are picking up the speed at which they are making a transition to renewable energy. California now requires all new construction to include solar power. We in Connecticut should push our builders and remodelers to add solar capability to any new construction. Any new building or addition in Connecticut should be heavily insulated and solar-ready, if not solar-supplied as California does. We

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should not be cutting holes in new construction to retroactively add solar after the building has already been completed. I know some have testified that we should leave periodic energy upgrades to the regulatory process, which has been rapidly progressing on energy efficiency, but we are not going to get the changes we urgently need in the 12 years if we wait for the periodic upgrade at the agency level, so I am hoping that you will push them further in the Energy Committee.

On 5002, the Green New Deal again in response to the 12-year timetable, it is wise for our state to concentrate on creating jobs and apprenticeships in the green energy and energy efficiency fields. Well before the IPCC report, The Program Review and Investigations Committee had identified green technology careers as well-suited for Connecticut because of our high cost of energy and because of our large number of universities and tech schools. At that time, they recommended that state agencies work together to create a green jobs career ladder, laying out the rungs starting from low skilled insulation and weatherization jobs, which high school kids can do, to higher skilled apprenticeships, installers and energy management positions.

The bill to do this is HB 5828 in Higher Education and Employment Enhancement Committee and I hope that you will consider adding the content of that bill to your bill. Other ingredients of Green New Deal should include the funding to make this whole thing work and that means we have to restore and annually audit the three green energy funds that were raided to balance the budget in 2017. We also need to reverse the weakened solar energy purchase rates

there. I know some people have invested their time and limited means in order to receive that kind of training and we have to make sure that those jobs don't go elsewhere. The kind of consistency you're describing needs to also be as you say invented in the Green New Deal in terms of funding it on a regular basis and that's really a challenge for us.

REP. MUSHINSKY (85TH): Yeah I know there were some layoffs in the weatherization field after the raids of 2017 and I was really heartbroken about that because we had gotten young people to enter the field, they were working, they were helping people save money in insulating houses and then suddenly, they were all laid off so that was a you know a double tragedy for them and for energy conservation.

REP. STEINBERG (136TH): Thank you, Representative. Thank you, Mr. Chairman.

SENATOR NEEDLEMAN (33RD): Thank you so much. So next David Sutherland.

DAVID SUTHERLAND: Good afternoon. My name is David Sutherland. I'm here today on behalf of The Nature Conservancy and I first want to thank all of you who have stayed around to hear those of us at the bottom of list. This is more than we usually see at this point in a hearing so thank you very much.

I want to express our strong support for Bills 5002 and 5789. I'm going to, I've submitted written testimony on both, but I'm going to address Bill 5002. I think one of the things we're going to have to contend with, with the Green New Deal is some of the noise that's going to come out of Washington regarding the concept down there. I consider some of the noise to be really good important noise. I

think this has really been an important galvanizing concept, but I think as dysfunction as Congress is right now, we're gonna see you know a lot of mischaracterization of the concept, we're gonna see mistakes by the proponents, and I think the prospects for it in Congress are pretty poor. You all can't do anything to control what's happening in Washington and what gets included in that bill or that concept or doesn't get included, and some of the arguments that are gonna be made back and forth about it there, but I think this legislature can ensure and take the bipartisan approach that Representative Arconti was discussing earlier, and really continue to take strong action here in Connecticut.

Earlier, Representative Ackert asked in effect, haven't we already done this in Bill 7 last year and 9 last year, and certainly with emissions reductions we have not, we've done some very good things. You have done some very good things, but there's a lot more that we wanna do and certainly with resilience. We are woefully, woefully and dangerously vulnerable to sea level rise and to coastal storms.

I included in my testimony a note that we are one of the, the northwest Atlantic is one of the two or three hotspots in the world where sea levels are rising at a faster rate than anywhere else due to certain ocean currents, due to the fact that our land is subsiding along the coastline and some other factors, so the NOAA's tide gauges which they've maintained in New London and Bridgeport since I think the 30's, they show that in the last few decades, not only are sea levels rising in Long Island Sound, but the rate at which they're rising is dramatically increasing. It's tripled over the

last few decades so we've got roads that used to flood once every five or ten years that are now flooding three or four times each year, and Connecticut now would have a foot higher platform in the water from which to launch itself at us and we've got vastly more development along our coastline so I'm glad that resilience is being referenced as a component of this effort for the Green New Deal and thank you very much again.

SENATOR NEEDLEMAN (33RD): Anybody have any questions? Thank you so much for coming.

DAVID SUTHERLAND: Thank you.

SENATOR NEEDLEMAN (33RD): Len Greene and Tom Kaslow?

LEN GREENE: Thank you, Senator Needleman, Representative Arconti, members of the Energy Committee for affording us the opportunity to testify here in favor of Senate Bill 600. For the record, my name is Len Greene. I'm the Director of Government and Regulatory Affairs for First Light Power Sources. We are the largest hydropower source of generation in the State of Connecticut and also the largest energy storage company in New England. We believe that Senate Bill 600 presents an opportunity for the State of Connecticut to advance its climate change goals and reduce overall costs for consumers at the same time.

With me is Tom Kaslow, our Vice President of Market Policy to explain how we think existing energy storage can help the state.

TOM KASLOW: Thanks, Len and we're both here to support SB 600. I think some of the prior discussion today and certainly some of the

REP. STEINBERG (136TH): So let me just sort of follow up on that. You know I believe that carbon pricing conceivably could be part of the solution to your point. Is SB 600 sufficient to sort of round out the, the, the holes because ISO is more interested in capacity than as you say some of these other factors, or is there more the state can do actually again, optimize the opportunity storage?

TOM KASLOW: I'm glad you asked that question because I think we're not here to say that the bill 600 is the only way to address the situation. I think that it's fair for me to say that our company believes that that's the only way immediately to try to capture that value and one thing that I would highlight, well a lot of the other new investments, for example, in a battery might be looking for a 10-year contract. I don't know that a tenure that long is necessary to try to capture some of the benefits we're talking about and we're certainly open to having discussions with members of the committee on how that might be addressed in further detail.

REP. STEINBERG (136TH): Mr. Chair.

SENATOR NEEDLEMAN (33RD): Thank you. Anyone else? Thank you so much.

TOM KASLOW: Thank you.

SENATOR NEEDLEMAN (33RD): Chris Phelps?

CHRIS PHELPS: Thank you, Senator and good evening. I'm Chris Phelps. I am State Director of Environment Connecticut and we've submitted written comments on I think six of the bills before you today supporting Senate Bill 468 and House Bill 5002, also supporting 6237 and 6242 and our comments also include opposition to and comments on 5381 and

HB 5380

5380. I'm not going to go into the details of all of our comments on those, but I hope you do have those.

Our organization is an environmental advocacy organization, citizen-based here in cortisone. We're part of the Environment America Federation of environmental groups and we come to these issues from a number of perspectives, but a big one is our focus on the urgency of efforts to combat climate change. The threat that our state faces from climate change is very real. The threat that our nation faces is very real and the science today is unequivocal on this point. To avoid the potential for catastrophe from climate change in years and decades to come, we have to commit our society to getting on a pathway to 100 percent clean, zero carbon renewable energy and we need to get there most likely no later than the middle of this century.

You've heard a lot of testimony that revolves around that topic in some respects here today, but that's it. I mean the science tells us that come hell or high water, that's what we've got to do because if we fail, we're going to be dealing with a lot of high water and it's going to be hot as hell in Connecticut by mid-century.

I want to just focus a little bit on some of our comments on the Green New Deal and then I'd be happy to answer any questions you might have at this time. We think that framework as you've heard a lot of testimony today about really does provide an opportunity to put good ideas in that, both lay out a vision and bring together some of the existing visions and policies has for how to get a cleaner

HB 5002

renewable energy future and we think it would be a good place to start to actually commit Connecticut to achieving 100 percent of our energy, not just electricity, but the energy resources that power our economy from zero carbon and renewable resources by 2050. Again, that's really what the science is going to be necessary so let's commit to figuring out how to do that, and then put, we've suggested some ideas that you've heard before for more concrete policies that could be enacted today as considering to strengthen Connecticut's Renewable Portfolio Standard for electricity, deployment of EV's and etc. The details are in our testimony.

We think that this bill in particular, obviously it's I think someone said five sentences earlier today, is an opportunity to put and bring together good ideas, tangible ideas that could be implemented now for this committee, this General Assembly and put them underneath an umbrella that really does commit Connecticut to figuring out how to get to where we need to go on climate change and energy policy. And I'm amazed the bell has not gone off yet. I don't think I've ever stopped before it has before so I'll stop there. If you have any questions, I'd be happy to answer them.

SENATOR NEEDLEMAN (33RD): Thank you so much.
[laughs] Anybody have anything? Thank you for your testimony. I appreciate you staying this late.

CHRIS PHELPS: Thank you.

SENATOR NEEDLEMAN (33RD): Almost evening.
Alexandrea Isaac?

ALEXADREA ISAAC: Good evening, Senator Needleman
and the rest of the distinguished members of the

HB 5687

We often hear we're living in an Amazon world where customers expect to receive their order or their results within a day or two. Telling a customer yes, we could give you the product or service you want, but you have to wait three months to get it is simply not a consumer friendly approach, and that is why we strongly encourage this committee to pass House Bill 5687. I'm happy to answer any questions.

SENATOR NEEDLEMAN (33RD): Thank you, I'm sorry. Anybody have anything at this point? Nope. Thank you.

ALEXADREA ISAAC: Thank you for your time. I appreciate it.

SENATOR NEEDLEMAN (33RD): Mike Morrissey?

MICHAEL MORRISSEY: Senator Needleman and other distinguished members of your committee. I'm Mike Morrissey with the Alternate Fuels Coalition of Connecticut and I'm here to speak in support of HB 5002 and HB 5380. First, here is the deal on the Green New Deal. Forty percent of all of Connecticut's greenhouse gas emissions are caused by the transportation sector. Of that 40 percent, 44 percent are produced by medium and heavy duty vehicles, i.e. trucks, buses and shuttle vehicles. We simply use too much of the dirty fuels and that's what's causing our emissions here in the State of Connecticut.

Going forward, if we really want to find a way to clean up the air that we breath, we have got to find alternatives to the conventional fuels. Back in the early 1990's, the Department of Energy identified a number of viable alternative fuels. Although vehicle electrification is an option, for the medium

& heavy duty vehicles, it is not viable today nor is it affordable, nor do we believe we're going to see that option in the foreseeable future. However, natural gas and propane are shovel ready now to displace some of these dirtier conventional fuels.

In the heavy sector, natural gas seems to be working out quite nicely for the refuse industry. In the medium duty sector, propane seems to be hitting the sweet spot. Five years ago, the cities of Shelton and Torrington replaced all of their diesel powered buses with propane buses. Since then, we've had the cities of Waterbury, Newtown, Danbury, Simsbury, East Hartford to name a few that have also done the same thing. Collectively, we've got just about 500 buses running on propane in the State of Connecticut.

Nearby, the city Boston has 247 propane powered vehicles in operation with a pledge goal of replacing all of the school buses to operate on propane. Nationwide today, we've got over 17,000 school buses running on propane transporting about one million kids a day around the nation.

Propane is not an experimental fuel, it's a proven fuel. In fact, 27 million vehicles around the world operate on propane. Allowing the use of conventional fuels is detrimental to our environment. Alternative fuels like natural gas and propane are viable today and we strongly encourage our state to find ways to better utilize these fuels. Propane in particular is abundant, is domestically produced, and delivers a 4050 percent savings when compared to conventional fuels and both natural gas and propane are supported by the Volkswagen Mitigation Trust Fund.

they're running the diesel engine as they're delivering the propane, I find it amusing.

MICHAEL MORRISSEY: Well and we don't have an engine available to run on propane and that is kind of the catch 22. A freightliner has recently produced an engine, but it has been a little problematic. We're waiting and I know the Propane Education Research Council who funds a lot of the research and development, I believe is right on the cusp of announcing an engine that is going to work for bobtail vehicles.

SENATOR NEEDLEMAN (33RD): I think that would be great. Thank you.

MICHAEL MORRISSEY: You're welcome, Senator.

SENATOR NEEDLEMAN (33RD): Martha Klein?

MARTHA KLEIN: Good evening. I think we're all a little tired [laughs]. Thanks for giving us the opportunity to give testimony. I'm Martha Klein and I'm a volunteer with the Sierra Club of Connecticut. I live in Norfolk, Connecticut. I'm a nurse and ski instructor. The Sierra Club submitted testimony in support of 6242, 5002, 7016 and I think a bunch of other things, but I'm just gonna comment on what I'm hearing here tonight.

I'm hearing a lot of concern about the cost of renewable power. I'm hearing concern that people have for their constituents, particularly low-income communities, and I'm hearing concern about the energy affordability gap. Sierra Club surely shares those concerns and having there be equity in our country in terms of energy and in every way is one of our primary goals, but I want to put a little bit

of context into looking at why our energy costs in Connecticut are the third highest in the nation.

Starting in 2013, the Department of Energy in collaboration with Eversource, UI and the former governor, hatched a plan to convert 300,000 new customers to methane for home use at ratepayer expense. That continues to be the stated goal of our plan, stated plan of our state, excuse me. You can look on the Energize CT website where it says our stated goal is to convert 300,000 people to methane for home use. Remember that methane, propane, fossil fuels, they're not renewable and the primary reason for climate change in the United States is coming from the burning of fossil fuels, both in the transportation sector as well as in industrial, residential, in every sector.

So we chose to invest millions or billions of dollars of ratepayer funds in the expansion of fracked methane, two-thirds of all methane coming into our country, transporting from the Marcellus Shale is fracked so we chose to invest in a fuel. We've expanded that use for individual customers. The only beneficiaries of that expansion plan have been Eversource and UI because those customers were captured completely for them. There has been no economic benefit from this plan because energy prices have continued to go up.

I moved to Connecticut only a little before 2010 and my energy bill and my home electric bill was around \$50 dollars from Eversource. It's \$150 dollars now. Now my supplier, the generation, is still about \$50 dollars on the bill, but the distribution part is about \$100 dollars and I know that I get little inserts from Eversource all the time saying your

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energy bill have gone up because we need to build more gas pipelines. We don't have enough gas and that's why your energy bill keeps going up so it seems to me that we've chosen to invest in a dirty fossil fuel which is causing climate change, which impacts the low-income communities the worst. The low-income communities are both impacted by the energy affordability gap, also by the dirty fossil fuel plans that we're investing in, in our state, as well as by the impacts from climate change.

So it's kind of like a not sensible situation to invest more ratepayer money in fossil fuel expansion that harms the poor, that harms our health, that makes our energy system less affordable. Energy prices have continued to go up as we've gotten increasingly focused on methane as the only source.

So I'm asking you to support 6242 for the reasons I stated.

SENATOR NEEDLEMAN (33RD): Thank you for your passionate testimony. Anybody have any questions?

MARTHA KLEIN: Thank you.

SENATOR NEEDLEMAN (33RD): Chris Herbst? Chris Herb. Okay, thank you.

CHRIS HERB: Good afternoon. My name is Chris Herb. I'm the President of the Connecticut Energy Marketers Association. We represent 600 home heating oil and propane dealers that now sell bio-heat in Connecticut. I'm here on a few bills. We submitted testimony on several of them. I'll try to quickly touch on the higher points, but you have my testimony to more fully explain. There were some people who testified before and will testify after me in more detail on some of the specifics.

HB 5380

HB 6242

HB 5478

SENATOR NEEDLEMAN (33RD): Thank you. Anyone else? Thank you so much. Former Speaker Sharkey, is he still here? Okay. Francis Pullaro? Thank you.

FRANCIS PULLARO: Good evening. I'm Francis Pullaro HB 5002 the Executive Director of RENEW Northeast and I was before you a few weeks ago for your Generational Information Hearing. I'd like to bring to your attention a couple of points I made at that hearing to address some of the question and comments that members of the committee made. I know Representative Cheeseman and Senator Fonfara had raised questions about the cost of renewable energy as part of a Green New Deal and several other speakers had pointed out as I did at the Generational Information Hearing, the recent DEEP procurements have resulted in new renewables like solar paired with storage that are comparable to the cost of new gas. Some reference had been made to well, they're still cheaper or they're still more expensive than existing nuclear. Well that's true, but ratepayers have already paid twice for those nuclear units, once when the utilities built them when we were vertically integrated and then a second time during structuring. The real apples to apples comparison for a new solar resource or offshore wind resources is to the cost of a new natural gas resource and if you look at what the cost of new gas is if you add the cost of what you expect that plant to get in the energy market, basically about \$35 dollars a megawatt hour, and what you would expect it to earn in the capacity market, which would be anywhere from some of these plants like Footprint Power in Massachusetts or here in Connecticut, Towantic, it basically doubles the cost of that. So the cost of a new gas plant is basically \$60 to \$70

dollars a megawatt hour so that solar and storage, those projects that DEEP just procured are actually at parity or cheaper than some of these new gas plans so I think Senate Fonfara, to your point about you know trying to do the right thing for the environment and also for ratepayers, I don't think we have to make that tradeoff anymore when it comes to large scale renewable energy.

And then another question had come up. Chairman Needleman, you had asked about where battery storage is these days. Well as I just mentioned, DEEP just procured several large scale solar projects that are paired with batteries. These batteries can provide an extra 2-4 hours of energy discharge. The Commonwealth of Massachusetts is actually developing what's called a clean peak standard where storage is paired with renewables so that those resources are able, incentivized to discharge during the peak periods when prices are high to help minimize electricity prices to shave off that peak, thereby not only providing clean energy, but lowering costs.

One of my members is developing a project in Massachusetts that's battery storage. It's 150 megawatts and there are hundreds more megawatts that are waiting in the ISO New England queue to get on the grid so to answer your question, Senator Needleman, battery storage is here and it's cost competitive when paired with say solar, cost competitive with new natural gas power plants and that's not even accounting for the emission costs and other polluting costs that come with natural gas power plants. It's just a straight up cost comparison so with that, I thank you for giving me another opportunity to talk about these issues.

SENATOR NEEDLEMAN (33RD): Thank you that was perfect timing and thank you for that answer. I really appreciate that. Anybody have any questions? Sure? Going once, no. Thank you.

FRANCIS PULLARO: Thank you. Have a good night.

SENATOR NEEDLEMAN (33RD): Ann, there's an ink stain across your name.

ANN GADWAH: Thank you, Chairman Needleman along with the other members of the Energy and Technology Committee for the chance to testify today. My name is Ann Gadwah. I'm a volunteer with Sierra Club Connecticut. I'm also the Chapter Chair. Sierra Club submitted testimony on six different bills today, House Bill 6242, 468, 5789, 6240, 7016, but I'm gonna concentrate on House Bill 5002, a Green New Deal, AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.

Given the urgency to address the threat of climate change and our current economic issues in Connecticut, the timing couldn't be better for what is known as a Green New Deal. The Sierra Club 's view is that the policies that form part of this Green New Deal must simultaneously achieve three essential goals; tackling the climate crisis and greenhouse gas pollution, creating good, high-paying green jobs, and counteracting racial and economic inequity.

The Green New Deal should include both goals and a plan to bring Connecticut to 100 percent clean renewable energy by 2035. This can be accomplished with a combination of energy efficiency and increasing our solar and wind power, building, installing and maintaining solar panels and offshore wind turbines along with retrofitting buildings for energy efficiency

will not only transform our energy system, but creates thousands of jobs.

Along with investment in clean energy, we're also going to have to reduce our greenhouse gas emissions if we're going to address climate change. Curbing our fossil fuel use is imperative to this goal. We must stop all new construction of fossil fuel infrastructure and make sure existing infrastructure is efficient, safe and as clean as possible. We should also require buildings to have the highest energy efficiency standards along with requiring renewable thermal technologies for heating and cooling in new construction. This also has the potential to create thousands of jobs.

We cannot ignore Connecticut's transportation system which accounts for almost 40 percent of Connecticut's greenhouse gas emissions. If we're going to meet our greenhouse gas emission reductions goal, we're going to have to transform our transportation system. We can do this by expanding commuter rails, transit bus service, and updating our infrastructure to include both EV-charging stations and alternative commuter routes.

This also has enormous potential for jobs in manufacturing, construction and sales, and just think of all the jobs a new and improved transit system could create. Of course, any transformative change risks leaving people behind. Let's not have that happen here in Connecticut. We are asking that the benefits of this Green New Deal go to historically marginalized communities, working families and the communities of color who all too often have borne the brunt of the worst effects of the fossil fuel economy and of climate change.

A percentage of training programs and jobs in the Green New Deal should go to members of these communities.

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BB

ENERGY AND TECHNOLOGY

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Other states are taking a proactive approach to these equity issues. If you look at our testimony, there are two great examples from Illinois. Something similar could be implemented here, tailored to fit the State of Connecticut.

Finally, the Green New Deal really is an investment in the future of the state. The boost our economy will get from putting people to work in good paying green jobs along with infrastructure projects and transforming industry is immeasurable and the state will save billions of dollars preventing the worst effects of climate disruption. Our Future generations deserve a healthy planet and an economy that includes everyone. Our vision is that a Green New Deal in Connecticut can make this a reality. Thank you and I'm happy to answer any questions.

SENATOR NEEDLEMAN (33RD): Thank you so much. Anybody have any questions? No? Thank you. Thank you for being patient.

ANN GADWAH: Thank you.

SENATOR NEEDLEMAN (33RD): Reverend Bridget Fidler? Going once. Sharon Peterson?

SHARON PETERSON: Good evening Chairman and thank you to the members of the committee for your time. My name is Sharon Peterson. With my father and my brother, I am co-owner of Apple Oil Company in West Haven, CT, a home building and home heating company serving over 8,000 customers in the greater New Haven area since 1957. Our family also builds increasingly more efficient homes and is committed to energy efficiency.

I am here today to testify in favor of HB 5380. Tangentially, I'm opposed to HB 5478 because I

SENATOR FONFARA (1ST): Right. Thank you, Mr. Chairman.

SENATOR NEEDLEMAN (33RD): Thank you and thank you for staying so long. Obviously adapted and modified what you wrote as the day went on so at least we kept you busy a little bit.

GERALD LAPLANTE: Yes and thank you for staying here to hear me.

SENATOR NEEDLEMAN (33RD): David Battle? He's gone also. Okay, Diane, already spoke? I can't read that, Ben. Okay. Ben Martin followed by Mike Cone and then we're done tonight. Mike is gone already. You are the cleanup guy.

BEN MARTIN: Oh maybe it's a different Mike. I don't know. Hi, my name is Ben Martin. I am a member of 350 Connecticut, an organization trying to move Connecticut beyond fossil fuels and to a renewables future. We submitted testimony online for several bills that are in here today supporting 466, supporting 6237, 6240, 6242, and in opposition to 5380 and 5381, but what I'll speak about is 5002 because we would like to express conditional support for the Green New Deal legislation as it is a great idea, but a lot depends on implementation. I'll try not to go over anything that the other groups that we are aligned with such as Sierra Club, CFB and Claire Coleman spoke about to save peoples' time.

One thing that is in our testimony I would like to mention is we light to highlight making public investments in research development and construction of new clean and renewable energy technologies and industries. There has been a lot of talk today about incentives and encouraging businesses to be

more renewable in the Green New Deal, which would be good, but there's also an opportunity for the government to do it itself. Filtering taxpayer money through other companies that will someday get back to them rather than just the government spending it in a wiser way would actually save money. So I would just encourage you when drafting the Green New Deal to consider that Connecticut can spend its own money to do things. They don't have to hire other people to do it.

But I will read a little bit because I think it's important. Any Green New Deal legislation drafted by the committee must chart a plan for Connecticut government departments, agencies and future administrations to transition the state away from fossil fuels and to a sustainable future. It must provide clear directions for protecting environmental justice communities from harm they have suffered for too many decades. It must prioritize the needs of the people of Connecticut and not corporations that can transfer the benefits to other states or countries. It must be bold, aspirational and demand the best of our state government, the companies that do business here and anyone the state chooses to contract with.

I will say that there's been a lot of talk today from different people from the frack gas industry saying sure, we can do a Green New Deal as long as we're a part of it. That is antithetical to the Green New Deal. Fossil fuels are not part of the Green New Deal and as much as people have their businesses, I feel some remorse for those people, but if they're not businesses that can protect our planet's climate, then they don't belong in the Green New Deal.

I urge this committee to draft the Green New Deal legislation with the knowledge that addressing climate change is not something to do in the future; we need to do it now and we need to do it fast. We have all the necessary technology to accomplish this. Do not allow the lobbyists from the fossil fuel industries to tell you we need to wait, we're not ready, it will be too costly. These are excuses in service of preserving their profits and not in the interests of the people of Connecticut. The people are ready for the Green New Deal. The time is now and we cannot wait. Thank you for your time and if you have any questions, I will be happy to address them.

SENATOR NEEDLEMAN (33RD): Thank you. Thank you for your time and thank you for patience today.

BEN MARTIN: Thank you.

SENATOR NEEDLEMAN (33RD): Dan Knudsen.

DAN KNUDSEN: So thank you for staying. I appreciate all your time, Chairman Arconti and Senate Needleman and the rest of the members. I think we've done a lot today. It's been an impressive day. I think the goals of HB 5002 are laudable. I would like to see the desire for action on climate change that I share with so many aimed at the most effective course of action.

When I look around the country at what is being done and seems to be working to achieve these goals of energy efficiency, deployment of renewables, sustainability and resilience of the electric grid, the mechanism that is like the vehicle that seems to be most effective is community choice aggregation. CCA is when a community or municipal agency becomes

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the default electrical procurer for its residents. That's taking the position of UI or Eversource to be the default, to take that default role. CCA removes the profit motive for increasing electrical consumption and part of its mission is to reduce demand through energy efficiency efforts. It also has been very successful in reducing and stabilizing electrical generation crises. CCA can develop their own local renewables instead of purchasing renewable energy credits which has been UI and Eversource's way of meeting the regional greenhouse gas initiative renewable standards. As CCA develops its own renewables, pricing is stabilized because renewables are not dependent on continually buying fossil fuels, but instead on a one-time investment which supplies electricity for 20-30 years.

It is actually purchasing the power rather than the renewable energy credit model of renting it. Renewables energy credits may reward green energy producers in another state, but the actual electricity that we use will still be made by burning fossil fuels here as long as our AC are employed. Connecticut's transmission lines are operating at capacity and therefore, inefficiently. So Connecticut has a choice of either making huge investments in transmission capacity, or investing in reducing demand and developing local renewables, thereby eliminating the need for additional transmission capacity.

Energy efficiency efforts are the most effective method to save on energy costs and yet, they are often marginalized and the first programs that are cut during budget struggles. Massachusetts and California allow the CCA's there to administer the energy efficiency funds of their customers. CCA's

can address the shortcomings of solar efforts which so far have only benefited a small minority of the market, i.e. those with resources, site control and interest in participation, and the majority who are the renters have no credit or don't pay their bill on time have been excluded from solar programs. So far, the systems of tax credits, net metering and state incentives have excluded the poor and unemployed from participation. CCA opens up the shared solar concept to universal offering. Smart design that matches areas of large demand with distributed energy resources are an optimal CCA practice.

CCA's administering energy efficiency programs can integrate them with the onsite renewables forming a broad spectrum of power, heating and hot water systems to maximize efficiency. CCA presents an opportunity to reopen the retail energy market to efficiency technologies using solar bonds and the development of local energy sources creates thousands of jobs. By working with members, CCA's can especially target the peak demand thereby flattening the power curve and reducing the overall costs.

I believe CCA is the best vehicle for addressing Connecticut's energy needs and best option to ensure the laudable goals. Thank you for staying.

SENATOR NEEDLEMAN (33RD): And thank you. You sent us a lot of information and it was very helpful. Sorry your name ended up on his list, but not mine. Okay, thank you so much.

DAN KNUDSEN: Have a good night.

Testimony of Robin Dutta on Behalf of SunPower Corporation
in Support of

Proposed House Bill 5002 – AAC the Development of a Green New Deal

Proposed House Bill 6237 – AAC Requiring a Study of Energy Storage Projects
and Distributed Generation in the State

Proposed House Bill 6239 – AAC Electric Suppliers, Direct Billing and Clean
Energy Facilities

Proposed Senate Bill 220 – AAC Certain Solar Power Facilities and Net Metering
Credits for Municipalities Where Such Facilities are Located

Senator Needleman, Representative Arconti, Senator Formica, Representative Ferraro, and
members of the Joint Committee on Energy and Technology:

My name is Robin Dutta, and I am the Director of Market Development and Policy for SunPower Corporation. SunPower is a global technology company involved in every step of the solar system supply chain. SunPower has over 7,000 employees worldwide, the world's highest efficiency solar photovoltaic panel technology, growing development of solar plus storage projects, and an extensive national dealer network mostly consisting of locally-owned small businesses. In Connecticut, SunPower has 11 local companies in our dealer network, who develop and install residential and commercial projects, representing several hundred full-time workers in Connecticut. SunPower also has an operations facility in Newington that supports our residential business.

SunPower supports the intent behind the four bills listed above, though it is our testimony that their implementation will be impossible under the current regulatory framework in Connecticut.

From the proposed language before us today, PHB 6239 appears to support the development of community solar on a utility scale by allowing for direct billing of customers by third party suppliers. PHB 6237 would require a study of energy storage as a key element of reaching Connecticut's distributed energy goals. PSB 220 would require the retention of credits for net metering by the municipality that hosts a solar facility but sells that power to another municipality. These are concepts worth exploring.

Most importantly, PHB 5002 expresses a desire on the part of the General Assembly to expand renewable energy opportunities and energy efficiency programs in Connecticut in an effort to not only improve our environment but create jobs in a new green economy. SunPower wholly endorses the goals expressed in a “Green New Deal” and looks forward to participating in its development.

However, it is critical for the committee to understand that none of the goals expressed in these proposed bills are possible under the current regulatory framework in Connecticut. The legislature’s adoption last year of Section 7 of Public Act 18-50, also known as Senate Bill 9, makes the aspirations expressed in these four bills before you today impossible to achieve.

For example, the goal of PSB 220 to share net metering credits with municipalities that host solar projects cannot be achieved if net metering, and virtual net metering for municipalities, is eliminated. The energy storage opportunities sought to be studied in PHB 6237 is pointless, because the instantaneous netting required by P.A. 18-50 makes energy storage financially impractical. Similarly, the promise of community solar expressed in PHB 6239 cannot be realized once the commercial solar provisions of P.A. 18-50 become effective.

And certainly, the prospects of a Green New Deal in Connecticut cannot be realized if P.A. 18-50 is fully enacted. Unlike surrounding states like New York and Massachusetts, Connecticut has taken a giant step backward in the development of its renewable industries. Whereas Connecticut created over 2,100 jobs in the solar industry alone, those companies with a presence here, including multiple SunPower dealers, are already making plans to shift those jobs to neighboring states. As it stands, P.A. 18-50 threatens the existing investments SunPower has made in Connecticut and the jobs we have created, and it prevents additional investment of any kind. HB 5002

A commitment for a Green New Deal requires a commitment for a distributed grid. This distributed grid opens access for homeowners and businesses to acquire solar systems on their property, ensures their right of self-consumption, and provides a means for Connecticut’s energy consumers to save money. A distributed grid creates additional resiliency and reliability for Connecticut in the face of super storms and cyber-attacks. It also reduces Connecticut’s reliance on far-away central generation plants, reducing the region’s carbon footprint and mitigating the high cost of dirty, peak power. A Green New Deal can benefit individual energy consumers and ratepayers at large. It can create a more efficient electric grid, improve on the traditional utility model that exists today, and create thousands of local jobs in the process.

Across New England and the Tri-State area, there is a massive bi-partisan movement of states aggressively increasing their renewable energy policies, with a specific emphasis on supporting

distributed solar. Connecticut's neighbors are moving away from the traditional utility model. The Baker Administration released a new solar program meant to double the Massachusetts distributed solar mandates to over 3 GW. New York announced their own Green New Deal and Governor Cuomo proposed a new 6 GW distributed solar goal. New Jersey is working on a new solar program for the next decade, building off the nearly 3 GW of solar currently online. All states rely on net metering, and recognize the importance of properly valuing distributed energy that is consumed and exported to the grid.

If this committee is seriously committed to promoting a Green New Deal, as well as the goals of these other bills on today's agenda, it first must address the problems created by Section 7 of P.A. 18-50. The solution does not require a wholesale repeal of the law, but rather a measured approach that includes an extension of existing programs while we study what other states are doing regarding valuing distributed energy and then crafting an approach that places the distributed solar industry on a path towards an incentive-free and sustainable future.

As you know, the committee leadership has been provided with proposed legislative language developed and endorsed by over 40 organizations from the renewable energy industry and the environmental community. Collectively, we urge you to accept that language as the starting point toward correcting the serious mistakes enacted last year that threaten to eviscerate the future of renewables in Connecticut.

Thank you for your time and consideration.

Sincerely,



Robin K. Dutta
Director – Market Development & Policy
SunPower Corporation
robin.dutta@sunpower.com



FEBRUARY 21, 2019 COMMENTS TO CONNECTICUT GENERAL ASSEMBLY'S ENERGY & TECHNOLOGY COMMITTEE FROM SOLARCONNECTICUT (SOLARCONN) EXECUTIVE DIRECTOR MIKE TRAHAN AND SOLARCONN GOVERNMENT AFFAIRS COMMITTEE CHAIRMAN NOEL LAFAYETTE, PRESIDENT SHR ENERGY

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We do though respectfully ask that before the Committee looks ahead to creating and funding new programs that create future green collar jobs in Connecticut, the Committee first turns its attention to the urgent situation facing dozens of solar business owners and over 2,000 workers currently working in the solar sector who will be out of work if the Committee does not act to correct and improve several aspects of Sec. 7 within last year's SB9. We thank the Committee for hearing bills related to sustaining the current solar workforce in the weeks ahead.

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[END]

TESTIMONY OF
VINCENT PACE
ASSOCIATE GENERAL COUNSEL
EVERSOURCE ENERGY
Before the Energy & Technology Committee
February 21, 2019

RE: S.B. No. 220, AN ACT CONCERNING CERTAIN SOLAR POWER FACILITIES AND NET METERING CREDITS FOR MUNICIPALITIES WHERE SUCH FACILITIES ARE LOCATED

S.B. No. 600, AN ACT CONCERNING ENERGY STORAGE RESOURCES AND WIND AND LARGE-SCALE HYDROPOWER FACILITIES

S.B. No. 678, AN ACT CONCERNING MARKINGS MADE PURSUANT TO CALL BEFORE YOU DIG REQUIREMENTS

H.B. No. 5002, AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

H.B. No. 5181, AN ACT EXEMPTING CERTAIN FACILITIES FROM THE NATURAL GAS DEMAND USE CHARGE

H.B. No. 5380, AN ACT REDEFINING "CLASS I RENEWABLE ENERGY SOURCE" TO INCLUDE CERTAIN USEFUL THERMAL ENERGY GENERATED FROM BIODIESEL AND CREATING A HOMEOWNER-GENERATED USEFUL THERMAL ENERGY PROGRAM

H.B. No. 6239, AN ACT CONCERNING ELECTRIC SUPPLIERS, DIRECT BILLING AND CLEAN ENERGY FACILITIES

H.B. No. 6242, AN ACT PROHIBITING SURCHARGES FROM BEING LEVIED ON UTILITY CUSTOMERS TO SUBSIDIZE INTERSTATE NATURAL GAS PIPELINE CAPACITY

H.B. No. 7114, AN ACT CONCERNING MUNICIPAL COMPETITIVE PROCUREMENT OF ELECTRICITY, NATURAL GAS, RENEWABLE ENERGY AND OTHER ENERGY-RELATED PRODUCTS BY NONPROFIT ENERGY BUYING CONSORTIA

My name is Vincent Pace and I am Associate General Counsel, for Connecticut State Regulatory matters, for Eversource Energy. I am offering Eversource's testimony on the above-listed bills that have been raised for public hearing.

Eversource transmits and delivers electricity to 1.2 million customers in 149 cities and towns, and provides natural gas to 222,000 customers in 72 communities in Connecticut. Eversource harnesses the commitment of its approximately 8,000 employees across three states to build a single, united company around the mission of delivering reliable energy and natural gas, and superior customer service.

3. S.B. No. 678, AN ACT CONCERNING MARKINGS MADE PURSUANT TO CALL BEFORE YOU DIG REQUIREMENTS

Eversource **does not support** S.B. 678,² which would require all companies that mark-out the location of underground electric, natural gas, water and communications utility equipment to utilize paint “that begins to fade not more than three months after such markings are made”.

As the Committee is aware, these markings are critical to ensure that state, municipal, utility company and private field workers excavating on and near roads, sidewalks and other areas do not damage underground utility equipment in order to avoid interruptions in utility service and to protect the safety of workers. For these important reasons, utilities need to ensure that such markings can remain visible for a reasonable period of time while a variety of excavation projects of different sizes are being worked-on, including ensuring that such markings can withstand our harsh and ever-changing New England climate and the wear-and-tear of vehicle traffic.

From Eversource’s perspective, the paint it and its contractors currently use to mark-out underground utilities already *does begin to fade* within three months of when such markings were initially made. Therefore, it is unnecessary to pass a new law that orders Eversource to perform what it is already performing. If, however, this law is adopted, it is critically important that such markings only be required to *begin* to fade within three months, because it is not possible (to the best of Eversource’s knowledge) for such markings to completely dissolve within three months.

4. H.B. No. 5002, AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

H.B. No. 5002 currently states that “the general statutes be amended to create new programs and to provide additional funding for such new and other existing programs concerning energy efficiency, the deployment of renewable energy resources, sustainability initiatives and resiliency, including resiliency of the electric grid in the state and coastal protection.” Eversource looks forward to collaborating with this Committee, DEEP, PURA, OCC and other stakeholders to facilitate providing the citizens of our State with the benefits resulting from a Green New Deal.

5. H.B. No. 5181 AN ACT EXEMPTING CERTAIN FACILITIES FROM THE NATURAL GAS DEMAND USE CHARGE

Eversource **does not support** H.B. 5181 for the following reasons:

H.B. 5181 exempts a subset of customers that use natural gas for heating from a “demand use charge” when those customers (1) have a building that contains at least one large room that constitutes not less than twenty-five per cent of the square footage of the entire facility and (2) where that room is used either one day per week, not more than seventy days in a calendar year or not more than two hundred hours in a calendar year.

A demand use charge helps the states’ three local natural gas distribution companies (“LDCs”), which are Yankee Gas Services Company, Southern Connecticut Gas Company and Connecticut Natural Gas

² S.B. 678 states in relevant part that “The authority shall prescribe by regulations adopted pursuant to section 16-357, as amended by this act, that any designation or mark made pursuant to this section that includes markings on streets, sidewalks or other surfaces shall be made with a material that begins to fade not more than three months after such markings are made.”

February 21, 2019

Senator Norm Needleman, Senate Chair
Representative David Arconti, House Chair
Energy and Technology Committee
Legislative Office Building, Room 3900
Hartford, CT 06106

Re: NECEC Testimony for Public Hearing on Thursday, February 21, 2019

Dear Chairmen Needleman and Arconti and Members of the Committee:

The Northeast Clean Energy Council (NECEC) appreciates the opportunity to submit written testimony on the legislation being heard during the Energy and Technology Committee's public hearing on Thursday, February 21, 2019. While still largely in concept form, the bills slated for review include promising proposals with important implications for Connecticut's energy future. NECEC urges the Committee to continue its steadfast support for renewable and clean energy and energy efficiency, and we look forward to collaborating with you and your fellow members in 2019 to help Connecticut achieve its clean energy and carbon reduction goals. We thank the Committee in advance for thoughtfully considering each piece of legislation.

NECEC is a clean energy business, policy, and innovation organization whose mission is to create a world-class clean energy hub in the Northeast, delivering global impact with economic, energy, and environmental solutions. NECEC is the only organization in the Northeast that covers all of the clean energy market segments, representing the business perspectives of investors and clean energy companies across every stage of development. NECEC members span the broad spectrum of the clean energy industry, including energy efficiency, wind, solar, energy storage, microgrids, fuel cells, biomass, and advanced and "smart" technologies. Many of our members are already doing business in Connecticut, and many more are interested in doing so in the near future.

NECEC is pleased to offer its recommendations and positions on the following pieces of legislation.

I. SUPPORT: H.B. No. 5002 – An Act Concerning the Development of a Green New Deal

NECEC is extremely pleased to see Connecticut embrace the concept of a Green New Deal through the strong legislative coalition that has put forward this initial proposal. We view it as absolutely essential that proposals focus on the clean energy economy development opportunities that come hand in hand with the massive energy transition we need to make, and that our energy and climate policymaking match the scale of the challenge before us. This appears to be embodied by the Green New Deal platform. Other states in the region, such as New York and Maine, are also looking at the framing of a Green New Deal as the banner that recognizes the linkages among the multiple critical clean energy, economic and climate efforts underway and planned for the future. Each state may have different points of emphasis within their respective Green New Deal platforms, reflecting their unique energy mixes, domestic resources, economic development priorities, emissions challenges, and more.

- E. **Support removal/refinement of the 2017 “ratepayer impact statement” provisions:** Public Act 17-144 requires the Office of Fiscal Analysis (OFA) to prepare a ratepayer impact statement for any bill before the General Assembly that would have a fiscal impact on electric ratepayers. While the law requires evaluation of costs, it does not require consideration of fiscal benefits, which may outweigh costs. In addition, requiring a ratepayer impact statement would be unduly burdensome, difficult to implement, and add unnecessary administrative cost as state agencies such as the Public Utilities Regulatory Authority (PURA) already provide oversight of ratepayer costs. The Legislature must take action to remove or modify the “ratepayer impact statement” provisions, which otherwise threaten to undermine many core elements of the Green New Deal effort.

In summary, NECEC strongly supports the ongoing Green New Deal efforts around HB5002, and we encourage the Committee to move swiftly to advance a package of proposals with concrete language for each of the priorities outlined above.

II. **OPPOSE: H.B. No. 5381 – *An Act Redefining “Class II Renewable Energy Source”***

NECEC opposes the addition of existing, higher-emitting trash-to-energy facilities to Connecticut’s Class II Renewable Portfolio Standard (RPS).

III. **SUPPORT: H.B. No. 5789 – *An Act Concerning the Lead by Example Program***

The Legislature should support and advocate for continuation and expansion of the state’s Lead by Example energy efficiency program, which is needed to meet the most basic principles set forth in the Governor’s Green New Deal platform (i.e., those envisioning state and municipal entities leading at the forefront of the energy transition). Greater Lead by Example commitments will cut both government expenses and environmental impacts by (1) reducing energy consumption in state buildings 40% by 2030, (2) converting state vehicles to zero emission for 50% of light duty and 30% for buses by 2030, (3) ensuring proper building codes for energy and transportation-related measures, and (4) implementing a pilot carbon charge across state buildings and vehicles. These elements should all be prioritized as part of a Green New Deal package and through this standalone vehicle.

IV. **SUPPORT: H.B. No. 6237 – *An Act Requiring a Study of Energy Storage Projects and Distributed Generation in the State***

We strongly support an undertaking to rigorously analyze the benefits of deploying energy storage in Connecticut, along with further analysis of greater distributed generation (DG) deployment. Comparable studies of energy storage have kicked off substantial energy storage activity in neighboring states, including the *State of Charge* report in Massachusetts,³ and the *Energy Storage Roadmap* process in New York.⁴ Both of these efforts serve as strong examples of the impact analytical work can have in highlighting the magnitude of the benefits and savings that storage can offer and in convincing policymakers, both legislative and administrative, about needed policy changes. Massachusetts’ *State of Charge* study revealed and confirmed startling

³ <https://www.mass.gov/files/2017-07/state-of-charge-report.pdf>.

⁴ <https://www.ethree.com/wp-content/uploads/2018/06/NYS-Energy-Storage-Roadmap-6.21.2018.pdf>.



FEBRUARY 21, 2019 COMMENTS TO CONNECTICUT GENERAL ASSEMBLY'S ENERGY & TECHNOLOGY COMMITTEE FROM SOLARCONNECTICUT (SOLARCONN) EXECUTIVE DIRECTOR MIKE TRAHAN AND SOLARCONN GOVERNMENT AFFAIRS COMMITTEE CHAIRMAN NOEL LAFAYETTE, PRESIDENT SHR ENERGY

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[END]



Connecticut Chapter
P.O. Box 270595
West Hartford, Connecticut 06127
 connecticut.sierraclub.org

Dear Co-Chairs Needleman and Arconti, Vice-Chairs Fonfara and Allie-Brennan, Ranking Members Formica and Ferraro, and members of the Energy & Technology Committee,

On behalf of the Sierra Club and our more than 11,000 members and 30,000 supporters in Connecticut, thank you for the opportunity to testify in favor of H.B. No. 6242, H.B. No. 5002, H.B. No. 7016, H.B. No. 6240, H.B. No. 5789, and S.B. No. 468.

H.B. No. 6242 AN ACT PROHIBITING SURCHARGES FROM BEING LEVIED ON UTILITY CUSTOMERS TO SUBSIDIZE INTERSTATE NATURAL GAS PIPELINE CAPACITY

Beginning in 2013, under the administration of the former Governor, Connecticut initiated an expansion plan to increase the use and transport of "natural" or shale gas in the state. The belief at the time was that due to fracking, the price of shale gas would remain low relative to oil and would therefore save the state money on energy costs. In addition, the limited understanding about shale gas which is a fossil fuel known as methane, led to the false belief that due to fewer carbon emissions at the point of use, methane would be less harmful to the environment than other fossil fuels.

Both of these assumptions, about cost and climate impact, have turned out to be wrong. Due to fracking and the glut of domestic fuels on the market, the price of oil dropped. The price of electricity for consumers has continued to climb as our state changed the grid to rely almost entirely on only two fuel sources: nuclear and shale gas. We pay the third highest price for electricity in the nation. At the same time, we learned that methane has a vastly greater global heating potential than carbon dioxide, nearly one hundred times the power to trap heat in the atmosphere when measured over the near term. Compared to oil and coal, gas produces significantly more climate destroying emissions over its lifecycle, including carbon as well as methane.

Unfortunately, based on false assumptions, our state plowed forward with the misguided gas expansion plan, with ratepayer subsidies built in. The expansion plan called for a massive increase by hundreds of thousands of consumers who would convert to shale gas for residential use, which created demand on the gas supply. These conversions are subsidized by all ratepayers in Connecticut. Since these conversions have not lowered our energy costs nor helped our climate, the only beneficiaries of this plan have been Eversource and UI/Iberdrola, the two electric and gas monopolies in the state. Due to consumer's growing awareness of the lack of economic or environmental benefit in converting to methane for residential use, the pace of this subsidized expansion plan has fallen fall short of the state's planned targets. Nevertheless, around eighty thousand consumers have been converted to methane, using ratepayer subsidies for advertising and for discounts or rebates on new gas burners, and miles of brand new intrastate pipeline have been built, without public notice or environmental impact reports from DEEP.

At the same time, the state's regulators approved multiple, large increases in energy generation powered by new shale gas plants, such as the plants built in Oxford and Bridgeport, and a proposed plant in Killingly that the Siting Council now has under review. These plants are not needed as Connecticut has been a net energy exporter for about a decade according to the U.S. Energy Information Administration, in the amount of approximately fifty trillion Btu. In fact, a substantial percentage of gas that enters our state and power produced from gas burned in Connecticut is exported out of state.



SIERRA CLUB

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implore you to support HB 6242, and to take the necessary steps to stop the gas rush, stop subsidizing climate destroying projects and allow truly renewable power to compete.

H.B. No. 5002 AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

Given the urgency to address the threat of climate change and our current economic problems in Connecticut, the timing couldn't be better for what is known as a Green New Deal. According to the United Nations Intergovernmental Panel on Climate Change 2018 report, we have until 2030 to reduce our greenhouse gas emissions by 45% from 2010 levels and to net-zero emissions by 2050 to avoid catastrophic climate disruption.¹ The Sierra Club's view is that the policies that form part of a Green New Deal must simultaneously achieve three essential goals:

- 1) Tackling the climate crisis and greenhouse gas pollution;
- 2) Creating good, high-paying green jobs; and
- 3) Counteracting racial and economic inequity

A Green New Deal would be a big, bold transformation of our economy to tackle the twin crises of inequality and climate change. It could create thousands of family sustaining jobs, expand access to clean air and water, raise wages, and build climate resilience. Ideally, these benefits would go first and foremost to the working-class families and communities of color that have endured the brunt of the fossil fuel economy.

Counteracting racial and economic inequity

Any transformative change runs the risk of leaving people behind. Let's make certain that this does not happen by starting here. Communities of color are disproportionately impacted by environmental pollution, and are most at risk for the worst impacts of climate change. To counteract systemic racism in the Green New Deal, it is essential that this proposal include requirements to invest in communities of color.

In 2016, Illinois passed the Future Energy Jobs Act that established solar training, solar jobs, and solar apprenticeship programs designed to establish and maintain a pool of trained solar installers who are from economically disadvantaged and environmental justice communities, alumni of the Illinois foster care system, and returning citizens (see fact sheet attached). Illinois also passed the Illinois Solar for All program to incentivize the development of solar projects in low-income and environmental justice communities.

We urge you to include similar measures, designed for Connecticut, in the Green New Deal.

Energy - Require 100% Clean, Renewable Energy by 2035

¹ https://report.ipcc.ch/sr15/pdf/sr15_headline_statements.pdf



SIERRA CLUB

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We currently have the resources and the knowledge to move Connecticut to 100% clean, renewable energy by 2035. By setting a 100% clean, renewable energy goal, and using a combination of energy efficiency, solar and wind to get there, Connecticut will add jobs and grow our local economy instead of investing in dirty fossil fuels produced elsewhere.

Green energy is the energy and the jobs of the future. In 2017, there were 800,000 Americans employed in low- carbon emission generation technologies, and 2.25 million employed in energy efficiency. This compares to only 92,000 for coal-fired generation.² Solar jobs have grown 168 percent over the past seven years, and wind turbine technician is one of the fastest growing jobs in America.³

⁴One study estimates that spending 2 percent of annual GDP on the green economy could create over 15 million green jobs in 5 years.⁵

Job-creating investments in clean, renewable energy that can help us reach our 100% goal could include:

- Installation of solar panels on state buildings and on the side of highways
- Energy efficiency - Requirements that new buildings meet the strictest energy efficient standards, energy efficiency requirements in public buildings, and protection of our energy efficiency funds
- Procurement of 2000 MW of offshore wind

Transportation - Invest in car-free travel, mass transit, electric vehicles, and electric vehicle infrastructure

Our transportation system is currently responsible for more than 35% of Connecticut's Greenhouse Gas Emissions.⁶ To bring meet our GHG reduction goals, we have to transform the way we get from place to place. Putting an emphasis car-free travel, mass transit and electric vehicles is critical.

Job-creating investment in transportation that might be considered include:

- Expand our existing commuter rail lines
- Expand transit bus service and transition to electric transit buses
- Build an EV charging infrastructure
- Plan and develop walking and biking commuter routes
- Repair but don't expand existing highway infrastructure

² Energy Futures Initiative and the National Association of State Energy Officials. 2018. U.S. Energy and Employment Report. <https://www.usenergyjobs.org/>

³ The Solar Foundation. National Solar Job Census. Accessed August 31, 2018. <https://www.thesolarfoundation.org/national/>

⁴ Bureau of Labor Statistics. Accessed August 31, 2018. <https://www.bls.gov/ooh/installation-maintenance-and-repair/wind-turbine-technicians.htm>

⁵ International Trade Union Confederation. 2012. "Growing Green and Decent Jobs." https://www.ituc-csi.org/IMG/pdf/ituc_green_jobs_summary_en_final.pdf

⁶ https://www.ct.gov/deep/cwp/view.asp?a=4423&Q=585318&Deepnav_GID=2121



SIERRA CLUB

Connecticut Chapter
P.O. Box 270595
West Hartford, Connecticut 06127
 connecticut.sierraclub.org

Building the infrastructure for a truly green transportation system has enormous potential for jobs and economic growth in the manufacturing and construction sectors. It will also create good paying jobs in the sales industry, as people transition their gas vehicles to electric. New and improved transit will require drivers, mechanics, and repairmen.

Curb Greenhouse Gas Emissions

Investing in clean energy is not enough to address climate change if we continue to bring in and use the same amounts of dirty fossil fuels into the state.

Sierra Club Connecticut strongly urges that this bill actively curb fossil fuels and create jobs by:

- Setting a greenhouse gas (GHG) emission reduction target to net zero emissions by 2050
- Reducing from 3% to 1% the amount of allowable gas leaks before repair must be done
- Require building electrification and installation of renewable thermal technology in new construction; include heat pumps in the Conservation & Load Management Plan.
- Incentivize the electrification of existing buildings along with the replacement of fossil fuel space and water heating with renewable thermal technology.
- Implement state procurement guidelines that emphasize sourcing and disposal in lowest-possible-carbon-impact ways; for example California's Buy Clean law that takes suppliers' emissions performance into account when procuring steel, flat glass, and mineral wool (insulation) for infrastructure projects

Conclusion

This is an investment in the future of the state. Solar on state buildings and near highways will be result in energy savings. Reallocate what we spend on building new roads can pay for public transit. The boost our economy will get from putting people to work in good paying jobs will undoubtedly pay off almost immediately. Infrastructure projects are a great public investment. And investments in upgrading and transforming industry are a chance to grow the wealth of our state dramatically.

On the savings side, stemming the worst effects of climate disruption will save the state billions of dollars in lost infrastructure, lost man hours, coastline, tourism dollars, health costs, and human lives. Superstorm Sandy in 2012 was estimated to cost \$360 million in damage.⁷ Air pollution is killing 168 people in Connecticut every year.⁸

Future generations deserve a healthy planet and a economy in which everyone can thrive. A Green New Deal could help make this vision a reality for both goals.

H.B. No. 7016 AN ACT CONCERNING THE CONSERVATION AND LOAD MANAGEMENT PLAN AND THE INSTALLATION OF HEAT PUMPS

⁷ <https://patch.com/connecticut/greenwich/gov-malloy-sandy-damage-totals-360-million-and-rising-f7f0d5a6>

⁸ <https://www.courant.com/news/connecticut/hc-air-pollution-deaths-hartford-20160810-story.html>



Testimony of Environment Connecticut State Director Chris Phelps
Before the Connecticut General Assembly Energy and Technology Committee

2/21/2019

Regarding:

S.B. No. 468, AN ACT CONCERNING THE INSTALLATION OF SOLAR PANELS ON STATE LAND NEAR PUBLIC HIGHWAYS. (Support)

H.B. No. 5002, AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.

H.B. No. 5380, AN ACT REDEFINING "CLASS I RENEWABLE ENERGY SOURCE" TO INCLUDE CERTAIN USEFUL THERMAL ENERGY GENERATED FROM BIODIESEL AND CREATING A HOMEOWNER-GENERATED USEFUL THERMAL ENERGY PROGRAM. (Oppose)

H.B. No. 5381, AN ACT REDEFINING "CLASS II RENEWABLE ENERGY SOURCE". (Oppose)

H.B. No. 6237, AN ACT REQUIRING A STUDY OF ENERGY STORAGE PROJECTS AND DISTRIBUTED GENERATION IN THE STATE. (Support)

H.B. No. 6242, AN ACT PROHIBITING SURCHARGES FROM BEING LEVIED ON UTILITY CUSTOMERS TO SUBSIDIZE INTERSTATE NATURAL GAS PIPELINE CAPACITY. (Support)

Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee, my name is Chris Phelps and I am State Director for Environment Connecticut. I thank you for the opportunity to submit these comments regarding the bills listed above.

Environment Connecticut is a nonprofit citizen-based environmental advocacy project of Environment America. We work to fight climate change and for a cleaner, greener future for Connecticut and our nation. We represent over 20,000 supporters and activists across Connecticut.

Today, our state and nation face a threat to the health and safety of our citizens, strength of our economy, viability of agricultural systems, and livability of coastal cities and large portions of our country. That threat is created by rapidly rising temperatures and the potentially catastrophic climate change they are causing. Bold action to achieve deep cuts in manmade emissions of carbon dioxide and other greenhouse gasses is necessary if we are to overcome the threat climate change poses to our way of life. The science is clear that to accomplish such pollution cuts requires the shifting of our economy off of fossil fuels and onto 100% clean, zero-carbon, renewable energy sources by no later than 2050. Just 30 years distant.

1. S.B. No. 468, AN ACT CONCERNING THE INSTALLATION OF SOLAR PANELS ON STATE LAND NEAR PUBLIC HIGHWAYS. (Support)

We support aggressive expansion of solar power in Connecticut. Solar is one of the best available homegrown renewable zero-carbon energy sources available to our state. Maximizing use of solar wherever and whenever possible is a key part of any strategy to achieve a 100% renewable energy future. Utilizing readily available open land along public highways is a strategy that could quickly expand the amount of clean solar power generation serving our state.

We wish to note that this proposal should incorporate provisions to require that any such solar generation is sited in an environmentally appropriate manner with regard to concerns such as habitat preservation.

2. H.B. No. 5002, AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.

As noted at the beginning of this testimony, overcoming the threat of climate change requires a commitment to moving our economy to reliance upon 100% clean, zero-carbon, renewable energy by no later than 2050. We applaud the efforts of the supporters of this proposal to address this major undertaking and look forward to working with other stakeholders, this committee, and members of the General Assembly on this issue. With that thought, we offer these suggestions for what a “Green New Deal” for Connecticut could include:

- This legislation should begin with a clear, unambiguous commitment to meeting Connecticut’s energy needs with 100% renewable energy by no later than 2050. This would be in accordance with the state’s existing greenhouse gas emissions targets and climate plans. Such a commitment should put our state on a path to 100% renewable energy for electric generation, building heating and cooling, and transportation, to name three of the largest energy sectors.

Beyond establishing a 100% renewable energy goal, this legislation can, and should, include specific immediate actions that Connecticut can take to make progress towards achieving that goal. Such actions could include:

- Aligning the state’s Renewable Portfolio Standard for electric generation with a 100% zero-carbon renewable energy goal by requiring that 50% of Connecticut’s electric demand be met with Class I renewables by 2030, 100% by no later than 2050, and;
- Phasing out non-renewable and carbon-emitting generation sources from inclusion in the Class I tier of the RPS between now and 2025 at the latest.
- Commit Connecticut to procuring no less than 2GW of offshore wind energy by no later than 2030.
- Restoring the right of Connecticut property owners to go solar while receiving the full value of the solar power they produce on their property by reversing the anti-consumer, anti-solar provisions contained in PA 18-50.
- Establish ambitious goals for expansion of solar power use wherever viable in Connecticut. Use of lands near public highways, as proposed in S.B. 468 is just one good idea to do this. Others include a requirement that new residential construction incorporate solar generation as California is doing, building solar canopies on parking lots, & etc. To support such growth of solar installations, this bill could leverage existing policies such as the “ZREC” program, community solar, and more, and establish an ambitious overall solar installation goal, such as 1GW of new solar installations within 5 years. Doing so would result in significant progress towards the state’s climate goals, and also could help revitalize the state’s solar power industry.
- Any strategy to shift our transportation sector to 100% renewable energy will require widespread adoption of electric vehicles that are, in turn, charged using electricity generated from renewable sources. Such widespread use of electric vehicles will require construction of charging infrastructure beyond single family residential home charging, and the limited public charging infrastructure that has been installed to-date. Green New Deal legislation could include requirements for charging stations in all public parking locations, encourage of existing publicly available parking locations with charging stations, and requirements that all new residential and commercial construction incorporate charging and charging-ready parking.

3. H.B. No. 5380, AN ACT REDEFINING “CLASS I RENEWABLE ENERGY SOURCE” TO INCLUDE CERTAIN USEFUL THERMAL ENERGY GENERATED FROM BIODIESEL AND CREATING A HOMEOWNER-GENERATED USEFUL THERMAL ENERGY PROGRAM. (Oppose)

We have testified in opposition to similar proposals to HB 5380 in previous years, and wish to reiterate that position today. “Class I Renewable Energy Source” refers specifically to electric

TESTIMONY OF TOM SWAN

EXECUTIVE DIRECTOR OF THE CONNECTICUT CITIZEN ACTION GROUP (CCAG)

February 21, 2019

BEFORE THE ENERGY AND TECHNOLOGY COMMITTEE

IN SUPPORT OF

HB 6242 AN ACT PROHIBITING SURCHARGES FROM BEING LEVIED ON UTILITY CUSTOMERS TO
SUBSIDIZE INTERSTATE NATURAL GAS PIPELINE CAPACITY

HB 5002 AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

SB 468 AN ACT CONCERNING THE INSTALLATION OF SOLAR PANELS ON STATE LAND NEAR PUBLIC
HIGHWAYS

HB 5789 AN ACT CONCERNING THE LEAD BY EXAMPLE PROGRAM

HB 7016 AN ACT CONCERNING THE CONSERVATION AND LOAD MANAGEMENT PLAN AND THE
INSTALLATION OF HEAT PUMPS.

AND IN OPPOSITION TO

HB 6239 AN ACT CONCERNING ELECTRIC SUPPLIERS, DIRECT BILLING AND CLEAN ENERGY FACILITIES

HB 5687 AN ACT CONCERNING ELECTRIC SUPPLIERS REDUCING RATES FOR GENERATION SERVICES
WITHOUT NOTICE

HB 5381 AN ACT REDEFINING "CLASS II RENEWABLE ENERGY SOURCE"

Senator Needleman, Representative and other members of the Energy and Technology Committee my name is Tom Swan and I am the Executive Director of the Connecticut Citizen Action Group. I apologize for not being able to testify in person on several important bills today but have to be away for business. Below are comments on bills on behalf of our member families.

Pipeline Tax

We support HB 6242 AN ACT PROHIBITING SURCHARGES FROM BEING LEVIED ON UTILITY CUSTOMERS TO SUBSIDIZE INTERSTATE NATURAL GAS PIPELINE CAPACITY. There is no reason for us to be keeping this pipeline tax on the books. The rationale Governor Malloy advanced in passing the pipeline tax no longer exists and we should not eliminate the need for future legislatures role in approving possible taxes on rate payers. The other states who were purported to be building parts of the pipeline will not be doing it, because their financing mechanisms were knocked down by the courts and Massachusetts had a town blow up to excessive pressure in a gas line.

Furthermore, the doomsday need for increased gas capacity has proven to be overstated. The declining cost of Wind, Solar and the increased storage capacity coming on line makes pipeline expansion an expensive boondoggle that will have Connecticut ratepayers on the hook for a long time. We should be dedicating our limited resources to advancing Governor Lamont's carbon neutral strategy and not paying for a pipeline whose primary purpose will be allowing fracked gas to be shipped to Europe.

The approval of a pipeline tax should be the purview of the legislature and not PURRA. This legislation returns that authority to you.

Green New Dealand

CCAG strongly supports the national New Green Deal and hope that HB 5002 AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL becomes a state model worthy of the title of the bill. The idea of a Green New Deal is that we make the types of changes in our economy that would adequately protect us and our children from the looming catastrophe of climate change while addressing inequality in a manner that lives up to the moniker of the New Deal. The questions that we need to consider as we write the bill. They include:

- How quickly does it move us to a 100% renewable economy?
- How does it maximize job creation in a manner that addresses economic and racial inequity?
- How does it help make communities resilient and bring the benefits to communities that have not benefited from existing programs?
- What is a fair mechanism to finance such a program?

We look forward to working with you to answer these questions in a way that will live up to the aspirational title of the bill.

Solar Highway

CCAG agrees with the concept being promoted in SB 468 AN ACT CONCERNING THE INSTALLATION OF SOLAR PANELS ON STATE LAND NEAR PUBLIC HIGHWAYS. We are behind our neighboring states in utilizing the spaces by our highways to advance clean energy and we believe doing this matters more than just the energy generated in terms of making it clear our commitment to clean energy. We think that as the bill goes forward it needs a clearer process for implementing this and clarity on the language related to public lands would be helpful.

Lead by Example and Heat Pumps

CCAG supports the concepts being advanced in HB 5789 AN ACT CONCERNING THE LEAD BY EXAMPLE PROGRAM and HB 7016 AN ACT CONCERNING THE CONSERVATION AND LOAD MANAGEMENT PLAN AND THE INSTALLATION OF HEAT PUMPS, but the lack of details in the proposed legislation keeps us from fully endorsing these bills. The state should ramp up our Lead by Example program in a manner that will save the state money and help to advance our clean energy goals. In addition to state owned facilities we should look to include public housing and incentives for municipalities and non-profits doing business with the state. The improvement of the technology related to heat pumps makes them a more effective tool in advancing our clean energy goals and we should revisit how they are a part of state strategy.

There are also several bills that we strongly oppose on the agenda today.

**JOINT
STANDING
COMMITTEE
HEARINGS**

**ENERGY AND
TECHNOLOGY**

**Part 1
1-796**

**2019
Index**

Testimony of
Joel M. Rinebold
Director of Energy
Connecticut Center for Advanced Technology, Inc.

Before the
Energy and Technology Committee

February 21, 2019

Regarding

Proposed S.B. No. 600 - An Act Concerning Energy Storage Resources and Wind and Large-Scale Hydropower Facilities

Proposed H.B. No. 5002 - An Act Concerning the Development of a Green New Deal

Proposed H.B. No. 5789 - An Act Concerning the Lead by Example Program

Proposed H.B. No. 6237 - An Act Requiring A Study of Energy Storage Projects and Distributed Generation in the State

The Connecticut Center for Advanced Technology, Inc. (CCAT) offers the following comments on concepts raised in proposed bills that would enhance energy reliability while improving environmental performance and economic development in the state of Connecticut.

CCAT is a nonprofit corporation that provides services and resources to entrepreneurs, businesses, industry, academia, and government. CCAT Energy has been established to improve the economic competitiveness of the region through solutions that lower energy costs, increase sustainability, and improve long-term energy reliability. CCAT administers several energy, education, and manufacturing initiatives and works with a variety of stakeholders to enhance economic growth in Connecticut through the development, manufacture, and deployment of clean energy technologies.

Proposed Bill 600 - An Act Concerning Energy Storage Resources and Wind and Large-Scale Hydropower Facilities. CCAT supports the concept raised in the proposed bill. CCAT agrees that leveraging existing energy storage resources, such as Connecticut's electrochemical and hydrogen industries, with future wind and large-scale hydropower facilities would make better use of the intermittent renewable generation and bolster Connecticut's clean energy economy. Connecticut's energy storage industry is a valuable economic resource that can be leveraged to make the development of out-of-state large-scale wind and hydropower facilities of higher value here in Connecticut. CCAT Energy has extensive knowledge and contact with the energy storage and wind industries in Connecticut and can provide assistance to the Connecticut Department of Energy and Environmental Protection (DEEP) and other public agencies to help identify, assess, and model wind and energy storage solutions to meet critical loads.

Proposed H.B. No. 5002 - An Act Concerning the Development of a Green New Deal. CCAT strongly supports the concept raised in this proposed bill. Developing a "Green Economy" and creating and expanding jobs in energy efficiency, renewable energy, sustainability and grid resiliency is important for meeting Connecticut's energy and environmental goals, including the Renewable Portfolio Standards (RPS), climate change targets, and deployment of zero emission vehicles. Consistent with distributed energy plans developed by CCAT, there is a near term market opportunity for the deployment of 170 megawatts of clean distributed generation technology, 591 zero emission electric vehicles, and six to seven hydrogen fueling stations in Connecticut. CCAT also identified and quantified economic indicators including over \$600 million/year in revenue and investment for Connecticut's hydrogen and fuel cell companies. CCAT has undertaken extensive analysis and can assist the State to identify deployment opportunities and to quantify the specific benefits that Connecticut's "Green Economy" industries can provide to the State.

Proposed Bill 5789 - An Act Concerning the Lead By Example Program. CCAT supports the concept raised in the proposed bill. CCAT suggests that State agencies have a great opportunity to demonstrate how to harmonize renewable development and siting considerations. There are numerous opportunities at state offices, education and healthcare facilities, public order and safety locations, seaports, high-traffic airports, correctional facilities, and more, which have been identified by CCAT, for the deployment of clean energy technologies that produce Class I renewable electricity and thermal energy. CCAT has done a considerable amount of work in this



TESTIMONY REGARDING:

SB 845 AN ACT CONCERNING THE PROCUREMENT OF ENERGY DERIVED FROM ANAEROBIC DIGESTION

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860.768.1100
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HB 5002 AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.

February 21, 2019

Submitted by: Bryan Hurlburt, Connecticut Farm Bureau Association Executive Director

To the members of Energy and Technology Committee:

Thank you for the opportunity to provide testimony regarding SB 845 AN ACT CONCERNING THE PROCUREMENT OF ENERGY DERIVED FROM ANAEROBIC DIGESTION and in support of HB 5002 AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.

The CT Farm Bureau Association is a private, non-profit, membership organization representing nearly 3,000 CT families dedicated to elevating the status of agriculture in our state through education, market promotion, and legislative advocacy.

Agriculture in CT is made up of over 6,000+ small businesses, contributing \$4 billion to CT's economy and employing 21,000, working 436,000 acres of land.

CFBA has long supported efforts to develop on-farm energy projects to reduce operating costs and provide additional revenue for farmers to help with farm viability. Agricultural Virtual Net Metering was designed to do just that while providing for expansion of diversified renewal energy. Other states have created and supported an environment for farms to develop and bring anaerobic digesters on-line, while our projects are stalled in the design phase due to challenges that we believe this bill can address.

On-farm anaerobic digestion projects in particular have proven to be very difficult to permit, finance, and build and have not been built despite the many economic and environmental benefits associated with nutrient management (manure) and solid food waste management solutions they offer. CFBA is pleased to see the attention paid to this technology and sees this technology as a great opportunity to support CT dairy farms that are struggling with high costs and low margins over the past five years.

We offer the following needs specific to creating a marketplace that would allow for on-farm generation projects to be successful:

- Include a specific on-farm generation category, in addition to the current 10-

megawatt aggregate;

- Allow for both the generation and sale of electricity and gas, depending on the project and region;
- Exempt manure transfer between farms from any waste permitting requirements;
- Create a tax credit to incentivize investors to invest in on-farm generation;
- Increase access, or mandate, Green Bank participation in on-farm generation projects;
- Create an alternative generation rate for energy produce by an on-farm generation project

On-farm energy production provides benefits to the consumer and the farm operation, in addition to contributing to the state's renewable energy goals. Counted among the many benefits of increasing on-farm energy production through anaerobic digester projects are the following:

- Alternative energy generation
- 24/7 energy generation
- Farm business operations:
 - Reduced energy costs in a high energy industry
 - Ability to mitigate phosphorus run-off
 - Ability to pelletize and sell phosphorus as a new source of revenue
- Carbon sequestration
- Food waste reduction
- Increased carbon reduction compared to other alternative energy sources
- Water quality improvement
- Micro-grid potential

HB 5002 AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

CFBA would support provisions a Green New Deal that recognize and promote the environmental benefits that agriculture provides. Agriculture is an energy intensive industry with low profit margins, making it difficult to attract secure funding for energy efficiency projects or alternative energy generation that support the farm operation.

On-farm energy production can increase the resiliency of the electric grid through the potential to tie production into a community micro-grid. Anaerobic digesters can be used to take food waste out of the waste stream and use it to generate energy.

CFBA requests that on-farm energy production be explicitly included, and promoted, for access to any programs in the Green New Deal.

Thank you for the opportunity to comment on these two proposals and I would be happy to answer any questions from the committee.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Please support the Green New Deal by drafting legislation that makes it easier to get electric cars on the road (including allowing Tesla to sell directly to the public) and by protecting Clean Energy funding.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Keith Ainsworth

31 Green Springs Dr Madison, CT 06443-2013 keithainsworth@live.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems. As an owner of an electric car, I'm especially supportive of greatly expanding EV charging stations.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

We cannot rely on the federal government to take the lead on any of this. We owe it to our residents and future generations to make CT a leader in rapidly transitioning from fossil fuels of all kinds. Climate Change is happening at an alarming rate. These efforts will position CT in a way to be a resilient as possible.

Thank you.

Sincerely,

Ms. Judy Allen

25 Fowler Dr West Hartford, CT 06110-1617 jdyaallen@aol.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Joshua Angelus

69 Hillside Ave Waterbury, CT 06710-2220 joshuaangelus@yahoo.com

Written Testimony in Support of Proposed Bill 5002:

An Act Concerning the Development of a Green New Deal

Submitted by Pamela Arifian, Director

United Church of Christ Northeast Environmental Justice Center

February 19, 2019

RE: Support Proposed Bill 5002: An Act Concerning the Development of a Green New Deal

Dear Senator Needleman, Representative Arconti, and Members of the Energy & Technology Committee:

As Director of the UCC Northeast Environmental Justice Center, I appreciate the opportunity to submit this testimony in support of the above-referenced bill. I strongly support this bill and respectfully urge the Committee to vote in favor of it without amendment.

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low- and middle-income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, by allowing Tesla sales in the state, giving a state income tax credit for purchasing an electric vehicle, building more charging outlets powered by solar energy and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through promoting construction of solar charging stations, infrastructure investments in electric shuttle busses and trackable bus systems, and community workforce agreements to hire from disadvantaged communities.

Thank you for the opportunity to voice my support of Proposed Bill 5002.

Sincerely,

Pam Arifian
227 Low Road
Sharon CT 06069
860-364-5418
Pama@ctucc.org

Hello,

We, members of an environmental-politics group at Avon High School, would like this testimony to be read on our behalf at tomorrow's 10 am Energy and Technology Committee hearing about HB 5002: AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL. Thank you for your consideration.

Sincerely,

Annika Mathias, Alex Kawa, Neel Srinath, Jonathan Sides, Julius Shieh, Sofie Fischler, Rachel Fischler, Allison Rinehart

"Mr. Chairman, members of the committee. We are a coalition of students from Avon High School who are dedicated to promoting the policy of the Green New Deal. Our group is just one of the many high school chapters across the nation working with Sunrise Movement and iMatter to generate awareness and support for this innovative, ambitious, and exciting movement. We will be speaking today in favor of HB 5002: AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.

In October 2018, the United Nations Intergovernmental Panel on Climate Change (IPCC) released a report saying the world has only until 2030 to limit devastating climate change and avoid unprecedented environmental disaster. The report states that every bit of warming matters, so even a fraction of a degree less will save lives and greatly benefit the world's economies. Our world has already experienced intense storms, unprecedented flooding and persistent wildfires attributed to climate change, and further human inaction will lead to even worse catastrophes. If we do not respond to climate change properly, our economy and environment will crumble, and human life, healthy communities, and critical infrastructure will be put at great risk. In order to properly address this climate crisis, we need a national mobilization of a scope and scale in order to address inequities caused and intensified by the fossil fuel economy. Connecticut can and should be a leading state in such mobilization.

Senator Ed Markey (D-MA) and Representative Alexandria Ocasio-Cortez (D-NY) released, on February 7, 2019, a Resolution recognizing the duty of the Federal Government to create a Green New Deal. Green New Deal legislation at the federal level would create a detailed plan to:

- within a decade, achieve net-zero greenhouse gas emissions through a fair and just transition for all communities and workers;
 - ensure prosperity and economic security for all people of the United States through the creation of millions of good, high-wage jobs
 - invest in the infrastructure and industry of the United States to sustainably meet the challenges of the 21st century;
 - secure adequate, essential, natural resources for all people of the United States for generations to come
 - promote justice and equity by stopping current, preventing future, and repairing historic oppression of various communities most affected by climate issues. These communities include those socially disadvantaged and those unequipped to bear the burden of climate disasters.
- We would like to see all further discussion of, and as a result of, HB 5002 include these key provisions in accordance with federal legislation.

Whether it be extreme weather, the demolition of low-income coastal towns and cities, or your morning coffee disappearing, climate change has real, serious implications on every aspect of our lives. The Green New Deal establishes the inextricable ties between the health of our climate and that of our nation. The Green New Deal is unique in its attempt to rectify situations of injustice often exacerbated by climate issues, along with its' primary goal of ending carbon emissions and the dependency of our economy on fossil fuels. The Green New Deal is not a radical piece of legislation, but a just and reasonable one. We only ask for what our parents, grandparents, and generations of our ancestors have been afforded before us: the right to a liveable, functioning, environment. Without a healthy climate, we cannot have a healthy community, nation, or human race. For these reasons, we call upon the Energy and Technology Committee to pass HB 5002. Connecticut's acceptance of the Green New Deal would make our state a leader in this historic movement, signaling to local, state, and federal governments across the globe that an ambitious climate proposal like The Green New Deal is exactly what we need to help create new jobs and preserve our planet for future generations

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Susan Barney

30 Cold Spring Dr Bloomfield, CT 06002-2106 susanrbarney@aol.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

I'm very excited about the prospect of moving forward at a time where the nation is in such turmoil. Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people. I feel that we can take leadership and show the way for the Nation, benefiting the state and the country at the the same time.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,
 Mrs Tonia Barringer
 115 Maywood Rd Norwalk, CT 06850-4424
falconer@optonline.net

Dear Committee Members:

As a Commissioner with Hartford's Environment Commission (ACOTE), I have been concerned about climate catastrophe and about environmental justice for a long time.

Therefore, I support and urge that you **support HB 5002 for the Green New Deal**, a concept that will further the cause of progressive policies to deal with the very real threats of climate catastrophe.

We urgently need a comprehensive plan to build a new green economy based on renewable-energy jobs, while establishing policies of environmental justice for all of CT.

Sincerely,

Dr. JoAnne Bauer
25 N Beacon St
Hartford, CT
06105

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Steve Bayley

331 Hidden Lake Rd Higganum, CT 06441-4528 stantz19@yahoo.com

February 21, 2019

Written Testimony Of Eva & Wildaliz Bermudez
In support of the CT Green New Deal & Bill # HB 5002.

Members of the Energy and Technology Committee. Climate change is the most critical issue of our time. Severe weather changes, droughts and displacement of people are issues that are affecting everyone and are occurring more and more often. Due to choices we have made and continue to make. This House Bill 5002 and a Green New Deal are crucial to the residents of this state because it deals with: 1) reducing our state carbon footprint. We have among the worse air quality in New England- this is caused by our carbon footprint which is exacerbated by our high reliance on our single occupancy vehicles. Those who are most impacted by air quality are residents living in cities where highways cut through them. Cities like Hartford where today which has one of the leading asthma rates in the country; 2) the bill is also important b/c it allows for an ample opportunity for a green jobs ladder in CT. CT needs to be at the forefront of this push as it has in the past. We were the first state in the entire country to establish a green bank. This means more working class people would be given opportunities to work in the green economy that is booming. We always talk about more jobs for CT and this is one fast growing market. 3) third this bill supports electrified mass transit which means that there would be better connectivity with our neighbors and calls for overall transit equity; 4) four this bill calls for the protection of energy efficiency funds. As we recall the funds were raided last year and impacted the health and quality of thousands across our state. For this reason and so many others I am in full support of HB 5002 and I strongly urge you to be as well. A green economy means a robust economy for our state of Connecticut. Thank you for your time on this matter.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,
 Mrs Debra Bologna
 933 Stone Rd Windsor, CT 06095-1038
freespirtfarm@me.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Edward I. Boynton

14 Hillside Pl Madison, CT 06443-3223

ted@soundboatworksllc.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

We all must take action now to preserve the health and safety of the Earth to ensure a future for all of the life on it!

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Patricia Brick

28 W Main St Clinton, CT 06413-2066

pbrick@snet.net

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms Julie Broom

28 W Point Rd Branford, CT 06405-5732

juliehbroom@gmail.com



TESTIMONY IN SUPPORT OF **HB 5002**
AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

February 20, 2019

To: Honorable Chairs Sen. Needleman and Rep. Arconti and Distinguished Members of the Energy and Technology Committee

From: Lori Brown, Connecticut League of Conservation Voters (CTLCV)

Thank you for the opportunity to testify **IN SUPPORT OF HB 5002**, An Act Concerning the Development of a Green New Deal.

Climate change is THE issue facing our generation, and its impacts are already being felt. From raging wildfires and vicious hurricanes to torrential rains and unprecedented droughts, extreme weather is only going to get worse across the globe and right here in Connecticut. We risk **billions of dollars in damage to our shoreline, infrastructure, public health, agriculture, and more if we do not take bold action.**

While climate change affects us all, it does not affect us all equally. The most vulnerable among us in low-income households and communities of color already grapple with some of the worst pollution and public health crises. Climate change magnifies these injustices and exposes working families to new threats from severe storms, record-shattering temperatures, flooding, and more. **Any attempt to address climate change must also address its disproportionate impact on low-income households and communities of color.**

The Green New Deal can offer a vision for a brighter, healthier future for ALL of us by adhering to a few critical guiding principles:

- **Community Inclusion:** Any policies developed on climate change, such as implementing climate resiliency adaptations must take into account the needs of ALL the communities directly impacted.
- **Lower Emissions:** Connecticut approved ambitious reduction in its carbon footprint and must act decisively now to meet those goals, and transition to 100% fossil-free clean energy by date certain.
- **Green Collar Jobs:** Smart investment in green initiatives can create public and private job growth as well as generate cost savings that lead to economic stimulus.
- **A Just Transition:** The right green policies can level the playing field in Connecticut. Displaced workers must be given access to training and new opportunities in the green

economy, and policies like energy efficiency standards should impact small businesses and big corporations equally—and enable everyone to thrive.

For the sake of our future, **we must transition away from fossil fuels and to 100% clean, renewable energy.** This will require a Green New Deal which not only outlines a clear vision for the future, but also contains concrete policies concerning **energy efficiency, renewable energy, sustainability, and resiliency.**

The Green New Deal should be a blueprint to stimulate the economy, tackle climate change, and promote racial and social equality at the same time.

These are some of the broad topics which could include a myriad of programs and policies, including but not limited to:

- Strict energy efficiency standards for buildings to reduce emissions and save costs;
- A “Green Jobs Ladder” or similar workforce development plan with an emphasis on training low-income and working-class residents;
- Creating a Residential Property Assessed Clean Energy (R-PACE) program to help low-income households finance energy efficient improvements;
- Protecting energy efficiency funds from diversion;
- A mandate that every action Connecticut’s regulatory agencies take should work to reduce the state’s carbon footprint;
- Increasing the urgency of Connecticut’s Renewable Portfolio Standards (RPS);
- A significantly higher offshore wind procurement target;
- An increased community solar allowance;
- Equitable net-metering to incentivize Connecticut residents and businesses to install solar panels;
- Electrified mass transit;
- Bans on new natural gas, coal, oil or other fossil fuel or oil infrastructure development;
- An emphasis on land conservation in order to sequester carbon;
- Increased access to compost to reduce methane leakage from landfills;
- Emphasis on the role of mini-grids and smart grids in an increasingly decentralized power distribution structure;
- Education on sustainable farming practices, like crop rotation and soil management;
- Upgraded coastal infrastructure to survive sea level rise and large storms;
- Mandated community and stakeholder involvement in the planning and implementation of resiliency measures;
- Monitoring and holding accountable state agencies and programs to ensure implementation of goals to “lead by example.”

Because it is not enough to simply set a goal, CTLCV also asks any Green New Deal include a mechanism, such as a **Green New Deal Advisory Committee, to track, report, and advise on the bill’s progress.** This Committee could be composed of a diverse group of stakeholders, including, but not limited to local and statewide legislators, climate scientists, economists, labor representatives, and business leaders. It could be empowered to report and advise on the

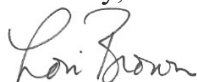
programs implemented through the Green New Deal. In this manner, the legislature will be armed with the knowledge it needs to expand successful programs and modify those that fail to meet expectations.

Connecticut cannot afford half-measures when it comes to climate change. CTLCV applauds the Green New Deal as serious effort to address the overarching crisis of our time.

In the absence of action in Washington, it is up to us to protect our resources and our future. The legislature has a golden opportunity to establish Connecticut as a leader in the fight against climate change, but only if we take bold action.

Thank you for your time and consideration as you deliberate on HB 5002.

Sincerely,

A handwritten signature in cursive script that reads "Lori Brown".

Lori Brown
Executive Director
CTLCV

553 Farmington Avenue, Suite 201 Hartford, CT 06105
www.ctlcv.org | ctlcv@ctlcv.org

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people. We can't rely on the federal government to provide necessary support. You have the power to make CT an environmentally better place for all of us.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
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- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,
Ms. valerie bryan
180 Beacon St Hartford, CT 06105-2913
vjbryan@att.net

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

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Thank you.

Sincerely,

Ms. Diane Bullock

16 Weekepeemee Rd Woodbury, CT 06798-2001 dianewbullock@gmail.com



TurningPoint Energy
999 18th Street STE 3000
Denver, CO 80202

February 21, 2019

Senator Norm Needleman, Senate Chair
Representative David Arconti, House Chair
Energy and Technology Committee
Legislative Office Building, Room 3900
Hartford, CT 06106

Re: TurningPoint Energy Testimony for February 21, 2019 Public Hearing

Dear Chairmen Needleman, Arconti and Members of the Committee:

TurningPoint Energy ("TPE") greatly appreciates the opportunity to submit testimony on the legislation being heard during the Energy & Technology Committee's ("E&T") public hearing. TPE understands that the bills being heard today are still very conceptual and has structured our testimony accordingly. TPE looks forward to collaborating with the legislature throughout 2019 to help Connecticut achieve its clean energy and carbon reduction goals.

TPE is a clean tech advisory, development and investment company focused on community solar and battery storage applications. The team is comprised of a veteran energy industry team with more than \$2.1 billion of solar projects originated, developed, financed, built and operating throughout the United States alone. We have been an active participant in both the development and policy side for various community solar markets including Rhode Island, New Jersey, Virginia, Maryland, Minnesota, and Texas.

TPE is very interested in expanding our business operations to Connecticut. In order to do so there are a number of concerns that need to be remedied in order to ensure a viable market including the program capacity on an annual basis, the simplification and predictability of bill credits to support residential and LMI targeted projects, and market continuity. As a member of the Northeast Clean Energy Council ("NECEC"), TPE supports NECEC's position related to the various bills being considered today. We are focusing our testimony on how the Shared Clean Energy Facilities ("SCEF") program could be improved through H.B. No. 5002 – An Act Concerning the Development of a Green New Deal.

First we wanted to express our appreciation that P.A. 18-50 enabled the creation of a SCEF program in Connecticut. It was a step in the right direction for community solar which provides unique opportunity for urban dwellers, renters and LMI customers to benefit from solar.

Some legislative tweaks would offer scale, market continuity and the simplification of offerings to customers, particularly LMI customers, which are fundamental aspects of successful programs. We would urge the E&T committee to incorporate these modifications into the SCEF program as part of H.B. No. 5002 – An Act Concerning the Development of a Green New Deal.

Increase the Program Cap from 25 MW to 50 MW Per Year: At 25 MW per year the program is relatively small as compared to other successful programs across the country including Massachusetts, Maryland,

New York, Minnesota, and even Rhode Island. There are substantial costs associated with identifying, securing and developing each solar project. The smaller the program the less companies are willing to invest the necessary resources to properly diligence a site, resulting in both less companies participating and riskier projects being submitted into the program.

Modify the Application to First Come, First Serve: TPE's is not aware of a successful community solar program of meaningful scale that has utilized a price competitive application process. Such programs create a "race to the bottom" mindset and have high project fallout rates. For example, TPE is doing a project in Maryland sited at a Church that provides heavily discounted electricity for the Church's benefit as well as marketing the power at a savings to LMI customers. A process that requires developers to bid in for bill credit values, would never allow such a project to go forward. A bidding process will push developers to seek higher credit worthy counterparties to satisfy investor requirements.

Establish a Project Waitlist Queue to Ensure Market Continuity: Even with high project maturity requirements projects will fall out. There should be a waitlist established to require the utility to reallocate capacity in a given year if it is forfeited by another project developer, or be first in line the following year. This creates market continuity which will allow developers to invest in the market, and result in the projects being brought online more quickly benefiting Connecticut residents at a faster rate.

Simplify the Bill Credit Rates to Match Customers Rates

Simplicity in the bill credits offered to customers will lead to more participation, particularly among LMI communities. Specifically, having a single, uniform bill credit, that matches the rate on a customer's existing electric bill will give consumers a straight forward understanding of the benefit they will receive from community solar.

Removal of Project Attestation Requirement: Removing the requirement that community solar customer certify they are unable to implement solar will greatly remove a somewhat arbitrary barrier to enrollment. This will be hard to implement since there are numerous reasons someone may not be able or willing to invest in solar on their home at a given time, and even harder to enforce.

Thank you for the opportunity to present TPE's testimony during the public hearing on February 21, 2019. We are extremely supportive of the E&T committees efforts around the Green New Deal package and look forward in engaging with you in the months ahead. I am available to answer any questions or provide additional feedback on any portions of my testimony should you need any additional information.

Regards,

#

~~Phon#Fushu#~~

Michelle Carpenter
Managing Director
Mcarpenter@tpoint-e.com
781-325-2884

Energy and Technology Committee Members,

I am writing to provide testimony on and support for Proposed House Bill 5002, “An Act Concerning the Development of a Green New Deal. --- To create new programs concerning and to provide funding for energy efficiency, renewable energy, sustainability and resiliency.”

First – I need to congratulate the state legislature for passing an important bill in June 2018 with a greenhouse gas (GHG) reduction target 45% below 2001 levels by 2030. That is an admirable target, and now we need to get to work on achieving that goal. In order to reach that target the state needs to continue with individual bills and this Green New Deal to push that target into the planning for transportation and development statewide.

- **40% of our state’s GHG emissions are from the transportation sector, the largest contributing sector by far.** The CT Department of Transportation must incorporate the GHG reduction targets into their infrastructure planning and project prioritization. Building new highway lanes, bonding funds for expensive new state garages, and planning for increased highway capacity work against the GHG reduction goals. Highway projects, and increased highway traffic capacity, are both expensive and unsustainable. The future of our transportation must be centered on transit and rail, with transit-oriented development around those high quality systems and stations.
- **Regional Plans** - The state’s COG regions, our metropolitan planning organizations, must incorporate the state’s GHG reduction target into their Long-Range Transportation Plans (25-year plans) and Plans for Conservation and Development. This may require legislative language to require those plans to include greenhouse gas reduction targets with a path to reach those targets.
- **State Transportation Benefits** - To meet the GHG reduction targets, the state’s transportation benefits for employees must include a ‘parking buy out’ or alternate ‘transit pass benefit.’ With 51,000 employees, the largest employer in the state, this sets the example for transportation benefits across institutions and employers statewide. A transit pass benefit was specifically recommended in the Governor Lamont’s transportation transition team recommendation and could be modeled after the popular U-Pass program at state colleges and universities.
- **GHG Reduction Opportunity with Water Utility Projects** - The metro Hartford water utility, the Metropolitan District Commission, needs to incorporate green infrastructure projects with GHG reduction benefits into their \$2 billion 40-year plan to reduce contaminated stormwater runoff into the Connecticut River. Those green infrastructure projects will also create local jobs, improve urban air quality, and increase the resiliency of our state capital.
- **Support a Shift to Transit and Active Transportation** – Our small State of Connecticut has three cities in the top 26 in the US (pop > 100k) with high rates of zero-car households. For example, the City of Hartford’s zero-car household rate is greater than 30%. In seven Hartford neighborhoods the zero-car household rate tops 40%. With that rate, one would expect a world class transit system and connected bicycle lane network serving our state’s capital city and neighboring towns. Let’s make that expectation a reality!

- **Development** – Sustainable development and transportation are integrally linked. The State of CT cannot afford to continue developing open space, forests, and farm land into sprawling development. A Green New Deal (or separate bill) that puts an appropriate price on greenfield development that is outside transit-oriented development zones supports a future state that values sustainability over sprawl.

The Transport Hartford Academy put out a survey in the metro Hartford area on transportation related issues. This survey may be useful to you when considering the green new deal and a sustainable transportation system that best serves the future of Connecticut. In addition to reaching out to our email list, we sent this survey to transportation industry professionals, posted it to local town social media pages, and shared it through the MetroHartford Alliance.

- **Survey Results** - <https://centerlatino.wufoo.com/reports/2019-transport-hartford-legislative-priorities/>

Thank you for your attention to these important issues and your work on shaping Connecticut's Green New Deal.

Anthony Cherolis

Transport Hartford Coordinator

Center for Latino Progress

95 Park Street, 2nd Fl.

Hartford, CT 06106

P. 860.247.3227 x.20

C. 860.204.2704

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

I'm a resident of Guilford, retired since January 2017. I've been devoting much of my retirement time to learning more about the global climate crisis and how it's already impacting New England, including Connecticut.

I've come to the conclusion that Connecticut is at a crossroads, and that we citizens and elected officials of this state have a once-in-lifetime opportunity to shape a healthier, more equitable, and more vibrant future for its people.

This is why I'm writing to ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to purchase or lease zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Rev DOUGLAS CLARK

869 N Madison Rd Guilford, CT 06437-1721 revdlmc@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

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Thank you.

Sincerely,
 Mrs patricia cole
 185 Vine Rd Stamford, CT 06905-2018
pldcole@me.com



Connecticut Fund
for the Environment

Save the Sound®

**Testimony of Connecticut Fund for the Environment
Before the Committee on the Environment**

In Support of,
H.B. 5002, AAC THE DEVELOPMENT OF A GREEN NEW DEAL

In Support of,
**HB 6242, AN ACT PROHIBITING SURCHARGES FROM BEING LEVIED ON
UTILITY CUSTOMERS TO SUBSIDIZE INTERSTATE NATURAL GAS PIPELINE
CAPACITY**

In Support of,
**HB 6240, AN ACT REQUIRING THE STATE BUILDING CODE TO HAVE
REQUIREMENTS TO IMPROVE ENERGY EFFICIENCY**

In Support of,
HB 5789, AAC THE LEAD BY EXAMPLE PROGRAM

In Support of,
**H.B. 7016, AAC THE CONSERVATION AND LOAD MANAGEMENT PLAN AND THE
INSTALLATION OF HEAT PUMPS**

In Support of,
**HB 6237, AN ACT REQUIRING A STUDY OF ENERGY STORAGE PROJECTS AND
DISTRIBUTED GENERATION IN THE STATE**

In Support of With Modifications,
**HB 7114, AAC MUNICIPAL COMPETITIVE PROCUREMENT OF ELECTRICITY,
NATURAL GAS, RENEWABLE ENERGY AND OTHER ENERGY-RELATED
PRODUCTS BY NONPROFIT ENERGY BUYING CONSORTIA**

Submitted by Claire Coleman
Climate & Energy Attorney
February 21, 2019

Connecticut Fund for the Environment (CFE) is a non-profit environmental organization with thousands of members and over 15,000 activists. The mission of CFE, and its bi-state program Save the Sound, is to protect and improve the land, air, and water of Connecticut and Long Island Sound. We use legal and scientific expertise and bring people together to achieve results that benefit our environment for current and future generations.

Dear Co-Chairs Arconti and Needleman, Vice-Chairs Fonfara and Allie-Brennan, Ranking Members Formica and Ferraro, and members of the Energy & Technology Committee:

I. H.B. 5002 AAC THE DEVELOPMENT OF A GREEN NEW DEAL (SUPPORT)

CFE strongly supports H.B. 5002, An Act Concerning the Development of a Green New Deal, and respectfully requests that the Committee fully draft and support Green New Deal legislation that propels a comprehensive path toward a rapid transition to an economy free of fossil- fuels. The primary focus of the Green New Deal must be to ensure that Connecticut can meet the mandate in Public Act 18-80 to reduce economy-wide GHG-emissions 45% from 2001 levels by 2030,¹ and transitions to a zero-carbon, 100% renewable economy by 2045.

An outline of proposals that CFE believes will help transition Connecticut to zero carbon renewable energy, while creating jobs and addressing economic and racial inequities, is attached to the end of this testimony.

Most critically, CFE supports including the following in H.B. 5002, the Green New Deal:

- **Supporting & Expanding Energy Efficiency.** Energy efficiency creates more savings than any other single fuel source. By reducing demand for energy, energy efficiency relieves pressure on the electrical grid, reduces our dependence on fossil fuels, and lowers families' bills, helping reduce the energy burden that falls disproportionately on lower-income families. Saving energy also grows Connecticut's job force. A 2017 federal report found that the design, manufacture, and installation of energy efficiency products and services accounted for nearly 34,000 Connecticut jobs.² The Connecticut Energy Efficiency Board (EEB) estimated that as a result of the two-year legislative diversion of approximately \$117 million³ in ratepayer funding for electric efficiency, Connecticut ratepayers will suffer lost bill savings of approximately \$275 million, 1.6 million additional gallons of oil will be burned annually, and approximately 13,000 homes, including 5,600 low-income households, will lose access to efficiency improvements. They also estimated that thousands of jobs will be lost, and efficiency projects worth over \$30 million will be canceled annually in 2018 and 2019.⁴ The Green New Deal should include the restoration of Connecticut's award winning C&LM energy efficiency programs and Clean Energy funds that were diverted from fiscal years 2018

¹ Governor's Council on Climate Change, *Building a Low Carbon Future for Connecticut: Achieving a 45% GHG Reduction by 2030* (released Dec. 18, 2018), at 28, available at https://www.ct.gov/deep/lib/deep/climatechange/publications/building_a_low_carbon_future_for_ct_gc3_recommendations.pdf (analysis suggest that we need to put approximately 500,000 zero emission vehicles (ZEVs) on the road by 2030 to meet these targets).

² https://www.energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report%20State%20Charts%202020_0.pdf.

³ The budget passed in October 2017, June Special Session Public Act 17-2, An Act Concerning the State Budget for the Biennium Ending June 30, 2019, imposed a major fund diversion on the Connecticut Energy Efficiency Fund (CEEF) – a sweep totaling \$127 million over the two-year state budget cycle. In 2018 the legislature restored \$10 million of these funds.

⁴ Connecticut Energy Efficiency Board, 2017 Annual Legislative Report, Executive Summary, available at <https://www.energizect.com/sites/default/files/Final-2017-Annual-Legislative-Report-WEB-2-20-18.pdf>.

and 2019, full-funding for these programs in the upcoming 2020/21 budget cycle, and the inclusion of explicit protections of ratepayer funds from future budget sweeps. Connecticut's Lead By Example program should also be expanded, as discussed below.

- **Transitioning to 100% Renewable Energy.** Slashing air pollution and slowing climate change are possible—if we end our dependence on fossil fuels and instead build a clean energy future. Renewable energy sources such as wind and solar have zero fuel costs, which can save families money on their energy bills. Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families, including instituting a mandate to procure no less than 2000 MWs of off-shore wind by 2030, and expanding Connecticut's residential, commercial, and shared solar programs. Ensuring local, distributed solar continues to grow in Connecticut by amending Section 7 of PA 18-50 is also critical.
- **Coastal Resilience & Green Infrastructure.** When Hurricane Irene and Superstorm Sandy hit in 2011 and 2012, the vulnerabilities of our region's coastal communities were exposed. Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves, are critical strategies to ensure Connecticut has healthy and safe shorelines.
- **Clean Transportation.** Transportation accounts for 38 percent of Connecticut's greenhouse gas emissions, more than electricity generation, and heating and cooling buildings. Making it easier for residents and businesses to adopt zero-emission vehicles through sustainable funding of the zero emission vehicle rebate program, state electric fleet and bus mandates (at least 50% light duty zero emission vehicles and 30% of the state's transit buses should be electric by 2030), and EV-ready building codes, as well as investing in Connecticut's bus and rail systems, are critical components of the Green New Deal.
- **Green Workforce Development.** Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements that would hire from disadvantaged communities to help deploy clean, reliable energy for the state. Programs and funding should also be established to provide transition benefits for those affected by the economy shifting away from fossil fuels, including job training, education, and opportunities in clean energy, energy efficiency and climate resilient infrastructure jobs.

II. HB 6242, AN ACT PROHIBITING SURCHARGES FROM BEING LEVIED ON UTILITY CUSTOMERS TO SUBSIDIZE INTERSTATE NATURAL GAS PIPELINE CAPACITY (SUPPORT).

CFE supports HB 6242, which protects ratepayers from making stranded investments and helps ensure Connecticut meets our newly adopted climate law to reduce our economy-wide greenhouse gas emissions by 45% below 2001 levels by 2030 under Public Act 18-82. Leaks associated with natural gas production and distribution release large amounts of methane, a pollutant that is 87-times more potent than carbon dioxide at trapping heat in the Earth's

A Connecticut Green New Deal**Primary Goals:**

- Rapidly transition to an economy with net-zero greenhouse gas emissions
- Create tens of thousands of good quality, high-wage green jobs
- Prioritize green strategies that will also increase racial and economic justice, and address historical inequities

Proposed Areas of Action:

- **Renewable Energy Production**
 - Increase the Renewable Portfolio Standard (RPS) requirement to 100% no later than 2045
 - Mandate a rapid expansion of offshore wind, with procurements of at least 2000 MW by 2030
 - Expand solar production by raising annual caps on shared solar and commercial & industrial installations
 - Solar Assistance Program: build upon the current Green Bank program targeting low and moderate income households
 - Support expansion of clean/renewable fuel cells by authorizing a larger share of the RPS to be met by fuel cells that use renewable gas from anaerobic digesters, landfills, etc.
- **Energy Efficient Buildings**
 - Rapidly expand energy efficiency programs by protecting and increasing funding
 - Update and expand the Lead By Example program for government facilities
 - Support electrification of heating and hot water by creating new incentive programs for heat pump technologies
 - Ensure that building codes are continuously aligned with the most recent International Energy Conservation Code standards
- **Clean and Accessible Transportation**
 - Lower barriers to personal and business adoption of electric vehicles (EVs)
 - Establish a sustainable and dedicated funding source for CHEAPR incentives
 - Establish EV-ready building codes so people can charge at home and at work
 - Expand the network of charging infrastructure
 - Set a state fleet target of 50% zero-emission vehicles (ZEVs) by 2030
 - Expand and electrify mass transit
 - State transit bus fleet target of 30% zero-emission buses (ZEBs) by 2030
 - Extend bus routes to provide greater geographic coverage, and expand inter-city services
 - Upgrade and extend rail lines and increase service levels
 - Reduce impacts from freight shipping
 - Repair but don't expand existing highway infrastructure
 - Regulate heavy trucks
 - Shift freight from trucks to rail

- **Workforce Development and Job Pipelines**
 - A mandatory Climate Labor Agreement, providing basic labor rights and standards for all publicly-supported, climate-related employment
 - Encourage community workforce agreements that provide significant proportions of hiring from disadvantaged communities
 - Create a solar jobs program modeled after the targeted training and job pipeline programs in Illinois's Future Energy Jobs Act
 - Provide transition benefits for those affected by the economy shifting away from fossil fuels, including job training, education, and opportunities in clean energy, energy efficiency and climate resilient infrastructure jobs
- **“Buy Fair” and “Buy Local” Procurement Policies**
 - Implement state procurement guidelines that support in-state companies with fair labor practices and recruitment of workers from disadvantaged communities
 - Implement state procurement guidelines that emphasize sourcing and disposal in ways that have the lowest possible carbon impact
- **Resiliency and Infrastructure Investment**
 - Upgrade coastal infrastructure to prepare for sea level rise
 - Emphasize “living shoreline” measures, including extensive deployment of the natural systems (green infrastructure) that protect our coastal and inland communities from flooding and the pollution caused by increased storm events.
 - Protect critical infrastructure that cannot be moved (e.g. coastal sewage treatment plants and electrical substations)
 - Prioritize storm sewer separation efforts
 - Increase bridge and culvert openings to reduce flood impacts
 - Develop plans for systematic retreat from low-lying areas
 - Intentionally invest in urban and rural impoverished areas that are at-risk
 - Establish a network of microgrids to enhance the resilience of the state’s power infrastructure
- **Sustainable Agriculture and Forestry**
 - Promote low-energy-intensive practices
 - Encourage management practices that draw carbon from the atmosphere and store it in plants and the soil
- **Financing**
 - Establish a CT Infrastructure Bank
 - Expand CT Green Bank’s mission to include some environmental and resiliency projects
 - Explore new creative financing mechanisms, e.g. low-interest residential and commercial loans for elevating structures in flood-prone areas that provide “on-bill repayment” through property insurance payments that direct flood insurance savings toward repayment of the loan
 - Create municipal stormwater authorities to allow towns to rapidly upgrade stormwater infrastructure and management activities

- **Municipal Engagement**

- Engage municipalities in Green New Deal by requiring plans of conservation and development (POCDs) to incorporate and plan for state mandates for GHG reduction, energy efficiency, adoption of EVs, and procurement of renewable power, as well as incorporating projects to make streets safer and cleaner through bike and pedestrian infrastructure improvements.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Leticia Colon

398 Palisado Ave Windsor, CT 06095-2031 Lcolonees@gmail.com

Mark Conrad
41 Mountain View Ave
New Milford CT 06776
markdotcon@gmail.com

The Energy and Technology Committee

Testimony in regard to Bill 5002 AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.

Honored committee members,

I am writing to ask this committee to reject the proposal to provide more funding for renewable energy and green technologies.

Technology cannot be legislated. Technological advances are not created through taxes.

Existing funding is in place for continued research and development, however solar and wind are not yet viable, cost effective alternatives. A recent World Energy Outlook report states that the percentage of total global primary energy demand provided by wind and solar is 1.1%. The WEO report also states that solar generation is at least twice as expensive as coal and almost twice as expensive as gas. Most significantly, due to the variability of solar and wind, systems that use these alternatives must fall back on fossil fuels and make the overall grid less efficient and cause increases in emissions. The storage of energy created through these media is still very limited and adds to the inefficiency.

When the technology advances to viability the market will adjust naturally. It is unrealistic to replace or phase out existing reliable technology until a superior, or at least equal, technology is available and cost effective.

The New Green Deal proposals are wish lists, not development plans.

Government subsidy does not tend to increase efficiency of development or improve the timetable. Connecticut cannot afford to push this agenda, either in monetary costs or by creating additional expenses for existing and potential industries.

Regards,
Mark Conrad

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

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- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Kristen Coperine

318 Griswold St Glastonbury, CT 06033-1192 kristen.coperine@gmail.com

To: Honorable Chairs Sen. Needleman and Rep. Arconti and Distinguished Members of the Energy and Technology Committee.

I am writing in support of HB 5002. An Act Concerning the Development of a Green New Deal.

In October 2018 The UN Intergovernmental Panel on Climate Change released a report saying urgent and unprecedented changes are needed to limit climate change catastrophe. Changes they say that are affordable and feasible.

We need to stop expanding fracked gas and fossil fuel use and we need to rapidly transition to clean renewable energy starting now, this year.

The October 2018 report says we have 12 years to limit climate change. Today February 2019 we now have 11 years and 8 months.

We need to save this planet for our children and time is almost up.

Please support HB 5002. An Act Concerning the Development of a Green New Deal.

Thank you for your time.

Susan Cote-DeMilia 136 Jacob Rd. Southbury CT 06488



February 21, 2019

To the Energy Committee of the Connecticut Legislature:

Thank you, co-chairs Representative David Arconti and Senator Norm Needleman for the opportunity to testify. I serve as president of E4TheFuture, a non-profit dedicated to supporting energy efficiency and clean energy. Our name was previously Conservation Services Group (CSG). For 31 years, we helped design and deliver energy efficiency nationwide. In 1988-1990 we led negotiations to set up efficiency programs across New England, including in Connecticut working with CL&P and UI. We are proud of the great work that the CLM program has achieved over the past 30 years. We are also proud that CSG was responsible for delivering energy efficiency upgrades to 2.5 million homes; a \$3.5 billion investment gleaned \$17+ billion in economic benefits overall. I also serve as co-chair of the Northeast Clean Energy Council (NECEC) policy committee and on NECEC's board of directors.

My testimony:

1. First and most important, the 2017 legislation that diverted \$70 million in energy efficiency and clean energy ratepayer funds in 2018 and a prospective loss of another \$70 million in 2019 was a significant mistake. It led to a loss of almost \$500 million in economic benefits in 2018. A similar loss is anticipated if the 2019 diversion is carried out. This loss of funding also resulted in at least 450 jobs lost. Several bills have been introduced that would stop that diversion; while these are not being heard today, the importance and value of energy efficiency should be highlighted in any and all proposed legislation. This would include HB 5002--which should include energy efficiency as a key aspect of a Green New Deal--and HB 5789 An Act Concerning the Lead by Example Program which should make note of existing funds available from the CLM program.
2. The Governor in his address yesterday clearly indicated that further diversions are not appropriate and in fact, that additional funding from ratepayers--and we hope, Federal and Regional funds--would significantly accelerate workforce and economic development as well as additional benefits across the board in energy security, resiliency, climate benefits, consumer equity and reduced health care costs.
3. From a consumer perspective, the rates paid per unit of energy are often a central policy concern. The much bigger concern, often overlooked, is how much is paid monthly for the energy needed to meet the needs of Connecticut's homes and businesses. Paying 5% higher rates, but using efficiency and renewable resources to reduce overall costs by 20%, is a tremendous net benefit to consumers. Connecticut is investing less than half of what Massachusetts invests per capita (prior to the diversions). The result is that Massachusetts' annual consumer energy cost is dropping faster than any state and just claimed a spot within the lowest-cost 25 states. Connecticut should join Massachusetts and other New England states working cooperatively and collaboratively to implement clean energy strategies.
4. Connecticut has a very strong infrastructure of employee training, workforce development, contractor qualification and market development for energy efficiency built with the help of

a national organization, the Building Performance Institute (BPI). BPI works hard with contractors, schools, utilities and DEEP to build the energy efficiency industry. They are ready and willing to ramp up efforts when Connecticut rejoins its higher degree of support for delivering efficient and clean energy.

5. Smart solar and other clean energy policies can greatly benefit Connecticut in addition to energy efficiency. As co-chair of NECEC's policy committee, I encourage the Connecticut legislature to review the several key recommendations from NECEC on these issues.

Thank you for your consideration.

Best regards,

A handwritten signature in dark ink, appearing to read "Stephen Cowell". The signature is fluid and cursive, with the first name "Stephen" being more prominent than the last name "Cowell".

Stephen Cowell, President
E4TheFuture, Inc.

845 Brook Street, Rocky Hill, CT 06067
 T 860.563.0015
ctgreenbank.com



Legislative Testimony of the Connecticut Green Bank
 Energy and Technology Committee
 February 21, 2019

Regarding House Bill 5002
AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

As the nation's first green bank, the Connecticut Green Bank ("Green Bank") leverages the limited public resources it receives to attract multiples of private investment to scale up clean energy deployment. Since its inception, the Green Bank has mobilized \$1.5 billion of investment into Connecticut's clean energy economy at a 6 to 1 leverage ratio of private to public funds, supported the creation of over 16,500 direct, indirect and induced jobs, reduced the energy burden on over 35,000 families and businesses, deployed nearly 330 MW of clean energy, helped reduce over 5.3 million tons of CO2 emissions over the life of the projects, and generated over \$75 million in individual income, corporate, and sales tax revenues to the State of Connecticut through 2018.

The Connecticut Green Bank (Green Bank) is supportive of the concept behind House Bill 5002.

In terms of a Green New Deal (Green Deal), the Green Bank proposes the following principles that could serve as a guide to the various public policies that are being considered for inclusion (order is of significance):

1. **Jobs** – creating jobs and spurring economic growth should be the top priority. This will require leveraging existing public resources to attract multiples of private sector investment in our growing green economy.
2. **Climate Change** – addressing both mitigation (i.e., reducing greenhouse gas emissions and increasing its associated local and global societal benefits) and adaptation (i.e., ensuring local resilience against natural disasters through science-based planning and proper siting, including microgrids and grid modernization) will help our state confront its impacts.
3. **Energy Affordability and Equity** – lowering energy costs for everyone, with an emphasis on underrepresented communities (e.g., low-to-moderate income households, seniors, people living with disabilities, communities of color, and small businesses), through increased investments in energy efficiency, renewable energy, and cleaner transportation.

Through decarbonization and grid modernization, the Green Deal will create jobs in Connecticut.

Recommendations

Based on the above principles, the Green Bank would recommend that the following public policies be included in the Green Deal:

- **Protecting Ratepayer Funds** – support efforts to add further protections to the enabling legislation and funding frameworks of the Clean Energy Fund (i.e., administered by the Green Bank), Conservation Adjustment Mechanism (i.e., administered by Eversource Energy and Avangrid), and Regional Greenhouse Gas Initiative (i.e., administered by DEEP). It is important that ratepayer funds be directed to their statutory purpose so as to achieve the societal benefits of which they were intended, and that any diversions of such funds are a bad signal to private investors seeking bring forward their resources to help families and businesses reduce the burden of high energy costs through the deployment of clean energy and energy efficiency.
- **Environmental Infrastructure** – expanding its scope beyond “clean energy,” the Green Bank’s purpose would be broadened to include “environmental infrastructure.” In an effort to help the state address its budget situation, while attracting more private investment in the modernization of Connecticut’s environmental infrastructure, the Green Bank could use its bonding capability to attract low-cost and long-term investment.

For example, the Green Bank supports Senate Bills 70 and 71 before the Banking Committee to create opportunities for public-private partnerships to invest in the modernization of Connecticut’s mobility and environmental infrastructures.

- **Behind the Meter Renewable Energy** – in order to assist with the sustainable, orderly development of the local solar industry from the transitional challenges of moving from net metering to a tariff-based compensation structure, the Green Bank requests modifications to Public Act 18-50 that would delay the transition until such time as the electric distribution company (i.e., Eversource Energy and Avangrid) metering and billing systems are capable of handling all statutory compensation options (i.e., daily, hourly, and simultaneous). The Residential Solar Investment Program (RSIP) would stop at 300 MW, and net metering would continue without the REC-based incentive of the RSIP. The tariff could be ready for full implementation on January 1, 2022, the date at which the federal investment tax credit policy expires.

Attached to this written testimony are:

- Connecticut Green Bank Fact Sheet
- EnergizeCT Fact Sheet “Clean Energy Delivers Value”

The Green Bank looks forward to working with the Energy & Technology Committee to build out the public policies that would shape the Green Deal.

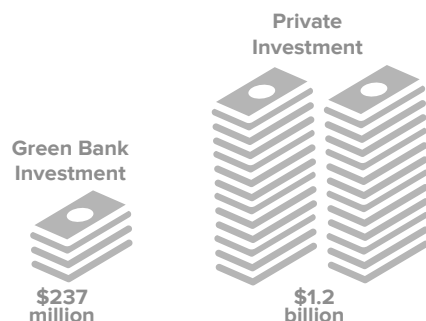
Questions on this document may be submitted to the Green Bank’s Legislative Liaison Matt Macunas, reachable at matt.macunas@ctgreenbank.com or at (860) 257-2889.

Green Bank Impact Report

Since the Connecticut Green Bank's inception through the bipartisan passage of Public Act 11-80 on July 1, 2011, we have accelerated the deployment of clean energy to benefit families, businesses, and our communities. The impact of our green bank innovation is shown below in terms of investment, economic development, and environmental protection from FY 2012 through CY 2018.

INVESTMENT IN CONNECTICUT

Investment Since inception, the Green Bank has mobilized **\$1.5 billion** of investment into the State's economy.



Leverage ratio The Green Bank's leverage ratio is the relationship between private investment and Green Bank investment.



For every \$1 of Green Bank investment, we attract \$6 of private investment.

Tax revenues The Green Bank's activities have helped generate an estimated **\$75.3 million** in state tax revenues.



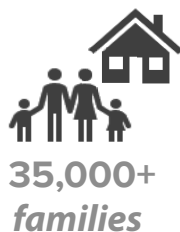
ECONOMIC DEVELOPMENT

Jobs The Green Bank has supported the creation of more than **16,500** direct, indirect, and induced job-years.

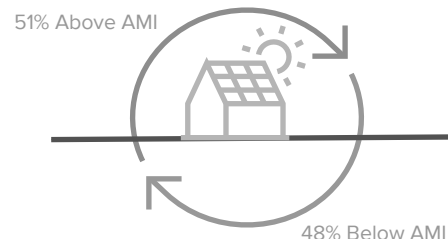
16,570 direct, indirect and induced job years



Energy burden The Green Bank has reduced the energy costs on families, businesses, and our communities.

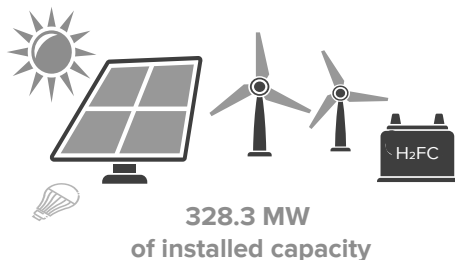


Accessible and affordable The Green Bank has supported residential solar PV installation to reach income parity and pursuing beyond.

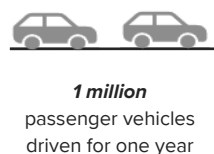
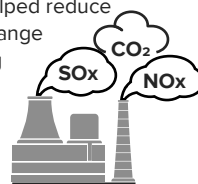
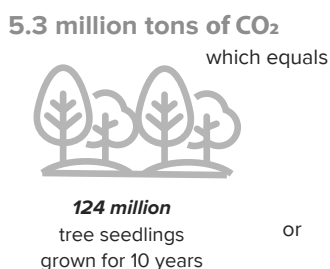


ENVIRONMENTAL PROTECTION

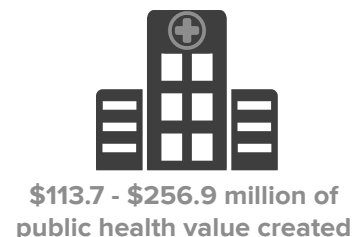
Deployment The Green Bank has accelerated the growth of clean energy to more than **325 MW**.



Pollution The Green Bank has helped reduce air emissions that cause climate change and worsen public health, including 4.8 million pounds of SOx and 5.9 million pounds of NOx.



Public health The Green Bank has improved the lives of families, helping them avoid sick days, hospital visits, and even death.



Learn more by visiting ctgreenbank.com/strategy-impact/impact



Winner of the 2017 Harvard Kennedy School Ash Center Award for Innovation in American Government, the Connecticut Green Bank is the nation's first green bank. We're creating a thriving marketplace to accelerate green energy deployment in Connecticut by making green energy financing accessible and affordable for homeowners, businesses and institutions.

Sources: Connecticut Green Bank Comprehensive Annual Financial Reports

Lenders on Connecticut Green Bank

“As America’s socially responsible bank, Amalgamated Bank is on a mission to align our investments with our values. We are committed to sustainability and environmental protection, and we want to help increase accessibility to the benefits of clean energy. Working with the Connecticut Green Bank, we have found a partner driven by the same mission. Together, we are making investments to fuel the green energy revolution.”



Keith Mestrich, President & CEO, Amalgamated Bank

“The importance of public-private partnerships, like the one between KeyBank and the Connecticut Green Bank, cannot be overstated, especially when it comes to the financing of renewable and other clean energy projects. Our partnership with the Green Bank through the CT Solar Lease led to over \$100 million of investment to reduce the energy burden on nearly 1,200 families and 75 businesses in our communities. Additionally, it was the involvement of the Green Bank that helped attract financing from Key Bank toward microgrid construction at critical facilities in Bridgeport, and a first-of-its-kind ‘micro-hydro’ generator at Hanover Pond in Meriden.”



Christopher Gorman, Vice Chairman and President of Banking, KeyBank

“Liberty Bank has been a partner with the Connecticut Green Bank from the start. Liberty Bank recently provided a financing facility for the Green Bank’s capital needs for solar on homes across the state, which is supporting the state’s growing green economy.”



Chandler Howard, President and CEO, Liberty Bank

“Our partnership with the Green Bank has helped us to invest in our local communities, while assisting the State of Connecticut in achieving its important energy, environment, and economic goals.”



Larry Holderman, President and CEO, Mutual Security Credit Union

“The CT Solar Loan program was a game-changer for solar financing and Sungage Financial. Our partnership with the Green Bank in Connecticut helped our company grow and become a national leader in helping families finance solar and realize the important benefits it provides.”



Sara Ross, Co-Founder and CEO, Sungage Financial

Clean Energy Delivers Value

EVERSOURCE, UI, SCG, CNG, THE ENERGY EFFICIENCY BOARD AND THE CONNECTICUT GREEN BANK PROVIDE ENERGY EFFICIENCY AND RENEWABLE PROGRAMS AND SERVICES THAT MAKE CONNECTICUT A BETTER PLACE TO LIVE AND WORK.



EVERY \$1.00 COLLECTED RESULTS IN AN ADDITIONAL \$4.20 OF CLEAN ENERGY INVESTMENT

An investment by residential, business and municipal energy customers that improves the quality of life in Connecticut.²



38,000 JOBS

Clean energy investment supports Connecticut jobs in HVAC, electrical, manufacturing, insulation, weatherization and solar industries.³



\$5.7 BILLION INCREASE TO THE GROSS STATE PRODUCT

Generated by the Conservation and Load Management Plan (Eversource, UI, SCG, CNG) and the Comprehensive Plan (Connecticut Green Bank).⁴



\$65 MILLION IN CT TAX REVENUES

Generated from individual, corporate, and sales tax revenues per year as a result of clean energy programs and services.



ENERGY SAVINGS

In 2018, clean energy in Connecticut resulted in energy savings equal to one 135 MW power plant. This is enough energy to power approximately 56,000 homes for a year.



\$6.4 MILLION IN PUBLIC HEALTH COSTS SAVED

Clean energy reduces emissions and pollutants resulting in healthier and cleaner air.⁵



608,000 CUSTOMERS BENEFITTED

Annually, 102,000 through programs for families, businesses, municipalities and other institutions ranging from energy assessments, efficient appliances, weatherization, solar PV installations, efficient lighting, heating and cooling, process improvements, thermal insulation, education and financing. 506,000 through retail lighting product incentives.

The numbers presented are from the implementation of the C&LM plan administered by Eversource, UI, CNG and SCG and the Comprehensive Plan administered by the CT Green Bank.

- 1 All numbers in this document reflect annual savings and benefits
- 2 Calculated from actual Conservation and Load Management and CT Green Bank reporting in 2017
- 3 U.S. Energy Employment Reports, U.S. Dept. of Energy, NASEO, and Energy Futures Initiative, 2017 & 2018
- 4 2009 Environment Northeast (ENE) "Energy Efficiency in Connecticut: Engine of Economic Growth". (Based on updated formula data.)
- 5 EPA AVOIDed Emissions and geneRation Tool (AVERT) 2018 Report

EnergizeCT.com or 877-WISE-USE

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

As a Board member of the CT Green Building Council, I spend much of my free time on all issues surrounding green initiatives within the State of CT.

We have partnered with several organizations across the State that have a genuine interest in the fire here.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,
 Ms Caroline DiDomenico
 35 Williams St Norwich, CT 06360-3417
c_didomenico@sbcglobal.net

A Plan for Connecticut's Green New Deal



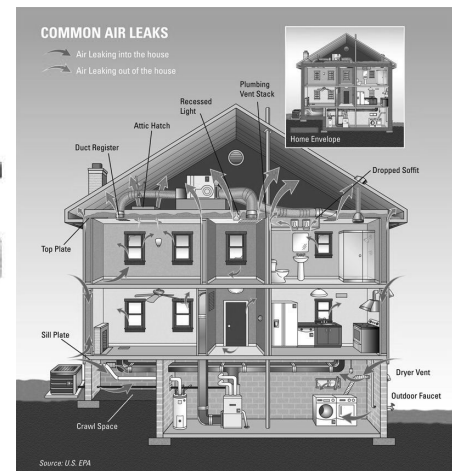
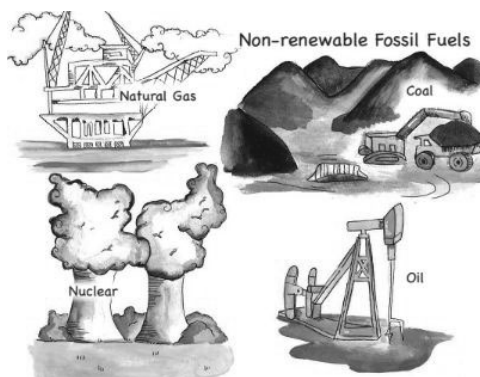
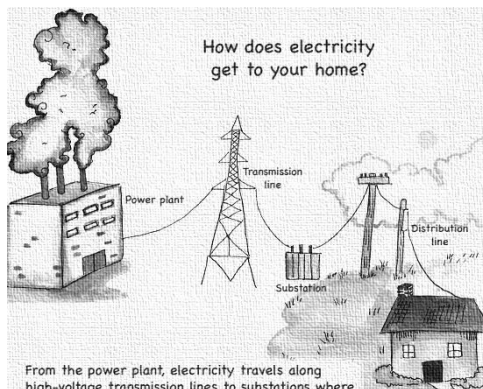
HARTFORD

A **15% reduction**
in energy use
could

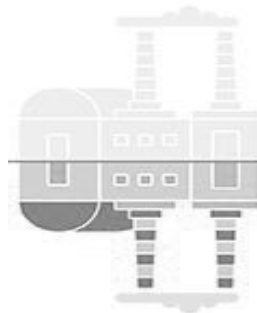
**reduce health
impacts by**

**\$73 per capita
annually**

15th highest in the
nation among
large metro areas



RATEPAYER SAVINGS



CARS OFF THE ROAD

\$2.4 Billion

Total impact to
Connecticut
economy over the
next 2 years due to
diversion of funds



\$147 Million

Total diversion of
Energy Efficiency
Funds and RGFI
over next 2 years

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, by allowing Tesla sales in the state, giving a state income tax credit for purchasing an electric vehicle, building more charging outlets powered by solar energy and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through promoting construction of solar charging stations, infrastructure investments in electric shuttle busses and trackable bus systems, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,
 MS Sarah Donovan
 103 N Park Ave Easton, CT 06612-1416
sdonavan@snet.net

Public Hearing – February 21, 2019
Energy and Technology Committee

Testimony Submitted by Commissioner Katie S. Dykes

H.B. No. 5002 – AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

Thank you for the opportunity to present testimony regarding H.B. No. 5002 – An Act Concerning the Development of a Green New Deal.

The Department of Energy and Environmental Protection (DEEP) welcomes the opportunity to offer the following testimony. DEEP **SUPPORTS** the concepts in this proposal, and looks forward to thoroughly analyzing a fully drafted bill.

DEEP welcomes the opportunity to work with the Committee on the specifics of this proposal, and submits the following principles and priorities for the Committee to consider:

- 1. Equity:** Connecticut's most vulnerable populations should be at the forefront of any new or enhanced new clean energy programs and approaches to coastal protection, as they will disproportionately feel the impacts of climate change and bear the costs of adaptation. Solutions that advance the new, low-carbon green economy should be designed to be accessible and beneficial for Connecticut's low-moderate income residents and disadvantaged communities. Well-designed approaches can also have benefits for all ratepayers, who bear the costs of expanded hardship programs and uncollectible accounts that result from unaffordable energy costs.
- 2. Decarbonization:** The analysis from the Governor's Council on Climate Change shows that reaching the state's current greenhouse gas (GHG) reduction goals for 2020, 2030 and 2050 will require strategically electrifying home heating/cooling and transportation, while advancing energy efficiency and zero-carbon renewable energy at scale. The state has a short window to make these transformational changes, so any new programs should prioritize those sectors or technologies that will reduce the most GHG emissions per dollar spent.
- 3. Ratepayer impacts:** Many new clean energy innovations require upfront capital, incentives, and/or long term contracts with electric distribution utilities in order to finance projects and meet gaps that the market cannot fill. To date, most of these programs and contracts have been paid for through charges on electric distribution rates (e.g. ratepayers). Energy use is not fully correlated with income, making ratepayer-funded programs more regressive than other funding mechanisms. Low- to moderate-income customers face a high energy affordability gap, and commercial/industrial businesses of all sizes struggle to remain competitive as operational costs from energy escalate. A consistent commitment to *minimizing the costs* of carbon mitigation and adaptation investments through competition (#3) and diverse investments and funding sources (#4), while pursuing investments that provide *maximum benefits* will be the best

approach to minimizing ratepayer impacts and ensuring affordable, predictable energy costs for the families and businesses of Connecticut.

4. **The role of competition:** Competition at all levels—from energy generators, to new renewable energy bidders in state procurements, to contractors in program delivery—can help ensure that the state has high-quality options that take advantage of falling costs. In particular, competitive procurements, open to the broadest range of resources that meet the state’s carbon reduction goals, are key to “price discovery” in the electric sector to determine what ratepayers should pay for new clean energy products or services. New or enhanced clean energy solutions should build upon Connecticut’s success in competitive clean energy solicitations that have resulted in contracts for over 400 MW grid-scale resources and almost 200 MW behind-the-meter commercial/industrial fuel cells and solar projects. Going forward, DEEP believes that setting a regular, predictable schedule of procurements, harmonized where possible with clean energy purchases in other states, will further enhance competition and ensure the best possible prices for the state’s ratepayers.
5. **Economic development and investment:** The state’s regulatory commitment to clean energy and environmental sustainability has spurred growth in the “green” economy in Connecticut. Going forward, strategic investments will be needed to the state’s sustainability and resiliency goals, and these choices should seek to leverage private sector investment and promote cost sharing across all affected sectors. The Connecticut Green Bank has successfully demonstrated multiple models for leveraging limited state and ratepayer dollars to achieve significant resource deployment, and should be an important partner in the state’s strategic green investments. Similarly, the state’s award-winning Conservation and Load Management programs have a long history of spurring the growth of clean energy jobs in the state, including training and workforce development. Protecting the funding sources for these programs from legislative sweeps will be key to maintaining a stable workforce and investment climate for Connecticut’s green economy.
6. **Go-to-market strategies and regional collaboration:** Connecticut has successfully deployed energy efficiency and renewable energy solutions through a variety of policies and programs, all of which are designed to meet unique consumer and market needs and gaps. All programs (both existing and new) should have a clear “theory of change” to address how the investment, deployment or behavioral shift will be incentivized to occur over time at scale with less upfront state or ratepayer investment. The success of the new “green” economy depends on how fully these transformations are absorbed and supported by residents, communities, businesses, and markets throughout the region. Different climate and energy challenges each require different policy approaches depending on how fully they have been mainstreamed and reached financial sustainability. For each new policy, program or incentive, the committee should identify how the solution will scale and go to market, and where regional collaboration is especially valuable or essential to achieve the goals.
7. **Winter reliability:** The constraints on gas delivery in New England during cold snaps continue to create vulnerabilities in the electric system and drive up electric rates. New

clean energy programs that prioritize meeting and reducing winter electric load can help the state and region acutely in the near-term.

8. **Regional market opportunities and challenges:** The regional wholesale electricity and capacity markets today do not accommodate or achieve state clean energy goals, leaving states to “pay twice” for critical new renewable resources. This problem will worsen as New England states accelerate their clean energy procurements. Therefore, succeeding at an equitable and affordable Green New Deal requires confronting these market shortcomings. Connecticut must work with other states and the grid operator, ISO New England, to develop new rules and approaches that allow for the entry zero-carbon resources at scale, or consider different market models that more affordably and reliably provide for Connecticut’s resource adequacy and decarbonization objectives.
9. **Grid modernization:** The modern grid distribution system should ideally integrate distributed generation (DG) resources and deploy them in the places and times where they produce the highest benefit (and reduce the most costs) for the grid and its customers. Programs and incentives to expand DG solutions such as storage, demand response and solar PV should be targeted to cost-effectively achieving the greatest grid benefits, GHG reductions and equitable customer access. At the same time, new frameworks for achieving “beneficial” electrification of transportation and building heating and conditioning uses will need to be considered in electric utility distribution planning to ensure reliable integration at least cost.

In sum, DEEP **SUPPORTS** the concepts in H.B. No. 5002 – An Act Concerning the Development of a Green New Deal. These are complex issues that DEEP has been engaging across all of our agency, and the comments here are certainly not complete. We welcome the opportunity to engage with the Committee further on this critical topic and look forward to seeing a full draft of the bill with estimated costs.

Thank you for the opportunity to present testimony on this proposal. If you should require any additional information, please contact Mandi Careathers, DEEP’s Legislative Liaison, at Mandi.Careathers@ct.gov.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

The simple point is that Connecticut is suffering economically, and this is an opportunity for our state to be a leader and distinguish itself. People want to live in a green state.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
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Thank you.

Sincerely,

Mr. Raphael Elkind

59 Coleytown Rd Westport, CT 06880-1529 relkind@countryschool.net



Testimony on House Bill 5002 (an act concerning the development of a green new deal)

Submitted by Donald Emanuel III, Policy Intern

DATE 2/21/2019

Good afternoon. My name is Donald Emanuel III. I am an intern at the Yankee Institute for Public Policy, Connecticut's free-market think tank. I submit this note in opposition to Bill 5002.

The proposed Bill 5002 does not take into account, or try to assess, the affordability nor the practicality of a Connecticut "green new deal." It does not even make much effort to clarify specifically what it has in mind. Regardless of personal feelings about the environment, the extreme measures that have been discussed as part of the recently proposed *federal* green new deal are not warranted by – among other things – Connecticut's current fiscal position.

To take one example, the state of Connecticut would need to invest hundreds of billions of dollars to reach a net-zero emission standard. The cost of moving to power-generating infrastructure that would adhere to a net-zero emission standard would cost the nation around \$14.6 trillion.¹ As Connecticut residents constitute approximately one percent of the national population, we might reasonably expect Connecticut's portion of that cost to equal about \$140 billion – or the state's *entire* revenue stream for seven years, with absolutely no other money spent on anything else – if the state were contributing to a national effort. If the state were to act alone, however, we could expect costs to be much higher. It goes without saying that this goal is beyond the state's wildest ambitions.

From a practicality standpoint, the land area that would need to be allocated to accommodate the green-energy-generating equipment would be either unacceptable to most Connecticut citizens, or impossible as a matter of usable free space available. According to CT.Gov, the state of Connecticut is 5,018 square miles, which is 3,211,520 acres.² According to the U.S. Energy Information Administration, the current net

¹ See, e.g., Ryan Bourne, *Alexandria Ocasio-Cortez's Green New Deal is a radical front for nationalizing our economy*, USA TODAY (Feb. 11, 2019), available at [usatoday.com/story/opinion/2019/02/11/aoc-green-new-deal-government-expansion-masquerading-climate-plan-column/2813404002/](https://www.usatoday.com/story/opinion/2019/02/11/aoc-green-new-deal-government-expansion-masquerading-climate-plan-column/2813404002/).

² See CT.Gov at <https://portal.ct.gov/About/The-Land>.

electricity generation in Connecticut is 2,801,000 MWh per month.³ Assume for illustrative sake that solar panels were used to generate this green power. Solar panels typically require 5 acres of land in full-sun conditions to generate 1 MWh. Connecticut would lose .0078125 square miles per MWh needed to replace our current usage. To accommodate all of those solar panels would require 781 square miles in full-sun conditions to accommodate Connecticut's daily electricity demands. That would require over 15% of Connecticut's land area to be allocated to solar-panel infrastructure. Connecticut's topography does not have an unallocated area equal to 15% of its land that would meet the full-sun requirement for the solar panels to work at or near peak efficiency. Because of elevated terrain, the solar panels could not be placed on the North or South side of hills or mountains and operate at an efficient level. That point aside, there would still need to be an alternate source of electricity to power the state at night, or during inclement weather.

To put that another way, assume instead that Connecticut chose to switch only its homes to solar energy and required solar panels to be installed on all 887,891 single-family homes.⁴ This would require about 35 of the typically used 250-watt solar panels to power each house during daylight hours. That means Connecticut would need over 31 million of the 250-watt solar panels to power just the single-family homes in Connecticut during daylight hours. Each night, or during inclement weather, those homes will still require an alternative power source.

Similar calculations could be made to highlight the impracticality of multiple green-energy sources at their current output and efficiency levels. Windmills, for example, would be as impractical as solar. For that, and many other reasons, we at Yankee Institute do not support Bill 5002. The free market will eventually push companies in the green-energy sector to be more efficient, and the winners and losers in that sector can be sorted out prior to allocating Connecticut's valuable and limited resources. A patient and sensible approach to green energy is the only responsible way to address Connecticut's considerable energy demands. The fiscal capital of Connecticut should not be sacrificed to allow lawmakers to use buzzwords like a "Green New Deal" to pander to their well-meaning supporters at the expense of the state's financial integrity.

³ See U.S. Energy Information Administration at <https://www.eia.gov/state/data.php?sid=CT#SupplyDistribution>.

⁴ See United States Census Bureau at <https://www.census.gov/hhes/www/housing/census/historic/units.html>.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,
ms. Karin Feingold
14 Stonehenge Rd Weston, CT 06883-2612
orofino84@aol.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

These are common sense strong economic and health benefit projects that will improve the lives of our children and grandchildren.

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
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Thank you.

Sincerely,

Mr Jim Fillman

23 S Washington Ave Niantic, CT 06357-3020 jim.fillman@gmail.com

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Thank you.

Sincerely,

Ms. Catherine Forman

28 Marvel Rd New Haven, CT 06515-2118

cathyforman@sbcglobal.net

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Thank you.

Sincerely,
 Ms. Sarah Ganong
 80 Howe St New Haven, CT 06511-4627
sarah.ganong@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

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Thank you.

Sincerely,

Dr. Nina Garrett

4 Sea View Ave Old Saybrook, CT 06475-2035 CORNEBG@GMAIL.COM

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

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Thank you.

Sincerely,
 Ms. Kimberly Gilbert
 11 Brook St Winsted, CT 06098-1209
kimberlygil@gmail.com

Testimony of Olivia Greenspan
Joel Barlow High School Class of 2015

Public Hearing, February 21, 2019
Joint Committee on Energy and Technology

In support of Proposed H.B. 5002:

AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

Good morning Committee Chair Needleman and Committee Chair Arconti; Vice Chair Fanfare and Vice Chair Allie-Brennan; and esteemed Members of the Energy and Technology Committee.

My name is Olivia Greenspan. I am an alumna of Joel Barlow High School in Redding and am currently a senior at Fordham University studying Economics.

I am raising my voice today in support of Proposed HB 5002: An Act Concerning the Development of a Green New Deal.

I am one of the many young people across the nation working on the frontlines of climate change, not only marching and advocating for change, but also building the real projects and companies putting forth the solutions to decarbonize our atmosphere and oceans, recarbonize our soil, and restore the ecological balance that had already been devastatingly corrupted before I was even born.

Representative Steinberg, I support your comment that we must take practical, focused, and disciplined measures as we decarbonize. I know you have been a critical advocate for the environment. Thank you. I also want to echo Commissioner Dykes' remark that climate research becomes bleaker by the day, further shortening our extremely brief window of time for radical action. We need all of your thoughtful, attentive leadership in leading Connecticut toward a future that returns to me my right to a habitable environment. Despite the great environmental work that has already been done, if the current situation persists — or, frankly, anything resembling the current situation — I will not live on an earth that is safe for me and those younger than me.

I know that acting on its longstanding tradition of environmental leadership, Connecticut can become *the* state that models for the nation unprecedented climate action that many I am sure will tell you is not possible. I am here to tell you that it is possible. If Connecticut is a smart and practical climate leader, many young people like me will stay in, move to, or move back to the State — a state that they know aligns with their values, cares about their future, and views our urgent challenge as an opportunity for long term economic growth and prosperity.

Thank you.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

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Thank you.

Sincerely,
 Ms Donna Grossman
 781 Kennedy Rd Windsor, CT 06095-1926
donna.grossman@sbcglobal.net

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Climate change affects us all, but it does not affect us all equally. Green policies must be crafted with the input and consent of the communities they impact. The main focus areas are: (1) Lower Emissions, (2) Job Creation, (3) Equity & Access, and (4) Planning for the Future. Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

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Thank you.

Sincerely,

Ms Mary Hogue

165 Stonewall Ln Fairfield, CT 06824-1831 maryhogue350@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

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Thank you.

Sincerely,

Ms Hannah Huddleston

2 High St Middlefield, CT 06455-1001

hannah.huddleston25@gmail.com



Connecticut Roundtable on Climate and Jobs

Testimony Before the Committee on Energy and Technology

In Support of
**H.B. No. 5002 AN ACT CONCERNING THE DEVELOPMENT OF
A GREEN NEW DEAL**

Submitted by **John Humphries**
Executive Director, CT Roundtable on Climate and Jobs
February 21, 2019

Dear Co-Chairs Needleman and Arconti, and Members of the Committee:

Thank you for this opportunity to submit testimony in support of H.B. No. 5002, An Act Concerning the Development of a Green New Deal.

The CT Roundtable on Climate and Jobs builds alliances among diverse constituencies to combat climate change and promote racial, economic and environmental justice. We embrace our diversity as a source of power, recognizing that our shared interests in a sustainable climate and a just economy are stronger than any specific issues that may tend to divide us. We believe the climate crisis presents an opportunity to build thriving local economies that are not only more sustainable but also more just and equitable.

The Green New Deal should express a similarly bold vision of putting people to work protecting the climate while addressing economic and racial inequity:

- **Rapidly transition to an economy with net-zero greenhouse gas emissions**
- **Create tens of thousands of good quality, high-wage green jobs**
- **Prioritize racial and economic justice, and address historical inequities**

I am appending to the end of this testimony a list of key areas for action to accomplish these goals, but I will focus on just a few of them in these comments.

Workforce Development and Job Pipelines

One critical way to achieve both the job creation and equity goals is give specific attention to the quality of jobs created, who gets those jobs, and how people acquire the skills that prepare them to perform the jobs.

The only way to ensure that jobs created through infrastructure investment become high-quality local jobs is through some form of workforce agreement. Project Labor Agreements (PLAs) maximize project stability, efficiency and productivity while minimizing the risk of

costly construction delays and poor workmanship by ensuring the use of skilled labor and preventing work stoppages. A Community Workforce Agreement is a more refined tool to establish targeted hiring provisions requiring specific percentages of the work to be done by disadvantaged and minority workers. Such provisions can create new pathways to skills training and high-quality jobs for residents of economically struggling communities.

We propose the establishment of a mandatory Climate Labor Agreement, providing (a) basic labor rights and standards for all publicly-supported, climate-related employment, and (b) a framework for negotiating Community Workforce Agreements with explicit, enforceable targets for recruitment and hiring from low-income communities and communities of color.

Illinois's Future Energy Jobs Act of 2016, which includes funding for solar jobs pipelines from targeted communities (with training and apprenticeship programs run by the building trades unions) could serve as a model.

100% Clean, Renewable Energy: Offshore Wind, Fuel Cells and Solar

Any vision for a Green New Deal will need to include a more rapid expansion of renewable energy, establishing an accelerated timeline for the Renewable Portfolio Standard (RPS) to reach 100% -- no later than 2045.

Achieving such a rapid transformation of Connecticut's energy supply will require an aggressive long-term commitment to offshore wind development. We applaud the Energy and Technology Committee's support for a legislative mandate to procure no less than 2000 MW of offshore wind energy by 2030. Such a mandate would still leave Connecticut lagging behind neighboring states (NY's Governor Cuomo has committed to 9000 MW by 2035, and the MA legislature has authorized 3200 MW). However, 2000 MW of offshore wind by 2030 would put us on track to replace the carbon-free generation from the Millstone nuclear plant before its reactors are forced into retirement.

An aggressive mandate for offshore wind will not only help meet the state's climate goals, it will also better position the state to receive significant onshore investment in supply chain activities leading to more robust local economic impacts with greater job creation.

As outlined above, offshore wind projects can provide new pathways to job training and careers for workers in low-income communities and communities of color, thereby helping to achieve another central goal of the Green New Deal.

Fuel cells manufactured in Connecticut could be allocated a larger share of the RPS and become an even more important way to reduce the state's carbon emissions by phasing in a requirement that fuel cells receiving Class I renewable status be fueled by renewable gas from landfills, sewage treatment plants and anaerobic digesters. By creating a market for renewable gas, such a move could also create new incentives for agricultural and food service

operations to compost animal and food waste, thereby reducing methane production from those sectors. Because fuel cells are manufactured in Connecticut, this strategy will also create new local green jobs.

We also support efforts to remove barriers to expanding solar production, including raising caps on commercial, industrial and shared clean energy facilities. Expanding the Green Bank's solar program targeting low and moderate income households would be one way to incorporate the Green New Deal's focus on alleviating inequities.

Energy Efficiency

A rapid expansion of energy efficiency programs will serve all three of the primary goals of the Green New Deal. Reducing energy use in all buildings must be a priority if we are going to achieve the state's climate and energy goals. It can also have a disproportionate impact on low-income residents who often struggle to pay their utility bills. And finally, an expanded energy efficiency sector could employ many more workers, offering good, entry-level and career opportunities to workers from low-income communities and communities of color.

Clean and Accessible Transportation

Increasing the quality and availability of public transit options in Connecticut is another priority for the CT Roundtable on Climate and Jobs. Transportation is responsible for more greenhouse gas emissions than any other sector of the state's economy. While transitioning to electric passenger vehicles needs to be a centerpiece of the state's overall strategy for reducing transportation emissions, public transit will be the critical feature of any Green New Deal strategy.

Expanding bus routes, upgrading rail lines and improving service will help increase ridership, reduce emissions due to vehicle miles traveled, and provide enhanced access to jobs and services for communities like Hartford with lower rates of car ownership. It will also reduce toxic air pollution that leads to high rates of asthma and other adverse health conditions in Connecticut's cities. Upgrading and expanding the state's public transit infrastructure will also create new green jobs all across the state.

Thank you for this opportunity to submit testimony on what could be incorporated into a Green New Deal for Connecticut.

John Humphries

john@ctclimateandjobs.org; 860-216-7972

A Connecticut Green New Deal

Primary Goals:

- Rapidly transition to an economy with net-zero greenhouse gas emissions
- Create tens of thousands of good quality, high-wage green jobs
- Prioritize racial and economic justice, and address historical inequities

Some Areas of Focus and Action:

- **Renewable Energy Production**
 - Increase the Renewable Portfolio Standard (RPS) requirement to 100% no later than 2045
 - Mandate a rapid expansion of offshore wind, with procurements of at least 2000 MW by 2030
 - Expand solar production by raising annual caps on shared solar and commercial & industrial installations
 - Solar Assistance Program: build upon the current Green Bank program targeting low and moderate income households
 - Support expansion of clean/renewable fuel cells by authorizing a larger share of the RPS to be met by fuel cells that use renewable gas from anaerobic digesters, landfills, etc.
- **Energy Efficient Buildings**
 - Rapidly expand energy efficiency programs by protecting and increasing funding
 - Update and expand the Lead By Example program for government facilities
 - Support electrification of heating and hot water by creating new incentive programs for heat pump technologies
 - Ensure that building codes are continuously aligned with the most recent International Energy Conservation Code standards
- **Clean and Accessible Transportation**
 - Lower barriers to personal and business adoption of electric vehicles (EVs)
 - Establish a sustainable and dedicated funding source for CHEAPR incentives
 - Establish EV-ready building codes so people can charge at home and at work
 - Expand the network of charging infrastructure
 - Set a state fleet target of 50% zero-emission vehicles (ZEVs) by 2030
 - Expand and electrify mass transit
 - State transit bus fleet target of 30% zero-emission buses (ZEBs) by 2030
 - Extend bus routes to provide greater geographic coverage, and expand inter-city services
 - Upgrade and extend rail lines and increase service levels
 - Reduce impacts from freight shipping
 - Repair but don't expand existing highway infrastructure
 - Regulate heavy trucks
 - Shift freight from trucks to rail

- **Workforce Development and Job Pipelines**
 - A mandatory Climate Labor Agreement, providing basic labor rights and standards for all publicly-supported, climate-related employment
 - Encourage community workforce agreements that provide significant proportions of hiring from disadvantaged communities
 - Create a solar jobs program modeled after the targeted training and job pipeline programs in [Illinois's Future Energy Jobs Act](#)
 - Ensure orderly, sustained development that avoids boom-and-bust cycles
- **“Buy Fair” and “Buy Local” Procurement Policies**
 - Implement state procurement guidelines that support in-state companies with fair labor practices and recruitment of workers from disadvantaged communities
 - Implement state procurement guidelines that emphasize sourcing and disposal in ways that have the lowest possible carbon impact
- **Resiliency and Infrastructure Investment**
 - Upgrade coastal infrastructure to prepare for sea level rise
 - Emphasize “living shoreline” measures, including extensive deployment of the natural systems (green infrastructure) that protect our coastal and inland communities from flooding and the pollution caused by increased storm events.
 - Protect critical infrastructure that cannot be moved (e.g. coastal sewage treatment plants and electrical substations)
 - Prioritize storm sewer separation efforts
 - Increase bridge and culvert openings to reduce flood impacts
 - Develop plans for systematic retreat from low-lying areas
 - Intentionally invest in urban and rural impoverished areas that are at-risk
 - Establish a network of microgrids to enhance the resilience of the state’s power infrastructure
- **Sustainable Agriculture and Forestry**
 - Promote low-energy-intensive practices
 - Encourage management practices that draw carbon from the atmosphere and store it in plants and the soil
- **Financing**
 - Establish a CT Infrastructure Bank
 - Expand CT Green Bank’s mission to include some environmental and resiliency projects
 - Explore new creative financing mechanisms, e.g. low-interest residential and commercial loans for elevating structures in flood-prone areas that provide “on-bill repayment” through property insurance payments that direct flood insurance savings toward repayment of the loan
 - Create municipal stormwater authorities to allow towns to rapidly upgrade stormwater infrastructure and management activities
- **Municipal Engagement**
 - Engage municipalities by requiring plans of conservation and development (POCDs) to incorporate and plan for state mandates for emissions reduction, energy efficiency, adoption of EVs, and procurement of renewable power, and making streets safer and cleaner through bike and pedestrian infrastructure improvements.

The Green New Deal can offer a vision for a brighter, healthier future for ALL of us by adhering to a few critical guiding principles:

- **Community Inclusion:** Any policies developed on climate change, such as implementing climate resiliency adaptations must take into account the needs of ALL the communities directly impacted.
- **Lower Emissions:** Connecticut approved ambitious reduction in its carbon footprint and must act decisively now to meet those goals, and transition to 100% fossil-free clean energy by date certain.
- **Green Collar Jobs:** Smart investment in green initiatives can create public and private job growth as well as generate cost savings that lead to economic stimulus.
- **A Just Transition:** The right green policies can level the playing field in Connecticut. Displaced workers must be given access to training and new opportunities in the green economy, and policies like energy efficiency standards should impact small businesses and big corporations equally—and enable everyone to thrive.

For the sake of our future, **we must transition away from fossil fuels and to 100% clean, renewable energy.** This will require a Green New Deal which not only outlines a clear vision for the future, but also contains concrete

policies concerning **energy efficiency, renewable energy, sustainability, and resiliency.**

Sharon Huttner
Branford CT

SUNRUN AND VIVINT SOLAR WRITTEN TESTIMONY ON

HB 5002: An Act Concerning the Development of a Green New Deal

and

HB 5237: An Act Requiring a Study of Energy Storage Projects & Distributed Generation HB 6237

February 21, 2019

Dear Energy Technology Committee Leaders and Members:

Sunrun and Vivint Solar, two of the largest residential solar companies in the United States, appreciate the opportunity to provide written testimony on this legislation. Our companies employ thousands of solar workers across more than 20 states, including Connecticut, and often partner with state legislatures on policies to grow solar energy and solar jobs.

Last year the legislature enacted one of the most regressive solar policies in the nation. Senate Bill 9 / Public Act 18-50 eliminated “net metering,” which is offered in 38 states¹ and provides bill credits to solar owners for their excess clean energy sent to the grid. Senate Bill 9 replaces net metering with two policies that have reduced solar installations and have killed solar jobs in other states.² The 2,200 jobs your constituents hold in Connecticut’s solar industry are now in jeopardy. We have tried to communicate this risk to the legislature, DEEP and PURA over the last year (see attached), but we feel our concerns have not been taken seriously. Without legislative action this session, significant job loss will likely occur when net metering expires in the third quarter of this year.

Regarding HB 5002, Sunrun and Vivint Solar support policies that promote clean energy, such as a Green New Deal, but saving Connecticut’s 2,200 solar jobs should take precedence over any other measure. We feel it does not make sense for Connecticut to advance a Green New Deal when its solar industry is facing an existential crisis. Simply put, a Green New Deal will not be possible without a viable solar industry. We respectfully urge the Committee to consider language supported by more than 40 solar companies, associations and environmental groups that would restore net metering, save solar jobs and advance Connecticut’s clean energy goals.

Regarding HB 5237, Sunrun and Vivint Solar support a study of energy storage and distributed generation in Connecticut. Over the past year we have encouraged Connecticut policymakers to complete a value of solar study to identify the benefits and any costs of distributed solar generation, as many other states have done. Such a study would identify whether any alleged “cost shift” is occurring from solar customers to non-solar customers, but DEEP has indicated it opposes taking this evidence-based approach. We believe such a study is necessary and will confirm that no “cost shift” exists in Connecticut, and that solar provides a net benefit to all ratepayers, as the Brookings Institution and others have concluded.³

¹ <http://www.dsireusa.org/resources/detailed-summary-maps/>

² <http://www.thesolarfoundation.org/wp-content/uploads/2019/02/Appendix-A.pdf>

³ <https://www.brookings.edu/research/rooftop-solar-net-metering-is-a-net-benefit/>

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Josh Judson

16 View St Manchester, CT 06040-4306

mrj527@yahoo.com



Climate Psychology Alliance North America

TESTIMONY IN SUPPORT OF **HB 5002** AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

February 20, 2019

To: Honorable Chairs Sen. Needleman and Rep. Arconti and Distinguished Members of the Energy and Technology Committee

From: Merritt Juliano, Climate Psychology Alliance North America

Thank you for the opportunity to testify **IN SUPPORT OF HB 5002**, An Act Concerning the Development of a Green New Deal

Climate change poses the most serious public health risk ever faced by humanity. It is no surprise that the loss of one's home and community due to catastrophic weather could lead to serious psychological trauma¹. Rising temperatures have been linked to an increase in suicide rates², as well as infertility³ and birth defects⁴. The Yale Program on Climate Change Communication recently released the results of a December 2018 survey which found that 29% of Americans identify as "alarmed" or "the most worried about" the unfolding climate crisis, while 30% are "concerned."⁵

¹ https://www.apha.org/~media/files/pdf/webinars/2017/mental_wellness_van_susteren_notes.ashx

² <https://www.theatlantic.com/science/archive/2018/07/high-temperatures-cause-suicide-rates-to-increase/565826/>

³ <https://www.usatoday.com/story/tech/science/2018/11/13/climate-change-could-damage-sperm-and-thus-male-fertility/1990220002/>

⁴ <https://newsroom.heart.org/news/climate-change-may-increase-congenital-heart-defects?preview=7a3d>

⁵ <http://climatecommunication.yale.edu/publications/americans-are-increasingly-alarmed-about-global-warming/>

We believe the unprecedented level of chaos and instability surrounding our children and younger generations as a fallout of the climate crisis is particularly concerning.

Children and young adults are being exposed to a vast number of potential climate change-related threats, whether through news outlets, on social media, among friends, or by simply sitting in science classes learning about massive insect decline threatening a collapse of nature.⁶ Such pressures are likely already causing, and have the potential to cause, a myriad of mental health conditions among our youth. While we can't shelter our children from climate change, we can support them through these difficult times. IPPR, a UK-based nonprofit and progressive think tank, identifies the need to support younger generations as they grapple with the reality of a destabilizing habitat and society based on a new report released last week.⁷ Jennifer Atkinson, a professor at the University of Washington, Bothell has already introduced a course called "Environmental Grief and Anxiety: Building Hope in the Age of Climate Consequences" for undergraduates to reflect on the emotional and ethical issues of climate change.⁸

The Green New Deal can offer a healthy pathway to support our youth by including an outline for policies to build resilience. We believe any such resiliency plan should include concrete policies for building social and psychological resilience. Policies for building resilience must include mandated public health community and stakeholder involvement in the planning and implementation of resiliency measures. To that end, any committee formed to track, report, and advise on the bill's progress should include public health and mental health professionals.

Connecticut cannot afford to overlook the public health risk posed by climate change as individuals are being affected now by the global climate crisis. In the absence of action in Washington, it is up to Connecticut to protect its children and future generations. The climate crisis is a

⁶ <https://www.statista.com/chart/16960/percentage-decline-in-selected-global-insect-populations/>

⁷ <https://www.ippr.org/research/publications/age-of-environmental-breakdown>; <https://www.theguardian.com/environment/2019/feb/12/climate-and-economic-risks-threaten-2008-style-systemic-collapse>

⁸ <https://medium.com/s/2069/the-emotional-damage-done-by-climate-change-2f8f9ad59155>

progressively intensifying problem. Any action now will be far more effective than any action delayed⁹.

Thank you for your time and consideration as you deliberate on HB 5002.

Sincerely,

A handwritten signature in black ink, appearing to read 'Merritt Juliano', with a long horizontal line extending from the end of the signature.

Merritt Juliano JD LMSW
Steering Committee Member
Climate Psychology Alliance North America
95 Long Lots Rd
Westport, CT 06880
Email: merrittjuliano@gmail.com
Website: www.climatepsychology.org

⁹ <https://climateforhealth.org/dr-lise-van-susteren-on-how-climate-changes-mental-health/>

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Our future is truly at stake. We need to support our citizens AND protect our environment. We can and must do both!

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mrs. Andrea Kerin

801 Eleven O Clock Rd Fairfield, CT 06824-1730 andrea@kerin.com

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Thank you.

Sincerely,

Mrs. Leah Killeen

44 Quarry Dock Rd Niantic, CT 06357-1907 raecheik@sbcglobal.net

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Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

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- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

I also ask to amend this bill to specifically support the implementation of a state-wide revenue-neutral price on carbon similar to what Rep. Steinberg introduced in 2018 as HB 5363.

Thank you.

Sincerely,

Ms. Jennifer Kleindienst

241 West St Middletown, CT 06457-4066

jennifer.kleindienst@gmail.com

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

I support every effort whose intent is to mitigate the effects of climate change. Climate change is the greatest challenge facing humanity and if we don't act the world will be one full of people fighting for survival and mass extinctions in the animal kingdom. I would like to see the desire for action on climate change that I share with so many aimed at the most effective course of action. When I look around the country at what is being done and seems to be working to achieve these goals of energy efficiency, deployment of renewable, sustainability and resilience of the electric grid, the mechanism that seems most effective is Community Choice Aggregation. CCA is when a community/ municipal agency becomes the default electrical procurer for its residents. CCA removes the profit motive for increasing electrical consumption and can make it its mission to reduce demand through energy efficiency efforts. It also has been very successful in reducing and stabilizing electrical generation prices. CCAs can develop their own local renewables instead of purchasing renewable energy credits which has been UI and Eversource's way of meeting the Region Greenhouse Gas Initiative renewable standards. When a CCA develops its own renewables, pricing is stabilized because renewables are not dependent on continually buying fossil fuels but instead are a one-time investment which supplies electricity for 20-30 years. It is actually purchasing the power rather than the renewable energy credit model of renting it. Renewable energy credit may reward green energy producer in another state but the actual electricity we use will still be made by burning fossil fuels here as long as REC are employed. CT's transmission lines are operating at capacity and therefore inefficiently. CT has a choice of either making huge investments in transmission capability or investing in reducing demand and developing local renewables thereby eliminating the need for addition transmission capacity. Energy efficiency efforts are the most effective method to save on energy costs and yet they are often marginalized and the first programs that are cut during budget struggles. MA and CA allow the CCAs to administer the energy efficiency funds of their customers. CCAs can address the shortcomings of the solar efforts which so far have only benefited a small minority of the market i.e. those with resources, site control and interest in participating. The majority, who are renters, have no credit, or don't pay their bills on time have been excluded from solar programs. So far the systems of tax credits, net metering, and state incentives have excluded the poor and unemployed from participation. CCA opens up the Shared Solar concept to a universal offering. Smart design that matches areas of large demand with distributed energy resources are an optimal CCA practice. CCAs administering energy efficiency programs can integrate them with the onsite renewables, forming a broad spectrum of power, heating and hot water systems to maximize efficiency. CCA presents an opportunity to reopen the retail energy market to efficient technologies using Solar Bonds. The development of local energy sources can create thousands of CT jobs. By working with its members CCAs can especially target reducing peak demand thereby flattening the power demand curve and reducing overall energy cost. UI and Eversource will insist that they need to make large expensive transmission upgrades because that is their business. I believe CCA is the best vehicle for addressing CT's energy needs and best option to ensure that the laudable goals set out in bill HB 5004 are achieved.

Sincerely,
Daniel Knudsen
Cheshire, CT

PAN34 environment monitor
New Haven energy task force member

Dear Committee Co-chairs Needleman and Arconti, dear Co-vice chairs Fonfara and Allie-Brennan,

I am writing in support for **HB 5002**, An Act Concerning the Development of a Green New Deal.

Following through on CTs program for renewables and carbon emission reduction is more urgent than ever, and at this time the best strategy is to revitalize effective strategies CT had already started, and add more strategies under the umbrella of a Green New Deal:

- Incentivize and support transition to renewables as quickly and as just as possible, and
- Creating “green collar jobs” along the way, by investing in infrastructure, transportation and electric grid.

The Green New Deal for CT should include at least:

- Strict energy efficiency standards for buildings to reduce emissions and save costs;
- A “Green Jobs Ladder” or similar workforce development plan with an emphasis on training low-income and working-class residents;
- Creating a Residential Property Assessed Clean Energy (R-PACE) program to help low-income households finance energy efficient improvements;
- Protecting energy efficiency funds from diversion;
- Increasing the urgency of Connecticut’s Renewable Portfolio Standards (RPS);
- An increased community solar allowance;
- Equitable net-metering to incentivize Connecticut residents and businesses to install solar panels;
- Electrified mass transit;
- Bans on new natural gas, coal, oil or other fossil fuel or oil infrastructure development; and divestment from any such project;
- Emphasis on the role of mini-grids and smart grids in an increasingly decentralized power distribution structure;
- Education on sustainable farming practices, like crop rotation and soil management;
- Installation of a Green New Deal Advisory Committee; and so on.

The town where I live has traditionally been rather resistant to renewables. While surrounding communities have their larger scale solar panels already installed and running, we just slowly got the permitting and contracting going. But even our little town is pulling itself on the bandwagon - because it’s obviously high time to do so. Wallingford has suffered greatly from the microburst last May; even if it’s hard to relate single storms to climate change, the concept of “devastating storms” and the concern about increasing frequency and severity of such events, the realization that the “norm” of our climate is breaking apart, has clearly started to occupy our residents’ minds. As a parent, I am lucky to volunteer for the school district’s efforts to increase energy efficiency - even if the terms climate change or environment are still not the main drivers, efficiency and potentially saving money is clearly a declared goal. So now, we need help from

the state, as from federal side is not much help to be expected. We need CT to step up, clarify statewide updated energy goals, standards and strategies, restore and increase funding for those measures, and create new green opportunities for workers, businesses and communities alike.

Please support and move forward the Green New Deal,
HB 5002.

Thank you,

Adelheid Koepfer
35 Whiffle Tree Road
Wallingford, CT 06492

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

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Thank you.

Sincerely,

Ms Katherine Kohrman

32 Huntington Rd Newtown, CT 06470-2615 kkohrwoman@aol.com

Proposed H.B. No. 5002

My name is Camille Kritzman. I live in Hartford. I am an organizer for Chispa CT, a group that focuses on environmental justice. H.B5002, Connecticut's "Green New Deal" has exciting implications for our state.

The prospects for job creation and reduction in pollution especially for our 7 counties that received an F in Air quality gradings by the American Lung association are very promising. It's important to ensure that the benefits of the Green New Deal mitigate environmental damage done to those most impacted and directly affected by pollution. This includes ensuring that green new deal jobs go to marginalized communities suffering from the highest rates of environmental damages. My testimony today is focused on children who live in areas with high levels of air pollution in Connecticut, as children are most vulnerable to health issues resulting from poor air quality.

Asthma is the leading cause of absenteeism for elementary students in Connecticut especially for minority students. It is estimated that 1 in 8 students suffer from asthma. Every day, the over 450,000 students who take the bus to school must breathe toxic fumes from diesel school buses, proven to cause asthma, bronchitis, and even long term effects like lung cancer. This is why our state's Green New Deal must include an initiative to electrify our school buses.

Clean buses mean cleaner air and healthier kids and communities. While zero-emissions buses may cost more up front, they cost 30 percent less to maintain than their diesel counterparts, and they reduce greenhouse emissions by almost 80 percent. Every diesel bus replaced with a zero-emission bus is equivalent to taking 27 cars off the road, and can save upwards of \$11,000 per year in fuel and maintenance costs.

As an organizer for Chispa Connecticut, I work with mothers who are hoping to move out of Connecticut because the burden of having a child with asthma is too great. As we continue to strive towards our goal of renewable energy by 2050, it is essential that we join New York, Oregon, Colorado, and California in prioritizing electric school buses so that our children can breathe clean air.

The technology is available, and Connecticut's children are worth it.

As I speak, there is a mother missing work again because her child cannot breathe. Exposure to pollution from diesel fumes at a young age will have life long health consequences for Connecticut children, especially in low income communities. We cannot afford to wait any longer to address this issue. Connecticut residents lives depend on it. I urge the committee to not only vote favorably on HB 5002, but also, to include electrification of our school buses in this initiative. Thank you.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

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Thank you.

Sincerely,

Ms. Storm Kuchta

85 New Rd Madison, CT 06443-2508

stormmkuchta@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,
 Ms. Storm Kuchta
 85 New Rd Madison, CT 06443-2508
 stormmkuchta@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Please support a Green New Deal for Connecticut. Our state is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

Please help. I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Luella Landis

16 Prospect Hill Rd Cromwell, CT 06416-2028 gwla620@yahoo.com

Testimony on House Bill No. 5002
Committee on Energy and Technology
Submitted by Katharine Lange
Sandy Breslin Conservation Fellow
Connecticut Land Conservation Council
February 20, 2019

Thank you for this opportunity to submit testimony on behalf of the Connecticut Land Conservation Council in support of **House Bill No. 5002, An Act Concerning the Development of a Green New Deal** (HB 5002).

As the state's umbrella organization for the land conservation community, including its 137+/- land trusts, the Connecticut Land Conservation Council (CLCC) advocates for land conservation, stewardship and funding, and works to ensure the long-term strength and viability of the land conservation community in Connecticut.

In the face of climate change, we need to use every available tool to keep our planet, and life as we know it, as stable as possible. One of these tools is land conservation, which provides the invaluable service of carbon sequestration, which occurs when trees and other vegetation "soak up" harmful carbon emissions from the air. Land conservation is typically only thought of for farming, recreation, or aesthetic purposes, however your favorite state park, wildlife refuge, apple orchard, or urban greenspace all double as air filters, helping people maintain healthy lifestyles well after they have left the trails.

In addition to sequestering carbon, land conservation is a critical element of local planning and development to reduce or avoid greenhouse gas emissions. For example, land conservation complements transit-oriented development which in turn reduces vehicle-related emissions from commuters. Land conservation also avoids overextending municipal infrastructure which takes considerable energy to install, operate, and maintain.

Beyond reducing our carbon footprint, land conservation promotes less polluted water and more balanced ecosystems, all of which are critical to protect as part of climate adaptation. Many conserved properties across the state are held in perpetuity, so there is no sunset date on their help in mitigating climate change. CLCC works with a



statewide network of land trusts that are standing by to do their part, often with the support of their municipalities.

In Connecticut's Green New Deal, CLCC would like to see land conservation included in the state's sustainability plan, alongside the critical coastal protection and renewable energy initiatives. As daunting and threatening as climate change is, land conservation is one tried and true solution that would work for Connecticut. Please think of your children, their children, and the generations to come that will inherit a polluted world. Supporting HB 5002, and land conservation generally, are actions you can take now that will have a positive impact on the future.

Thank you for this opportunity to speak today. I welcome any questions.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Doreen Lebel

472 Main St Waterbury, VT 05676-4413

lebel_da@yahoo.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
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- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mrs. jo-ann lechner

1444 Dewey Ave North Bellmore, NY 11710-2131 chrisplace@verizon.net

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee:

Please advance a Green New Deal for Connecticut by supporting Proposed Bill HB 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I urge the Committee to draft and support Green New Deal legislation that will include the following:

- Restoring rate payer funds designed for energy efficiency and renewable energy;
- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids;
- Restoring electric rate equality (net metering) harmed by 2018 legislation in CT;
- Retiring polluting power plants like Millstone Nuclear Power Station & Bridgeport Harbor Station (Combined Cycle);
- Banning gas infrastructure development and fracked gas waste;
- Requiring government buildings to be powered by clean renewable energy such as solar, wind or geothermal;
- Requiring all new construction in CT to incorporate clean renewable energy;
- Expanding and electrifying mass transit systems to serve the most people and eliminate emissions;
- Expanding the renewable portfolio standard to 100% by 2030 or sooner;
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families;
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves (resiliency);
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems;

- Generating high-quality employment for tens of thousands of Connecticut residents through a clean renewable energy jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thanks you for your consideration.

Sincerely,

Ms. Diane Lentakis
81 West Rutland Road, Milford, CT 06461
dlentakis@sbcglobal.net

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

As a parent, public school educator and long-serving volunteer on numerous town committees, I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,
 Mr. Joseph Lewerk
 174 Kendall Rd Lisbon, CT 06351-7443
jplewerk@yahoo.com

Energy and Technology Committee Members,

I am writing to support Proposed House Bill 5002, "An Act Concerning the Development of a Green New Deal."

Last year, this body worked together, summoned its courage, and passed an ambitious bill to reduce greenhouse gases to 45% below 2001 levels, by the year 2030. Thank you to all of you for your support and leadership in addressing climate change. As a millennial, I simply ask for the same opportunity to breathe air that older generations have enjoyed on our planet for centuries. Unfortunately, lack of action by politicians for decades has made your task bigger today. Luckily for us, you are up for the challenge.

Considering the existential threat of climate change to our planet, the GHG reduction goal is a great start. The next question is, how do we get there? Let's consider that up to 40% of our state's greenhouse gas emissions come from transportation, and that the dominant mode share for CT commuters and travelers is to take a single occupancy vehicle. In Hartford, we see the impact of transportation decisions on our environment and public health. The majority of jobs in Hartford, my city are held by people - 80,000 of them - who drive to work alone every day. This increases the wear and tear on our roads, and pollution in our air - threatening public health, environmental safety, and economic development in our city. Without pushing more commuters, including state employees, to sustainable transportation modes - bus, train, bike, walk, carpool - we won't be able to make a dent in our greenhouse gas emissions. Or, you'll have to make drastic cuts and changes in other areas to compensate.

Fortunately, expanding sustainable transportation opportunities through the Green New Deal framework addresses several of our state's challenges simultaneously, leveraging our efforts in each area for maximum impact.

In order to reach that target the state needs to continue with individual bills and this Green New Deal to push that target into the planning for transportation and development statewide.

- **40% of our state's GHG emissions are from the transportation sector, the largest contributing sector by far.** As such, any solution to reduce GHG must address transportation. Please ensure that The CT Department of Transportation be required to incorporate the GHG reduction targets into their infrastructure planning and project prioritization. Instead of designing highways for MORE diesel trucks and single occupancy vehicles, DOT must design for FEWER private vehicles, and MORE & BETTER public transit, in line with our state's complete streets policy. On the other hand, building new highway lanes and bonding funds for expensive new state garages work against our shared goals. Improving public transit will also support public health and economic development goals. Instead of simply writing plans, we will need you to also fund and execute the great ideas experts in our states develop together.
- **State Transportation Benefits** - Please support Rep. Concepcion's bill to offer a 'parking buy out' or alternate 'transit pass benefit' for state employees. The state of Connecticut employs roughly 51,000 employees. As the largest employer in the state, we ask you to manage transportation demand for your employees - shifting even 20-30% to sustainable commuting, and to even move closer to their jobs, could be transformative for our cities. A transit pass benefit was specifically recommended in the Governor Lamont's transportation transition team recommendation and could be modeled after the popular U-Pass program at state colleges and universities.

- **Focus on Equity, Existing Systems - Shift to Transit and Active Transportation –**
Our small State of Connecticut has three cities in the top 26 in the US (pop > 100k) with high rates of zero-car households. For example, the City of Hartford's zero-car household rate is greater than 30%. In seven Hartford neighborhoods the zero-car household rate tops 40%. In addition to increasing economic viability of public transportation by improving service, we must view transportation as an equity issue - many folks walk or bike, transportation modes we should encourage and incentivize, because that's the only way they can afford to get around. Improving public transportation will have a great impact on folks' abilities who don't have cars to get and keep jobs. And for goodness sakes, will you please get bike racks at the Supreme Court, LOB, and State Capitol? We've been trying to do this for years. It's a shame how long it's taking.

The Transport Hartford Academy put out a survey in the metro Hartford area on transportation related issues. This survey may be useful to you when considering the green new deal and a sustainable transportation system that best serves the future of Connecticut. In addition to reaching out to our email list, we sent this survey to transportation industry professionals, posted it to local town social media pages, and shared it through the MetroHartford Alliance.

- **Survey Results -** <https://centerlatino.wufoo.com/reports/2019-transport-hartford-legislative-priorities/>

Thank you for your attention to these important issues and your work on shaping Connecticut's Green New Deal.

Gannon Long
49 Hungerford St Apt 1
Hartford, CT 06106

Gannon R. Long

Transport Hartford Assistant Coordinator
Center for Latino Progress
95 Park Street, 2nd Fl.
Hartford, CT 06106
P. 860.247.3227 x.13

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Andrew Lopez

286 Montauk Ave New London, CT 06320-4722 alopez6@conncoll.edu

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and you have an opportunity to shape a healthier, more equitable, and more vibrant future for our residents.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds while also protecting ratepayer funds from future budget raids.
- Rapidly increasing the use of solar and offshore wind and ensuring that clean energy's benefits will be accessible for low- and middle-income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including the use of marshes, dunes and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles.
- Investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar job-training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mrs. Elise Low

1211 W Lake Ave Guilford, CT 06437-1350 elow@hotmail.com

Dear Honored Chairs Senator Needleman and Representative Arconti and Distinguished Members of the Energy and Technology Committee,

The global scientific community is in total agreement: we must act decisively to combat the devastating effects of climate change. HB 5002, otherwise known as the Green New Deal, is Connecticut's chance to advance a program which matches the scale and urgency of our climate crisis. Through policies which encourage renewable energies, green public transit, sustainable agriculture, coastal adaptation, and energy efficiency, the Green New Deal will match climate change's vigor and ferocity.

Simultaneously, the Green New Deal promises to promote equity, create jobs, ensure a just transition and include historically marginalized groups in decision-making processes.

HB 5002 is a historic opportunity. With this bill, Connecticut can cement its position as a clean energy leader and help the least fortunate among us.

Thank you for considering my testimony as you deliberate on this bill.

Sincerely,
Sophie MacDonald
106 Goslee Rd, Bantam CT
sophie.macdonald@uconn.edu

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Sophie MacDonald
She|Her|Hers
Sustainability Intern, Office of Environmental Policy
B.S. Mechanical Engineering, May 2020
University of Connecticut

February 20, 2019

Energy and Technology Committee

Re: Proposed HB 5002, AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

Members of the Energy and Technology Committee:

I would like to thank the committee and the many co-sponsors of the HB 5002 for proposing a Green New Deal in Connecticut. Although the news about climate disruption for the past decade has grown increasingly bleak and the current federal administration is intent on making it worse, the ideas around the Green New Deal provide realistic hope that we can address the crisis while we improve the economy, eliminate pollution, and bring environmental justice to our state and nation.

The resolution introduced in the federal congress has several parts that our state could implement to benefit the people of CT. To list just a few goals that the state could enact :

- meeting 100 percent of the power demand in CT through clean, renewable, and zero-emission energy sources
- overhauling transportation systems to remove pollution and greenhouse gas emissions, through investment in (i) zero-emission vehicle infrastructure and manufacturing; (ii) clean, affordable, and accessible public transit; and (iii) high-speed rail;
- identifying emission & pollution sources and creating solutions to remove them
- providing resources, training, and high-quality education, including higher education, to all people of CT, with a focus on frontline and vulnerable communities,
- making public investments in the research, development, and construction of new clean and renewable energy technologies and industries;

Implementing these policies will make our state our leader in the fight against climate disruption and a better place for the people that live here. It will also make CT a model of success for other states and a desirable place for people & businesses looking to relocate.

Any Green New Deal legislation drafted by this committee must chart a plan for CT government departments, agencies and future administrations to transition the state away from fossil fuels and to a sustainable future. It must provide clear directions for protecting environmental justice communities from the harm they have suffered for too many decades. It must prioritize the needs of the people of CT and not corporations that can transfer the benefits to other states or countries. It must be bold, aspirational and demand the best of our state government , the companies that do business here and anyone the state chooses to contract with.

I urge this committee to draft the Green New Deal legislation with the knowledge that addressing climate change is not something to do in the future : we need to do it now and we need to do it fast. We have all the necessary technology to accomplish this. Do not allow the lobbyist from the fossil fuel industries to tell you : “we need to wait”, “we’re not ready”, “it will be too costly” . These are excuses in service of preserving their profits and not in the interests of the people of CT . The people are ready, the time is now and we cannot wait.

Thank you,

Ben Martin

Member of 350 CT

Wallingford, CT

**WRITTEN TESTIMONY
OF**

Patrick McDonnell

**UIL HOLDINGS CORPORATION (United Illuminating, Southern Connecticut Gas and
Connecticut Natural Gas)**

Regarding

**Raised House Bill 5002
AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL**

**Before the
Energy & Technology Committee**

**Legislative Office Building
February 21, 2019**

Good morning/afternoon Senators Needleman, Formica and Fonfara, Representatives Arconti, Ferraro and Allie-Brennan and the members of the Energy & Technology Committee. My name is Patrick McDonnell and I am the Vice President of Regulatory Affairs for UIL Holdings Corporation (UIL), the parent company for United Illuminating, Southern Connecticut Gas and Connecticut Natural Gas, and wholly-owned indirect subsidiaries of Avangrid, Inc.

I thank you for this opportunity to offer this testimony on behalf of UI, SCG and CNG on Raised House Bill 5002, AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL. I was personally involved in the Energy Transition Team formed by the Lamont administration, and we support the efforts resulting from that team embodied in this bill, to combat the effects of climate change.

UI, as well as its parent Avangrid, have been leaders in implementing the strategies that will be needed to combat climate change. We have along history of developing and implementing innovative, award winning energy efficiency programs for the benefit of our customers. These programs have evolved from simple lighting replacement programs to include smart thermostats, heat pump technologies and whole building science. We have begun the process of developing a modern, resilient electric system that can allow for interconnection of increasing levels of locally sourced renewable energy. We have taken steps to reduce the impact on our system from weather related events, including rising sea levels. We worked with a local community to develop an innovative approach to powering a microgrid with a fuel cell while at the same time using the heat in the local school. UI is also actively working on electric vehicle charging strategies in anticipation of larger numbers of electric vehicles. And our parent company, Avangrid, is a national leader in developing large scale wind energy projects. And while we

believe we have already developed an impressive list of initiatives, we know much more work needs to be done to meet the challenges that climate change poses to us all.

While we need to take the necessary steps today to position ourselves for the future, the Lamont transition team was mindful of the cost to the residents, and electric ratepayers, of Connecticut. The cost of living in Connecticut is challenging to many of our residents and electric costs are one of the contributing factors. There can be large differences in costs between the various types of renewable energy that must be considered. Additionally, differences in economic value of various projects can exist depending on where they are located, geographically and on the electric system. These are complicated interactions that need to be carefully considered before making choices. As you craft the details needed before this bill is passed, I would urge you to rely on the expertise in the Connecticut regulatory agencies, DEEP and PURA, and the outside experts they might retain to carefully weigh the options and make the best choices for Connecticut.

So as we develop our clean energy strategy, we must maintain regional collaboration and focus on what clean energy strategies provide the most overall value to the residents of Connecticut. If we strike this delicate balance, we can embrace a clean energy future that all of our residents can afford.

For these reasons, and with these considerations, we support House Bill 5002.

Thank you. I would be happy to answer any questions at this time. For additional information, you may also contact Al Carbone, Manager, AVANGRID/UIIL State Government Relations at (203) 671-4421.



**Written Testimony of the
Renewable Energy and Efficiency Business Association, Inc.
Before the Energy and Technology Committee
In Support of H.B. 5002, S.B. 468 and H.B. 5789**

February 21, 2019

Senator Needleman, Senator Formica, Representative Arconti, Representative Ferraro, and Members of the Energy and Technology Committee, the Renewable Energy and Efficiency Business Association, Inc. (REEBA) appreciates the opportunity to comment in support of Senate Bill 468, House Bill 5002, and House Bill 5789.

REEBA's mission is to provide its members, including solar companies, fuel cell manufacturers, and energy services companies with a unified voice for advocating for the removal of regulatory barriers and establishing legislative-based opportunities to promote the sustainable deployment of renewable energy and energy efficiency in Connecticut.

REEBA's comments to the proposed bills are as follows:

S.B. 468: **AN ACT CONCERNING THE INSTALLATION OF SOLAR
PANELS ON STATE LAND NEAR PUBLIC HIGHWAYS.**

REEBA supports S.B. 468, which would open up vast amounts of underutilized state land near public highways for potential solar energy installation. The land near public highways may be more attractive for solar energy investment because it would not conflict with the conservation concerns that accompany undeveloped land near forests and agricultural areas. Public highway land could be put to good use for Connecticut by installing solar panels that would contribute to the State's energy security and clean energy development.

Installing solar energy facilities next to the State's public highways would also send a highly visible signal that Connecticut is committed to transitioning to clean energy. Neighboring states, like Massachusetts, have been building solar projects next to highways for years, making Connecticut an outlier with an absence of renewable energy projects visible to interstate travelers. This bill would demonstrate to our residents and visitors that Connecticut has a robust solar industry with the support of the state government.

**JOINT
STANDING
COMMITTEE
HEARINGS**

**ENERGY AND
TECHNOLOGY**

**Part 2
797-1660**

2019

Therefore, REEBA strongly urges the E&T Committee to support this bill, which would promote Connecticut's commitment to solar power and advance our clean energy goals.

H.B. 5002: AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.

REEBA supports H.B. 5002, which would help Connecticut transition to a clean energy economy and expand and create new business opportunities for our state. This proposal could potentially yield enormous economic gains for the State in the form of private investment dollars and job opportunities in renewable energy, as well as reduced costs from greater energy efficiency. Investing in our local energy companies and revising restrictive regulations are also essential components to achieving the state's clean energy goals.

However, this bill could be more effective at encouraging renewable energy if it addressed several obstacles to renewable energy investment in Connecticut. First, Public Act 18-50 restricts rooftop and ground mounted solar arrays to only meet the onsite load of the customer. This is wasteful when many large building rooftops and unproductive open land can host solar arrays that provide a surplus of clean energy beyond the customer's on-site load. PA 18-50 should be amended to remove the onsite load cap.

Second, private investment in renewable in Connecticut has been inhibited by the unnecessary regulatory barriers to building solar on farmland and forestland enacted in PA 17-218. Proceedings before the Siting Council to install solar energy facilities on underutilized land have been slowed or frustrated by PA 17-218's land conservation restrictions. REEBA believes that the Green New Deal must balance the states land conservation needs with the need for greater clean energy resources. One way to achieve this balance is to limit the conservation restrictions to larger projects exceeding 10 MW in size and allowing the Siting Council to consider rebuttable evidence and mitigation plans in its proceedings.

REEBA strongly urges the E&T Committee to consider REEBAs recommendations in creating a Green New Deal for the State of Connecticut that will build a stronger economy and help meet our Renewable Portfolio Standards.

H.B. 5789: AN ACT CONCERNING THE LEAD BY EXAMPLE PROGRAM.

REEBA supports H.B. 5789, which would provide updated energy savings targets and added metrics to Connecticut's energy efficiency Lead By Example program. Such energy efficiency programs are an effective method for state agencies to find long-term energy savings. The small investments made in the program have yielded millions of dollars annually in reduced energy costs. However, the program has had limited reach because it currently can only be funded through general obligation bonds. Lead By Example requires new funding mechanisms to be revived and

February 20, 2019

Energy and Technology Committee

Re: Proposed HB 5002, AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

Co-Chairs Arconti and Needleman, Vice Chairs Fonfara and Allie-Brennan, Ranking Members Formica and Ferraro, and members of the Energy and Technology Committee:

Thank you for the opportunity to comment on HB 5002, the Green New Deal. As you know, climate change threatens the existence of life on the planet. You now have an opportunity, and responsibility, to act to address this existential threat.

As each new scientific report comes out, we learn that the earth is in a more dire position than we previously thought. Scientists express concern that warming may be moving even faster than we know¹. Hence, even actions taken today are not likely to go far enough.

Last session, SB 7 was passed which required a 45% reduction in greenhouse gas (GHG) emissions from 2001 levels by 2030. This sounded quite reasonable. However, the Intergovernmental Panel on Climate Change (IPCC) recommended² in 2018 that reductions of 45% off 2010 levels were necessary to avoid catastrophic consequences. In Connecticut, 2001 emissions levels were approximately 20% higher than 2010 levels, and so, we are already behind target.

The point is this: we need to set goals today that seem out of reach in order to have a chance of making real change for the state, the country, and the planet. I urge you to target a 100% renewable energy goal by 2030, with a zero carbon goal from the state by 2040, or sooner. In addition, methane, the primary component of “natural” gas, is exceptionally dangerous to our atmosphere over the short run, at up to 100 times more potent as a greenhouse gas than carbon dioxide³. We need to immediately shut down any further growth in the use of this gas and plan for the closing of power plants and pipelines using this fuel. All these goals would have the effect of beginning the essential transformation in our state. To reach these seemingly impossible goals we would need to begin today:

¹ <https://www.nature.com/articles/d41586-018-07586-5#ref-CR10>; “Global warming will happen faster than we think”

² <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

³ <http://news.cornell.edu/stories/2015/10/bridge-fuel-may-escalate-atmospheric-greenhouse-gas>

1. transforming our transit system to create clean mass transit available to all;
2. transforming our energy system to acquire all our electricity from clean renewable sources including wind and solar;
3. transforming our heating systems to eliminate all fossil fuels.

These changes would have many economic benefits for the state: thousands of well-paying jobs in the green industry, improved health outcomes and lower health costs from diminished pollution, better workforce retention and less absenteeism due to health problems, better school attendance due to reduced asthma events. In addition, these changes will help us keep us with our neighboring states and keep us competitive in attracting businesses and workers.

We have an opportunity to address another pressing need in the state by taking these actions, namely, addressing the severe inequality of our residents. Low-income communities and communities of color have experienced the brunt of the pollution and negative health outcomes. In addition, lack of adequate transportation affects the ability to obtain and retain employment and the ability to get well-paying jobs. These communities should be prioritized when making investments in renewable infrastructure and expanded clean transit. They should be prioritized in hiring for these new well-paying jobs. Raising up these communities benefits us all.

There are many good approaches to support these goals: restoring the raided rate payer funds to support energy efficiency and renewable energy; restoring net metering for solar; expanding offshore wind; minimizing methane leaks from existing pipelines; and more.

I hope that you will seriously consider the moment that we are in, and work to push strong climate legislation to address our existential threat. If not now, when? If not us, who?

Thank you for your attention.

Susan Miller, member 350 CT and Windsor Climate Action
10 Ethan Drive
Windsor, CT 06095
susancmiller@comcast.net
860-205-4217

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr Tim Millhiser

42 E Wharf Rd Madison, CT 06443-3114

tmillhiser@verizon.net

Testimony of
T. Michael Morrissey
Director of GOVT Affairs – Business Development
332 Strickland Street
Glastonbury, CT 06033
860-280-8027
Morrissey.consulting@cox.net

ENERGY & TECHNOLOGY Committee
Public Hearing Room 1B
Legislative Office Building
Thursday February 21, 2019 @ 10:00AM
Connecticut General Assembly

H.B. No. 5002: AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL

H.B. No. 5380: AN ACT REDEFINING "CLASS I RENEWABLE ENERGY SOURCE" TO INCLUDE CERTAIN USEFUL THERMAL ENERGY GENERATED FROM BIODIESEL AND CREATING A HOMEOWNER-GENERATED USEFUL THERMAL ENERGY PROGRAM.

Chairmen Needleman & Arconti, ranking members and distinguished members of your committee, I am Mike Morrissey and I am here in support of H.B. No. 5002 & H.B. No. 5380.

First, here is the “deal” on the Green New Deal; 40% of all of Connecticut’s greenhouse gas emissions are caused by the transportation sector. Of this 40%, 44% of these emissions are generated by the medium and heavy duty vehicles. The reason we have such dirty air in Connecticut is because we **simply use too much gasoline and diesel fuel** to power this segment of the vehicle population, which primarily consists of trucks, buses and transit vehicles. Going forward, if we really want to start to clean up the air that we breathe, we have got to find a way to more aggressively utilize the designated alternatives to conventional fuels. The Department of Energy sometime ago identified these following “alternatives” to conventional fuels;

America’s Leading Alternative Fuels per U.S. Department of Energy¹

Alternative Fuels and Advanced Vehicles

More than a dozen alternative fuels are in production or under development for use in alternative fuel vehicles and advanced technology vehicles. Government and private-sector vehicle fleets are the primary users for most of these fuels and vehicles, but individual consumers are increasingly interested in them. Using alternative fuels and advanced vehicles instead of conventional fuels and vehicles helps the United States conserve fuel and lower vehicle emissions.



Biodiesel >

Biodiesel is a renewable fuel that can be manufactured from vegetable oils, animal fats, or recycled cooking grease for use in diesel vehicles.

 **Diesel Vehicles >**



Electricity >

Electricity can be used to power plug-in electric vehicles, which are increasingly available. Hybrids use electricity to boost efficiency.

 **Hybrid & Plug-In Vehicles >**



Ethanol >

Ethanol is a widely used renewable fuel made from corn and other plant materials. It is blended with gasoline for use in vehicles.

 **Flexible Fuel Vehicles >**



Hydrogen >

Hydrogen is a potentially emissions-free alternative fuel that can be produced from domestic resources for use in fuel cell vehicles.

 **Fuel Cell Vehicles >**



Natural Gas >

Natural gas is a domestically abundant gaseous fuel that can have significant fuel cost advantages over gasoline and diesel fuel.

 **Natural Gas Vehicles >**



Propane >

Propane is a readily available gaseous fuel that has been widely used in vehicles throughout the world for decades.

 **Propane Vehicles >**

¹ <https://afdc.energy.gov/fuels/>

Although vehicle electrification is an option, for the medium & heavy duty vehicles, it is not viable and or affordable at the moment and into the foreseeable future. Natural gas and propane Autogas are “**shovel ready**” today to assist our state in reducing emission and achieving its ambitious and statutory lower emission goals. In the heavy duty sector, natural gas especially amongst many of our State’s Refuse Haulers, is working well.

In the medium duty sector, propane Autogas is catching on. Five years ago, the cities of Shelton & Torrington switched all of their diesel buses to operate on propane Autogas. Since this time, other communities like Danbury, Simsbury, New Milford, Newtown and Waterbury collectively operate almost 500 buses on propane Autogas. Nearby, Boston Public Schools operates 247 propane Autogas buses with the goal of operating all school buses on this fuel.² Nationwide, there are over 17,000 propane Autogas school buses carrying almost one million children a day³. Propane Autogas is not an experimental fuel, it is the third leading transportation fuel in the world with over **27 Million** vehicles in operations today.

Allowing the use of conventional fuels is detrimental to our environment. Alternative fuels like natural gas and propane Autogas are viable today and we strongly encourage our state to find ways to deploy more of these alternatives in the medium and heavy duty vehicle sectors. Propane in particular, is abundant⁴, domestically produced, delivers a 40% - 50% saving compared to conventional fuels and because of its portability, is available to all. If our state can find more ways to adopt propane, we will reduce operating cost and harmful emissions. Finally, these alternatives are now supported by our state’s \$57 million Volkswagen Mitigation Trust Fund.⁵

In regards to **H.B. No. 5380: AN ACT REDEFINING "CLASS I RENEWABLE ENERGY SOURCE" TO INCLUDE CERTAIN USEFUL THERMAL ENERGY GENERATED FROM BIODIESEL AND CREATING A HOMEOWNER-GENERATED USEFUL THERMAL ENERGY PROGRAM**, we support this bill and would like to see the language expanded to also include **Renewable or Bio-Propane**. Last November Roush CleanTech⁶ the official OEM Vehicle Upfitter for Ford Motor Company and Blue Bird Corporation in part stated;

“When commercial vehicles are equipped with our ultra-low NOx engines and fueled by renewable propane, they achieve near-zero emissions while still being financially viable for fleets,” said Todd Mouw, president of ROUSH CleanTech. “These clean-operating, medium-duty trucks, vans and buses enable fleets to take a giant leap toward meeting their state’s clean air standards, especially in California.”

Renewable propane although not in wide production now, is viable and we should amend our statutes to accommodate it when it becomes available in Connecticut.

Thank you for giving me this opportunity to provide testimony on these important bills

² <https://propane.com/propane-products/buses/>

³ <https://propane.com/propane-products/buses/>

⁴ There currently is an excess supply of propane in our nation. 20% of all domestic propane production is exported lacking domestic demand.

⁵ https://www.ct.gov/deep/cwp/view.asp?a=2684&q=587294&deepNav_GID=1619

⁶ <https://www.roushcleantech.com/roush-cleantech-launches-first-available-near-zero-emissions-engines-fueled-by-renewable-propane/>



State of Connecticut
HOUSE OF REPRESENTATIVES
 STATE CAPITOL
 HARTFORD, CONNECTICUT 06106-1591

REPRESENTATIVE MARY M. MUSHINSKY
 EIGHTY-FIFTH ASSEMBLY DISTRICT

LEGISLATIVE OFFICE BUILDING, ROOM 4038
 HARTFORD, CT 06106-1591
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 TOLL FREE: 1-800-842-1902
 E-mail: Mary.Mushinsky@cga.ct.gov

ASSISTANT DEPUTY SPEAKER

MEMBER
 ENVIRONMENT COMMITTEE
 FINANCE, REVENUE AND BONDING COMMITTEE
 HIGHER EDUCATION AND EMPLOYMENT ADVANCEMENT
 COMMITTEE

Testimony of Rep. Mary Mushinsky (85th) in Support of PHB 5002, An Act Concerning the
 Development of a Green New Deal

Before the Energy and Technology Committee
 Public Hearing Feb. 21, 2019

10:00 a.m. Rm 1B

Connecticut faces a much tighter deadline to improve energy efficiency and switch to clean energy now that the IPCC has shortened the timetable to reduce CO2 emissions to 12 years if we are to avoid unstoppable climate change. The 12-year window is very small while the effort we will need to make is enormous. If we fail, the repercussions for CT and our families will be severe: expensive storm damage; loss of water supplies; increased power demand; the need to move roads, railroads, highways, and sewage treatment plants; dislocation of residents; increased tropical disease vectors; agricultural losses; and additional world conflicts which will affect the safety of our families including members in military service.

In response to the 12-year timetable, it is wise for our state to concentrate on creating jobs and apprenticeships in the green energy and energy efficiency fields. Even before the IPCC report, The Program Review and Investigations Committee in 2009 identified green technology careers as well-suited for Connecticut. They recommended state agencies work together to create and publicize a green jobs career ladder, laying out the rungs from low skilled insulation and weatherization jobs to higher skilled apprenticeships, installers and energy management positions. The bill to do this is HB 5828 in Higher Education and Employment Enhancement Committee; the content should be added to this Green New Deal bill.

Other ingredients of this bill should include funding: the restoration and an annual audit of the three green energy funds that the legislature raided to balance the budget in 2017 (an idea contained in HB 6453); reversal of the weakened solar energy purchase rates that the legislature authorized in SB 9 in 2018 (the focus of HB 6633); an increase in CT wind power to 2000 MW (per bills HB 6839, 6418, 6425) and professional installation of solar energy using state certified apprenticeships (HB 6630).

Dear Committee Members,

We are writing to let our legislators know we want them to take this opportunity to take real action to lower emissions, create the "green collar" jobs Governor Lamont talked about in yesterday's budget address, and **make sure our transition to clean energy is fair and equitable for all. Please do all you can to move this New Green Deal forward. Thank you.**

Sincerely yours,

**Eileen & Paul Neri
146 Ironworks Rd.
Clinton, CT 06413**

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- investing widely in Connecticut's bus and rail systems. Forget making electric vehicles more available--they're still part of the problem.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Elizabeth Neuse

8 Paramount Ave Hamden, CT 06517-2712

elizabeth.neuse@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Now is the time to take the long view! Commitment to and investment in technologies and policies that promote clean energy is an economic imperative as well as an environmental one. We can't afford to wait any longer.

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Thank you.

Sincerely,
 Ms Lisa Newell
 243 E Hill Rd Canton, CT 06019-2120
lisa_newell@sbcglobal.net

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Thank you.

Sincerely,

Ms. Christine Njuki

15 Crest Rd Mansfield Center, CT 06250-1206 christined.hare@gmail.com

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Thank you.

Sincerely,

Mr. Don Noel

400 Seabury Dr Apt 2102 Bloomfield, CT 06002-2667 dononoel@me.com

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Thank you.

Sincerely,

Mr. Bill Nygren

107 Woodpond Rd West Hartford, CT 06107-3540 walf54bud@comcast.net

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

As a young person in Connecticut, I firmly believe that climate change is the issue of my generation. I want to live in a world,unafraid and confident in a safe future that will sustain life for me and my kids. I want to be able to always live in a biodiverse world, instead of waiting for another endangered species to fall off the face of the Earth.

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The environmental club at my local high school was actually planning on presenting a resolution to our local common council, and we would love to be involved in generating support for a CT Green New Deal!

Thank you so much for your hard work during this time of much needed action!

Sincerely,

Ms. Natalie Ochoa

17 Shamrock Ln Norwalk, CT 06850-3108

natalieochoa65@gmail.com

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Thank you.

Sincerely,

Ms. Heidi Olson

56 Winfield St Unit 2 Norwalk, CT 06855-2128 heidieolson14@gmail.com

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Sincerely,

Dr. Philip Oppenheimer

12 Outer Rd Norwalk, CT 06854-4709

philmath@optonline.net

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Thank you.

Sincerely,

Ms. Carole Osborn

11 Brook St Winsted, CT 06098-1209

longing4desertskies@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut has the opportunity to be at the forefront of adopting legislation that promotes and supports the development of renewable energy technologies that will lead to a more hospitable environment for those that come after us.

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Thank you.

Sincerely,

Mr. Nicolas Pacella

130 Silvermine Ave Norwalk, CT 06850-2033 nmpacella@gmail.com

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Sincerely,
 Fairfield Mike Papa
 49 Bouton St E Stamford, CT 06907-1609
artscapeorganiccarellc@gmail.com

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I understand that the Green New Deal's goal of 100% renewable energy may not be attainable, but we have the chance to make a compromise and set new goals for a green future. Please consider this new possibility and push for an attainable green energy future.

Thank you.

Sincerely,

Ms Lauren Pawlowski

605 A Shippee Storrs Mansfield, CT 06269-6605 3lpawlowski@gmail.com

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Thank you.

Sincerely,
ms anne penniman
97 N Main St Essex, CT 06426-1071
ap@annepenniman.com

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Thank you.

Sincerely,

Mr. Dominic Percopo

100 Lakeview Ave West Haven, CT 06516-1063 domjohnjr@sbcglobal.net



**HOME BUILDERS & REMODELERS ASSOCIATION
OF CONNECTICUT, INC.**

3 Regency Drive, Suite 204, Bloomfield, CT 06002
Tel: 860-216-5858 Fax: 860-206-8954 Web: www.hbact.org

*Your Home
Is Our
Business*

**ENERGY & TECHNOLOGY COMMITTEE
PUBLIC HEARING
February 21, 2019**

To: Chairmen Needleman, Arconti, Ranking Members Formica, Ferraro and distinguished Members of the Energy & Technology Committee

From: Jim Perras, CEO, Home Builders and Remodelers Association of Connecticut (HBRAC-CT)

Re: HBRA-CT Testimony in Support of **Proposed House Bill 5002: An Act Concerning the Development of a Green New Deal**

The Home Builders and Remodelers Association of Connecticut (HBRA-CT) is a professional trade association with over eight hundred business members statewide, employing tens of thousands of Connecticut residents. Our association of small businesses is comprised of residential and commercial builders, land developers, remodelers, general contractors, subcontractors, suppliers and those businesses and professionals that provide services to our diverse industry. We build between 70% to 80% of all new homes and apartments in Connecticut each year and engage in countless home remodeling projects.

Thank you, for the opportunity to provide testimony in support of HB 5002: An Act Concerning the Development of a Green New Deal. This bill is intended to provide funding and create programs to incentivize energy efficiency, renewable energy, sustainability and resiliency. The HBRA-CT requests the committee consider including provisions in this bill to create tax incentives for buyers of newly constructed homes with HERS ratings of 60 or better. In addition, we would suggest that the final draft of the bill also include tax incentives for buyers of older homes that remodel their homes within one year of purchasing with the end result of a 60 or better HERS rating.

The Home Energy Rating System (HERS) Index is the industry standard by which a home's energy efficiency is measured. HERS ratings are conducted by licensed third parties. A typical resale home scores around 130 on the HERS index (on average), while a standard home, built to current energy code, scores around 85. Every point below 100 on the HERS index, translates to roughly 1% energy savings compared to home built to current code requirements.

Tax incentives for HERS rated new construction and remodeling will promote energy efficiency and minimize stresses on the state's energy infrastructure. It will also provide much needed stimulation to the residential construction sector of our economy which has been producing at recession levels since 2009. It will create jobs, help to replenish our depleting housing stock and keep environmentally conscious millennials in Connecticut, ultimately helping to reverse the trend of outward migration. Similarly, incentives for HERS rated remodels will help revitalize urban areas and the state's aging housing stock (CT has the oldest housing stock in the country) and create jobs all while helping to sustain our environment. New homes and remodeling will generate significant tax revenue and jobs to help offset the targeted incentive.

Most consumers know anecdotally that a drafty old house is less efficient and more expensive to heat and cool than a new house. Now, metrics exist to quantify a home's efficiency. Most prominently, the Home Energy Rating System (HERS) examines various elements that contribute to a home's overall energy efficiency and gives a score so that homeowners can gauge just how well their house performs (the HERS Index Score). The lower the number, the more energy efficient the home. The U.S. Department of Energy has determined that a typical resale home scores, at a minimum, a 130 on the HERS Index, although this score can be much higher dependent upon the overall energy performance of the home. A home built to the 2006 International Energy Conservation Code is awarded a rating of 100 as the reference baseline. Current code required building practices result in houses with HERS index scores of 85.

What does this mean for new home energy performance A home with a HERS Index Score of 130 is 30% less energy efficient than the 2006 reference home. A home with a score of 60 is markedly more efficient than a typical re-sale house, resulting in significant savings by reducing utility costs. According to the US Dept. of Energy, a buying a house with a score of 60 will save the typical homebuyer \$1,257 every year in energy savings vs. the average re-sale house. **That is more than \$37,700 over 30 years.** The homes that we build today, are expected to last for a century. Not only will these new homes have higher levels of efficiency and lower costs, but they will also provide equally important auxiliary benefits including better indoor air quality, improved comfort, and conditions for improved occupant health.

Please consider adding language to HB 5002 that would provide tax incentives to homebuyers that either purchase a new home or remodel a recently purchased used home with a HERS rating of 60 or better. New Connecticut tax incentives coupled with existing federal tax incentives and rebates currently offered through EnergizeCT, will lead to more jobs, revitalization of our aging housing stock, healthier more energy efficient and cost saving homes for Connecticut residents.

Thank you for the opportunity to provide testimony on House Bill 5002: An Act Concerning the Development of a Green New Deal.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr Craig Peters

430 Pond Bridge Rd Windsor, CT 06095-4760 craig.peters@manchesterhonda.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut has an opportunity to shape a healthier, more equitable, and more vibrant future for its people. This goal is very important to me.

I behoove you to move it forward by fully drafting and supporting Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, bioswales, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems, especially rail!
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Anna Pickett

144 Foster St New Haven, CT 06511-2654

Aruthpickett@Gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

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- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Ed Pikaart

900 Chapel St Apt 409 New Haven, CT 06510-2816 edpikaart@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

As a parent and grandparent, an environmentalist and wildlife enthusiast, I urge this committee to support all efforts for a Green New Deal in Connecticut!! Our planet is in crisis because of climate change. Connecticut's coastal cities are already feeling the effects.

Wildlife which depends on the coast and its habitats are having difficulty nesting because of rising water levels. We need to quickly transition to clean renewable energy sources and along with that technologies which will provide livable wage jobs for our residents. Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,
 Mrs. Beverly Propen
 185 Crocker Ct Orange, CT 06477-3026
bpropen@gmail.com



**Testimony of RENEW Northeast before the
Energy and Technology Committee in support of**

House Bill 5002

An Act Concerning the Development of a Green New Deal

February 21, 2019

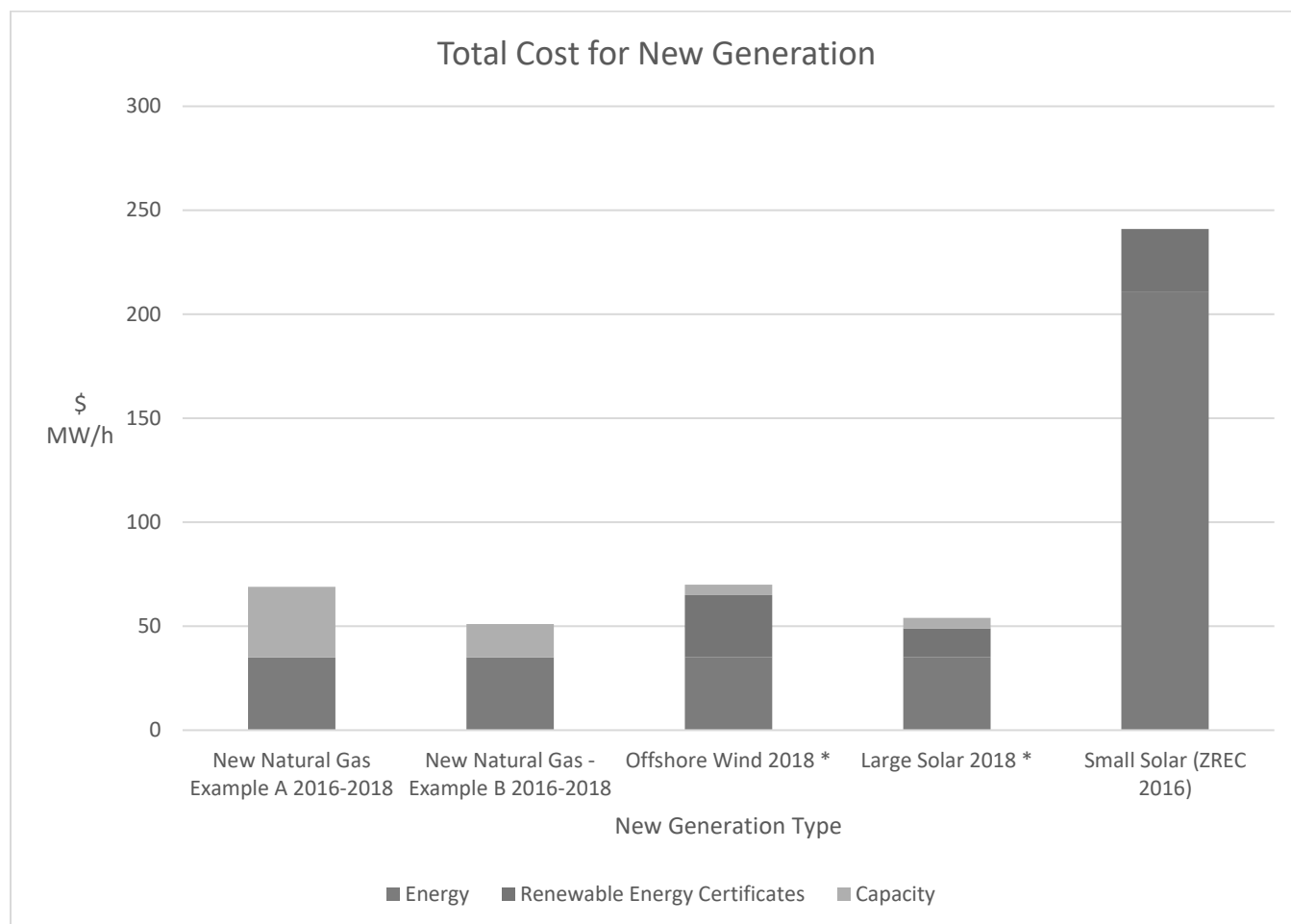
Chairmen Needleman and Arconti, Ranking Members Formica and Ferraro, and members of the Energy and Technology Committee, my name is Francis Pullaro and I am here on behalf of RENEW Northeast (RENEW),¹ its Executive Director, to testify in support of the concepts in House Bill 5002, *An Act Concerning the Development of a Green New Deal*, to create new programs for energy efficiency, renewable energy, sustainability and resiliency. Low-cost energy resources eligible under the Renewable Portfolio Standard (RPS) will enable Connecticut to meet greenhouse gas reduction requirements under its Global Warming Solutions Act (GWSA) while providing local economic development benefits and increasing power system reliability by lessening our heavy dependence on natural gas fueled electric power generation.

I. A Pro-Renewables Strategy Is a Ready-Made, Cost-Effective Approach to Meeting Connecticut's Environmental and Economic Development Goals

Renewable energy projects are providing Connecticut with positive economic benefits to host communities including much needed new tax revenue. The stream of projects supports local construction and service jobs during development and new opportunities in operations and maintenance once projects are supplying clean energy.

¹ The comments expressed herein represent the views of RENEW and not necessarily those of any particular member of RENEW. RENEW is a non-profit association uniting the renewable energy industry and environmental advocates whose mission involves coordinating the ideas and resources of its members with the goal of increasing environmentally sustainable energy generation in the Northeast from the region's abundant, indigenous renewable resources. RENEW has focused on highlighting the value of grid-scale resources- specifically offshore and onshore wind and small hydropower- and the benefits of transmission investment to deliver renewable energy to load centers in the Northeast. RENEW members own and/or are developing large-scale wind and hydropower facilities in Connecticut and across the Northeast. Others are independent transmission developers with proposals for transmission facilities to connect clean energy resources from around the region to Southern New England.

Today's level of installed renewable energy pales in comparison to the region's wind and solar potential. Recent competitive solicitations reveal wind and solar developers are providing renewable energy at prices at parity with new natural gas power plants.



* Assumes wind and solar qualify for limited exemption being phased-out to earn capacity revenue; otherwise renewables prohibited from earning capacity revenue

Abundant offshore wind can connect to southeastern Connecticut and provide opportunities for the state to be involved in the construction, maritime and service sector activities related to the construction of offshore wind generation and transmission facilities. The states that go first in establishing this new growth industry will likely capture the largest amount of this market share.

Competitive clean energy procurements complement Connecticut's RPS requirements by lowering cost and improving the chances of projects receiving financing. The greater revenue certainty of contracts from reduced investor exposure to commodity market price risk increases the chances of projects getting financing and at a lower rate. Lower financing costs and the competitive nature of the law's procurement lowers consumer costs.

Connecticut's existing programs for energy efficiency and its renewable energy requirement are projected to reduce natural gas consumption from the electric generation sector and render any pipeline capacity expansion uneconomic.² Emerging technologies like battery storage are also likely further to moderate peak demand and serve as a cleaner alternative to natural gas to balance variable output renewable resources. Massachusetts is even developing a Clean Peak Energy Standard requiring retail electricity providers to purchase attributes from energy storage resources paired with renewables for electricity they will produce at peak times. This approach could serve as a model for a storage program in this bill. By adding more renewable resource and energy storage, a build-out of the natural gas pipeline system will simply result in billions of dollars in costs to consumers for *unnecessary* pipeline capacity.³

RENEW supports the Governor's Council on Climate Change December 2018 recommendation that "DEEP should exercise its full discretionary procurement authority for grid-scale renewable and zero-carbon energy. Continued investment in diverse, zero-carbon, renewable energy technologies will be necessary for Connecticut to meet its GHG emissions reduction goals." RENEW recommends DEEP's existing procurement authority for renewable resources be raised to ensure that at least 2000 megawatts of offshore wind in addition to land-based wind and solar can be procured over the next decade. RENEW thanks Governor Lamont for recently filing offshore wind legislation that calls for up to fifteen percent of Connecticut's load to be met with offshore wind.

II. Solar Siting Law Could Increase Cost to Connecticut to Meet Higher RPS Requirements

If Connecticut is going to meet increased RPS requirements using a significant component of the lowest priced form of renewable energy development in the state- utility-scale solar- the siting laws must be better aligned to facilitate utility-scale solar development. RENEW believes that the measures for the siting of utility-scale solar energy projects on farmland in Public Act 17-218 are harming ratepayers by making it significantly harder to deploy utility-scale solar. It will also discourage the use of utility-scale solar projects on farmland as an alternative revenue stream for farmers or on lands no longer economically viable for farming.

The power given to the Department of Agriculture (DOA) in Public Act 17-218 singles out utility-scale solar development and allows DOA to impose a permitting process on utility-scale solar intended for large fossil fueled power plants. DOA effectively can "veto" any solar project- even non-farmland ones- and require it face the "certificate" process designed for large fossil-fueled power plants. To achieve Connecticut's environmental, renewable and economic development goals, a solar energy project should not face a riskier and costlier permitting process compared to a project to be fueled by natural gas or oil, or a permanent housing or commercial development. The added costs and risks will

² Synapse Energy Economics, *New England's Shrinking Need for Natural Gas* (February 7, 2017) iii <http://www.synapse-energy.com/sites/default/files/New-Englands-Shrinking-Need-for-Natural-Gas-16-109.pdf>.

³ *Id* at iv.

needlessly increase Connecticut's electric rates; jeopardize stable and predictable increases in municipal tax revenue; weaken alternative revenue streams and property rights for farmers; and hinder the state's ability to meet renewable energy goals.

It could ultimately cause renewable energy developers to look outside of Connecticut to states not subjecting large-solar projects to these risks. According to the Solar Foundation's most recent jobs census, one out of every fifty new jobs added in the United States in 2016 was created by the solar industry.⁴ A January 2017 report by U.S. Department of Energy found that solar makes up the largest segment of Connecticut's electric power generation workforce, with 2,927 jobs.⁵

Thank you for the opportunity to offer these comments.

Contact: Francis Pullaro, Executive Director
RENEW Northeast, Inc.
Voice: 646-734-8768
Email: fpullaro@renew-ne.org
Web: www.renew-ne.org

⁴ The Solar Foundation, Solar Jobs Census 2016, available at <https://solarstates.org/#state/connecticut/counties/solar-jobs/2016>.

⁵ U.S. Department of Energy, 2017 US Energy and Jobs Report, State Charts at 38, available at https://energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report%20State%20Charts%20_0.pdf.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

It is clear that very little action will be taken at the federal level to address climate change. BUT there is so much we can do at the local level. We need to stop waiting for the federal government to save us and to do what we can to get our own local house in order. We can, and must step up to not only meet, but exceed the Paris Agreement and do everything we can to save our state for future generations. Connecticut has an unprecedented opportunity to radically transform EVERYTHING and make our future better. As a parent and an educator, in my opinion there is nothing more important than addressing climate change and building a carbon neutral Connecticut.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids. We need more investment in our energy infrastructure at the state level and we need to protect the funds designated for this.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families. Let's put a solar panel on every roof that can carry one. Start with all state owned buildings, require all the big box stores (with their big flat roofs) to put solar on their buildings and subsidize solar panels for low income families. If we invest properly we can get off fossil fuels in 10 years. Once businesses get used to free electricity they will see the benefit, but we're going to have to push them to get there by regulating and requiring it.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves. Metronorth train lines are probably particularly vulnerable.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems. I live in Middletown and you can't get anywhere from here on public transportation - its a huge problem for our student population. And at the local level, bike trails so that more people can get healthy and commute or run errands by bike. High school students could bike to school. It'll be awesome.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities. Lets put people to work building a cleaner, greener tomorrow!

Climate change is scary and seems daunting, but for our kids' sakes we have to try. We can't pinch pennies and cut corners - the stakes are literally life or death. We need bold decisive action that will shape the future of our state for the next century. And we, the voters and taxpayers of Connecticut, will remember whether you voted for a green future or for despair.

Thank you.

Sincerely,
Prof. Justine Quijada
15 Brainerd Ave Middletown, CT 06457-3131 justine_quijada@yahoo.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

I ask the Committee to fully draft and support Green New Deal legislation that will shape a healthier and more equitable for Connecticut residents by:

Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.

Increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.

Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.

Investing in Connecticut's bus and rail systems and making it easier for residents and businesses to adopt zero-emission vehicles, and .

Generating high-quality employment for thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,
Ms. Dorothy Rich
4 Clearview Ave Norwalk, CT 06851-5111
dorothyjeanrich@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

I was going to write my own message, but the items below are as I see it and encourage your support. I would add that there is a great opportunity for Wind Power in New London, CT. Please get behind this effort to help the New London economy as well as our Green initiative.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Michael Riggio

18 Cutler Rd Old Lyme, CT 06371-1856

mike.riggio@teltechcs.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

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- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Melissa Rivera

225 Seaton Rd Stamford, CT 06902-3317

skkookie303@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

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- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr Jerry Rivers

8 Gombert Pl Roosevelt, NY 11575-1602

jerry.rivers13@yahoo.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Chris Robedee

74 Brooklawn Dr Meriden, CT 06450-7032

crobedee@yahoo.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
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- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

MR. David Robinson

PO Box 909 East Lyme, CT 06333-0909

drobphotographer@gmail.com

Testimony In Support Of HB 5002: An Act Concerning the Development of a Green New Deal

February 20th, 2019

To: Senator Needleman, Representative Arconti, and Distinguished Members of the Energy & Technology Committee

From: Alexander Rodriguez, Greater Hartford Environmental Coalition

Thank you for considering this testimony from the Greater Hartford Environmental Coalition in support of HB 5002: An Act Concerning the Development of a Green New Deal.

It is my understanding that the purpose of this legislation is to create new programs concerning and to provide funding for energy efficiency, renewable energy, sustainability and resiliency.

What should the Green New Deal accomplish? For CT, it should be comprehensive plan to tackle climate change, revitalize our economy, and address economic and racial inequity at the same time. Immediately after the 2018 elections, a group of young people called the Sunrise Movement began urging Congressional leaders to support a plan to create millions of jobs by putting Americans to work making a rapid transition to a fossil-free economy. I wholeheartedly believe Connecticut should proceed with the same urgency.

The devastating effects of climate change — from raging wildfires and vicious hurricanes, to torrential rains and extreme droughts — are being felt across the world, across the country and right here in Connecticut. With over 600 miles of coastline and 2.2 million shoreline residents, **Connecticut is exceedingly vulnerable to the impact of extreme weather events.** If climate change is not dealt with immediately, Connecticut will suffer billions of dollars of damages to its wetlands, beaches, infrastructure, public health, agriculture and parks. Importantly, the adverse

effects of climate change and air pollution hit low-income and marginalized communities the hardest.

There is a global scientific consensus that **dramatic societal and economic changes must be made in order to mitigate climate change and adapt to its effects**. The Green New Deal fits this bill. Crucially, the Green New Deal advocates for more than just 100% renewable energy — it also aims to address issues such as poverty, environmental justice, equity and access. A renewable-energy transition, through the Green New Deal, will buoy the economy, create jobs and bolster Connecticut's middle class.

The components HB 5002 should be organized into three sections, as follows:

First, a list of guiding principles to which all programs in the Green New Deal should adhere to: **community inclusion** in decision making processes; **100% renewable energy by no later than 2050**; **economic stimulus** through the creation of jobs or cost-savings which are circulated in local economies; **equitable implementation** for small businesses, low-income households and marginalized groups; and a **just transition** for displaced workers and negatively affected communities.

Second, a policy suite. Policies in this bill will adhere to the guiding principles and most will fall into four categories: **energy efficiency, renewable energy, sustainability and resiliency**.

In energy efficiency, we propose...

Strict energy efficiency standards for buildings in order to create cost-savings and reduce emissions (could be achieved by ramping up Lead By Example program),

Workforce development programs — with an emphasis on low-income communities — to equip workers with the skills to hold good-paying long-term jobs,

The creation of a Residential Property Assessed Clean Energy (R-PACE) program to help low-income households finance energy efficient improvements,

The protection of energy efficiency funds (from the Regional Greenhouse Gas Initiative, Connecticut Energy Efficiency Fund and Green Bank) from diversion to the general fund,

A mandate that every action Connecticut's regulatory agencies take should work to reduce the state's carbon footprint,

In renewable energy, we propose...

Increasing the urgency of Connecticut's Renewable Portfolio Standards (RPS) to match the scale of the climate crisis,

A significantly higher offshore wind procurement target to meet emissions goals and create good-paying jobs,

An increased community solar allowance to create jobs and ensure access to solar for renters, low-income households and otherwise disadvantaged groups,

The return of net metering to create cost-savings and incentivize residents to install solar PV panels,

Mandated municipal plans for electrified mass transit by 2040 to reduce emissions, create cost-savings and lessen air pollution which disproportionately affects marginalized communities,

A ban on new natural gas, coal or oil infrastructure development to lessen the risk of stranded assets and reduce our reliance on fossil fuels,

Allowing electric vehicles to be sold through dealerships in Connecticut to reduce costs for consumers and incentivize widespread adoption,

Job training for displaced workers from the fossil fuel sectors,

Implementation of a roadside solar program to reduce emissions,

Expansion of existing renewable energy incentives and REC's,

In sustainability, we propose...

An emphasis on land conservation in order to sequester carbon,

Increased access to compost to reduce methane leakage from landfills,

Mandatory climate change education to instill the values of environmental stewardship in future generations,

Emphasis on the role of mini-grids and smart grids in an increasingly decentralized power distribution structure,

Emphasis on reducing urban sprawl in order to lessen transportation times and increase the viability of widespread electrified mass transit,

In resiliency, we propose...

Education on sustainable farming practices, like crop rotation and soil management, to reduce emissions and increase resiliency,

Direct investment in upgraded coastal infrastructure to survive sea level rise and large storms,
Mandated community and stakeholder involvement in the planning and implementation of
resiliency measures,

Third, we ask for an accountability committee to track, report and advise on the bill's progress. In order to design a flexible and equitable policy, this committee must be composed of a diverse group of stakeholders, including, but not limited to: local and statewide legislators, climate scientists, economists, labor representatives and business representatives. This committee will report and advise on the programs implemented through the Green New Deal. In this manner, the legislature will be armed with the knowledge to tinker with programs that work and eliminate programs if they are not working as designed.

Now is not the time for half-measures. **The Green New Deal is a serious climate change solution,** which also emphasizes equity, access, poverty reduction, energy security, sustainability and community inclusion. HB 5002, in the format that we have proposed, will **cement Connecticut's status as a clean energy pioneer.** On behalf of the Greater Hartford Environmental Coalition, I urge you to consider our proposals for HB 5002.

Thank you for your time and consideration.

Respectfully,

Alexander Rodriguez

HB 5381 HB 7016 SB 600
HB 5789 HB 7114 SB 845
HB 6237 SB 220
HB 6240 SB 468

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February 21, 2019

Senator Norm Needleman, Senate Chair
Representative David Arconti, House Chair
Energy and Technology Committee
Legislative Office Building, Room 3900
Hartford, CT 06106

Re: NECEC Testimony for Public Hearing on Thursday, February 21, 2019

Dear Chairmen Needleman and Arconti and Members of the Committee:

The Northeast Clean Energy Council (NECEC) appreciates the opportunity to submit written testimony on the legislation being heard during the Energy and Technology Committee's public hearing on Thursday, February 21, 2019. While still largely in concept form, the bills slated for review include promising proposals with important implications for Connecticut's energy future. NECEC urges the Committee to continue its steadfast support for renewable and clean energy and energy efficiency, and we look forward to collaborating with you and your fellow members in 2019 to help Connecticut achieve its clean energy and carbon reduction goals. We thank the Committee in advance for thoughtfully considering each piece of legislation.

NECEC is a clean energy business, policy, and innovation organization whose mission is to create a world-class clean energy hub in the Northeast, delivering global impact with economic, energy, and environmental solutions. NECEC is the only organization in the Northeast that covers all of the clean energy market segments, representing the business perspectives of investors and clean energy companies across every stage of development. NECEC members span the broad spectrum of the clean energy industry, including energy efficiency, wind, solar, energy storage, microgrids, fuel cells, biomass, and advanced and "smart" technologies. Many of our members are already doing business in Connecticut, and many more are interested in doing so in the near future.

NECEC is pleased to offer its recommendations and positions on the following pieces of legislation.

I. SUPPORT: H.B. No. 5002 – An Act Concerning the Development of a Green New Deal

NECEC is extremely pleased to see Connecticut embrace the concept of a Green New Deal through the strong legislative coalition that has put forward this initial proposal. We view it as absolutely essential that proposals focus on the clean energy economy development opportunities that come hand in hand with the massive energy transition we need to make, and that our energy and climate policymaking match the scale of the challenge before us. This appears to be embodied by the Green New Deal platform. Other states in the region, such as New York and Maine, are also looking at the framing of a Green New Deal as the banner that recognizes the linkages among the multiple critical clean energy, economic and climate efforts underway and planned for the future. Each state may have different points of emphasis within their respective Green New Deal platforms, reflecting their unique energy mixes, domestic resources, economic development priorities, emissions challenges, and more.

However, policymakers must not in the process overlook improvements to existing initiatives. Instead they must prioritize corrective action to improve current programs and policies in parallel with new proposals that codify more sweeping and ambitious long-term proposals. For Connecticut, that means that a Green New Deal can only start with an honest assessment of legislative action in recent sessions, most notably the energy efficiency fund raids and ratepayer impact statement provisions passed in 2017 (PA 17-144), and the substantial solar/net metering changes enacted in 2018 (PA 18-50, SB9), which are undermining the very economic, energy and environmental goals Connecticut has long espoused and the Green New Deal intends to achieve. Whether as part of a Green New Deal package or via separate vehicles, it is imperative that this Committee and the General Assembly take action to substantially correct these recent actions, which threaten disproportionate harm for the two work-horses of the Connecticut clean energy economy – energy efficiency jobs and solar jobs (particularly, residential solar). To take action on a Green New Deal without addressing these critical near-term issues would run counter to the core tenets of economic development and renewable energy adoption and choice.

With this in mind, NECEC strongly recommends that the Committee prioritize inclusion of the following policy priorities in any forthcoming Green New Deal package:

A. Undo Harmful Solar Policy Changes in P.A. 18-50 to Protect Jobs and Customers:

With drastic changes set to take effect later in 2019, implementation of policy changes from Public Act 18-50 threatens to substantially up-end the state's solar workforce and limit customers' ability to pursue solar in the future. The General Assembly must intercede to undo changes from last session and put the state back on a course to sustained, orderly solar and renewable energy growth.

New legislation should first pause PURA's implementation of Section 7 of P.A. 18-50, and reinstate existing programs. The regulatory process unfolding at PURA has been rushed and will produce unintended consequences, including delays to enable utility implementation that may take up to two years. The proceedings should be put on hold before substantial changes are triggered in mid- to late-2019. *We emphasize that it is insufficient to simply provide additional time to the PURA proceedings underway, as PURA cannot change the "buy-all, sell-all" and sub-daily netting constraints locked-in by SB9/P.A. 18-50, which are essentially unworkable in the time frame needed to avoid significant negative consequences for customers and solar jobs.* Connecticut should recognize that its solar policies have been successful in beginning to build the foundation for the clean energy economy that benefits all customers and as such should be continued until the Green New Deal policies and programs can be put in place, including a reinstatement of net metering, an expansion of the Green Bank's RSIP Program by 100 MW, and a two-year extension of the commercial LREC/ZREC program. Continuation of these programs will preserve the well-being of Connecticut's solar industry and the benefits it is providing to Connecticut's economy until an independent study is done, evaluating the value of solar and the benefits and costs of net metering, the best policies and programs in other states to reform net metering, and whether or not other changes are warranted in Connecticut.

In addition, legislation should include elements that provide for sustained, orderly growth in the future with increased program capacity. P.A. 18-50 put arbitrary caps on commercial solar and fuel cell investment that will restrict development. Removing

project size restrictions and increasing the annual caps from 50 MW to 200 MW for commercial projects, from 25 MW to 50 MW for shared clean energy projects, and from 10 MW for low emission projects, will increase opportunities for customers to adopt and benefit from clean energy.

B. Restore Energy Efficiency Funds and Safeguard Against Future Diversions:

Energy efficiency is the cleanest and cheapest way to meet Connecticut's energy needs, save customers money, and create local jobs. Although Connecticut boasts 34,743 energy efficiency-related jobs¹ and a #5 ranking from the American Council for an Energy Efficient Economy (ACEEE),² the Connecticut General Assembly in 2017 raided \$63.5 million from the Energy Conservation and Load Management Fund (Energy Efficiency Fund), \$14 million from the Clean Energy Fund (Green Bank), and \$10 million from Regional Greenhouse Gas Initiative (RGGI) proceeds from budget years 2018 and 2019. This unacceptable setback for customer savings, greenhouse gas emission reductions, and clean energy jobs must be reversed in 2019. Any Green New Deal package must prioritize the restoration of efficiency and clean energy funds, and prohibit any future diversion of budgets. This means that the Legislature must protect the Energy Efficiency, RGGI, and Green Bank funds from future raids and, to the greatest extent possible, undo the raids from the 2017 session. In addition, the Legislature should coordinate with the Lamont Administration to resolve the pending lawsuit over the raids and preserve the funds for their original purposes, especially following the Governor's announcement of full funding for energy efficiency in his February 20 budget address.

C. Expand "Lead by Example" Energy Efficiency Program Efforts: Please see further comments below under H.B. 5789.

D. Establish an ambitious mandate for offshore wind procurement, and pursue additional Class I solicitations: With neighboring states recently announcing substantial offshore wind commitments, Connecticut must codify its intent to become an offshore wind leader as well. Establishing a strong commitment to offshore wind will deliver a wide array of benefits, ranging from cost reductions and winter reliability to in-state jobs and port infrastructure upgrades. Results from other recent Class I RFPs around the region also demonstrate substantial opportunities for large-scale onshore renewable investment as well. The Green New Deal package should include as a major pillar the establishment of an offshore wind procurement mandate to achieve 2,000 MW by 2030. While Connecticut has taken some positive steps to procure offshore wind through existing authority (300 MW so far), it has not pursued the large-scale development necessary to meet its ambitious climate and economic development goals. In contrast to neighboring states that have made robust long-term commitments to offshore wind (e.g., MA, NY, NJ), Connecticut needs a strategy to expand this important clean energy resource. Legislation should direct DEEP to establish a procurement mandate of and solicit competitive bids for 2,000 MW of offshore wind. Soliciting offshore bids at this scale will enable Connecticut to take advantage of this increasingly cost-effective resource (e.g., MA contracts at \$0.065/kWh). These efforts should be in addition to continued solicitations for Class I renewables, which have also demonstrated highly competitive offerings.

¹ E2's Energy Efficiency Jobs in America report, available online at: <https://www.e2.org/wp-content/uploads/2018/09/CONNECTICUT-Dist.pdf>.

² <https://aceee.org/state-policy/scorecard>.

E. Support removal/refinement of the 2017 “ratepayer impact statement” provisions:

Public Act 17-144 requires the Office of Fiscal Analysis (OFA) to prepare a ratepayer impact statement for any bill before the General Assembly that would have a fiscal impact on electric ratepayers. While the law requires evaluation of costs, it does not require consideration of fiscal benefits, which may outweigh costs. In addition, requiring a ratepayer impact statement would be unduly burdensome, difficult to implement, and add unnecessary administrative cost as state agencies such as the Public Utilities Regulatory Authority (PURA) already provide oversight of ratepayer costs. The Legislature must take action to remove or modify the “ratepayer impact statement” provisions, which otherwise threaten to undermine many core elements of the Green New Deal effort.

In summary, NECEC strongly supports the ongoing Green New Deal efforts around HB5002, and we encourage the Committee to move swiftly to advance a package of proposals with concrete language for each of the priorities outlined above.

II. OPPOSE: H.B. No. 5381 – An Act Redefining “Class II Renewable Energy Source”

NECEC opposes the addition of existing, higher-emitting trash-to-energy facilities to Connecticut’s Class II Renewable Portfolio Standard (RPS).

III. SUPPORT: H.B. No. 5789 – An Act Concerning the Lead by Example Program

The Legislature should support and advocate for continuation and expansion of the state’s Lead by Example energy efficiency program, which is needed to meet the most basic principles set forth in the Governor’s Green New Deal platform (i.e., those envisioning state and municipal entities leading at the forefront of the energy transition). Greater Lead by Example commitments will cut both government expenses and environmental impacts by (1) reducing energy consumption in state buildings 40% by 2030, (2) converting state vehicles to zero emission for 50% of light duty and 30% for buses by 2030, (3) ensuring proper building codes for energy and transportation-related measures, and (4) implementing a pilot carbon charge across state buildings and vehicles. These elements should all be prioritized as part of a Green New Deal package and through this standalone vehicle.

IV. SUPPORT: H.B. No. 6237 – An Act Requiring a Study of Energy Storage Projects and Distributed Generation in the State

We strongly support an undertaking to rigorously analyze the benefits of deploying energy storage in Connecticut, along with further analysis of greater distributed generation (DG) deployment. Comparable studies of energy storage have kicked off substantial energy storage activity in neighboring states, including the *State of Charge* report in Massachusetts,³ and the *Energy Storage Roadmap* process in New York.⁴ Both of these efforts serve as strong examples of the impact analytical work can have in highlighting the magnitude of the benefits and savings that storage can offer and in convincing policymakers, both legislative and administrative, about needed policy changes. Massachusetts’ *State of Charge* study revealed and confirmed startling

³ <https://www.mass.gov/files/2017-07/state-of-charge-report.pdf>.

⁴ <https://www.ethree.com/wp-content/uploads/2018/06/NYS-Energy-Storage-Roadmap-6.21.2018.pdf>.

Testimony of Amy McLean Salls

Connecticut Director and Senior Policy Advocate

Public Hearing, February 20, 2019



**Acadia
Center**

Advancing the Clean Energy Future

Before the Energy and Technology Committee

Honorable Chairpersons Arconti and Needleman, Vice Chairpersons Fonfara and Allie- Brennan, Ranking Members Formica and Ferraro and Committee Members:

Acadia Center appreciates this opportunity to provide written testimony to the Public Safety and Security Committee regarding the bill referenced below. Acadia Center is a nonprofit research and advocacy organization committed to advancing the clean energy future. Acadia Center is at the forefront of efforts to build clean, low carbon, and consumer friendly economies.

1. Support H.B. No. 5002 A Act Concerning The Development Of A Green New Deal

Position: Acadia Center supports the Development of the Green New Deal, which can revitalize Connecticut by modernizing transportation and energy

Connecticut has an exciting opportunity to use proven transportation and energy reforms to revitalize and strengthen Connecticut's economy, competitiveness, and overall quality of life. The Green New Deal can seize this opportunity by pursuing five reforms:

- Modernize our transportation infrastructure to improve safety, access, and convenience;*
- Transition power generation to cheaper, cleaner, and more resilient local sources;*
- Improve energy performance in buildings to reduce costly energy use and emissions;*
- Change energy grid rules to reduce high energy costs and speed energy innovation;*
- Give communities and consumers more control over their energy choices.*

These reforms will unlock significant new economic, consumer, and public health benefits for our state. For instance – modernizing transportation only – could produce over \$8.9 billion in new economic benefits, add 14,900 new jobs, and create \$3.7 billion in public health and other benefits.

Remaking the transportation and energy systems must be a core part of Connecticut's new economic strategy. Newly-unleashed innovation will drive economic progress, improved quality of life, and more equitable benefits for all residents, businesses, and communities.

Lawmakers need to prioritize the existing initiatives and current programs and improve them so there is a strong base on which to place initiatives, such as ambitious offshore wind procurement, heat pump incentives, the lead by example program, and a fully funded energy efficiency program. For example, the solar industry is poised to grow if Connecticut makes good policy choices which encourage deployment not suppress it. The harmful changes to the net metering language in P.A 18-50 need to be addressed in this 2019 session in order to have a successful Green New Deal going forward.

Acadia Center has outlined a strategy to revitalize Connecticut's economy through clean energy and transportation investments in its recent report "Building a Stronger Connecticut."¹

2. S.B. 468, An Act Concerning The Installation Of Solar Panels On State Land Near Public Highways

Position: Acadia Center supports this proposal of solar panels on public lands or private lands.

Acadia Center has been very supportive of this program in Massachusetts and have assisted in getting the model established there. Connecticut will have to coordinate with multiple agencies to create a working, coordinated and successful effort. The solar industry will be very supportive as are many in the energy advocates community. The Green New Deal should include all ways to increase the deployment of solar and this method should be included to help us reach or aggressive RPS and carbon emissions goals.

3. H.B. No. 5789 An Act Concerning The Lead By Example

Position: Acadia Center supports the continuation of Lead By Example as it is a win-win-win opportunity to foster in-state job creation and economic development while reducing the states substantial energy costs and helping meet it climate goals.

Acadia Center urges the legislature to support legislation that expands and accelerates the current LBE program in order to create more in-state jobs and encourage economic development while reducing state energy costs. LBE is a foundational piece of any state clean energy strategy. With each completed LBE project it saves money for taxpayers, eliminates costly energy waste in the state building sector and helps protect our air and climate by reducing emissions.

4. H.B. No.6242 An Act Prohibiting Surcharges From Being Levied On Utility Customers To Subsidize Interstate Natural Gas Pipeline Capacity

Position: Acadia Center supports this bill to the extent it limits ratepayer liability for unnecessary natural gas pipelines that would lock in future GHG emissions.

Acadia Center supports prohibiting ratepayer dollars from subsidizing new natural gas pipelines. Acadia Center has previously analyzed the impacts of a proposed major expansion of pipeline capacity and have found that many of the proposed benefits of this investment, such as ratepayer savings and reliability, are overstated.² For example, using hard-earned ratepayer dollars for major new natural

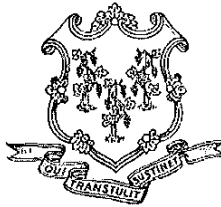
¹ See: https://acadiacenter.org/wp-content/uploads/2018/12/Acadia-Center_CTGovernorMemo_2018.pdf

² See: <https://acadiacenter.org/clearing-the-air-long-term-trends-and-context-for-new-englands-electricity-grid/>

SENATOR ROB SAMPSON
SIXTEENTH DISTRICT

LEGISLATIVE OFFICE BUILDING
300 CAPITOL AVENUE, SUITE 3400
HARTFORD, CONNECTICUT 06106-1591

Capitol: (860) 240-8843
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E-mail: rob.sampson@cga.ct.gov
Website: www.senatorsampson.com



State of Connecticut
SENATE

SENATE REPUBLICAN WHIP

RANKING MEMBER
GOVERNMENT ADMINISTRATION &
ELECTIONS COMMITTEE

MEMBER
FINANCE, REVENUE & BONDING COMMITTEE
JUDICIARY COMMITTEE

Testimony of Sen. Rob Sampson
Energy and Technology Committee
February 25, 2019

Sen. Needleman, Rep. Arconti, Sen. Formica, and Rep. Ferraro,

Thank you for giving me the opportunity to submit testimony on HB 5002, "AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL."

The bill before us contains only five lines of vague and seemingly purposefully innocuous text. If I read it correctly, it is designed more as a statement of purpose than a piece of law. If it is a statement of purpose, the question becomes, what is the purpose? What is the "Green New Deal" and how will it be implemented in Connecticut?

Are the sponsors of this legislation being clever by using the indefinite article before "Green New Deal?" Is this supposed to give them some wiggle room to say that they support *a* green new deal rather than *the* Green New Deal proposed lately by New York Representative Alexandria Ocasio-Cortez and Massachusetts Senator Ed Markey?

It seems to me the purpose of this vague bill when the identifiable title is simply as a virtue signal to the most ardent supporters of remaking our great country into something much different and resembling socialism. Whether they think they have or not, by using the words "Green New Deal" in the title, the sponsors of this bill have signed up to support the general principles of the Green New Deal proposed in Washington, public policy anathema to the American Experiment.

The Green New Deal proposes to socialize the healthcare industry and guarantee every person a "green" job. These jobs will be paid for by massive transfers of wealth. The proponents of the Green New Deal say these proposals promote justice. But what is just about the theft of the production of one set of citizens for the benefit of another? The sponsors of the Green New Deal speak a lot about equity, but they are referring to equality of outcome. That seems laudable until you realize that we all have different talents and skills, and that the prosperity of our great country is a direct result of a free market economy and the rewards associated with risk-taking and hard work. A society which places equality of outcome over equality of opportunity and reward for effort will necessarily result in less freedom and is certain to fail as it has each time it has been tried.

I'll leave it to others to criticize some of the more absurd specifics of the Green New Deal, from abolishing air travel to regulating cow flatulence. Suffice it for me to say that every single proposal is a further restriction on individual freedom.

My suggestion to this committee would be to reject the bill before you. Don't reject it on the specifics—there aren't any. Rather reject this bill for what it represents: an intention to undermine and fundamentally change our nation for the worse.

Sincerely,

State Senator Rob Sampson
16th Senate District

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr Paul Sanderson

311 N Anguilla Rd Pawcatuck, CT 06379-1249 pesanderson@sbcglobal.net

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Thank you.

Sincerely,

Mr. Frederick Schroeder

18 Iris Ln Redding, CT 06896-2112

fdsch@earthlink.net

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Thank you.

Sincerely,

Ms. Dani Schulman

367 Elm St Apt 302 New Haven, CT 06511-4756 daniela.schulman@yale.edu

Re: Testimony for House Bill 5002, "An Act Concerning the Development of a Green New Deal"
ETtestimony@cga.ct.gov

Dear Committee Members,

It's critical Connecticut invest immediately in reducing GHG emissions. Failure to do so will be very dangerous and long term extremely expensive for a coastal state.

Below are suggestions of what should be included.

Thank you.

Chris Schweitzer

Director

New Haven Leon SCP

What Should Be in a CT Green New Deal

Goals of CT GND:

- **Clear plan for rapid transition to next zero by 2030 or sooner.**
- Recognize climate crisis as urgent existential threat to Connecticut's future well being.
- Develop plan to respond to climate emergency designed to meet the scale of the problem.
- State to play leadership role in moving public, region, nation to create appropriate response.
- Begin to structure economy in way that recognizes ecosystem limits (Planetary Boundaries).
- Create significant community benefits including improved public health, jobs, better access to transportation options, and more attractive communities.

Criteria for 2019 CT GND Policies

Reduce greenhouse gases.

Have good track record in CT or elsewhere, or already exist and need expansion.

Produce co-benefits like job creation and public health improvements.

Address climate justice, equity.

Possibly support local efforts that municipalities can partner/lead on.

Short term CT GND Possible Projects (to 2021)

1. Fund regional planning for 2020 grants for projects.
2. Increase funding for DEEP and other appropriate state agencies to support statewide and local ghg reduction efforts.
3. Support programs that reduce GHG emissions and reduce government costs, like Pay as You Throw to free up funds.
 Expand existing successful programs like Energize CT, Green Bank to reduce building energy use.

Fund local alternative transportation projects, and accelerate pace of project implementation, i.e.,
cycle tracks, bus shelters, transportation alternatives communication campaigns (CTrides), etc.

4. Support expansion of electric vehicle purchase by state and citizens.
5. Pass legislation freeing municipalities to implement GHG reduction projects, like energy efficiency ordinances, or create statewide legislation.
6. Prioritize projects that create CT jobs and have public health and other co-benefits.
7. State support advocacy for national Green New Deal.
8. State provide small grants for NGOs to lead GHG reduction projects. Invite private foundations and corporate giving to do likewise.
9. State grants for GHG reduction projects identified in Sustainable CT plan.
10. Pass legislation allowing community choice aggregation for clean energy purchase.
11. Across the board, decrease barriers limiting growth of successful efforts like solar installation, energy efficiency, transportation alternatives support.
12. Do analysis and community consultation on which projects to prioritize for job creation, public health and other co-benefits.

Transportation ideas

13. Funding to fully develop/complete CT Action Transportation Plan, including consultation with regional/local groups to develop regional plans. Would fund construction projects identified in later years.
14. Funding Safe Routes to Schools and bike/ped education programs in communities across the state.
15. Fund Complete Streets construction projects to make streets safer and more bike ped friendly.
16. State funds for bike-ped coordinator
17. Allow cities to reduce speeds
18. Encourage State employees to use alt transportation (might be part of the first or third point as well).

Long term possible projects

1. Significantly decrease overall energy use aiming for carbon neutral ASAP or 2030.
2. Plan should respect wide range of planetary and local environmental boundaries. Include “polluter pays” policies.
3. Expand public education on climate change, ecological boundaries, and support creation of ecological culture.
4. Create local clean sources of energy; replace importation of fossil fuels with CT based energy industry; explore state/local ownership of energy production.
5. Support just transition to clean energy economy giving priority to vulnerable communities.
6. Support community resiliency projects to limit impacts of climate change.
7. Recognizing Connecticut’s climate debt,, adopt international sister climate justice communities (Puerto Rico, Ecuador, Haiti, etc) and coordinate projects that help them reduce GHG emissions and build resiliency.

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Thank you.

Sincerely,
Mrs. Elizabeth Scott
49 Tuttle Ct Bethany, CT 06524-3027
ehscott1@comcast.net

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Sincerely,

Mrs. Laura Sheinkopf

541 Chapel St New Haven, CT 06511-6976

lsheinkopf@gmail.com

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Sincerely,
 Ms. Georgiana Silk
 190 Godfrey Rd E Weston, CT 06883-1442
silkphoto@yahoo.com

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Sincerely,

Mr. and Mr Peter Sipple

177 State St Guilford, CT 06437-2471

sipplemp@gmail.com

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Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

We love our state but are upset to know people are leaving because of high taxes and inadequate highways (I 95!) and too few conservation laws. This bill addresses some vital situations to help the latter and will set the environmental standards for future actions. Think green!

Thank you.

Sincerely,
MRS Sally Smith
825 Harbor Rd Southport, CT 06890-1408
sallybsmith1@me.com

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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms Amanda Smock

469 Eastern Pkwy Brooklyn, NY 11216-4440 addiesmock@yahoo.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Ross Spiegel

122 Popes Island Rd Milford, CT 06461-1738 ross.spiegel@snet.net

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by **supporting Proposed Bill 5002**.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people. I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.
- support CT businesses and families by investing in a reliable electric grid, fueled by local renewables, (community solar, net metering etc), and halt any fossil fuel infrastructure expansion or subsidies.

Thank you,
Missy Stevens
26 Nichols Hill Rd
Washington, CT

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

The nation is at a crossroads. We can, . . . we must do this.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Lindsay Suter

16 Mill Rd North Branford, CT 06471-1060 suter16@comcast.net



**55 Church Street
New Haven, Connecticut 06457
203-568-6297**

**Testimony of David Sutherland – Director of Government Relations
Before the Energy and Technology Committee – February 21st, 2019**

**In Support of Proposed H.B. No. 5002
AN ACT CONCERNING THE DEVELOPMENT OF A GREEN NEW DEAL.**

On behalf of The Nature Conservancy, I would like to express our strong support for HB 5002, as a transformational initiative to have Connecticut take a leadership role in demonstrating how bold, decisive action to arrest climate change can also transform our economy.

We cannot control here in Connecticut what happens with or what is included in federal proposals for a Green New Deal. Even though recent polls show that majorities of Americans of all political affiliations favor the policy components of the Green New Deal; it seems unlikely that the current Congress will pass any version of it.

Our General Assembly can act, however, and the devastation that various impacts of climate change will visit on our state and the world demands that states like Connecticut take bold action and not wait for Washington. There have been many times in our history when states have had to take the lead in addressing critical issues when Congress has refused to act. Connecticut, in 1813, was the first state to pass laws regarding child labor. Other states followed suit, and it took many years, but Congress finally passed child labor laws. Kentucky and Wyoming acted to allow women to vote, years before they were granted suffrage nationally.

A February poll by Business Insider found that:

- 87.6% of respondents said it was somewhat, very, or extremely important that the federal government invest in infrastructure designed to build resilience against climate-change-related disasters.
- 87.2% of poll respondents said it was somewhat, very, or extremely important that the US meet 100% of its power demands through renewable or zero-emission energy sources; 12.7% said this goal was either not so important or not at all important.

A December survey conducted by the Yale Program on Climate Communication and the George Mason University Center for Climate Change Communication found that 92 percent of Democrats and 64 percent of Republicans back the Green New Deal plan.

Many laws and programs that we now consider bedrock foundations of a fair and well-functioning society – child labor laws, women’s suffrage, social security – were very controversial when first introduced to address a major societal problem.

(over)

Climate change is certainly a major societal problem, and one of the gravest threats facing the world and Connecticut today. Perhaps the biggest threat to our state is our extremely vulnerability to coastal flooding that is being intensified by climate change. Sea levels do not rise consistently around the world. Ocean currents, land uplift, and other factors cause variations across the globe. **Unfortunately, the Northwest Atlantic coast from Virginia to Maine has had some of the largest increases in the rate of sea level rise on the planet.** According to the U.S. Geological Survey, *“Between 1950–1979 and 1980–2009, SLR rate increases in this northeast hotspot were 3–4 times higher than the global average.”*

Sea levels are not only rising in Long Island Sound, but the **rate** at which they are rising is increasing. Calculations of a rolling 10-year average of mean sea level rise in New London, as measured by NOAA’s tide gauge data, show a significant recent acceleration of the rate of rise. **Compared to the average annual rate of rise from 1938 to 1988, the rate of rise between 1989 and 2012 tripled.**

These rising seas threaten our coastal roads, septic systems, and much other infrastructure. They also give storm waves a higher platform from which to launch themselves into coastal neighborhoods. A direct hit by a hurricane of the magnitude of the 1938 storm would cause more devastation to Connecticut’s communities and economy in a few hours than any other event in our lifetimes, save a war on our soil.

These and other climate threats mandate that Connecticut take a bold and comprehensive leadership role in reducing our greenhouse gas emissions; using nature-based and other state-of-the-art protection measures to make our communities resilient to the impacts of a disrupted climate; and demonstrate that these actions can be done in a way that enhances our economy and distributes its benefits more equitably to all sectors of society.

We urge that Connecticut’s Green New Deal be framed to address these critical aspects of climate change policy:

- Equitable benefits of climate mitigation and adaptation initiatives to all communities, particularly historically disadvantaged groups
- Intensified support and funding for energy efficiency
- Acceleration of energy efficiency and renewable energy for State-owned buildings
- Funding and policies to make communities more resilient to storms and sea level rise
- Significantly increased deployment of renewable energy for Connecticut homes and businesses
- Natural habitat conservation and other nature-based solutions to reduce greenhouse gasses in the atmosphere and increase resiliency
- Increased mass transit and electrification of vehicle fleets
- Climate and energy workforce development

Testimony in Support of
HB 5002 AN ACT CONCERNING THE DEVELOPMENT OF A NEW GREEN DEAL
Submitted by
Nisha Swinton & Jennifer Siskind
Food & Water Watch

To honorable Energy and Technology Committee Co-Chairs Senator Needleman and Representative Arconti and distinguished members of the Committee,

On behalf of our 20,000 supporters in Connecticut, we urge you to support HB 5002 AN ACT CONCERNING THE DEVELOPMENT OF A NEW GREEN DEAL.

As the Intergovernmental Panel on Climate Change recently warned, if we are to keep global warming below 1.5°C, we must act aggressively and quickly. At a minimum, reaching that target requires visionary and affirmative legislative action.

The science is clear that fossil fuels must be kept in the ground. Pursuing new fossil fuel projects at this moment in history is folly. The State of Connecticut must stop approving fossil fuel power plants and infrastructure projects. We must overhaul relevant statutes that govern new fossil fuel infrastructure in order to pursue a managed decline of fossil fuel production.

Your leadership is needed to transition CT power generation to 100% renewable energy. CT must simultaneously ramp up energy efficiency and conservation activity and transition to clean, renewable energy to power our state's economy where, in addition to excluding fossil fuels, any definition of renewable energy must also exclude all combustion-based power generation, nuclear, biomass energy, large scale hydro and waste-to-energy technologies.

Connecticut must shift to 100 percent renewable power generation by 2035 or earlier. This shift will necessitate upgrading our electricity grid to be smart, efficient, and decentralized, with the ability to incorporate battery storage and distributed energy systems that are democratically governed. In addition, Connecticut must bring electricity management into the twenty-first century, encouraging public and community ownership over power infrastructure and electricity choice, as well as permitting distributed energy sources, including rooftop and community solar programs to supply the grid.

Expand public transportation and phase out fossil fuel vehicles. Moving forward, instruct DEEP to use Volkswagen settlement funds to power electric engine vehicles. Our transportation system must undergo 100 percent decarbonization. To accomplish a fossil-fuel-free reality, Connecticut must require and fund greater investment in renewable-energy-powered public transportation that serves the people who need it most. Connecticut must move toward replacement of automobiles and trucks with internal fossil fuel combustion engines as quickly as possible, by encouraging sale and use of all electric vehicles.

Harness the full power of the Clean Air Act. The Clean Air Act provides powerful tools that have proven successful in protecting the air we breathe and reducing greenhouse pollution. It can also serve as an important backstop to ensure climate targets are met. The Act has successfully reduced many air pollutants and can do the same for greenhouse pollution.

Ensure a Just Transition led by impacted communities and workers. In effectuating this energy transformation, it is critical to prioritize support for communities who have historically been harmed first and most by the dirty energy economy and workers in the energy sector and related industries.

We support a comprehensive economic plan to drive job growth and invest in a new green economy that is designed, built and governed by communities and workers. Building new energy, waste, transportation and housing infrastructure, designed to serve climate resilience and human needs; retrofitting buildings to conserve energy and other resources; and, actively restoring natural ecosystems to protect Connecticut communities from climate change, are but a few ways to build a sustainable, low carbon economy where no one is left behind during this change.

We look forward to working with and supporting you to address the gravest environmental crisis humanity has ever faced, to protect all present and future generations around the world, while centering the rights of those communities and workers most impacted.

Thank you for your consideration.

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

This is very possibly the most important issue of not only our generation, but humanity overall. THIS is the time to be bold and choose wisely.

Thank you.

Sincerely,

Dr. Alison Thirkield

105 Cedar Woods Ln Fairfield, CT 06825-1308 pinkhouse25@yahoo.com

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Naomi Tomlin

250 Rockwell Ave Stratford, CT 06615-5716 naomigtomlin@gmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Allison Walsh

22 Putnam Grn Apt F Greenwich, CT 06830-6068 awalsh@opendoorcounsel.net

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

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Thank you.

Sincerely,

Ms. Merrill Wiechmann

10 Langley Park Farmington, CT 06032-1541 merrillwiechmann@hotmail.com

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr Stephen Wilmarth

671 Prospect St New Haven, CT 06511-2003 stephen.wilmarth@gmail.com

Testimony for the Committee on the Environment Hearing; 2/21/19 on the following:

HB 6242. An Act Prohibiting Surcharges from Being Levied on Utility Customers to Subsidize Interstate Natural Gas Pipeline Capacity.

HB 5002, An Act Concerning the Development of a Green New Deal.

I want to strongly register my support for both of these bills. They address different aspects of the state's move toward a cleaner future less dependent on fossil fuels.

HB 6242 acknowledges the reality of declining use of natural gas in New England as a whole, a situation that Massachusetts has already accepted. The citizens of our state should not be asked to subsidize pipelines for the benefit of natural gas companies when other states are dropping this tax and when the use of natural gas is predicted to drop precipitously. We now know that methane has an even worse impact in the short term on climate. We should be targeting our efforts on our stated goals for renewables and greenhouse gas reduction instead. It is ironic that this tax is still a possibility when monies raised from the surcharge on utility bills that were meant to improve energy efficiency across the state have been siphoned off to plug the budget hole.

HB 5002 presents an opportunity to aggressively widen our efforts to attain a greener future, to get off the fossil fuel diet. There will be many ideas and strategies forthcoming that will be worth pursuing. Let's aim high and think outside the box. I heartily endorse the principles laid out by the CT League of Conservation Voters that social justice must be a strong component of any Green Deal. Low-income communities have too often been left out of the equation. This could provide a boost to our local economies as well, opening up new job opportunities for young people. In our town of Norfolk a plan is being developed that would provide affordable net zero energy consumption housing. Imagine a young family being able to start out with no heating bills to worry about! This is the kind of green deal project that could help young people live and work in our small towns again.

Thank you for the chance to be heard.

Susannah Wood
55 Windrow Road
Norfolk CT 06058

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people. Climate change poses an existential threat to our state and our world, and Connecticut needs to lead on this issue.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve a better future by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
- Upgrading coastal infrastructure to prepare for storms and sea level rise, including use of marshes, dunes, and rain gardens to prevent flooding and buffer waves.
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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms Mary Woolsey

4 Saint Ronan Ter New Haven, CT 06511-2315 mlswoolsey@gmail.com

We need a green new deal. Climate change is the global emergency of our time. We must act now to get to zero carbon emissions so that we can have any hope of slowing and hopefully reversing global warming. We cannot afford not to make the necessary changes to move to renewable, clean energy right now. The good news is that in doing so we will improve the quality of life for all people in Connecticut and create jobs at the same time.

Liz Yetman
Windsor, CT

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

There has never been more important action to take as policymakers. This is a moment that history will judge extremely closely.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
- Rapidly increasing use of solar and offshore wind and ensuring clean energy's benefits are accessible for low and middle income families.
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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr Sam Zacher

783 Orange St Apt 1 New Haven, CT 06511-2582 sam.zacher@yale.edu

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
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- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Mr. Thomas Zissu

42 Paper Mill Rd Woodbury, CT 06798-2005 t.zissu@att.net

February 21, 2019

Senator Norm Needleman, Senate Chair
Representative David Arconti, House Chair
Energy and Technology Committee
Legislative Office Building, Room 3900
Hartford, CT 06106

Public Testimony of Brookfield Renewable on Proposed House Bill No. 5002, An Act Concerning the Development of a Green New Deal and Proposed Senate Bill No. 600, An Act Concerning Energy Storage Resources and Wind and Large-Scale Hydropower Facilities

Thank you to the Co-Chairs and members of the Energy and Technology Committee for the opportunity to provide comments on Proposed House Bill 5002, An Act Concerning the Development of a Green New Deal and Proposed Senate Bill 600, An Act Concerning Energy Storage Resources and Wind and Large-Scale Hydropower Facilities.

Brookfield Renewable operates over 1,500MW of carbon-free resources in ISO-NE and an additional 1,000MW that can be imported to New England from New York and Quebec. Our renewable hydro, wind, solar and pumped storage resources are available to help meet the energy needs and environmental objectives of Connecticut and the region.

An Act Concerning the Development of a Green New Deal

House Bill 5002 proposes to “create new programs concerning and to provide funding for energy efficiency, renewable energy, sustainability and resiliency.” Due to the limited details available, Brookfield Renewable is not taking a position on this measure at this time. However, in general, Brookfield Renewable strongly supports efforts to create a more sustainable, resilient and clean energy system that can both strengthen the State’s economy and assist in achieving near-term and long-term greenhouse gas mandates.

As this bill evolves and advances Brookfield Renewable recommends the authors and Committee consider the current treatment of and reliance on existing renewable energy and energy storage –

namely existing small-scale hydropower and existing pumped hydro storage, and work to ensure future policies maintain and even expand such treatment, in addition to promoting investment in new technologies and resources. Because Connecticut must thoughtfully and deliberately balance economic and environmental goals with electricity costs and ratepayer impacts, it is imperative to remain cognizant of the need for maintaining and re-investing in assets already available to the State. Identifying new ways to optimize and enhance the region's existing small-scale hydropower fleet, especially dispatchable resources capable of providing imperative reliability services, will prevent backsliding of the State's baseline of clean energy supply, thus ensuring Connecticut's policy goals are met in the most cost-effective and efficient manner possible.

An Act Concerning Energy Storage Resources and Wind and Large-Scale Hydropower Facilities

Senate Bill 600 proposes to “require the leveraging of existing energy storage resources in programs for wind and large-scale hydropower facilities.” To the extent not explicitly considered to date, Brookfield Renewable recommends this legislation ensure eligibility of existing pumped hydro storage, including the 600 MW Bear Swamp pumped hydro storage project owned and operated by Brookfield Renewable. Existing pumped hydro resources provide critical grid reliability services and, given the scale, flexibility and duration of discharge, these resources can pair well with new intermittent resources such as offshore wind. Requiring future procurements to leverage these important resources can facilitate the development of what are effectively base load renewable products capable of renewable energy delivery during periods of greatest need. Such transactions can ensure new intermittent resources are seamlessly integrated into the electricity grid, without requiring the provision of incremental reliability services or creating additional demand for fossil-fired resources. This more comprehensive planning consideration can have meaningful cost, reliability and environmental impacts.

Thank you again for the opportunity to comment on Proposed House Bill 5002 and Proposed Senate Bill 600. Brookfield Renewable would be happy to provide the Committee with any additional information on how our existing small-scale hydropower and pumped hydro storage plays a significant role in helping the State meet its renewable energy and environmental goals. We look forward to continuing to be part of the solution moving forward.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Zuretti", with a stylized flourish at the end.

Steve Zuretti

Director, Government Affairs

Brookfield Renewable

steven.zuretti@brookfieldrenewable.com

310-849-3210

Dear E&T Committee clerk Energy & Tech Comm Energy & Tech Comm,

Dear Senator Needleman, Representative Arconti, and members of the Energy and Technology Committee,

Please advance a Green New Deal for Connecticut by supporting Proposed Bill 5002.

Connecticut is at a crossroads, and has an opportunity to shape a healthier, more equitable, and more vibrant future for its people.

I ask the Committee to fully draft and support Green New Deal legislation that will achieve this vision by:

- Regaining the confidence of small businesses and saving money for working families by restoring the Energy Efficiency and Clean Energy funds and protecting ratepayer funds from future budget raids.
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- Making it easier for residents and businesses to adopt zero-emission vehicles, and investing in Connecticut's bus and rail systems.
- Generating high-quality employment for tens of thousands of Connecticut residents through a solar jobs training program, infrastructure investments, and community workforce agreements to hire from disadvantaged communities.

Thank you.

Sincerely,

Ms. Alison Zyla

1 Shore Grove Rd Clinton, CT 06413-2310 barral11@att.net