

EXHIBIT 3 Samsung's Performance (as of November 2012)

SAMSUNG		ZERO	LOW	MEDIUM	HIGH
ENERGY	Disclose and set targets for operational GHG emissions and RE supply				
	Disclose and set targets for supply chain GHG emissions and RE supply				
	Clean Electricity Plan (CEP)				
	Clean Energy Policy Advocacy				
PRODUCTS	Product energy efficiency				
	Avoidance of hazardous substances in products				
	Use of recycled plastic in products				
	Product life cycle				
OPERATIONS	Chemicals management and advocacy				
	Policy and practice on sustainable sourcing of fibres for paper				
	Policy and practice on avoidance of conflict minerals				
	Provides effective voluntary take-back where there are no EPR laws				

Source: "SAMSUNG'S PERFORMANCE IN DETAIL" <http://www.greenpeace.org/international/en/Guide-to-Greener-Electronics/18th-Edition/SAMSUNG/>, November 2012.

EXHIBIT 4 Samsung's Green Management Policies

Global Green Management System	Establish a top-class global green management system, ensure full compliance of all environment safety and health regulations in all our operation sites and enforce strict internal standards.
Life Cycle Responsibility for Products and Services	Take full responsibility for ensuring minimum environmental impact and the highest safety in all stages of the product life cycle including purchasing of parts/raw materials, development, manufacturing, transfer, product use and end-of-life.
Green Manufacturing Process	Establish manufacturing processes that minimize the release of greenhouse gas emissions and pollutants by employing best available clean manufacturing technologies that enable efficient resource and energy management.
Zero-Accident Green Operation Sites	Create recycling-centric production facilities and safe workplaces where wastes are recycled and accident prevention measures are implemented to ensure the health and safety of all employees.
Preservation of the Global Environment	Take actions to tackle climate change and protect local communities as well as the global environment. Disclose green management policies and achievements to both internal and external stakeholders.

Source: "Global Harmony with people, society & environment," http://www.samsung.com/us/aboutsamsung/sustainability/sustainabilityreports/download/2012/2012_sustainability_rpt.pdf, 2012.

EXHIBIT 5 Climate Change and Energy Management Activities in Samsung

- Installed F-gas treatment equipment to reduce SF6 and PFCs gases from the LCD and semiconductor manufacturing process which was equivalent to a reduction of one million and thirty thousand tons of CO2.
- Various energy efficiency improvement measures, including replacement with energy-efficient equipment system, installation of high efficiency transformers, and waste heat recovery facilities, were implemented which led to a reduction of 370 thousand tons of CO2. As a result, the company achieved its annual reduction targets since 2009 and achieved a 40% reduction in CO2 emissions intensity in 2011 compared to 2008.
- The estimated CO2 emission associated with use of Samsung products reduced by 17.63 million tons of CO2 in 2011 compared to 2008, with an estimated accumulated reduction of 32.92 million tons of CO2 during 2009–11.
- Optimised operation of manufacturing and utility facilities, introduced high energy efficient facilities, and waste heat recycling facilities to achieve the goal of a 2.5% reduction per year.
- Samsung Electronics first participated in the Korean scheme in 2009 and received the first carbon footprint reduction label for a LED TV, a Note PC and a memory chip product. Galaxy SII smartphone and Galaxy Note also became the first product in their category to receive a Carbon Footprint label issued by the Carbon Trust.
- Eliminated Polyvinyl Chloride (PVC) and brominated flame retardants (BFRs) in all mobile phones and MP3 players sold from April, 2010. For notebook PCs, it launched the first PVC-free and BFRs-free in October 2010, and eliminated PVC and BFRs in all 15 notebook PC models released in 2011.
- Reduced business travel-related emissions through measures including the encouragement of the use of mass transport and video-conferencing systems.
- Samsung received ISO 50001 certification in 2011 for Gumi, Giheung, Hwasung, Onyang and Tangjung plants in Korea. Also received 'Carbon Trust Standard' certification in April 2012 for significant GHG reductions achieved by all eight production plants in Korea.

Source: Compiled by the author from "Global Harmony with people, society & environment", http://www.samsung.com/us/aboutsamsung/sustainability/sustainabilityreports/download/2012/2012_sustainability_rpt.pdf, 2012.

energy efficiency and standby power of its products.³⁷ This was followed by its take back and global recycling programs. The company managed to increase the use of recycled plastic by 2.26%.³⁸ It continued to reduce its energy consumption from its operations and products to respond to the challenges thrown by climate change. In addition, to facilitate on-site energy management, Samsung adopted energy cost rate (%) to assess the financial benefits of reduction in energy consumption.³⁹ Furthermore, Samsung launched an Environmental Health & Safety (EHS) Certification management programme in its operation sites and earned ISO 14001 and OHSAS 18001 certifications.⁴⁰ Samsung planned to receive ISO 50001 certification in its units by 2015 with the objective of setting up a systematic energy management structure.⁴¹

Moreover, sustainable water management became an important global environmental issue for all electronic companies. Analysts observed that, the semiconductor industry consumed 7,500 to 15,000 tons of ultra pure water on a daily basis, which was sufficient to sustain a city with 50,000 residents per day.⁴² Being a leading manufacturer of semiconductors, Samsung took up the responsibility to be

an effective contributor to water resources management (**Exhibit 6**). For this the company incorporated water management policies in its agenda, and specified the reduction targets and strategies for preservation of sustainable water resources. With the goal of maximising water efficiency, Samsung Electronics established a 3% water usage reduction target per production unit by 2015.⁴³ After collecting the necessary data on water usage, Samsung identified plants where use of water was maximum, set up a monitoring structure, planned various reduction measures, and then implemented the most cost effective measures to curtail business risks related to water use and its environmental impacts. Samsung adopted new technologies to reduce discharge of water pollutants. In 2011 the company achieved a 30% reduction in water pollution by improving the efficiency of waste water processing facilities.⁴⁴

In addition to water management, Samsung also had in place a waste management policy. It focused on enhancement of waste recycling and reduction of waste generation. In 2011, the company started recycling and utilising waste glass, waste plastics, and organic sludge which used to be either burnt