

Building business competitiveness in Alberta: Part 2



Empowered employees can be champions of efficiency gains

Businesses can increase their competitive advantage by fostering a continuous improvement mindset. Since there are countless ways to reduce energy consumption, it is a key area in which to rally employees to look for incremental improvements. The benefits can include reducing energy use, trimming operational costs, improving process efficiencies and lowering greenhouse gas emissions.



In part 1 of this blog we saw how CSV Midstream is using energy efficiency measures to find cost savings and improve processes. In this blog, we learn how Lafarge is leveraging their employee base to uncover significant natural gas and power savings.

Harnessing the power of employees to lower energy use

Lafarge Canada Inc. is the largest provider of diversified construction materials in the country and has seven ready mix plants, two asphalt plants, concrete pipe and precast operations in the Edmonton area. In April 2019, Lafarge joined Energy Efficiency Alberta's Strategic Energy Management (SEM) program. Two Edmonton ready mix facilities, Petroway and Winterburn, participated. Numerous low or no-cost energy efficiency improvements and operational upgrades were implemented across the two sites such as changing pump timers and lowering the temperature a few degrees on their large outdoor aggregate heating pads, which require a lot of natural gas to heat, especially in cold outdoor temperatures. Employees were engaged and identified incredible savings simply by turning things off when not in use, such as truck block heaters, conveyor belts, lighting and computer monitors.

With excellent uptake from its operational employees and numerous incremental costs savings found, after only eight months the Winterburn site was showing an eight per cent improvement in natural gas use and a 16 per cent improvement in electricity use. At Petroway, natural gas consumption (per unit of production) was down 23 per cent. Electricity use had dropped about 110,000 kWh since April 2019. On electricity and gas combined, the plant saved about \$85,000/year.

"Participating in the SEM program has been enormous for Lafarge. We have benefited by having access to energy specific resources and specialists to aid in achieving energy reduction, and in training assistance. One facet of the SEM program that we have particularly appreciated is the encouragement and the guidance and keeping us on track in achieving our objectives. The energy audits have been useful in identifying things that may have not been obvious to us, and



we are able to replicate those learnings at other facilities." – William Gowdy, Environment & Public Affairs Manager, Northern Alberta & Northern Saskatchewan



William Gowdy holds stickers dispersed to all product lines. Each operation then places stickers by light switches, or by equipment as reinforcement and a reminder to turn off lights or equipment when not in use.