Retrofit Case Study
Cambridge Space Heaters vs. Hot Water Boiler
Manufacturing Plant

**Before – Hot Water Boiler**

- **Building Specifications**
  - 78,000 ft²
  - Over 50 year old building
  - 18' Ceilings – Lots of Glass
  - Located in Broadview, IL

- **Performance**
  - Uneven temperatures
  - Cold draft areas
  - High Maintenance Cost ($15,000)
  - High Energy Bills

- **Operating Costs**
  - Based on: 89,822 therms for 2005-06 heating season
  - Normalized to 30 year averages
  - $0.87/ft² Gas cost @ $0.75/therm

**After – Cambridge Space Heaters**

- **Performance**
  - More even temperatures
  - Reduce Maintenance Cost
  - Reduced Energy Bills

- **Operating Costs**
  - Based on: 43,376 therms for 2006-07 heating season
  - Normalized to 30 year averages
  - $0.36/ft² Gas cost @ $0.75/therm

“I expected the energy savings by upgrading to the Cambridge system. I overlooked the $15,000 in annual Boiler maintenance cost.”

- Wayne Mackey
  Plant Manager

**Summary**

The Cambridge system used **52% less** gas.
The Cambridge system saved approximately **$34,835/year** in gas cost operating at $0.36/ft² vs. $0.87/ft².