



LG ELECTRONICS POSITIONS ITSELF AS ESG MARKET LEADER

LG Electronics demonstrates how Environmental, Social, and Governance considerations can be **WOVEN INTO A COMPANY'S BUSINESS PRACTICES** and operations.

Environmental, Social, and Governance (ESG) considerations play increasingly crucial roles in a company's prospects and viability.

Key stakeholders, including consumers and investors, regulators, and non-government organizations, are demanding that companies incorporate ESG factors into nearly every aspect of their business strategy and operations, from procurement and manufacturing through to product development and hiring.

South Korea's LG Electronics (LGE), a global leader in

▲ **LG Smart Park at Changwon, South Korea.**

information technology with about 30 production sites worldwide, has recognized that for ESG management to be effective it needs to be integrated into a company's day-to-day operations.

"Changes in the social perception of the impact of companies have led to the emergence of ESG management," says Jay hyuk Rhee, professor in the School of Business Administration at Korea University and chair of LG's ESG advisory committee.

These changes, he says, reflect "a need to improve corporate sustainability by comprehensively examining

business activities based on ESG principles."

TOWARDS A BETTER LIFE

In 2018, LGE outlined its strategic direction for its ESG management based on standards required by the international community, which reflected the Sustainable Development Goals established by the United Nations.

Following a review of its ESG performance over the previous three years, the company established a new direction for its ESG programme and, in 2022, launched *The Better Life Plan 2030*.

The plan reflects current

global ESG trends, and includes a new ESG vision and strategy to be overseen by an advisory committee. "Implementing an ESG program can be very challenging for companies," says Yong Sik Ok, professor and programme director in the Associations of Pacific Rim Universities (APRU) Sustainable Waste Management Program at Korea University in Seoul, and a member of the LG's ESG advisory committee.

"Not only are the E, S, and G highly interrelated, but it is also practically impossible to identify all the individual issues that fall under each category," he says.

"LGE aims to promote

ESG management across the business, and ensure that sustainability is embedded within the company's operations and processes," says Sung-min Hong, head of the company's ESG department.

The Better Life Plan 2030 includes six ESG commitments, three of which aim to significantly improve the company's environmental performance by reducing its greenhouse gas (GHG) emissions and increasing the use of recycled materials in its products.

For example, LGE has committed to becoming carbon-neutral by 2030 by reducing emissions generated from its production processes.

To achieve this, the company plans to reduce by 50% the 1.93 million tonnes of carbon dioxide equivalent (tCO₂e) generated in 2017 by creating more energy-efficient facilities and adopting emission reduction technologies.

To support its carbon-neutrality goal, the company has transformed its factory complex, in Changwon, South Korea, into a futuristic manufacturing hub for its home appliances line.

Renamed the LG Smart Park, the complex uses a digitally enabled 3D logistics system, advanced edge computing and machine learning analytics to predict defects, and state-of-the-art facilities to produce multiple models that respond to customer requirements.

Earlier this year, the World Economic Forum selected the complex as a Lighthouse Factory — these showcase companies that demonstrate leadership in using Fourth Industrial Revolution technologies.

According to LGE, the LG Smart Park has increased productivity by 17% and reduced the cost of defective-product returns by 70%. The factory

has reduced GHG emissions and boosted energy efficiency per unit produced by 30% compared to an earlier site.

LGE plans to apply the smart production technologies pioneered at LG Smart Park to 26 of its production facilities in 13 countries, accelerating the digital transformation of its global manufacturing network by 2025.

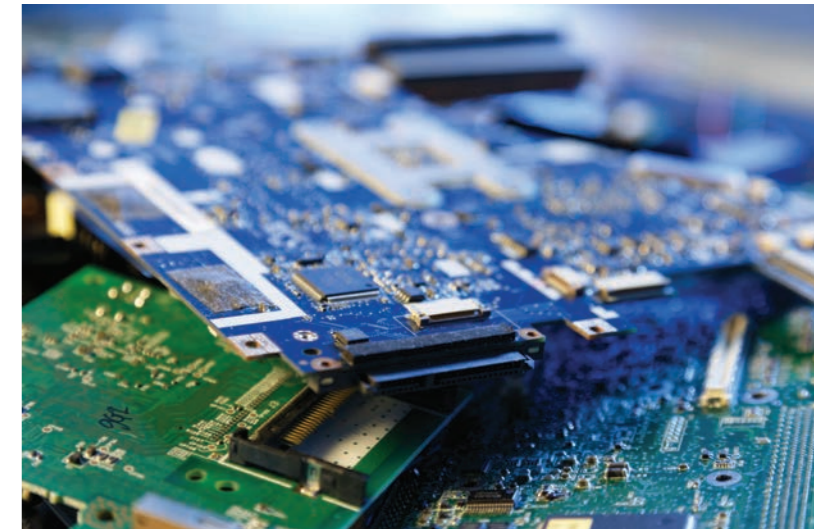
The remaining 960,000 tCO₂e generated in 2017, says the company, will be offset by securing carbon credits through the United Nations Framework Convention on Climate Change's Clean Development Mechanism, which allows it to reduce emissions by investing in technology and capital in developing countries, and through external carbon reduction activities by utilizing its high-efficiency home appliances.

Under the ESG framework, LGE aims to source 60% of its energy from renewable technologies by 2030, transitioning to 100% renewable by 2050.

POWERING THE CIRCULAR ECONOMY

LGE is also committed to building a circular economy through waste recycling initiatives and improving waste treatment processes, and aims to recycle 95% of waste generated at its global production sites by 2030, up from 92% in 2021, by utilizing 600,000 tonnes of recycled plastics in its manufacturing processes.

"Conducting product stability and quality reliability tests will improve resource efficiency, with recycled materials being used in a range of products, from washing machines and refrigerators to air conditioners and TVs," says Hong. "LGE is also



▲ **LG Electronics is committed to building a circular economy, including the recovery of e-waste.**

implementing policies to comply with regional regulations on the take-back and disposal of e-waste by establishing infrastructure for the recovery of e-waste.

This approach reflects the European Communities' directive on Waste Electrical and Electronic Equipment, which requires countries to achieve a cumulative e-waste recovery rate of 8 million tonnes by 2030, says Hong. To support its efforts the company opened the Chilseo Recycling Center, in South Korea, in August 2001.

"The facility is spearheading the company's e-waste initiative by collecting electronic waste at the end of product lifecycles and re-using recycled plastic to manufacture new components for use in home appliances like refrigerators," he explains.

LGE is also improving the energy performance of its products. For example, in June, the company launched its new

ThinQ washing machine, which features an Artificial Intelligent Direct Drive (AI DD) motor. The motor uses deep learning to identify different types of fabrics and then selects the optimal cycle and settings for each load.

In a first for the home appliance industry, the ThinQ received the AI Algorithm Reproducibility Process Verification from UL, a global safety science leader, which helps companies to demonstrate safety, enhance sustainability, and achieve regulatory compliance.

"LGE's current activities are in line with our mid- to long-term ESG strategy to produce eco-friendly products and services for future generations," says William Cho, CEO of LG Electronics. "LGE is actively working on environmental solutions, so that future generations can enjoy a better life and contribute to a better tomorrow." ■

 **LG Electronics**

www.lg.com