

Red Shield Acquisition

RSA will construct an Integrated Biorefinery that will extract hemicelluloses from wood chips to make biofuel and other specialty chemicals at an existing pulp mill. The cellulose and lignin will be maintained in the pulp manufacturing process.

RSA in collaboration with the University of Maine will develop, demonstrate and commercialize a process to extract hemicelluloses from wood chips to make biofuel and specialty chemicals. When operating, the facility will produce 1.5 million gallons per year of butanol and create 16 new ‘green collar’ jobs and 80 construction jobs. The successful project will demonstrate the technical and economic feasibility to convert lignocellulosic extract to biofuel that will form the basis for a series of commercial scale biorefineries.

Project Description

This process will employ a patent pending hemicelluloses extraction process, within the pulp manufacturing step, followed by filtration, separation and concentration before entering biological conversion to produce biofuel and chemicals. Sugars extracted in the hemicelluloses stream will be converted to feed the biological processes.

The project will provide technical, business and operational data that are crucial to commercializing and deploying the technology to existing pulp operations across the United States.



Demonstration of an Integrated Biorefinery at Old Town Maine

Potential Impacts

As technology is proven at the IBR and economies of scale are achieved, It will provide a significant technical advantage over competing technologies since it can be integrated into existing pulp facilities and minimizes the need for expensive capital outlays.

Other Participants

RSA has collaborative agreements with University of Maine, Integrated Process Technologies, and Waldron Engineering.

Prime	Red Shield Acquisition (RSA)
Location	Old Town Maine
Feedstock (s)	Woody Biomass
Size	72 BDMTD
Primary Products	Butanol, Acetic Acid
Capacity	1.5 MMGY Butanol, 2.2 MMGY Acetic Acid
Award Date	January 2010
GHG Reduction	
Anticipated Job Creation	18 Permanent & 80 Construction
Company Point of Contact	Richard D. Arnold, President (dick.arnold@redshieldenv.com)