



Working together for a healthier world™

Synergy in Energy Savings: The Whole is More Than the Sum of its Parts



[The Research Technology Center](#) (RTC) in Cambridge, Massachusetts is a vanguard of Pfizer's biotherapeutic ("[BioTx](#)") sites. The RTC's area of particular focus includes the promising RNA (ribonucleic acid) interference (aka "RNAi") field, as well as stem cell research, and other emerging biotech technologies.

The RTC is a state-of-the-art scientific facility. It is also energy intensive. Wanting to contribute more significantly to Pfizer's public goals to reduce greenhouse gas (GHG) emissions and reasoning that monies spent on utility bills directly impacted available funds for research, the RTC undertook an energy audit of the facility in 2002. They found that the building was consuming more energy per square foot than the industry average.

The RTC partnered with NStar Electric & Gas, their local utility company, and various local business and government partners in an initiative to significantly lower that number. By starting slowly and simply, one project at a time, the energy conservation program has resulted in measurable, award-winning successes since its inception in 2002.

Specific measures included installing a capacitor bank, variable speed drives on rooftop air handlers, installing occupancy sensors on the lighting system throughout the building, and improving the cooling system by adding free cooling and modifying cooling tower controls to automate the chiller plant process. Some impressive "net-net" numbers:

- Invested a total of \$1,382,000 and earned NSTAR rebates of \$67,000, resulting in a payback period of less than 2 ½ years.
- Annually:
 - Reduced electricity consumption by 400,000 kilowatt-hours, representing a 15% decrease in use.
 - Saved costs at least \$50,000 (after consideration of one-time rebates).
- Per Colleague:
 - Reduced individual usage of electricity as much as 2,000 kilowatt-hours (2004-06).
 - Saved costs of as much as \$8,000 per person (2002-08).

How was this done? Management and colleague commitment, awareness, and implementation – simple as that! And, the energy and cost savings were not the only benefits. RTC was recognized widely for these efforts. For example, the RTC was showcased in case studies with Nstar Electric and NEEP and received the City of Cambridge "Go Green Business Award." Additionally, Pfizer was honored as a *Business Leader for Energy Efficiency* by NEEP at their 2007 Northeast Energy Efficiency Summit.