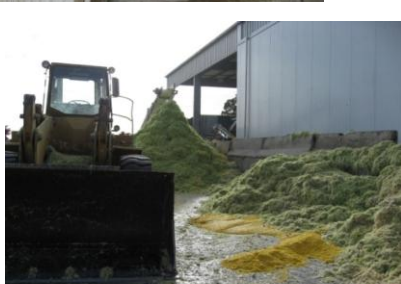


STAHLBUSH ISLAND FARMS · CORVALLIS · OREGON

Stahlbush Island Farms, located in Corvallis, Oregon, is committed to the practice of sustainable agriculture throughout their approximately 5,000 acres of farm land and their processing facility. Minimizing the company's carbon footprint and supporting renewable energy are both considered integral to this commitment.

A technical and financial feasibility study performed by Essential Consulting Oregon, LLC (EC Oregon) provided Stahlbush Island Farms the required analysis to confidently move forward with the development of an anaerobic digestion facility. Processing waste originally trucked offsite will now be digested on site for the production of renewable biogas and organic fertilizer.

EC Oregon, based in Eugene, Oregon was founded in 2005 to provide energy analysis services to the agricultural and business community with an emphasis on anaerobic digestion of organic waste and biogas production.



FEASIBILITY AND DEVELOPMENT PROCESS

EC Oregon recently performed the Anaerobic Digester Feasibility Study for Stahlbush Island Farms which entailed (in part): analysis of waste streams; assessment of potential co-digestion substrate; digestion trials; estimation of biogas yields; assessment of technology options; biogas utilization calculations; utility interconnection options; effluent treatment and use; permitting requirements; and financial modeling.

Upon completion of the feasibility study, EC Oregon was retained for the following services:

- application for electrical interconnection
- certification with FERC as a qualified facility
- filing of land use compatibility statement
- application of necessary permitting
- application for business energy tax credit



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EC Oregon performed vendor selection for the digester technology and combined heat and power unit through a request for proposal process. EC Oregon assisted with project management and scheduling services throughout construction.

RESULTS

The project was commissioned in the second quarter of 2009. Nearly 55,000 wet tons/year of mixed biomass (primarily fruit and vegetable waste) is being processed by two anaerobic digestion tanks (each with 900,000 gallons of capacity) to produce biogas. As a comparison, this is more biomass than the entire Oregon wine industry processed in 2006. As an added benefit, digesting the processing waste will reduce transportation costs and the correlating greenhouse gas emissions.



The biogas generated at Stahlbush Island Farms fuels a 1.6 MW capacity combined heat and power unit. The electrical power is being sold to the electric utility (PacifiCorp) and the recoverable heat (hot water and steam) is utilized in the processing facility.

As a comparison, the energy content (in Btu's) of the biogas is equivalent to one million gallons of biodiesel. Macro-nutrients contained in the processing waste, which would have otherwise been exported off site, will be recovered for land application. "Closing the loop" on energy and nutrients is good for business, the environment and the community.



The Energy Trust of Oregon provided financial assistance for the initial feasibility study. The Oregon Department of Energy (DOE) Business Energy Tax Credit supports the investment opportunity.

For more information regarding feasibility studies for anaerobic digestion, or other biomass conversion technologies, contact Dean Foor with EC Oregon at dean@ecoregon.com or (541) 485-9095.



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