

# **Intertape Polymer Group and Energy Efficiency**

## **Energy Savings Through Energy Treasure Hunts and Summits**

### Overview

Intertape Polymer Group (IPG) in Danville has been an ENERGY STAR partner since 2009 and received the ENERGY STAR 2019 Partner of the Year – Sustained Excellence Award for its contributions to reducing carbon pollution through its energy efficiency efforts.

#### Who is IPG?

Intertape Polymer Group Inc. is a recognized leader in the development, manufacture and sale of a variety of paper and film based pressure-sensitive and water-activated tapes, polyethylene and specialized polyolefin films, protective packaging, engineered coated products and complementary packaging systems for industrial and retail use. Headquartered in Montreal, Quebec and Sarasota, Florida, IPG employs approximately 3,600 employees with operations in 30 locations, including 21 manufacturing facilities in North America, four in Asia and one in Europe.

## What is an Energy Treasure Hunt?

IPG first learned about Energy Treasure Hunts (ETH) from other ENERGY STAR partner companies and was interested in using the approach to engage plant employees in finding and implementing energy savings. An ETH is a Kaizen event, which is focused on continuously improving business functions and typically takes place over two days. The hunt utilizes a cross-functional team of people to identify areas of energy improvement. Solutions to the discovered opportunities are implemented during the ETH whenever possible. Items that cannot be addressed during the ETH are added to a priority list to be addressed as quickly as possible afterward. Any opportunities discovered that require more time, evaluation or resources to implement are documented and forwarded to the appropriate team for further evaluation.

# **How did IPG start doing Energy Treasure Hunts?**

In 2012, the company worked with ENERGY STAR and Danville Utilities for the pilot project that was then used as the prototype for <u>ENERGY STAR's training materials and guidance</u>. When the pilot project started, the guidelines were in development and IPG was one of the first facilities to test the training materials.



Participants in an IPG Energy Treasure Hunt

# What are the benefits?

- Energy reduction and efficiency are continual processes. IPG strives each year to invest in new, more efficient equipment, whether large (i.e. an industrial chiller) or small (i.e. changing out lighting systems to LEDs).
- ETHs provide training experience for energy engineers, production workers, and office personnel. When a group
  of people with diverse backgrounds takes part, participants learn from the varying perspectives.

### What are the best practices?

- All new employees at IPG's Danville facility receive training concerning IPG's Environmental Management System and Energy Management System upon starting at the company.
- Employees receive information throughout the year on plant performance and their role in achieving goals.
- In the past, IPG has held annual Energy Summits where representatives from the various facilities, including Danville, meet to receive additional training, hear guest speakers, and share best energy practices.
- Awards are given at the IPG Energy Summit in various areas of achievement.



2019 Energy Treasure Hunt Participant Training

### What are the results?

The ETH proved an effective method for finding low- or no-cost energy saving opportunities. Something as simple as changing the temperature five degrees one way or another could potentially save \$10,000 or more a year. The ETH participants identified over \$218,000 in savings opportunities with a reduction of 1,200 metric tons of greenhouse gases in the first year. In addition, the participants identified several other longer-term opportunities for energy savings. IPG included both the short- and long-term opportunities in its Energy Action Plan to help achieve its corporate energy and greenhouse gas reduction goals.

### How does continuous improvement play a role?

IPG has an Energy Coordinator who is part of the corporate energy team, which holds monthly meetings in addition to the annual energy summit. The Danville plant has an energy team that works on projects year-round. The plant continually improves its energy efficiency as the energy team evaluates long-term opportunities identified during ETHs. The Danville plant has an energy monitoring system with a dashboard that is connected to the plant's electric, gas and water meters. This allows the plant to see what is happening in real time and address issues immediately. The team has completed six ETHs at the Danville facility. Overall, IPG has completed 15 ETHs corporate-wide, engaging 183 employees and identifying over \$1.9 million in savings opportunities.

## How can other facilities implement these programs?

IPG has established a local Association of Energy Engineers (AEE) Chapter, which is an energy manager network in Danville, Virginia. This network helps advance energy efficiency at local companies and promotes ENERGY STAR tools and resources. IPG also invites participants from external companies and the local utility to participate in the ETH and reaches out to the public through their local AEE Chapter to assist others in performing ETH's. Once a year, the Danville chapter of the AEE performs ETHs for free. This has included other companies, the Boys and Girls Club of America, and the Epiphany Episcopal Church. The free ETHs provide access to energy experts, allowing more local groups to reduce their energy consumption, costs and carbon footprint.