

Updated: 07/02/2025

Non-Energy Benefits Case Studies

Case 1. **2006 Rohm and Haas** – Furnace Replacement Project Saves Energy and Improves Production at a Chemical Plant

Summary: This chemicals producer **process heating** energy efficiency project reduced energy costs and improved material/chemical reclamation process which improved throughput.

Reference Link: https://docs.nrel.gov/docs/fy06osti/39276.pdf

Case 2. **2001 Fetzer Vinyards** – Heat Exchange System Improvement Saves Energy and Improves Production at a Winery

Summary: This company implemented a project to improve its **process heating**. The project enabled the winery to reduce its annual natural gas consumption and water consumption, leading to energy savings. The project also increased productivity, reduced material waste and reduced labor costs.

Reference Link: https://www.osti.gov/servlets/purl/1216015

Case 3. **2003 American Water Heaters** – Compressed Air System Optimization Project Saves Energy and Improves Production at Water Heater Plant

Summary: An example of **compressed air** system inefficiency that adversely impacted production equipment and caused excessive maintenance requirements, all of which were resolved by energy efficiency.

Reference Link: https://docs.nrel.gov/docs/fy04osti/33648.pdf

Case 4. **2002 John H. Harland Corporation** – Compressed Air Project Improves Efficiency and Production at Harland Publishing Facility

Summary: This publishing company's printing machine reconfigure reduced the amount of **compressed air** needed and reduced energy costs and the need for new compressor purchases. NEBs include increased product quality, decreased production cycle time and reduced maintenance.

Reference Link: https://docs.nrel.gov/docs/fy02osti/31713.pdf

Case 5. **2001 Mead- Johnson Nutritionals** – Compressed Air System Renovation Project Improves Production at a Food Processing Facility

Summary: An example of **air compressor** optimization project which resulted in energy savings and improved productivity. Also, this project avoided unnecessary new compressor purchase.

Reference Link: https://docs.nrel.gov/docs/fy01osti/30231.pdf

Case 6. **2001 Solutia, Inc.** – Compressed Air System Optimization Saves Energy and Improves Production at a Synthetic Textile Plant

Summary: This synthetic textile plant improvement project on a **compressed air** improved the efficiency of the plant's compressed air system, leading to substantial energy savings, better product quality, and lower maintenance costs.

Reference Link: https://docs.nrel.gov/docs/fy01osti/30230.pdf

Case 7. **2005 CEMEX** – Cement Manufacturer Saves 2.1 Million kWh Annually with a Motor Retrofit Project

Summary: This cement manufacturer saved energy costs, reduced maintenance cost and improved productivity with their **motors** retrofit project.

Reference Link: https://docs.nrel.gov/docs/fy06osti/38223.pdf

Additional questions? Contact: nebs@nrel.gov