Intern: Michael Banwo
Major: Chemical Engineer
School: University of Nebraska-Lincoln

Background

During the summer with the Nebraska Industrial Assessment Center (NIAC), I helped assess two clients:

- Auburn WWTP and Utility Center – Auburn, NE
- Flexmag – Flexible Magnet Division – Norfolk, NE

Project Description

As part of these assessments, I was able to use my background in chemical engineering to prepare recommendations including:

- Insulation implementation
- Solar Panels implementation
- Air leak detection system implementation

Pollution Prevention Benefits

The potential benefits of the recommendations over the summer are summarized in below.

Recommendation Potential Savings and Benefits

Recommendation	Annual Energy Savings	Annual Cost Savings ($/year)	Implementation Cost ($)	Payback Period (years)
Insulation (2)	2213 kW 1047 kW	$121 $58	$388 $280	3.2 4.8
Solar Panels	24,927 kWh	$1,168	$39,707	34
Air Compressor	36,543 kWh	$616	$500	0.8
TOTAL	**3260 kW 61,470 kW**	**$1,963**	**$40,875**	