

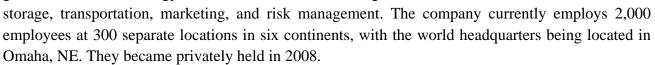
Project Overview

Intern: Alex Sellers

Major: Biological Systems Engineering **School**: University of Nebraska–Lincoln

Company Background

Gavilon is a global company that offers extended services to the grain, fertilizer, and energy industries in areas such as origination,





During the summer of 2012, Partners in Pollution (P3) interns Alex Sellers and Lais Speranza were asked to assist Gavilon in furthering their sustainable development initiatives. Their projects focused specifically on analyzing and reducing energy and waste consumption and reducing environmental impact. Facilities analyzed included the grain elevator at Grand Island, the liquid fertilizer manufacturer at Hastings, and the dry fertilizer manufacturer at St. Joseph, MO.

Pollution Prevention Benefits

Several pollution prevention recommendations were made and analyzed within the report. These suggestions were designed to reduce solid waste production, minimize energy consumption, reduce greenhouse gas emissions, and reduce environmental impact by changing or adding current processes within Gavilon's facilities.

Results

Table 1 below provides a concise overview of possible benefits at each facility analyzed.

Table 1. Potential Benefits of P2 Opportunities

Tangible Benefits	<u>Intangible Benefits</u>
\$70,732/year, 295,633 kWh/year, 45,000 lbs	352.3 MTCO2E/year greenhouse gas
solid waste/year	emissions
\$34,216/year, 28,453 kWh/year, 9,785,000 gal	371.1 MTCO2E/year greenhouse gas
water/year	emissions
\$1,722/year, 6,714 kWh/year	6.4 MTCO2E/year greenhouse gas emissions
	\$70,732/year, 295,633 kWh/year, 45,000 lbs solid waste/year \$34,216/year, 28,453 kWh/year, 9,785,000 gal water/year

Total: \$106,700/year, 330,800 kWh/year, 9,785,000 gal water/year, 45,000 lbs solid waste/year, 730 MTCO2E greenhouse gas/year