

# Improving Efficiencies and Lowering Energy Costs



*"In a continuing effort to remain cost competitive in the baby food industry, Beech-Nut looks for opportunities to put in place energy efficient equipment along with modifications to existing equipment that will enhance our energy producing systems for the long term. By participating with NYSERDA and Clough, Harbour & Associates in a co-funded energy efficiency analysis, we identified and implemented enhancements to our boiler operations, refrigeration and compressed air systems that will help us in obtaining cost savings through energy reduction and improved efficiencies for years to come. We truly appreciate the opportunities that NYSERDA provides industries such as ours in helping us to not only reduce our energy costs but reduce our overall energy requirements. Reducing energy requirements through programs such as these is not only good for industries, but for all of us."*

- Jeff Heiser  
Plant Manager  
Beech-Nut Nutrition Corporation



## Boiler Efficiency and Compressed Air

### Canajoharie, Montgomery County

Beech-Nut Nutrition Corporation, a producer of baby food located in Canajoharie, Montgomery County, worked with Clough, Harbour & Associates LLP and The New York State Energy Research and Development Authority (NYSERDA) to conduct an energy efficiency analysis. The facility is approximately 1,000,000 square feet and employs 363 people. The study focused on determining the most economical means to improve the efficiency of the boiler plant, capture waste energy, and improve efficiencies of compressed air and refrigeration systems.

As a result of the study, three Energy Conservation Measures (ECMs) were implemented, and will result in an annual savings of approximately \$72,000 for the facility. The measures include the following:

- Replacement of the existing boiler controls with high efficiency boiler controls  
*Implementation Cost: \$50,000; Annual Savings: \$22,300; Payback: 2.2 years*
- Capture refrigeration system compressor heat to pre-heat boiler feed water  
*Implementation Cost: \$20,000; Annual Savings: \$24,000; Payback: 1 year*
- Install high efficiency two-stage variable-displacement compressor  
*Implementation Cost with NYSERDA's incentive: \$69,000; Annual Savings: \$26,000; Payback: 3 years*

The compressor was installed with the help of the **New York Energy Smart<sup>SM</sup>** Commercial and Industrial Performance Program. NYSERDA provided an incentive of \$13,000 based on annual electricity savings of 177,000 kWh. The cost of installing all of the measures, after accounting for NYSERDA's incentive, was \$140,000. With an annual savings of approximately \$72,000, Beech-Nut Corporation will recover its investment in 2 years. Through this project, Beech-Nut Corporation was able to improve plant efficiency and reduce its energy costs.

### New York Energy Smart<sup>SM</sup>

All **New York Energy Smart<sup>SM</sup>** programs are funded by a System Benefits Charge (SBC) paid by electric distribution customers of Central Hudson, Con Edison, NYSEG, Niagara Mohawk, Orange and Rockland, and Rochester Gas and Electric. NYSERDA, a public benefit corporation established by law in 1975, administers SBC funds and programs under an agreement with the Public Service Commission.

**New York Energy Smart<sup>SM</sup>** programs are designed to lower electricity costs by encouraging energy efficiency as the State's electric utilities move to competition. The programs are available to electric distribution customers (residential, commercial, institutional, and industrial) who pay into the System Benefits Charge (SBC).