Bertch

CASE SUMMARY 3

BERTCH CABINET MANUFACTURING

Waterloo, Iowa
Black Hawk County

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The Company

Bertch Cabinet Mfg. is located in Waterloo, Iowa. Bertch has been creating high quality cabinets and accessories for nearly 30 years. During that time, the company has diversified and today manufactures a variety of home products including cabinets, surface solutions and solid wood interior doors.

Project Background

Bertch Cabinet Mfg. purchases millions of wood board feet per year. The main purpose of the project is to determine the actual quantity of wood scrap generated, the quantity ground for use in the boilers, the quantity shipped for animal bedding, and the amount sent to the landfill.

Incentive to Change

The company wanted to quantify the waste streams mentioned above. Using this information the company expects to create incentives within the organization to divert scrap from the landfill and identify other uses for it.

Results

1. Analysis of processes in order to diminish amount of waste generated

The quantity of hardwood waste generated in the processes is higher than desired. A detailed analysis of the fabrication processes is highly recommended.

2. Burning sawdust for electricity and steam generation

Bertch has operated a wood-fired boiler coupled to an electrical generator for more than 12 years. This arrangement could be expanded upon, potentially saving the company up to 80 percent of its electricity bill. An assessment is needed to determine the quantity of steam utilized in processes and heating. With that information, design options can be considered.

3. Selling sawdust for electricity generation
Sawdust can also be burned in an existing power plant boiler to produce energy. Selling sawdust at $0.85 per MM Btu, Bertch could receive $38,000 more in revenue than what is currently received from recycling. The power plant would also save in purchasing costs, making this a profitable venture for both parties.

Project Summary Table

Project Description	Environmental Impact	Economic Cost Savings	Status
Process Mapping	2,223 tons	$1.09 million	Recommended
Electricity Generation (sawdust)	12,000 tons of sawdust	$600,000 to $900,000	Recommended
Burning Biomass (sawdust)	5,000 for pet coke	$38,715	Recommended