

Iowa Insulation Wins an Award of Excellence for their 3M Project

Iowa Insulation, Inc. was recognized with a 2009 Award of Excellence in the Green Building/LEED \$0 - \$500,000 Category. The award was presented based on the company's work on 3M – Knoxville, IA. Criteria for the award included complexity of the project, attractiveness, unusual challenges, innovation, safety, and budget compliance.

PROJECT POINTS

- Energy conservation project
- Added additional insulation to existing mechanical piping systems and equipment which reduced annual natural gas usage by 10%.
- By reducing the amount of natural gas burned, emissions were reduced by 1,100 metric tons of CO2 equivalents. This is the equivalent to the emissions from 2,582 barrels of oil or 126,007 gallons of gasoline!
- The payback for the project was less than 20 months and the annual return on investment is 60%.
- Since the insulation stays in place for 25 years or more,

the cumulative savings and emissions reductions are very significant.

- Annual energy savings of \$177,619.00 X 25 years = \$4,440,475.00
- 1,110 x 25 years = 27,750 metric tons of CO2 equivalents

Adding additional mechanical insulation has many other benefits too, such as:

- Burn protection for employees
- More comfortable working environments by lowering ambient temperatures
- Improves appearance of mechanical rooms
- Lowers maintenance costs
- Extends equipment life



Left to Right: Todd Lampe, vice-president of Iowa Insulation, Darrell Bunting, president of Iowa Insulation, Jim Oberbroeckling, senior resident engineer of 3M, Jason Oglesby of Alliant Energy, Dave Freeman, supervisor of Iowa Insulation and Andrew Nelson of Iowa Insulation.

Alliant Energy works with Iowa Insulation on energy efficiency projects

Iowa Insulation designs custom-made insulation blankets for the 3M Company

Management at 3M Knoxville received assistance from Interstate Power & Light Company (IPL), an Alliant Energy company and Iowa Insulation as they explored ways to become more energy efficient. The energy experts were able to demonstrate to 3M leadership how an energy savings project could help lower operating expenses, decrease emissions and advance their competitive position.

3M Knoxville installed custom-made removable insulation blankets to cover exposed areas of steam pipes. The installation resulted in a gas use reduction of 304,061 therms, which avoids more than 1,520 metric tons of carbon dioxide. This is equivalent to removing the CO₂ emissions from 172,566 gallons of gasoline consumed or 3,536 barrels of oil consumed.

In addition to improving its environmental performance, 3M will realize an estimated savings on its annual energy bill of \$238,427.00. Part of the insulation project included training 3M maintenance staff on the importance of energy savings. Employees observed new areas where insulation could be added. A follow-up project resulted in an additional \$30,000 energy savings per year.

"We saw an immediate change after installing the insulating blankets," says Jim Oberbroeckling, 3M Company. "Saving energy is an important goal for us at 3M Knoxville. We want to thank Alliant Energy and Iowa Insulation for identifying this opportunity in energy savings."

"The impact of this energy savings project is huge. Saving money on set operating costs is just like earning more profit," says Darrell Bunting, Iowa Insulation. "Our goal at Iowa Insulation is to help customers tap in to the power of energy conservation through mechanical insulation. We would like to thank the leadership of 3M for the vision to make this energy-saving project happen. From a financial perspective, the return-on-investment over 25 years is 1,500 percent!"

3M Knoxville manufactures pressure sensitive tapes that are sold worldwide into the industrial, automotive, and construction markets. Worldwide exports from Knoxville exceed \$50 million per year. Currently the plant occupies over a half a million square feet of manufacturing and warehouse space and employs 550 employees.

"It was a pleasure working with 3M Knoxville on this project," says Susan Koch – Manager - Sales, Alliant Energy. "I applaud the company for everything it has done to become more energy efficient."

Making energy-savings improvements in business, farm or commercial facilities reduce energy use and result in lower energy bills for years to come. Energy experts are available to identify ways your company can reduce energy use and provide estimates on how much improvements will

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cost, as well as how much your business can expect to save. For more information call 1-866-ALLIANT. Alliant Energy is an energy-services provider with subsidiaries serving approximately one million electric and over 420,000 natural gas customers.

Providing its customers in the Midwest with regulated electric and natural gas service is the company's primary focus. Interstate Power and Light, the company's Iowa utility subsidiary, serves 539,000 electric and 239,000 natural gas customers. Alliant Energy, headquartered in Madison, Wis., is a Fortune 1000 company traded on the New York Stock Exchange under the symbol LNT. For more information, visit the company's website at www.alliantenergy.com.