Case Study - Sustainability

**SITUATION:** An international leader in cement and concrete production identified energy as their highest operating cost. Electricity represented 13% of consumption but 48% of energy costs, and compressed air made up a significant portion of this cost. They estimated 30% savings potential through leak reduction, better control practices, and modernizing the compressors and distribution piping. The company undertook a progressive program over several years to evaluate and optimize compressed air production in five US plants with a combined power consumption of 44 million kWh annually for compressed air.

**SOLUTION:** They conducted extensive air system audits and implemented system wide improvements to address poor controls, leaks, etc. Their new systems included controls that more accurately track consumption in real time.

**OUTCOME:**
The results:
- A reduced carbon footprint by 23 million lbs of CO₂
- An 8% improvement in specific power (kW/100cfm)
- Improved pressure stability in all five plants
- An average of 43% reduction per plant (range was 23 to 64%)
- Total energy savings over 19 million kWh annually

Not Just Good for Public Relations. For many companies (especially publically traded companies) sustainability has become a buzzword that the PR or Marketing team writes into corporate brochures, ads, and press releases to positively influence public opinion. Fortunately, when it comes to compressed air, the actions that reduce the carbon footprint and the waste stream are also making real and significant contributions to the bottom line, sustaining profitability in addition to environment benefits.