

# Energy and Technology Committee JOINT FAVORABLE REPORT

**Bill No.:** HB-5002

AN ACT CONCERNING A GREEN ECONOMY AND ENVIRONMENTAL

**Title:** PROTECTION.

**Vote Date:** 3/19/2019

**Vote Action:** Joint Favorable

**PH Date:** 2/21/2019

**File No.:** 385

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## **SPONSORS OF BILL:**

Energy and Technology Committee

## **REASONS FOR BILL:**

HB 5002 was drafted to create a new framework for expanding anaerobic digestion (AD) and explore a way the state could reintroduce Lead by Example initiatives from past legislation. AD is the process of capturing and refining methane gas that's emitted from the breakdown of food and animal waste. This captured gas can be mixed into a variety of products and used for numerous applications from heating homes to powering farm equipment. The second part of the bill deals with requesting that The Office of Policy and Management study what potential return on investment would occur if the state realigned itself with previous Lead By Example (LBE) initiatives. LBE was a past plan to have state run and owned buildings take on energy efficiency initiatives but the plan was not fully implemented. The bill includes language to require a study on how to reincorporate these LBE measures.

## **RESPONSE FROM ADMINISTRATION/AGENCY:**

[Katie S. Dykes, Commissioner, Department of Energy and Environmental Protection \(SB-845\)](#): Commissioner Katie Dykes testified on behalf of the Department of Energy and Environmental Protection (DEEP) in support of SB-845 with modifications to the proposed language. The agency recommends any DEEP-run procurements of anaerobic digestion should inform the State's 'Comprehensive Materials Management Strategy,' along with the energy planning documents already noted in the proposed language which includes the 'Integrated Resource Plan' and the State's 'Comprehensive Energy Strategy.'

The agency also recommends this procurement should be discretionary rather than mandatory, to ensure the best interest of ratepayers and meet the market needs. Section 16a-3h of the Connecticut General Statutes allows DEEP to conduct a solicitation for any combination of the listed resources, which includes anaerobic digestion. "DEEP has

approximately 0.6% of electric load remaining under this authority, which equals approximately 20 MW in electricity derived from anaerobic digestion.” In summary, DEEP supports SB-845 with the above modifications.

DEEP also supports the LBE initiatives and state that they have worked on reducing overall utilities for many state buildings and they look forward to continuing this work.

**Connecticut Green Bank** – CT Green Bank supports the bill and state that they have made investments in green energy initiatives throughout the state and welcome any bill that would further support these efforts.

**Josh Geballe, Connecticut Department of Administrative Services** – Geballe states that they have codified efforts to make buildings more energy efficient into the State Building Code as well as the High Performance Building statutes and regulations and states that he looks forward to continuing to work with stakeholders to adopt new policies.

#### **NATURE AND SOURCES OF SUPPORT:**

**Seth Bachler, CEO, Oakridge Dairy (SB-845)**: Oakridge Dairy, a farm located in Ellington Connecticut submitted testimony in support of this legislation for multiple reasons. Seth Bachler offered a list of benefits for the consumer, the farm operation, and the State’s renewable energy goals. Moreover, the list includes the following, alternative energy generation, 24/7 energy production, carbon sequestration, food waste reduction, water quality improvement, micro-grid potential, and increased carbon reduction compared to other alternative energy sources. Specifically for the farm industries, the benefits of creating the market include the ability to mitigate phosphorus runoff, reduced energy costs in the high energy sector, and the ability to pelletize and sell phosphorus as a new source of revenue.

**Claire Coleman, Climate and Energy Attorney, Connecticut Fund for the Environment (HB-5002)**: Claire Coleman testified on behalf of the Connecticut Fund for the Environment in support of clean/ renewable fuel cells, renewable energy production, met by fuel cells, respectively, from anaerobic digestion. Coleman is also in support of LBE expansion and funding. She believes it will help the state save money and foster in-state job creation.

**L. Jeanne Davies, Executive Director, Connecticut Resource Conservation & Development (SB-845)**: Connecticut Resource Conservation & Resource (CT CR&D) is an organization that offers assistance to agriculture businesses, farms, land trusts and Connecticut towns; in which the establishment provides comments and observations for the Committee. The list states the following:

- Include a precise carve out for an on-farm generation category within the proposed 10-megawatt aggregate for those farm projects seeking PPA.
- Allow for the production, the sale of electricity, and the opportunity for biogas sales from anaerobic digestion projects into the main pipeline of natural gas.
- Allow for an exemption of up to 100 tons per day for solid waste, similar to current allowances in Massachusetts.
- Consider the creation of a state tax credit to incentivize investors for anaerobic digestion on-farm generation projects. This would help bridge the gap created by the loss of the federal 30% tax credit for anaerobic digestion projects.

- Increase incentives to farms installing anaerobic digestion through an organics to energy grant incentive similar to that in Massachusetts. The CT Green Bank could implement this grant program along with loan opportunities.
- Create a Thermal RED for on-farm anaerobic digestion projects, similar to Massachusetts's alternative energy credit program.
- Consider the creation of a Farm anaerobic digestion rec for the environmental benefit that anaerobic digestion systems provide the State.

Joined by:

[\*\*Amanda Fargo Johnson, Agricultural Programs Director/ Energy Program Director\*\*](#)

[\*\*Matthew Freund \(SB-845\)\*\*](#): Matthew Freund and his family are dairy owners in North Canaan. Freund's testimony states they are running one of the oldest anaerobic digesters built in the United States, and they believe Connecticut has the opportunity to combine the manure from farms that are surrounding each other. Freund's presumes, "we should have a Heat Utilization Energy Credit for systems that will be making renewable natural gas. Having a tax credit would incentivize investors to invest in on-farm generation." Freund's believes we need to mandate Green Banks participation and create an alternative rate for energy production on-farm as well as remove the charges for transferring manure from farm to farm.

[\*\*John Humphries, Executive Director, Connecticut Roundtable on Climate and Jobs \(SB-845\) & \(HB-5002\)\*\*](#): John Humphries testified on behalf of Connecticut Roundtable on Climate and Jobs "in general" support of SB-854. Yet, Humphries strongly opposes Section (d) in SB-845 that would establish a time limit on PURA's review process; they state that within 45 days is unacceptable. Also, Humphries encourages the Committee to include a provision to study producing pipeline-quality biogas from anaerobic digestion as an alternative to electrify production.

[\*\*Bryan Hurlburt, Executive Director, Connecticut Farm Bureau \(SB-845\) & \(HB-5002\)\*\*](#): Connecticut Farm Bureau (CFBA) is a private organization representing 3,000 CT families their testimony is similar to [Oakridge Dairy](#)'s written testimony, CFBA offers a list of needs focused on creating a marketplace that would allow for on-farm generation projects to be successful which includes:

- 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 an on-farm generation;
- Increase access, or mandate, Green Bank participation in on-farm generation projects;
- Create an alternative generation rate for energy production by an on-farm generation project.

In regards to HB-5002, CFBA would promote and recognizes the environmental benefits the agriculture provides. "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 is included for access in HB-5002.

[\*\*Kies Orr, Fort Hills Farms \(SB-845\)\*\*](#): Orr testifies in support of SB-845, in which provides finical aid to dairy farmers. Orr offers a useful list of suggestions nearly identical to [Oakridge](#)

[Dairy](#)'s testimony. The list includes the following, alternative energy generation, 24/7 energy production, carbon sequestration, food waste reduction, water quality improvement, micro-grid potential, and increased carbon reduction compared to other alternative energy sources. Specifically for the farm industries, the benefits include the ability to mitigate phosphorus run-off, reduced energy costs in the high energy sector, and the ability to pelletize and sell phosphorus as a new source of revenue.

**[Brian Paganini, Vice President and Managing Director, Quantum Biopower \(SB-845\):](#)**

Brian Paganini testified on behalf of Quantum Biopower in support of SB-845. The company requests that the Committee "considers including a provision that would establish a docket at PURA to set clear gas interconnection standards that would enable investors to design their systems, as well as price the systems."

**[David Sutherland, Director of Government Relations – Nature Conservancy –](#)**

Sutherland supports the bill and states that if the nearly 4000 state owned buildings took on energy efficiency plans that we could save massive amounts of money in the General Fund and it will also help the state reduce emissions.

**[Tom Swan, Exec. Director of the CT Citizen Action Group](#)** – Supports the state focusing on LBE and supports how these initiatives will save money and advance our clean energy goals.

**[Ann Gadwah, Sierra Club of Connecticut](#)** – Sierra Club supports the LBE and state that CT spent over 90 million dollars on utilities in SFY18 so any potential savings should be explored. They suggest upgrade the lighting and window seals, move to 50% zero emissions vehicles by 2030, and create a carbon pricing program.

Joined by:

**[Peter Rothstein, Northeast Clean Energy Council](#)**

**[Joel Rinebold, Director of Energy Connecticut Center for Advanced Tech, Inc.](#)**  
**[Renewable Energy and Efficiency Business Association, Inc.](#)**

**NATURE AND SOURCES OF OPPOSITION:**

None offered

**Reported by: Elizabeth Blackman**

**Date: 4/2/19**