

## Continuous Energy Improvement – Case Study

### JR Simplot Helm



Energy management at the site has been highlighted as a critical process operation.

#### **Sustainability Objectives:**

Simplot's Helm facility is a leading producer of Nitric Acid, Ammonium Nitrate, and Can 17, 10-34-0. These specialty fertilizers are used all around the world.

JR Simplot Helm enlisted the aid of Strategic Energy Group (SEG). The SEG program focused heavily on the behavioral aspects of Continuous Energy Improvement. The plants Energy Team has a long-term goal to obtain an energy intensity reduction of 25% by the year 2019 (10 years) by implementing cost-effective energy management initiatives. Energy management in a complex ever-changing environment is as much a journey as a destination. Growth, new technologies, environmental concerns, availability of fuels, as well as new regulations and codes are a few of the challenges that were navigated.



#### **The Approach:**

Helm Plant engineer, David Albright, has been working at Simplot for more than two years. During that short time, with the direct support of SEG, David has been able to work with the Energy Team and other employees to drastically improve their energy waste.

Albright has focused on accomplishing the long term Company-wide sustainability goal by improving awareness and educating employees on energy efficiency and energy projects that will decrease the plant's energy usage in electricity, natural gas, and butane.

*With the tools and resources provided and supported by SEG, Simplot's Helm Facility hit their 10 year goal in only the second year!*

"The amount of energy we saved by taking simple steps to educate our employees and change procedures has been tremendous."



**The Outcome:** By David Albright

Helm finished the fiscal year with a solid month in the safety, quality, production, and energy departments at the Helm plant! Energy activities for August included wrapping up the first phase of the SEGEMA action items, completing our 2<sup>nd</sup> Energy Management Assessment, a 3-day DOE-level steam assessment including steam fundamentals training for maintenance and operations, DOE pump training for a couple of maintenance employees in Sacramento, and completion of our interior lighting upgrade project. Our overall energy intensity for the year was **reduced 26%** and butane intensity was **reduced 27%** from the baseline! Another positive is our gasoline purchases which have **dropped 70%** since switching most of our maintenance/utility vehicles with golf carts and mini trucks.

"Simplot has set out to reduce our energy intensity by 25% in the next 10 years. That's a huge goal, and in order to accomplish that, we must first recognize what our energy intensity is at the Helm plant, and then identify and implement projects that will decrease our energy usage, all while meeting production goals."

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