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**Background**

As part of the Nebraska Industrial Assessment Center (NIAC) team, she assessed three manufacturers. These include Horton Holding, Inc. which manufactures fan clutches for semi-trucks and farming equipment, Aulick Industries which produces tractor trailers, and CS Precision that makes hydraulic coupling components.

**Project Description**

As part of these assessments, examples of the recommendations that were prepared include:

- Upgrading fluorescent fixtures to LED lighting fixtures. By converting to all LED lighting will result in reduced electricity use and demand, as well as lowering maintenance costs due to an increased life span for the lights. In addition, it is recommended that occupancy sensors are installed in the main plant restrooms to reduce energy use and demand
- Replace the existing fluorescent emergency exit signs with LED emergency exit signs.
- Replace existing outdoor fixtures with LED lighting fixtures.
- Install occupation sensor to operate certain lights.

**Pollution Prevention Benefits**

The benefits of the recommendations discussed above are summarized below in Table 1:

**Table 1: Recommendations Savings and Benefits**

Recommendation	Annual Cost Savings	Implementation Cost	Payback Period (years)	Energy Savings (kWh/yr.)	GHG Reduction (MTCO <sub>2e</sub> /yr.)
LED lights	\$115,600	\$21,400	5.4	140,000	104
LED lights	\$19,700	\$133,000	6.8	291,000	217
LED lights	\$5,000	\$45,000	9	36,000	27
Occupancy Sensors	\$120	\$440	3.7	2,600	5
LED Exit Signs	\$108	\$254	2.4	1,300	1
Outdoor LED fixtures	\$540	\$580	1.1	4,400	3
<b>Total</b>	<b>\$141,000</b>	<b>\$200,000</b>	<b>1.4*</b>	<b>480,000</b>	<b>357</b>

\*Total payback period was calculated by taking the total implementation cost divided by the total annual cost savings.