Integration of Advanced Logistical Systems and Focused Bioenergy Harvesting Technologies to Supply Crop Residues and Energy Crops in a Densified Large Square Bale Format

OBP WBS: 1.2.1.4

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Project objectives support the adoption and production goals of the Office of Biomass Programs for feedstock adoption and cost minimization in a “stump to throat” harvest, storage, and transportation demonstration. Use of a common set of equipment, where possible, was emphasized as a key factor required for rapid adoption and cost minimization. Modifications to the equipment set, as required, were identified and have been implemented and demonstrated as a first step toward commercialization. The project demonstrates the use and suitability of commercially available equipment to meet the feedstock needs of a production scale conversion facility. The common set of equipment was utilized to harvest wheat and corn crop residues and energy crops including switch grass, energy sorghum, mixed grasses, miscanthus, and energy cane.