

Project Overview



Nebraska Industrial Assessment Center

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Industrial Assessments

- Trenton Agri Products LLC, an ethanol plant in Trenton, NE; examined steam trap leaks and leak prevention.
- Collins Aerospace, a military contractor focusing on aerospace products in York, NE; examined reducing the weight of hazardous waste and installing solar panels.
- Yankton Wastewater Plant, a wastewater treatment plant in Yankton, SD; examined installing solar panels.

Project Description

The project is a solar AR guide for future NIAC interns. The guide covers subjects such as what rebates are available in Nebraska and neighboring states and the average costs of purchase and installation of solar panels. It also includes useful tools for calculating estimated savings.

Environmental Benefits

Solar panels are environmentally beneficial because they reduce the amount of electricity a facility draws from the grid. Traditionally generated electricity on the grid is largely from plants fueled by coal and other fossil fuels, which have heavy environmental footprints and are well known for their atmospheric pollution. Solar panels decrease a facility's utility bills and environmental footprint and are a strong investment in the health of the environment.

Results

Table 1: Comprehensive benefits from summer work on IAC recommendations.

Benefit	Amount
Grid electricity usage reduction	4.7 million kWh
Reduction in greenhouse gas emissions	3,330 metric tons CO ₂ e
Electrical demand reduction	5,640 kW
Annual cost savings	\$295,000