

Breaking Energy

BIOMASS, DEPARTMENT OF ENERGY, INVESTMENT

Improving the Way We Harvest And Deliver Biofuels Crops

By U.S. DEPARTMENT OF ENERGY
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The self-propelled baler collects and packages bales of feedstock on-site that can be immediately loaded and sent to a biorefinery for use. | Photo courtesy of Antares Group.

America is the largest biofuels producer in the world - accounting for 48 percent of global output. To remain the global industry leader, the Energy Department is investing in projects that address critical barriers to continued growth. This includes a key focus on improving feedstock logistics - the processes we use to collect grasses, plants and other organic material prior to converting them into clean, renewable fuel.

Collecting feedstock to convert into biofuels - from harvesting and packaging, to loading and transporting - can be complex and costly. To better streamline the process, the Energy Department competitively awarded grants to five companies aimed at overhauling the feedstock logistics process. Among the grant recipients selected to improve processes to sustainable grow and harvest feedstock was Ohio-based FDC Enterprises.

For its project, FDC enlisted a number of industry partners to design, build and test innovative harvesting equipment that integrates many different components of the feedstock collection process into one system. To test the new system, FDC harvested large acre crops of homegrown feedstocks - including switchgrass, prairie grass and corn stover. After significant testing, FDC's innovative approach enabled a faster, more streamlined solution to the feedstock logistics process - all while cutting operating costs. This new equipment will reduce the cost of harvesting and delivering large square bales of homegrown feedstocks by more than \$13 per delivered ton.

FDC's efforts - along with their collaborating partners - support the Energy Department's sustained commitment to making biofuels an affordable, reliable, domestic alternative to fossil fuels.