

real success:

a profile of HARBEC Plastics Inc.

HARBEC Plastics Inc., a custom-injection molder in New York, is an extraordinary example of how, with persistence and a commitment to overcoming challenges, any type of business can be sustainable. HARBEC manufactures highly-toleranced tooling, machined components, and quality injection-molded parts for the automotive, medical, aerospace, and communications industries. Since 1977, before “sustainability” became a household term, HARBEC’s founder, Bob Bechtold, was committed to minimizing HARBEC’s environmental footprint. According to Bechtold, innovative energy solutions and early adoption of new technologies have been important components of HARBEC’s green success.

Injection molding is not an easy industry to green and HARBEC’s energy needs are significant. The company’s complex melting and freezing processes require approximately three million kWh of power per year. To meet this demand through green solutions, Bechtold combined renewable energy generation with an innovative energy management system. In 2002, he installed a 250 kW wind turbine at HARBEC that supplies approximately 25 percent of HARBEC’s electricity. In line with the company goal of achieving carbon neutrality by 2016, Bechtold is considering installing an additional wind turbine to supply 1500 kW of clean, renewable wind power.

HARBEC is one of the first companies in the world to successfully use a co-generation or combined heat and power (CHP) system powered completely by micro-turbines. Heat energy that would otherwise be wasted is used for space heating and air conditioning. HARBEC’s CHP system uses natural gas to power micro-turbine generators that create electricity. The hot exhaust from the electric generators goes to a heat exchanger that transfers the heat to water. The heated water then warms the building through a radiant in-floor heating system in winter. During summer, the hot water goes to an absorptive chiller to provide air-conditioning. This system saves two to three times more energy than a conventional system. HARBEC’s energy use can be viewed in real time on the company web site.

HARBEC also uses more conventional approaches to saving energy such as high efficiency lighting fixtures, motion sensor



activated lighting, natural lighting, and double insulation. The company’s energy-efficiency measures extend to its vehicle fleet, which consists of electric, hybrid, and alternative fuel vehicles.

Driven by a strong belief that the wise use of resources makes for better business, Bechtold believes that inefficiency and pollution are wastes that negatively impact profitability. While intrigued by the potential for renewable energy, he realized that environmentally responsible investments still required positive returns. By positioning HARBEC to withstand unpredictable energy prices and be prepared for greenhouse gas regulations, this potential is being realized.

HARBEC’s energy solutions have garnered numerous awards and public recognition for the company. Energy efficiency improvements continue to save money and put HARBEC ahead of its competitors. Bechtold’s long-term thinking and **triple bottom line** philosophy have been in HARBEC’s best economic interest, and have also created a better work environment for employees through improved air quality and reduced noise in the workplace. A better work environment leads to improved quality, service, and overall value for its customers.

Bob Bechtold believes perceived barriers to greening are a “cop out” in today’s world and that “it’s in your best economic interest....to do more with less.” He concludes: “sustainability is absolutely critical to [any business’] future success.”

For more information about HARBEC Plastics Inc., visit www.harbec.com.

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