



Testimony of Quantum Biopower, LLC
to the Joint Standing Committee on Energy and Technology

Raised Bill 928, ACT CONCERNING SHARED CLEAN ENERGY FACILITIES

March 17, 2015

Senator Doyle, Representative Reed and distinguished members of the Energy and Technology Committee:

My name is Brian Paganini and I am the Vice President and Managing Director of Quantum Biopower, LLC. Quantum is an anaerobic digestion project developer and operator based in Southington, Connecticut. Quantum is a subsidiary of Supreme Industries, which is a family-owned and operated site preparation and Right Of Way (ROW) contractor based in Harwinton, Connecticut. Supreme has been providing safe and environmentally-responsible solutions to the power, pipeline and site construction industries for thirty-five years.

I appreciate the opportunity to testify before you today in support of Raised Bill No. 928, An Act Concerning Shared Clean Energy Facilities.

Quantum is developing a 1 MW anaerobic digester in Southington, Connecticut. The facility will process 40,000 tons of food waste per year to produce methane gas, which will fuel a generator to produce electricity, heat and hot water to support on site operations. Excess power will be fed to the local electric distribution system. This facility will sit adjacent, on the same site, to our mulch and soils manufacturing business. Quantum will process the residual material from the digestion process and use it to create a high grade organic compost blend.

Last year, the U.S. Department of Energy released a biogas industry roadmap which detailed the future opportunity to develop biogas projects across the country, like the one we are developing in Southington. This study, commissioned by the White House, hypothesized that an additional 11,000 biogas facilities could be developed in the United States on top of the current 2,000 that are in operation at farms, municipal water treatment plants, and in critical regional locations; to put in it perspective, Germany currently is home to 7,000 biogas facilities and Germany is roughly the size of Montana.

Quantum's Southington facility is on track to be the first anaerobic digestion plant to be built in Connecticut in response to the State's new food waste diversion goals. The project is fully financed, including a \$2 million loan from the Connecticut Green Bank. Once completed, this facility will set the stage for the next revolution in recycling in the United States where organic materials are collected, processed for energy, and then turned into valuable commodities for sale back on the open market.



Anaerobic digestion is a capital intensive technology. The Southington facility will cost more than \$11 million to build. Revenue to support the investment comes from tipping fees for incoming organic wastes, electric power fed to the grid and the sale of fertilizer and mulch products.

Raised Bill 928 creates a mechanism for anaerobic digestion projects to share the benefit of renewable energy produced with the organic waste generating partners that supply the facility's fuel. In this way, the bill supplies the missing link that will close the loop on food waste in a very real way and incentivizes those who wish to manage their waste in a responsible way.

Raised Bill 928 will allow a developer like Quantum to work with area food waste generators – both large and small – to subscribe to receive the benefit of shared clean energy facility credits derived from the decomposition of their waste. In that sense, Quantum will have the tools it needs to jointly advance the State's food waste diversion and renewable energy goals by becoming a "sustainability provider" in the community.

Thank you, once again, for the opportunity to testify before you today.

Sincerely,

A handwritten signature in black ink that reads "Brian M. Paganini". The signature is written in a cursive, flowing style.

Brian Paganini
Vice President and Managing Director
Quantum Biopower, LLC