

GE Environmental Report – China (2012)

Environment, Health and Safety (EHS) commitments are a priority for GE, no matter where it operates in the world. GE China has specific requirements for protecting the environment, and safeguarding the health and safety of its employees, including: (a) complying with applicable Chinese laws and GE's policies; (b) providing employees with a safe and healthy working environment; (c) Assessing EHS legal and reputational risks impacts before starting or changing a business activity, venture or process in China; (d) to the extent reasonably practicable, reducing the generation, use and release of toxic and hazardous materials; (e) disclosing GE China Environmental Report publicly; and (f) continuously improving the EHS management system and performance as an integral part of GE's operational strategy.

GE China releases this Environmental Report publicly as part of its strategy to meet these requirements and promote EHS awareness in China. Compliance with China's laws and regulations is at the core of GE's EHS policy, and a precondition for any operation or investment in China. GE uses local EHS regulatory guidelines and self-assessment checklists, developed for national regulations on air, water, waste and other environmental areas, to ensure compliance with EHS requirements during China's rapid economic transformation. This enables GE China to operate responsibly and increase its business in China's growing market.

Starting in 2004, GE began collecting greenhouse gas (GHG) emissions data for its worldwide operations. In 2006, GE began gathering waste generation and water consumption data. In 2009, GE China released the "GE Environmental Report – China (2008)" disclosing environmental performance data for the first time and demonstrating GE's commitment to environmental transparency. This report presents key environmental data for GE China operating facilities in 2012.

I. Data Sources

In 2012, GE had 25 manufacturing facilities (wholly owned or majority stake) in China. The number of GE China facilities is the same as 2011. However, one facility was closed in 2012, while a different facility acquired in 2011 began to report environmental data from 2012. This report gathers environmental data from Pollutant Discharge Registration Forms submitted to government agencies or daily environmental monitoring/management by the 25 facilities in 2012. Greenhouse gas (GHG) emission data were collected from GE's internal reporting system.

In order to better represent real changes in environmental impacts caused by increasing production capacity, or affected by acquisitions and divestitures, this report tracks Environmental Release Intensities, or ratios between environmental impact and GE China Output¹. This metric

¹China Output: revenues from all GE China facilities' production, including sales in China and overseas, but imports to China and China's service revenues excluded.

reflects environmental impact per unit of manufacturing revenue, allowing for historical comparisons and reflecting productivity and material efficiency against production increases, which resulted from effective environmental program implementation.

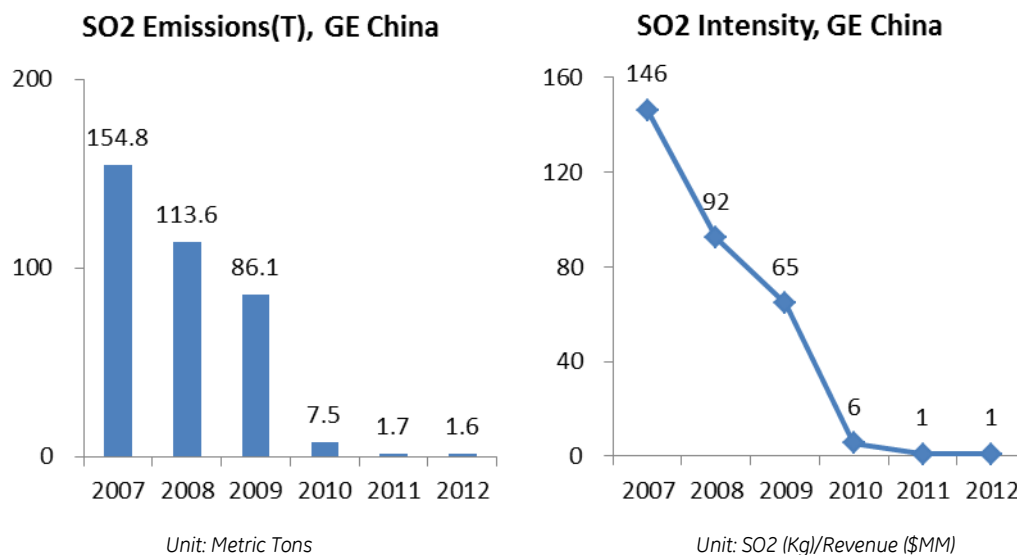
Data in this Report excludes GE Advanced Materials Business (Plastics, Silicone and Quartz) facilities, which were sold between 2007 and 2008.

II. Key Environmental Indicators

As in past years, this report covers sulfur dioxide (SO₂), greenhouse gases (GHG), fresh water use, chemical oxygen demand (COD) and hazardous waste. In addition, nitrogen oxides (NO_x) and ammonia nitrogen (NH₃-N) were in line with China 12th 5-year Environmental Protection Plan, in which NO_x and NH₃-N are added as targeted pollutants.

1. Air: Sulfur Dioxide (SO₂) Emissions

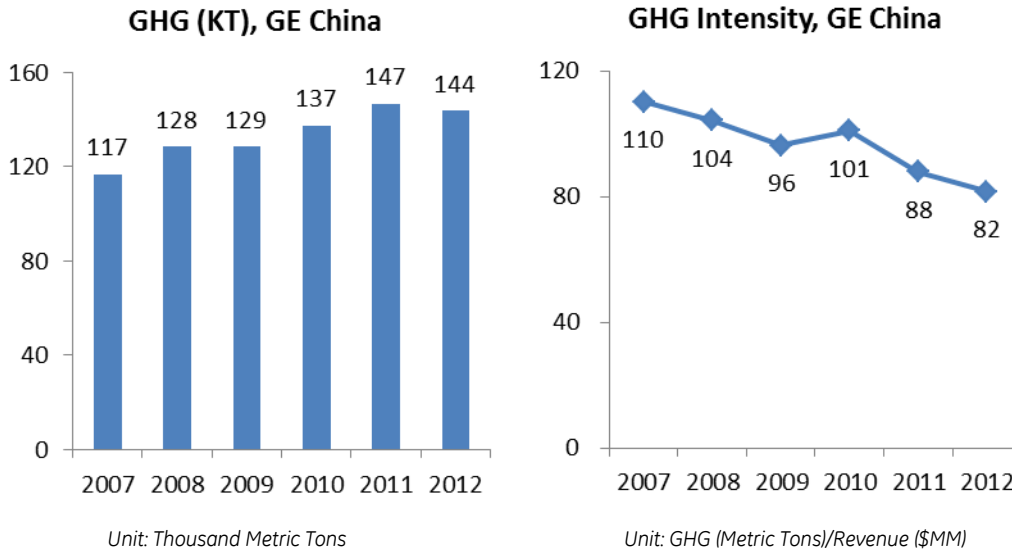
In 2012, sulfur dioxide (SO₂) emissions from GE China facilities were 1.62 metric tons, almost at the same level of 2011. This represents one percent of GE's SO₂ emissions in 2007. The 2012 emission intensity is even less than 1% of the level in 2007.



SO₂ emissions have been significantly reduced by GE operations in China through the steady replacement of coal, heavy oil or diesel-fired combustion equipment with natural gas systems. Progress has been historically driven by GE Lighting facilities, which had successfully replaced all heavy oil industrial furnaces with natural gas by May 2010.

2. Air: Greenhouse Gas (GHG) Emissions

GE China's 2012 greenhouse gas (GHG) emissions were 144,000 metric tons of carbon dioxide equivalents (CO₂e), a decrease of 2.0% from 2011. Our emission intensity decreased by 12%. GE China invested heavily in new production capacity in 2011 with the acquisition of 5 new facilities, which led to a spike in emissions for the year. As new production came online in 2012 and energy saving actions have been taken in 2012, both GHG total emissions and intensity dropped accordingly.



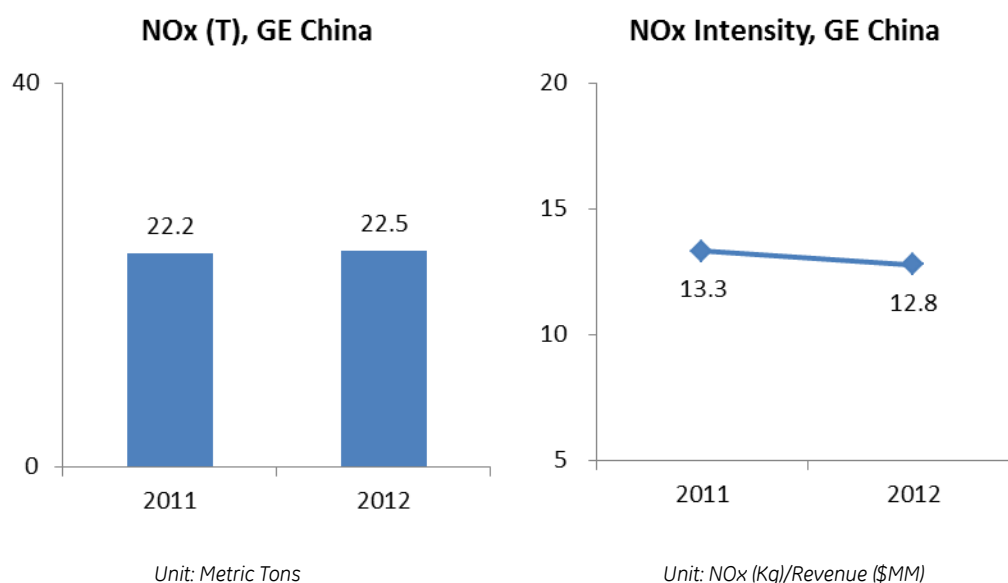
GE China's GHG emissions arise from electricity use and the consumption of fossil fuels during manufacturing. GE China has been displacing carbon intensive fuels with cleaner fuels—heavy oil to natural gas for example. Upgrading these combustion systems increased our fuel efficiency and reduced our CO₂ emissions.

GE is also a strong proponent of "Treasure Hunts," or competitions that leverage the expertise and creativity of GE employees to identify energy-saving opportunities. Very good results have been achieved via "Treasure Hunts" across GE China facilities in 2012. For example, GE Aviation Suzhou site has reduced electricity consumption 16% from 2011. They introduced new compressors and updated lighting in 2012, which saved 1,500 metric tons of carbon dioxide equivalents. GE China Technology Center reduced 1,200 metric tons of CO₂e by replacing refrigerators with an energy-saving model. The total electricity consumption dropped 1.43 M KWh year-over-year and saved cost by RMB 1 M.

More information on GE's GHG inventory, including methodology, Quality Control/Assurance processes, baseline verifications, and the extent to which GE follows the World Resources Institute (WRI)/World Council for Sustainable Development (WBCSD) GHG Protocol can be found at www.ge.com/citizenship/performance_areas/environment_health_safety_inv.jsp

3. Air: Nitrogen Oxide (NOx) Emissions

Since 2011, GE China began to track and analyze NOx emissions. GE China facilities released 22.5 metric tons of NOx in 2012, up 1.3% from 2011, while emission intensity is 4% down. The increase of total production capacity and the number of boilers led to the rise of NOx emission.

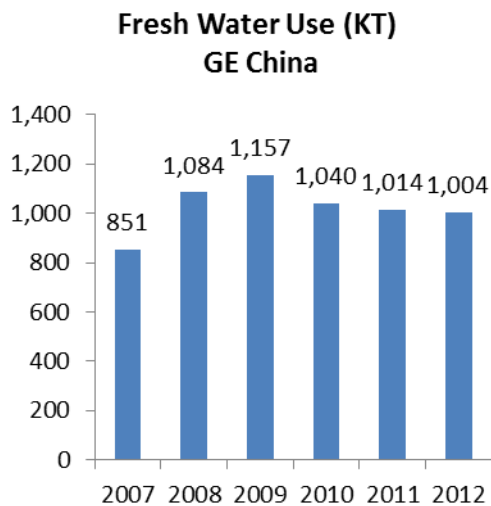


GE China NOx emissions are driven primary by the combustion of lighting industrial glass furnaces and the material oxidized under high temperature.

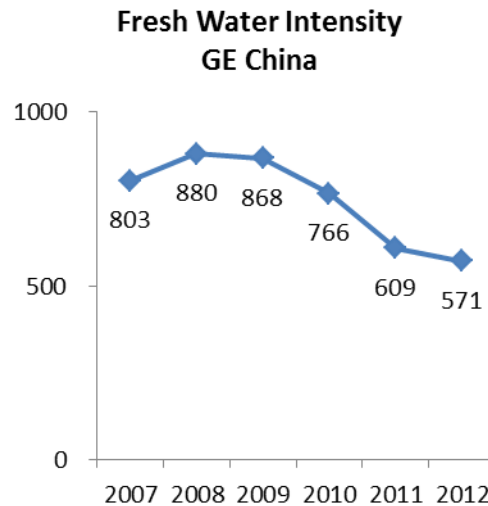
4. Water: Fresh Water Use

GE China used 1,003,840 metric tons of fresh water² in 2012, a 1.0% decrease from 2011. Fresh water use intensity also saw a decline of over 6.1%. Since 2008, GE China's fresh water use intensity has been continuously decreased despite the expansion of GE China business. The fresh water use intensity of 2012 is only 65% of 2008's.

²Fresh water use includes public potable water, process and domestic water, as well as non-contact cooling waters from freshwater sources.



Unit: Thousand Metric Tons



Unit: Fresh water (Metric Tons)/Revenue (\$MM)

Through “Treasure Hunts”, opportunities for fresh water saving and waste water reduction have been identified. Simple methods, such as leakage inspection and repair of water facilities, pipes and valves in 2012, contributed to the continuous reduction of fresh water use in GE China sites.

In 2008, GE announced a global water reduction goal for manufacturing operations – a 20% reduction by 2012 from a 2006 baseline. In early 2009, GE further proposed a 25% water reduction goal by 2015, which has been fulfilled in 2011.

As part of our ecomagination goal to reduce our freshwater consumption 25% by 2015, GE has a special program for those locations that consume more than 15 million gallons of freshwater a year. These locations account for approximately 90% of GE’s total freshwater usage. GE’s Global Research Center reviewed the 65 sites that used more than 15 million gallons of freshwater in 2012 against the Maplecroft Water Stress Index. Five sites were identified as in potentially extremely water-scarce regions (Water Stress Index (WSI) ≥ 0.7), and 19 additional sites were identified as in areas with a medium level of water scarcity (WSI between 0.40 and 0.7). Overall, 1.08 billion gallons or 15% of the total freshwater consumption in 2012 was in water-scarce areas. GE’s use of freshwater consumed in water scarce areas decreased 2.5% in 2012 vs. 2011.

Besides India, the remaining sites we identified in developing countries were in China (5) and Mexico (1). The majority of the sites located in China are in the greater Shanghai region. These Shanghai area sites’ usage, compared to total water usage in the region, is minute—GE water usage in 2012 was equivalent to 0.004% of Shanghai’s 2008 water usage—but we expect to see additional opportunities to reduce usage at these sites. In 2013, we will be hosting a water Kaizen training event in the region to begin building the skill level of our local teams to anticipate water scarcity and to reduce water use. Through 2014, the remaining sites in potentially water-scarce areas will be prioritized for Kaizen events.

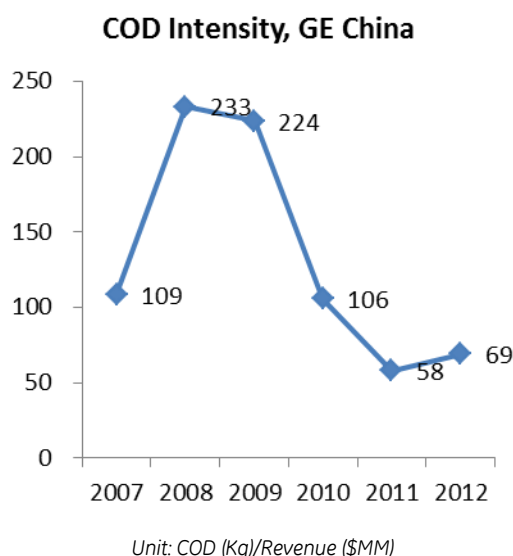
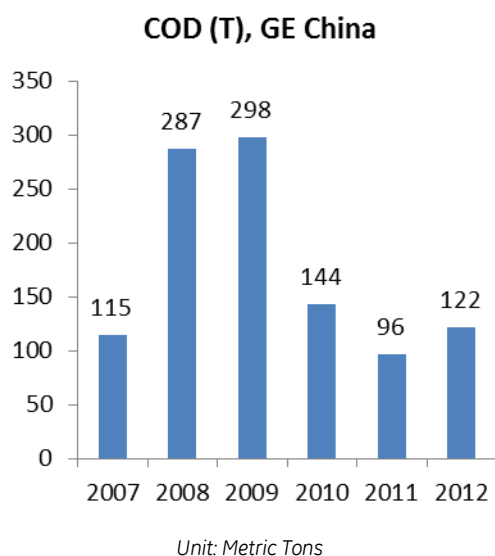
In recent years, GE has designed many other tools to help facilities implement water saving

measures and assess the benefit on water saving. To learn more about this initiative, please visit: <http://www.gecitizenship.com/our-commitment-areas/environment-health-safety/environmental-disclosures/water-use/>

5. Water: Chemical Oxygen Demand (COD)

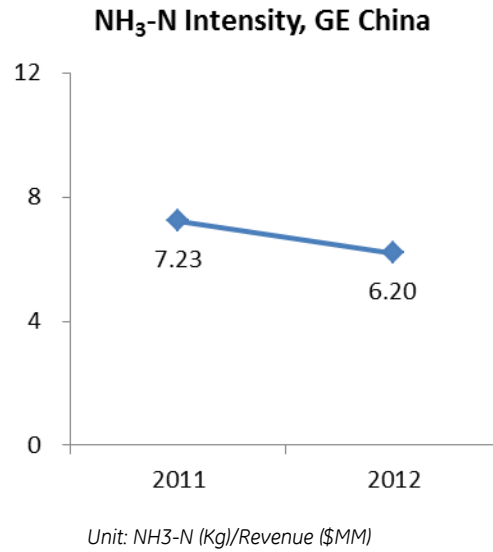
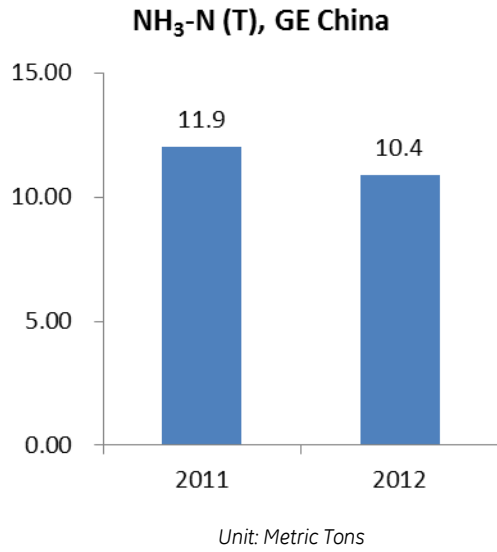
GE China facilities discharged 122 metric tons of COD in 2012, an increase of 26 tons from 2011. This is due to the increase of sanitary waste water discharge, which is from the increase in the number of employees at some GE China sites.

All of the COD discharged by GE China 2012, was sent to local industrial park or municipal waste water treatment plant for further treatment before discharging to a natural water body.



6. Water: Ammonia-Nitrogen (NH₃-N)

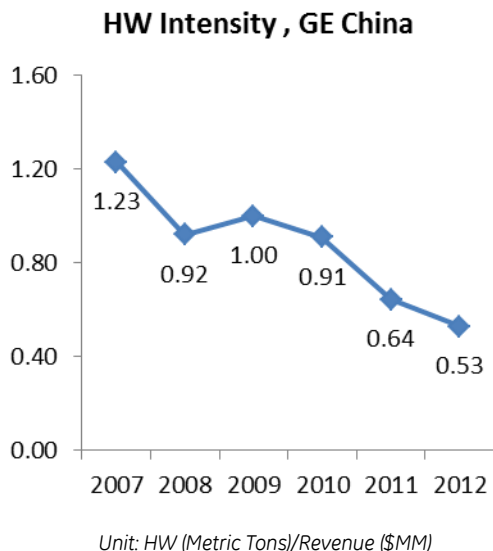
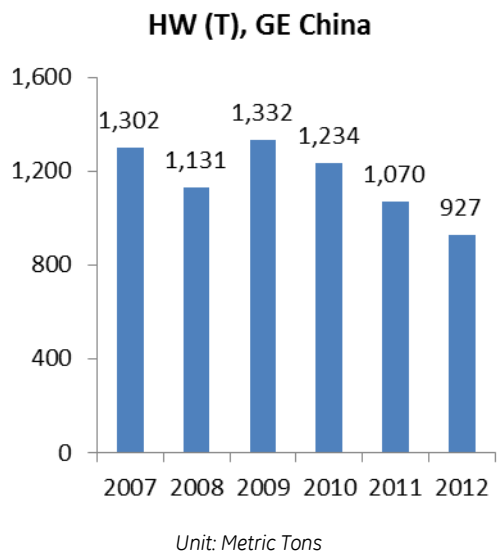
From 2011, all sites in GE China began tracking and analyzing NH₃-N discharge. There was totally 10.4 metric tons of NH₃-N discharged in 2012, a 13% reduction from last year, which demonstrated the rigor control of NH₃-N discharge by the related sites was going to effective.



NH₃-N discharge is very similar to COD, which is mainly generated from sanitary wastewater streams.

7. Hazardous Waste

In 2012, GE China facilities generated 927 metric tons of hazardous waste, a decrease of 13.4% from the prior year. Similarly, 2012 hazardous waste generation intensity dropped by 17.9%.



In 2012, GE Lighting China EHS team continuously worked with the local and municipal EPB to study and reclassify about 180 metric tons of sludge from waste water treatment plant into industrial waste, according to GB 5085.1-7 Hazardous Waste Identification Standards. The correction of waste classification not only optimized the disposal of waste with less carbon

footprint, but also reduced the expense for waste disposal. GE facilities have also been improving industrial processes to further reduce environmental impact. For example, using more environmental friendly chemicals during industrial cleaning processes has reduced the generation of hazardous waste. GE facilities have continued to make progress in waste management, through the optimization of raw material inputs, waste identification and segregation. Moreover, GE China implements GE global Waste Vendor Qualification Program, which requires all hazardous waste vendors to meet GE internal standards in addition to regulatory requirements.

III. Environmental Awards

In 2012, GE continues to be a steady recipient of EHS recognition from government authorities, nonprofit organizations and media outlets for outstanding EHS leadership or management system. Below listed are some examples:

GE Power and Water (P&W)

- GE P&W Hangzhou site received numerous EHS awards over the course of 2012. Hangzhou EPB rated the facility as a “Green-Grade Enterprise” (绿色企业) for the fifth consecutive year in 2012, continuing a legacy of environmental management excellence. Hangzhou site has passed the Cleaner Production Audit in the first group among all enterprises of Hangzhou. The site EHS leader was awarded the title of “Advanced Individual of Environmental Protection” by Xiaoshan Economic-Technological Development Area Management Office.

GE Oil & Gas (O&G)

- GE O&G Shanghai MCS site was awarded the title of “Strong Contributor to building National Eco Industrial Park”(国家生态工业园区建设工作贡献突出) by local EPB for its excellent environmental performance in 2012.

GE Aviation

- GE Aviation Suzhou site was highly commended by Suzhou Industrial Park EPB, and awarded RMB 160,000 from an environmental fund for the successful upgrade of the air treatment system of painting house.

GE China Technology Center

- GE China Technology Center(CTC) received the “Environment Green Enterprise”(环境诚信绿色等级企业) award as one of the 15 recognized companies in Pudong district from the Shanghai Pudong EPB for CTC’s excellent performance on environmental compliance assurance, pollutant reduction, hazardous waste management and good community relationship, etc. It’s the second time for CTC received this award.