



Cognizant Technology Solutions

India Pvt. Ltd

Creating a culture toward achieving energy efficiency

CASE STUDY

Summary

Energy program initiated in the year 2009 helped realize many benefits and also helped develop best practices through understanding of energy use, energy sources and opportunities for improvement.

Objective of Intervention

Cognizant is one of the fastest growing global providers of information technology, consulting, and business process outsourcing services. A key target of CTS environmental stewardship programme is to reduce our absolute emissions, primarily arising out of grid electricity consumption and captive power generation from diesel generators. CTS believe that their associate population is a good normalizing indicator for business. CTS captures power generation, purchased electricity consumption, and business travel are all directly related to the number of associates employed in the company.

Type of Intervention and Location

Cognizant has operations geographically distributed around the world with India housing the majority of our operations. Cognizant has received the Environmental Management System (EMS) certification from DNV-GL for ISO 14001 standard. Cognizant conducts energy audits and implements corresponding measures to reduce energy consumption. Most of the buildings that the company owns are in India and run as per BEE Bureau of Energy Efficiency (Energy Efficiency compliance regulation agency in India) guidelines. Additionally, all new Cognizant facilities are being built to comply with BEE 3 Star rating and for the old buildings we have launched an energy efficiency program which has already helped achieve and go beyond the set energy consumption targets.



Description of Intervention

Facilities energy optimization and GHG management have been achieved in CTS using Six Sigma and Lean techniques. The programme covered all aspects of CTS infrastructure—office space, utilities, desktop hardware, data centres, etc. Energy performance was measured and reported every month, and prizes for best energy performance were awarded every year to motivate our operations team to push further reduction in emissions. This operational improvement delivered the first set of results as explained below:

- Cognizant has received the Environmental Management System (EMS) certification from DNV-GL for ISO 14001 standard
- New Buildings are LEED® Gold certified.
- Cognizant conducts energy audits and implements measures to reduce energy consumption. Old inefficient buildings were retrofitted with EE equipment.
- All existing Cognizant facilities are in compliance with BEE 3 Star rating.
- The major energy saving measures implemented includes following:
 - Optimized building design as per climate conditions
 - EE building envelope
 - LEDs for lighting system
 - Lighting controls integration such as occupancy sensors, daylight controls, and programmable timers.
 - Increased set point temperatures to reduce energy consumption
 - EE air conditioning systems
 - Energy management controls, and
 - BMSs

Intangible or Tangible Benefit

Implementation of all above-mentioned energy conservation measures has resulted in an energy saving of more than 20 per cent energy in new and existing buildings.

Initial target of energy saving reduction was around 25 per cent over 5 years (2008–13) on a global basis. The target was achieved, and a new target of achieving 40 per cent reduction by 2015 was set. This target has also been achieved.

Overall the program produced a 51 per cent reduction in per capita carbon emissions and a reduction of 56 per cent in kWh/person/month from 2008 through 2014. The success of the program stems from the fact that the process fixes that we did three years ago continue to sustain and deliver energy savings even



today. The scale of deployment (50 facilities across 10 cities) and the uniformity of the adoption is a unique factor of the program.

Business Growth with Energy Efficiency	2014	2013	2012	2011	2010	2009	2008 (baseline)	% Reduction from baseline
Global Revenues (in Billions)	\$10.26	\$8.84	\$7.34	\$6.12	\$4.59	\$3.25	\$2.82	NA
Per Capita Energy Efficiency (kWH/person/month)	145	155	172	197	232	261	327	56%

About Cognizant

Cognizant is a leading provider of consulting, information technology and business process services. Our passion is helping clients worldwide build stronger businesses and maximize their competitive performance through innovative technologies and processes. Over 219,300 associates – connected by our global delivery network -- are committed to using their strategic insight, technology expertise and deep industry and business process experience to help clients harness the forces shaping the future of work.

India is a crucial piece of our global business strategy, with global delivery centers in Mumbai, Bangalore, Chennai, Coimbatore, Gurgaon, Hyderabad, Kerala, Kolkata and Pune.