

EXHIBIT 1 CER Activities of Selected Leading Companies

Company	Activity/Performance
Intel	- At the end of 2011, Intel reduced their absolute emissions more than 60% below 2007 levels. In the same time frame, its annual revenue increased by 41%. - In 2010 and 2011 new videoconferencing facilities resulted in cost savings of over \$114 million and the avoidance of more than 87,500 metric tons of CO₂ emissions.
Apple Inc	- Apple's designers and engineers pioneered the development of smaller, thinner, and lighter products in 2011, thereby generating fewer carbon emissions. - In addition to eliminating toxins and designing products with highly recyclable aluminum enclosures, Apple used recycled plastics, recycled paper, biopolymers, and vegetable-based inks in its products. - Apple's global recycling exceeded its 70% goal in 2011. - In 2011, there was a 61% increase in participation in the Commute Alternatives program which offered transit options that reduced traffic, smog, and CO₂ emissions associated with the use of single-occupancy vehicles.
Microsoft Corporation	- Saved resources by developing modular data centers that used up to 50% less energy and consumed only 1% of the water of traditional data centers. - Helped reduce its reliance on electricity generated from coal and other traditional energy sources by purchasing more than 1.1 billion kilowatt-hours of green power in FY12. - Eliminated unnecessary components from servers within its data centers, and used higher-efficiency supplies, converters, processors, and platforms.
AT&T	- Earned annualised savings of \$86 million from 8,700 energy-saving projects implemented in 2010 and 2011. - Deployed 5,114 alternative-fuel vehicles, including 3,469 CNG vehicles and 1,617 hybrid electric vehicles, as part of its \$565 million commitment to deploy approximately 15,000 alternative-fuel vehicles (AFVs) over a 10-year period through 2018. - Kept 50.1 million Pounds of network scrap materials out of landfills through reusing, selling and recycling materials. - Collected approximately 3.0 million cell phones and 1.7 million pounds of batteries and accessories for reuse or recycling.

Source: Compiled by the author from various sources.

Competitive SMEs', a 'Supplier Support Fund' and 'New Technology Development Contest' to facilitate financial assistance.¹⁸ Samsung also took up measures for the benefit of second and third-tier suppliers from its shared growth initiatives. In 2011, Samsung launched a program titled 'Samsung Hope for Children' which dealt with various social contribution activities.¹⁹ The programs included activities such as 'Hope Children's Learning Center' for students coming from low income households and the 'Stepping Stone Scholarship Program' for college students with disabilities. These programmes were organised in different regions of the world with the sole purpose of focusing on health and education of children and youth.²⁰

Besides showing its concern towards social issues, Samsung was also aware of its responsibilities towards the environment. It not only practiced environmental leadership at the global level, but also demonstrated environmental leadership and citizenship in its own facilities, operations, and supply chain. The organisation worked to measure, report, and reduce its environmental impacts across all its operations. As per the 18th version of the 'Guide to Greener Electronics' published by Greenpeace International in November 2012, Samsung moved up to the 7th rank, with an overall score of 4.2 points in its performance scorecard²¹ (See Exhibit 2). The guide ranked 16 global electronics companies considering their commitment and growth in three environment

EXHIBIT 2 2012 Ranking of Electronics Companies

Rank	Companies	Points out of 10
1	WIPRO	7.1 (new)
2	HP	5.7 (↓)
3	NOKIA	5.4 (↑)
4	ACER	5.1 (↑)
5	DELL	4.6 (↓)
6	APPLE	4.5 (↓)
7	SAMSUNG	4.2 (↑)
8	SONY	4.1 (↑)
9	LENOVO	3.9 (↓)
10	PHILIPS	3.8 (↓)
11	PANASONIC	3.6 (↓)
12	LGE	3.5 (↑)
13	HCL INFOSYSTEMS	3.1 (new)
13	SHARP	3.1(↓)
15	TOSHIBA	2.3 (↓)
16	RIM	2.0 (↓)

Source: Compiled from "Guide to Greener Electronics", <http://www.greenpeace.org/international/en/campaigns/climate-change/cool-it/Campaign-analysis/Guide-to-Greener-Electronics/>, November 2012.

criteria such as energy and climate, greener products and sustainable operations²² (**Exhibit 3**). Samsung performed well on product life cycle criteria, as it provided detailed information on spare parts to extend product lifetime. Besides, Samsung almost scored maximum points on energy efficiency. The energy score increased as it continued to disclose information on its GHG emissions information, including its supply chain data. Samsung also scored major points for sustainable operations due to its relatively good e-waste take-back programme.²³

Samsung strongly believed that it had the responsibility to run its operations in the most enriching ways. With this belief, Samsung carried out a range of environmental activities around the world (**Exhibit 4**). In 2009, Samsung established a mid-term environmental plan, Eco-Management 2013 (EM 2013), and accordingly framed strategies to achieve sustainable development.²⁴ The company manufactured eco-friendly products and was dedicated to products stewardship throughout the entire life cycle of its products.²⁵ Samsung's operations were guided

by its focus on enhancement of a greener environment through greening of not only its products and technologies, but also the workplace and the communities. The company reiterated its concern for the environment through the 'PlanetFirst' approach.²⁶ It was a basic commitment that Samsung believed was essential for consumers to strike a balance between their aspiration for cutting edge technology and leading a greener way of life. Samsung made regular investments in green management. As of 2011, Samsung witnessed an increase of 86% in green investment compared to 2010.²⁷

As part of its Vision 2020, Samsung identified climate change and energy management as one of its important management priorities.²⁸ The company implemented a number of measures to improve energy efficiency and developed technologies to reduce greenhouse gas (GHG) emissions (**Exhibit 5**). As per the mid-term environmental plan, Samsung set up a greenhouse gas emission management system to monitor direct as well as indirect sources of emissions related to all its business activities as well as its global partners'.²⁹ Samsung adopted a number of measures to accomplish its mid-term target of 50% reduction in GHG emissions by 2013 in comparison to 2008.³⁰ With respect to limiting electricity consumption during use of products, Samsung invested in developing energy efficient products. Moreover, the company participated in a carbon footprint labeling scheme set up by the Ministry of Environment in Korea as well as the one that was established by the Carbon Trust in the U.K.³¹ The objective of the scheme was to convince manufacturers to reduce carbon emissions from their products by revealing information regarding GHG emissions through labeling and persuade consumers to purchase low carbon products. In 2011, Samsung Electronics selected around 2,630 models for eco-product labeling.³² Samsung also took steps to monitor its carbon emissions emanating from transportation of its products, as well as supplier activities and business travel by employees.³³

Achieving a 100% eco-product along with a 40% enhancement in energy efficiency rate were considered to be the key performance indicators for EM2013.³⁴ In 2011, the good eco-product and good eco-device rates crossed the specified targets and increased to 97% and 85% respectively.³⁵ Likewise product energy efficiency also went up by 25.6% in 2011.³⁶ Further, Samsung implemented the 'Eco-Design process' to address