



What's next.

June 7, 2016

Senate Finance Committee

Statement of Steve Miller, Chief Executive Officer of Bulk Handling Systems and Zero Waste Energy, LLC, Eugene, Ore.

Thank you Chairman Hatch, Ranking Member Wyden, and the rest of the Committee for the honor of speaking today.

I am the CEO of Bulk Handling Systems and our subsidiaries, a group of four companies with more than 275 employees and operations in the states of Oregon, Tennessee, and California. The company was established in 1976, supplying conveying and sorting equipment mostly to the timber and wood products industry, and began exporting equipment in the early 1980s. During the late 1980s and 1990s, we pivoted to supply equipment to the quickly-growing recycling industry which makes up the bulk of our business today. Together our companies design, engineer, manufacture and install systems to extract and sort valuable commodities from municipal solid waste streams; maximizing value from what is thrown away and minimizing the amount of materials sent to landfill. The majority of our employees are engineers, welders, technicians and fabricators. We also outsource a significant amount of work locally to other metal fabricators and so are responsible for additional job creation by affiliated companies in our areas. Through anaerobic digestion technology, our Lafayette, California-based Zero Waste Energy, LLC transforms organic materials – such as source-separated organics, and yard waste and food waste separated from the municipal solid waste stream by our recycling equipment – into biogas that is used to produce electricity or compressed natural gas to fuel vehicles. The remaining solid organic material in our systems is used to produce nutrient-rich compost for agricultural use. In addition, our company is involved in the conversion of the remaining elements of the waste stream into an EPA-approved Engineered Fuel product out of waste, which is suitable for use by utilities to produce electricity as a clean burning supplement to coal. While our products are produced in the United States, we export our equipment around the world and today are fulfilling orders on five continents.

My focus today relates to the work that my company is doing to produce renewable energy and compost from the solid waste stream; and describe opportunities that changes in tax policy will have to accelerate our efforts. Through our anaerobic digestion process we create baseload renewable fuel and/or electricity from the large percentage of food waste and other organic materials in our waste stream that would otherwise decompose for years in a landfill; leaking methane and carbon dioxide into the atmosphere. We have successfully built projects that produce electricity and compressed natural gas (CNG) that is used to provide fuel for waste truck fleets as a replacement for diesel. In each of our systems, the resulting solid material is turned into compost which is used to return nutrients to the soil and aid in water retention. In short, our anaerobic digestion systems substantially increase diversion of material from landfills, manage the production of methane from the breakdown of organic waste so that it is not released in the atmosphere, produce valuable baseload electricity and transportation fuels, and produce organic compost to both replenish soils and retain water in the agricultural sector. Despite the overall attractiveness of the products that we create, our development has been slowed by low prices for electricity, oil and natural gas. Since the renewable products that we produce compete with these fossil fuels, we have been challenged to provide our Customers the economics needed to fund projects.



Unlike wind and solar, anaerobic digestion produces electricity in all weather conditions, 24 hours a day, seven days a week, and 365 days a year. Despite the significant advantages of our proven technology, it has been difficult to compete for scarce investment dollars against solar and wind. While I certainly appreciate the Senate's attentiveness toward renewable energy generally, the policies adopted at the end of 2015 do not do enough. For example, while the PTC and ITC for wind and solar received long-term extensions, biogas credits were extended to only the end of 2016 for the biomass industry and only applied to the renewable energy portion of the project. Since development of such a project takes several years, the early expiration of the credit makes the value extremely limited from a planning and development perspective. Additionally, all of our systems are required to produce compost as a byproduct of the renewable biogas production process. Thus, the cost to build an anaerobic digestion system must necessarily also include compost system capacity. While the intention of the credit is to provide value across the whole project, limiting the credit to only the energy portion and ignoring the compost element puts the renewable energy portion at risk. To make the credit useful, it needs to include all necessary elements of the renewable energy system. As such, we would ask you to consider the following:

- Extend the PTC for biogas technologies for five years with no phase out
- Give those technologies an equal credit to wind per kilowatt-hour
- Ensure that the legislation that allows technologies to convert a PTC into an ITC is extended
- Allow biogas that is used as transportation fuel to qualify for both the PTC and ITC – currently it only qualifies if used for electricity
- Include the cost to develop the compost and nutrient recovery technology portion of the renewable energy project. Extension of the credit to include compost technologies would significantly expand the development of waste to energy and compost facilities.

Your help will be impactful on many levels – including:

- Increasing diversion of material from landfill to a beneficial use
- Reduce greenhouse gas emissions from organic wastes
- Create high paying domestic jobs for companies like mine as well as our owner/operator customers
- Increase renewable fuel production
- Increase baseload renewable power generation
- Increase nutrient-rich compost generation for agriculture

I hope that you can help us develop this important domestic industry. Thank you again for the opportunity to speak here today.

Bulk Handling Systems (BHS)



Steve Miller
Chief Executive Officer

