Project Overview

Nebraska Industrial Assessment Center Intern: Segun Samuel Oladipo
Major: Mechanical Engineering
School: University of Nebraska-Lincoln

Summer Activities
In this summer I was attached to 5 facilities assessment. In addition to the assessment, I also deployed strategies to onboard manufacturers for the program. My roles in these visits were lead analyst (1 assessment), analyst (all assessments), and safety and equipment coordinator in some of the visits. As the Lead Analyst for an assessment, I assisted in recruiting this manufacturer for assessment as well as acting as the liaison officer between the students and facility Manager. Also, I put together the together the final report for this assessment and ensured it was available for submission to Department of Energy.

Recommendations Description
In the assessments, I worked on preparation of several such ARs as convert liquid propane forklift to compressed natural gas, close up wash bay section, purchase secondary air receiver tanks and reduce compressed air operating pressure, replace condenser fan wire mesh, installation of water deduct meter, combined heat and power, onsite nitrogen generation.

Pollution Prevention Benefits
The indirect or intangible benefits to the facilities include reduction of greenhouse gas emissions, elimination of employee exposure to accidents and improved employee productivity.

Results
The pollution prevention benefits and results done by the intern are summarized in Table 1:

Table 1: Pollution Prevention Benefits and Results

AR	Annual Energy Savings	Annual Cost Savings	GHG Emission Reduction
Close up wash bay section	3,056 kWh/year	$271/year	2.9 $MTCO_2E$/year
Purchase secondary air receiver tan and reduce compressed air operating pressure	24,170 kWh/year	$1,325/year	23.1 $MTCO_2E$/year
Replace condenser fan wire mesh	-	$333/year	-
Convert liquid propane forklift to compressed natural gas	-	-	-
Onsite Nitrogen generation	-	-	-
Install water deduct meters	TBD	TBD	TBD
Total	**27,226 kWh/year**	**$1,929/year**	**26 $MTCO_2E$/year**