

First Data

ESTIMATED CUMULATIVE RESULTS (2010-2013)

First Data is the global leader of payment technology and services solutions for merchants, financial institutions and card issuers globally, with operations in 35 countries, serving over 6 million merchant locations and over 3,500 financial institutions.

\$11.4M

IN AVOIDED ENERGY COSTS

124,300

METRIC TONS OF GHG EMISSIONS AVOIDED

42%

GHG EFFICIENCY IMPROVEMENT

Key Environmental Performance Area: GREENHOUSE GAS EMISSIONS (FACILITIES)

RESULTS

In 2013, as part of the Green Portfolio Program, First Data continued measuring and managing energy consumption in its United States-based data centers against a 2009 performance baseline.

In absolute terms, GHG emissions from data centers have decreased approximately 25% compared to a 2009 baseline, while efficiency has improved approximately 42% (GHGs/transaction) during the same time period. The improvements in efficiency have helped First Data to avoid almost \$11.4 million in costs and an estimated 124,300 metric tons of GHG emissions since 2009.

First Data: Data Center GHG Efficiency (2009 Baseline)¹

Estimated Results	2010	2011	2012	2013	Total
Avoided GHGs (metric tons)	15,000	27,500	37,100	44,600	124,300
Avoided costs	\$1,300,000	\$2,500,000	\$3,200,000	\$4,400,000	\$11,400,000
Change in productivity (GHGs/transaction number)	-16%	-13%	-12%	-10%	-42%
Change in absolute GHGs	-4%	-7%	-9%	-8%	-25%

Notes:

- See methodology section for description of avoided and efficiency calculations.
- The total % change is aggregate change between the baseline year and the most recent year of data. All other % changes are expressed as year-over-year.
- Reported numbers are rounded and may not produce the same results when used to analyze percent changes or total impact.

ACTIONS

In 2013, First Data achieved these results through the following practices:

- Replaced three legacy chillers with high-efficiency units at the company's Nebraska data center
- Replaced the chiller plant controls system and control logic to reduce the amount of equipment required to operate per tonnage of cooling capacity required
- Replaced one additional legacy chiller at the company's Arizona data center along with the controls system and logic improving the performance of the chiller plant by reducing the kW required to support significant cooling

FUTURE PLANS

Through 2014 and for 2015, First Data is continuing to focus on the efficiency of its data centers and is currently considering or actively implementing the following additional practices:

- Replacing the final two legacy chillers in the Arizona facility with high-efficiency units and continuing to tune the chiller plant control system to deliver efficiency
- Replacing HVAC controls in UPS rooms at two data centers
- Upgrading lighting in the Arizona data center
- Replacing part of the legacy computer room air conditioning inventory with high-efficiency units with additional capacity
- Additional data center consolidation

As a global company, First Data recognizes the importance of operating at the highest level of accountability for its clients, its employees, and the environment in which they work. First Data enrolled in the Green Portfolio Program in 2010 and is reporting results for the fourth time. To learn more about First Data's commitment to Corporate Social Responsibility, visit the company's website.

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¹ In 2013, GHG calculations were updated in order to align with the Environmental Protection Agency eGRID 2014 v1 year 2010 emissions factors released in February 2014. The results for prior years were recalculated using the EPA 2014 ratios and thus may not be comparable to previously reported results.