

THINK THE GREEN

About This Report

Since the publication of Sustainability report in 2012 for the first time in Korea as an environment company, KC Green Holdings has published the report every year. With such effort, we will communicate with various stakeholders and share performance of sustainability activity of KC Green Holdings with them for mutual growth.

Principle	GRI G4
Target	All domestic and international affiliates and workplaces
Period	2015. 01 ~ 2015. 12 (2016 performance partially included)
Criteria	Information of at least 3 years based on accounting year (USD currency)
Assurance	Business Institute for Sustainable Development, The Korea Chamber of Commerce & Industry
Cycle	Every year
Disclosure principle	KC Green Holdings Homepage (www.kcgreenholdings.com) Regular disclosure
Additional information	KC Green Holdings Strategy Management Team Tel. 02-320-6221 Email Sustainability@kcgreenholdings.com

Cover Story



KC Green Holdings makes effort to be a new leading company in green environment by maximizing synergy between business portfolios for sustainable growth. The cover image expresses such effort and change of KC Green Holdings symbolically.

Think the Green []

2016 KC Green Holdings Sustainability Report

KC Green Holdings will communicate with various stakeholders and share performance of sustainability activity of KC Green Holdings with them for mutual growth.

Think the Green []

Under the key word 'Green' that indicates the care for global environment, it expresses possibility of various subjects such as The Green Society, People, Company and Business in the form of bracket [] in order to connect with and embrace various stakeholders.

Contents

Overall KC Green Holdings' Sustainable Management

04 KC Green Holdings' Sustainable Management at a Glance	12 Global KC Green Holdings
06 CEO Message	14 Governance
08 Stakeholder Dialogue	15 KC Green Holdings' Sustainable Management
10 KC Green Holdings Business	16 Stakeholder Communication
12 Company Profile	17 Materiality Assessment

7 agenda of KC Green Holdings' Sustainable Management

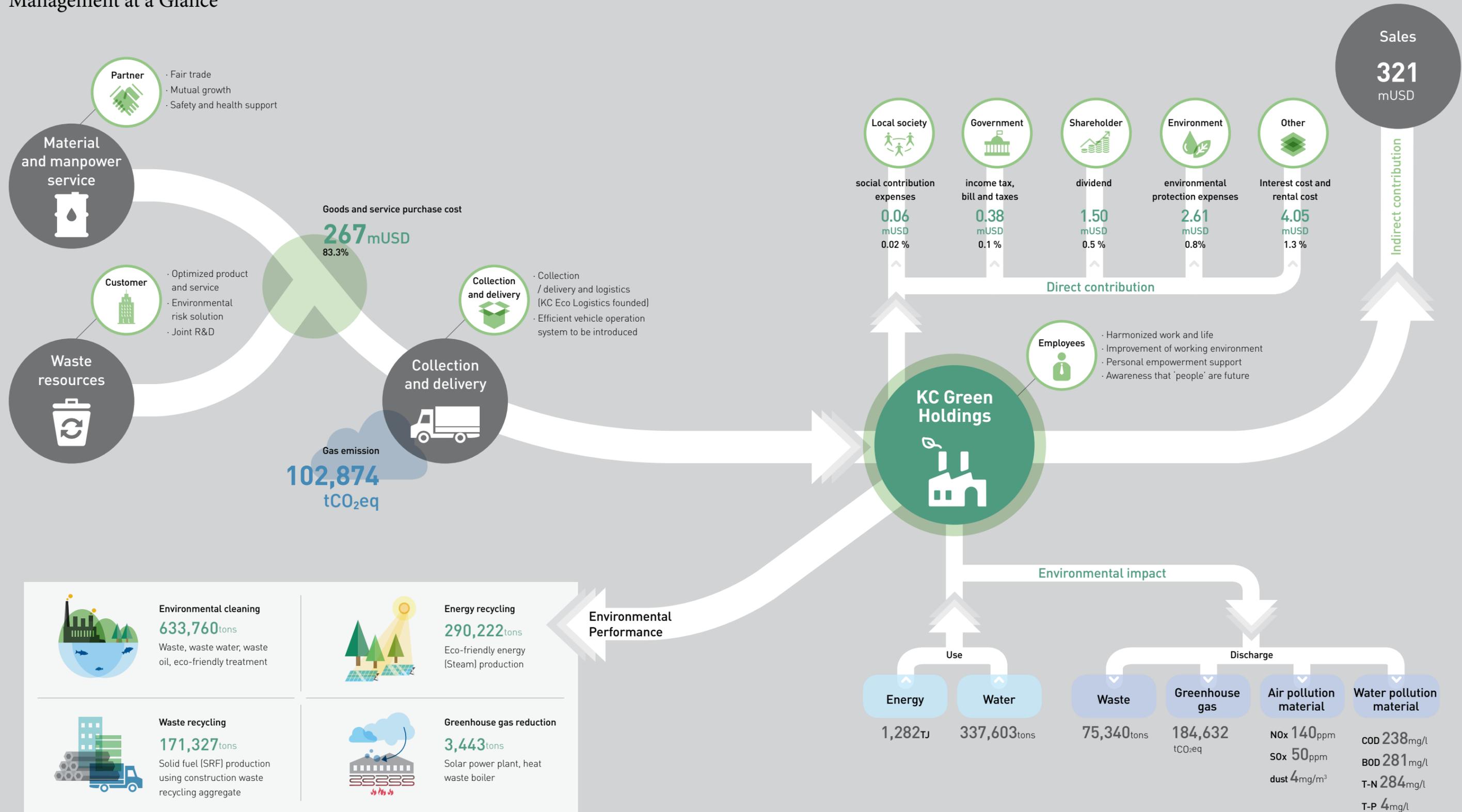
19 Safety and health	29 Customers & Partners
21 Management Innovation	31 Environment
25 Ethical Management	35 Community
27 Employees	

APPENDIX

38 KC Green Holdings' Affiliates	47 GRI G4
42 Financial Information	49 Registered Association and Awards
46 Independent Review opinion	

KC Green Holdings' Sustainable Management at a Glance

Overall process to create and distribute value of KC Green Holdings



CEO Message



Dear Stakeholders

In 2015, we experienced delayed global economy recovery under the low growth trend worldwide. While the USA was restored from economic recession, the EU and China could not overcome such recession which made it difficult to run businesses. To cope with such hardships efficiently, KC Green Holdings made every effort to develop sustainable business portfolio such as active business expansion and new business model development. Thanks to such effort, KC Green Holdings has secured growth engine for longer and further development and we focus on Sustainable Management as our management philosophy.

Reconstruction of business portfolio for sustainable growth

Paris Agreement on climate change achieved consensus on the environmental problem solving and green house gas reduction. Awareness and criteria on global environment and energy have been rapidly changed. Under such circumstances, KC Green Holdings has made an effort to find an opportunity by reconstructing business portfolio. KC Cottrell that has supplied air pollution prevention facility and the plant for last 40 years provided 34 mUSD size waste material furnace and SRF production facility for Changwon Enertech from which KC Hanmi Environment obtained 40% of share. In doing so, we attempted to enter energy plant construction business (Mini-EPC) and have obtained visible achievement. In addition, we completed KC Enviro Services plant construction in Hwachi, KC Eco Energy's SRF production facility for reinforcement of Waste-To-Energy business, KC Hanmi Environment's waste water and oil treatment facility extension and establishment

of KC Eco Logistics to ensure logistics network of environmental resources. In Vietnam, as the economic grows rapidly, support of environmental industry becomes essential. So, we have promoted joint venture for advanced environmental businesses with local partner in Vietnam. We aim to expand business of 'Resource Recovery' successfully in domestic and overseas markets.

In 2015, we distributed 333 mUSD of economic value to society and stakeholders, treated 36,928 tons of waste safely and recycled 171,327 tons.

KC Green Holdings engages in reduction and treatment of environmental pollution materials from industry and recycles waste resources as energy source. As a result, we treated 36,928 tons of waste, waste water and waste oil in 2015, and recycled 171,327 tons of waste resource to create new values. We supplied 290,222 tons of heat source (steam) to the adjacent industrial facility by incinerating waste or burning solid fuel. As such we have led resource circulation and recycling by converting waste to energy. KC Green Holdings improves and protects global environment with our development and growth. At the same time, we do our best to make clean management based on innovation in order to distribute more economic value to our stakeholders. Thanks to such efforts, KC Green Holdings and our affiliates could distribute 333 mUSD of economic value to society and stakeholders.

We made effort for ethical and dedicated social activity of employees who are key for Sustainable Management

In 2015, we published the code of ethics so that employees may practice compliance and ethical management. It contains our willingness to provide safe and happy workplace for employees, to seek mutual growth with partners and to give best value to customers and shareholders. As a result, KC Cottrell was appointed as 'the best mutual growth partner company of 2015.' In 2016, we prepare a systematic decision making system for the improvement of governance structure and intend to perform social contribution activities from the company level through final approval and distribution of 'CSR Initiative.'

KC Green Holdings will make every effort to make clean environment, happy people and warm society. We will do our best for our stakeholders to enjoy happier life in a better environment.

We look forward to your continual support and encouragement.
Yours sincerely,

KC Green Holdings Co., Ltd.
CEO **Taeyoung Lee**

Stakeholder Dialogue

Purpose of stakeholder dialogue

KC Green Holdings held a dialogue to check sustainable management and to find any improvement measures. External experts make comments on the performance and direction and figure out improvement measures, which we will implement. At the first forum, philosophy and vision of KC Green Holdings' Sustainable Management were mainly discussed.

Main opinions



Prof. Hyungkoo Moon
Prof. of Korea University
Business School

Sustainable management report can be downloaded from Homepage of KC Green Holdings but there is no CSR. If CSR philosophy, target and performance can be shown to stakeholders, it would be an efficient message to them. As KC Green Holdings mainly engages in environmental business, it provides global environment with positive effect. I ask for active and sustainable interest in the management as well.

Corporate Social Responsibility (CSR) treats company as a person and requires social responsibility. To cope with such social requirements, the vision of the company must be linked to CSR. I recommend KC Green Holdings to re-edit its leaflet from the 'Corporate Citizenship' perspective. Corporate Citizenship includes environment and people. For effective environmental business, it needs to study policies such as GCF (Green Climate Fund) and to make strategy to utilize it. Furthermore, KC Green Holdings must be a company leading environmental policy.

Business of KC Green Holdings itself has an effect on the sustainable of the global society. While it is meaningful to develop a new model, if we explain 'what we do' effectively, it can be recognized as environmental performance.

* Corporate Citizenship: It means that a company has certain right and responsibility as a member of local society like person. The company has right to receive excellent management resources from society and must contribute to society in reward. Many companies define own corporate citizenship and carries our CSR activities.



Yoonki Ahn,
Management director
POSCO Management
Research Institute
(Sustainable - environment
management)



Eunkyung Lee
Team manager
The Global Compact
Network Korea

For effective sustainable management of KC Green Holdings, it is important to show willingness of CEO clearly. And, it is required to designate any issues to a certain team and member clearly so that the direction of sustainable management may be determined and it is managed continually to achieve goals.

While it is argued in Sustainable Management Report that KC Green Holdings pursues environment business, it is insufficient on 'how they contribute to environment.' It is necessary to define environment performance target and its achievement. And, CSR must contain the description on how their effort transformed society to what degree.

CSR review is common in overseas. Scope of review is not restricted to inside organization, but it recognizes supply chain as a whole. And it assesses how the contents of report are reflected in the management system. It is important to embody PDCA* process into the organization. Embodiment stresses two things: Risk management and Value creation. It is important for KC Green Holdings to view the management of the company from CSR Risk management. In this context, it is crucial to integrate CSR vision and mission to the existing corporate vision.

* PDCA: Plan-Do-Check-Action



Jeongkwon Ahn
Team manager
Slowalk CSO

Main opinions and reflections

Proposed by	Proposed opinion	Response of KC Green Holdings
Yoonki Ahn	Reinforcement of environmental index management	Process, performance and environment index report updated at 'KC Green Holdings at a glance'
	Reinforcement of international index and criteria through GCF	GCF business review and promotion in progress through Korea Environmental Industry and Technology Institute
Jeongkwon Ahn	Integration of corporation vision with CSR	To be incorporated in 2016
	Embodiment of CSR into corporate management from the perspective of PDCA	Reflected in management strategy in 2016
	Expression on how we contribute to society and environment	Process, performance and environment index report updated at 'KC Green Holdings at a glance'
Eunkyung Lee	Setting target and criteria of environment performance	Environmental index and target set in 2016
	Definition of CSR team and duties	Recruitment of staff (1 added person)
Hyungkoo Moon	Delivery of sustainable management meaning at homepage	Section added in homepage update in 2016

KC Green Holdings Business

KC Green Holdings engages in environment and energy business for sustainable global society.

Sales per business



* The sales are simple sum of sales including internal transaction between affiliates.
* Investment business is reaction measure on the share of affiliates owned by KC Green Holdings.

1 Environmental engineering business

It treats fine dust and greenhouse gas from industrial boiler, power plant and steel mill to prevent air pollution

Main facility and service

Electric dust collector, desulfurization /denitrification facility, ash treatment facility, Pneumatic Conveying system

Power plant, steel mill and other industrial facilities

Ash handling system (AHS)

Electric precipitators (EP)

Selective catalytic reduction (SCR)

Flue gas desulfurizer (FGD)

Waste To Energy

Waste Collection and transportation

2 Environmental service

It treats waste in a clean and safe manner. It realizes resource recovery through Waste-To-Energy.

Main facility and service

Waste resource incineration, landfill, SRF production, waste water / oil treatment, steam (waste heat) sales, low pressure steam power generation

Landfill

Waste water and waste oil treatment

3 Environmental manufacturing industry

It produces environmental facility/product and glass material and recycles drink bottles

Main facility and service

Special glass material development, industrial heat exchanger, eco-friendly assembly partition, transformer and recycling of glass bottle

Glass bottle· glass material recycling /production

Environment facility· product development / manufacturing

4 Renewable energy

It constructs solar power plant in diverse areas from flat, roof and waste salt pond site for efficient operation.

Main facility and service

Solar power plant construction, consignment operation and management (O&M), energy saving system (ESS)

Solar power plant

Company Profile

KC Green Holdings dedicates business for our environment and future. With the 43rd anniversary, we strive for a new 50 years. We will make an effort to make customers and employees happy.

General information

Company name	KC Green Holdings Co., Ltd.
Head office	11F, Digital Cube, 34, Sangamsan-ro, Mapo-gu, Seoul, Korea
Est. Date	Nov. 27, 1973
CEO	Taeyoung Lee
No. of employees	1119
Credit rating	A- (NICE, As of Dec. 2015)
Homepage	www.kcgreenholdings.com

Shareholders

As of Dec. 31, 2015

Category	Relation	No. of share	Equity rate
Taeyoung Lee	CEO	7,091,089	31.61%
Korea Institute for Industrial Economics Trade	Other	2,070,000	9.23%
Jaeyoung Lee	Relative	1,478,965	6.59%

Organization chart



Mission, Vision and Core Value

Mission

Our growth, Green growth, & Sustainable future of global society.

We are committed:

To embrace talented people with positive thinking;

To extend and explore Green/Environmental Business Opportunities through development and growth of our employees; And therefore, to contribute to the sustainable growth of the global society.

Vision

KC Green Holdings, as a holding company in the Green / Environmental business area, is committed to promote synergies among KC Network companies. Based on our solid APC business, we strive to explore synergies with Eco-friendly Green Business and Renewable Energy Business. Our target is to achieve 0.9 million dollars in revenue from our green business portfolio by 2023, and to build a transparent and solid business group in the Green / Environmental Business Area. To achieve our goal, we effectively share technologies and resources among KC Network companies, explore new business opportunities in diverse markets, and build close mutually communicating network operating systems. We will continue to grow to be a small, but powerful leading company in the Global Green Business with open communication, leadership by everyone, and mutual respect that overcomes cultural differences.

Core Values



Global KC Green Holdings

Environmental engineering division

- 01 KC Cottrell
- 01-1 KC Air Filtertech
- 01-2 NoL-Tec Korea
- 01-3 KC Energy Technology
- 01-4 KC Africa
- 02 Changchun KC Envirotech
- 03 KC Cottrell Vietnam
- 04 KC Cottrell Taiwan
- 05 Lodge Cottrell UK
- 06 KC Cottrell India
- 07 NoL-Tec Systems
- 07-1 NoL-Tec Asia

Environmental manufacturing division

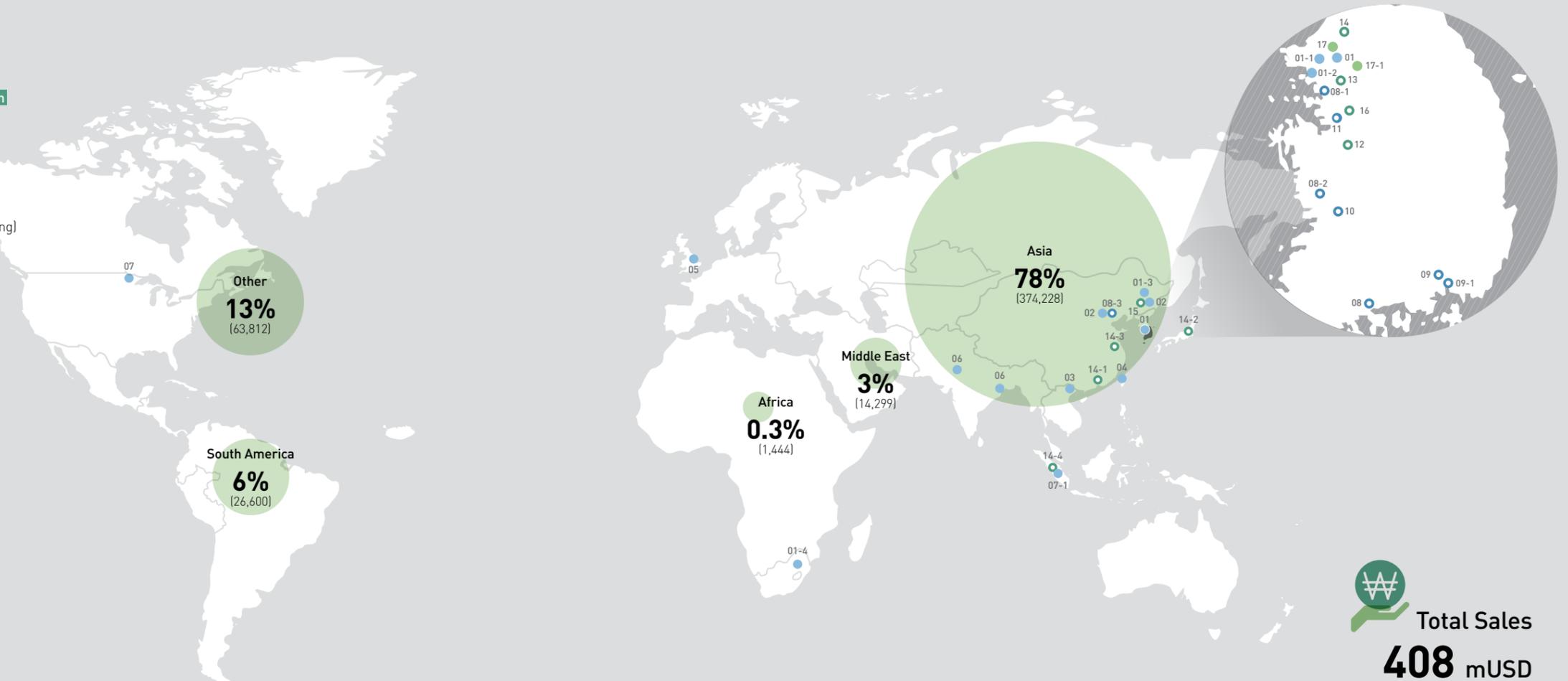
- 12 KC Glass & Materials
- 13 KC Thermal
- 14 Clestra Hauserman
- 14-1 Clestra (Hongkong)
- 14-2 Clestra Hauserman k.k
- 14-3 Clestra Hauserman (Taicang) Architecture Product
- 14-4 Clestra (Singapore)
- 15 KC Envirotech E&C (Fushun)
- 16 NWL Pacific

Environmental service division

- 08 KC Enviro Services
- 08-1 KC Lanfill Services
- 08-2 KC Enviro Construction
- 08-3 KC Catalyst Services (Beijing)
- 09 KC Hanmi Environment
- 09-1 Changwon Enertech
- 10 KC Eco Energy
- 11 KC Eco Logistics

Renewable energy

- 17 KC Solar Energy
- 17-1 KC Green Energy



Total Sales
408 mUSD

Governance

KC Green Holdings operates independent and professional board of directors to seek transparent and efficient management and to protect rights of shareholders.

Board of directors

Board of directors is the top decision making organization in the company. Based on specialty and transparency, the wage of board of directors is determined by the shareholders' meeting. In 2015, total 357,197 USD was paid to inside director, auditor and outside director. Total 39 times of board of directors' meeting were held in 2015 having 54% participation of outside director and 85% of auditor. Main agenda, participation of outside director and decision result are disclosed at the electronic disclosure system.

Director and auditor

[As of end of Apr. 2016]

2015 performances

Enactment and education on code of ethics of employee to protect shareholder, Introduction of e-voting system for KC Cottrell

2016 plan

Enactment of corporate governance charter, updated homepage disclosure

Category				
Inside director		<ul style="list-style-type: none"> Representative director, KC Green Holdings Vice president of environment climate committee of Korea Chamber of Commerce and Industry Vice chairman, Korea Environment Industry Association Simon Fraser University MBA Seoul National University Dept. Business Administration (Bachelor's Degree) 	Full time	Male
		<ul style="list-style-type: none"> Representative director, KC Glass & Materials COO, KC Green Holdings Seoul National University, Dept. Business Administration (Master's & Bachelor's Degree) CPA 	Full time	Male
		<ul style="list-style-type: none"> Vice president of KC Green Holdings Former Korea Institute of Machinery & Materials Former Korea IBM Science Technology Support Center Seoul National University, Dept. of Mechanical Engineering 	Full time	Male
Outside director		<ul style="list-style-type: none"> Prof., Kookmin University, Dept. of Business Administration University of Texas at Austin, Business School, (Ph.D in Accounting) University of California Berkeley, Business School (MBA) Seoul National University, Dept. Business Administration 	Part time	Male
Auditor		<ul style="list-style-type: none"> Adjunct professor of Hanyang University, College of Engineering Former managing director of Korean Air Former team head of financial management of Hanjin Group Hoseo Graduate school of venture (Ph.D) 	Full time	Male

Board of directors' meeting

Average attendance rate of auditor and auditor (%), No. of meeting (time)

2013 (21)  83%

2014 (25)  71%

2015 (39)  69%

Management committee

With the representative director as the chair, the management committee of KC Green Holdings was established whom engages in management review, strategic management planning and decision making on investment.

KC Green Holdings' Sustainable Management

KC Green Holdings has management philosophy to protect global environment and to create values continually.

Core Value, Vision and Mission



7 Major Issues of Sustainable Management

Economy 		Environment 		Society 		
Value creation	Innovative management	Eco-friendly business	Environment pollution management	Role and responsibility	Personnel development	Social contribution
<ul style="list-style-type: none"> Management Performance Quality and product information New businesses Governance 	<ul style="list-style-type: none"> R&D Innovation activities Risk management Knowledge Management 	<ul style="list-style-type: none"> Environmental Management System Environmental technologies Use of sustainable resources Renewable Energy 	<ul style="list-style-type: none"> Pollution prevention 	<ul style="list-style-type: none"> Win-win cooperation Fair competition Ethical Management Product responsibility Customer happiness Participation of stakeholders 	<ul style="list-style-type: none"> Family-friendly management Employee health and safety Training and education 	<ul style="list-style-type: none"> Social contribution activities

Goals for sustainable management and Business Group Goals

Goals for sustainable management	Strengthen communication with stakeholders			Internalize sustainable management in company-wide management index		Establish CSR strategies	
	Environmental engineering	Environmental Services	Environmental Manufacturing	Renewable Energy			
Business Group Goals	<ul style="list-style-type: none"> Develop and manufacture environment-friendly air pollution control facilities for sustainable global environment Expand Waste-to-Energy Business 	<ul style="list-style-type: none"> Construct handling system that restores wastes and sewage to safe and clean nature 	<ul style="list-style-type: none"> Develop and manufacture high efficiency and high performance environmental equipment 	<ul style="list-style-type: none"> Develop environment friendly renewable energy for the future environment 			

7 AGENDA of KC Green Holdings' Sustainable Management

	Supply company	KG Green Holdings	Customer	Community	Earth
19 Safety and Health	●	●	●		
21 Management Innovation		●			
25 Ethical Management	●	●	●	●	
27 Employees		●			
29 Customers & Partners	●		●		
31 Environment				●	●
35 Community				●	

Safety and Health

Safety of the employees is the utmost value of the company as the company engages in plant construction and waste management with heavy safety risk. KC Green Holdings carries out periodic education and safety and health assessment to all affiliates to prevent accident in advance and to develop safe workplaces.

-  **Accident-free goal**
6 [1 company▲]
-  **Safety and health certification**
12
-  **8 times of disaster free achievement**
(KC Glass & Materials)
-  **Internal award for safety and health Special award**
(KC Eco Energy)

Safety and health certification

KC Green Holdings puts safety and health of employees at its first priority. Main affiliates obtained OHSAS18001¹⁾ and KOSHA18001²⁾ to execute, assess and update safety and health. Such acquisition of safety and health management certificate not only awakens the autonomous safety awareness to all employees but also reduce loss and disaster at work. Besides, KC Air Filtertech and KC Eco Energy obtained 'Risk Assessment Recognition' by minimizing risky and harmful factors in workplaces. NWL-Pacific and KC Air Filtertech received 'Clean Workplace Recognition' by observing safety criteria on the installation and handling of industrial facility.



¹⁾ OHSAS18001: Health and Safety Management System

²⁾ KOSHA18001: Autonomous safety and health system to promote disaster prevention and corporate loss prevention activity

Certification of Safety and health

Category	Company
OHSAS 18001	KC Enviro Services, KC Cottrell, KC Envirotech E&C, Changchun KC Envirotech, KC Thermal, Lodge Cottrell UK
KOSHA 18001	KC Cottrell, KC Hanmi Environment, KC Glass & Materials, Clestra Hauserman
Risk assessment recognition	KC Eco Energy, KC Air Filtertech (2015)
CLEAN Workplace recognition	NWL-Pacific, KC Air Filtertech (2015)

Management Innovation

As the environment issues became national issues, efficient recycling of waste as 'resource' has been stressed. KC Green Holdings makes effort to create synergy and management efficiency between affiliates having different waste treatment processing in a different area.



Patent registration
6 cases



R&D investment
17 mUSD



CC100 qualitative performance
13 mUSD

Safety and health activities

KC Green Holdings appointed a safety & environment executive under the direct supervision of representative, Taeyoung Lee to make quick and coherent decision making as a control tower. NWL-Pacific, KC Glass & Materials and KC Eco Energy make effort to improve health of the employees and to develop accident response ability through periodic physical training and mock training. KC Green Holdings and affiliates will make an effort to prevent disaster by keeping safe and clean working environment in order to grow as a healthy company.

1. KC Glass & Materials: morning gym, safety campaign per quarter and self-firefighting unit activities
2. KC Eco Energy: Mock training in event of safety accident and monthly education to employees



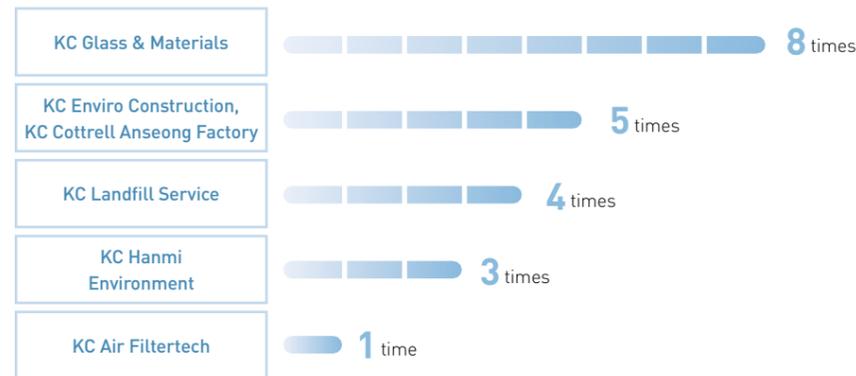
Safety and health assessment

To keep clean and safe working environment and to improve health of the employees, KC Green Holdings evaluates safety and health activities of affiliates and award qualified affiliates. In 2015, KC Hanmi Environment won safety and health award again following 2014 for the acknowledgement of periodic safety and health training and active improvement of safety check and working environment winning the full score of the evaluation. KC Eco Energy won special award for the discovery of potential risk factors and for active improvement of working environment.



KC Eco Energy Co., Ltd. won special award for safety and health

Disaster Free Achievement

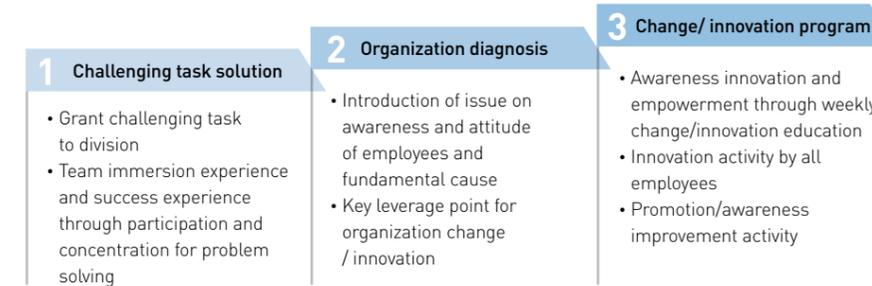


Worker safety and health (KC Enviro Services)



CC100 Operation Innovation Project

Following CC20 project in 2010 for the cost reduction, KC Cottrell performed operation innovation project for 2 months from October to develop progressive organization culture and to cope with rapid changing market environment.



Under the target of challenging culture, achievement focused atmosphere, passionate organization, teamwork and influential leaders, this project had 7 steps including granting challenging task → Problem solving → Problem check at solution process → Announcement of solution plan → Innovation education. Through CC100 project¹⁾ employees had a chance to figure out problems and to have a mind to solve problems in an active and innovative mind beyond passive attitude.



¹⁾ CC100 Project: It stands for "Challenge & Change" and "One(1) Mind, with United (0) Spirit to create Permanent (0) Company



The 2nd TOP Unit Meeting

The second TOP(Total Operational Performance) Activity

After the success in the first TOP activity (from June 2014 to December 2015), KC Enviro Services, KC Hanmi Environment and KC Eco Energy have performed the 2nd TOP activity since January 2016. This activity sets increase of sales, cost reduction, increase of operational efficiency, and safety and environment activity as its targets. In the 2nd activity, they increase correlation between activity and management as they include these targets in their business plan for 2016 and they reinforce its implementation by having their field staffs participate in the unit activity. Repair consumables, safety and electric materials and medicines are registered in IMK¹⁾ to promote purchase through the system. The use of IMK makes employees more convenient and may reduce work burden. Through the 2nd TOP activity, promotion of management innovation and active participating culture has been settled. We will make continual improvement on the activity.

¹⁾ | Market Korea (MRO service company)

R&D

KC Green Holdings and affiliates carry out continual R&D activities to provide differentiated technology for customers and to reinforce competitiveness.

R&D projects

Projects in progress

- CO₂ collection technology commercial package development for 100MW dry CO₂ collecting plant operation (KC Cottrell)
- Delivery of electric dust collector system to Gangnam Ring Road 7-2 section (KC Cottrell)
- Development of manufacturing medium quality desulfurization and denitrification SCR catalyst (KC Cottrell - KC Enviro Services)
- Module type complex dissipation power system development (KC Cottrell)
- CO₂ solution technology development through heavy metal stabilization of ash purification and mixed mineral waste (KC Cottrell)
- Long Bag Test R&D (KC Cottrell - KC Air Filtertech)
- Validity test of sintering denitrification complex system (KC Cottrell)
- Development of low heat expansion crystal glass board technology (KC Glass & Materials)
- Medium IR optical glass part technology development (KC Glass & Materials)
- In-duct mixing addition for DSI/ACI (NoL-Tec Systems)
- Standards for sizing gas-management on systems without air assist (NoL-Tec Systems)
- Hose switch design (NoL-Tec Systems)
- Site evaluation method development on life and performance of solar power module (KC Solar Energy)
- High concentration waste water treatment system (KC Hanmi Environment)
- Waste oil separation system process (KC Hanmi Environment)
- Waste oil purification system (KC Hanmi Environment)

Projects to progress

- Development and validity of desulfurization system by applying condensing system at the rear of desulfurization facility (KC Cottrell)
- New biomass fuel development using bio waste (KC Cottrell - KC Eco Energy)
- High-tech material (insulation material, ceramic, Glass Bubble Frits) (KC Glass & Materials)
- New material development of electronic thermal control new material development for high density electronic device (KC Glass & Materials)
- Evaluation of ESP for dust collection on core business systems (NoL-Tec Systems)
- Modify air pad distributor, dehumidifier guidelines (NoL-Tec Systems)
- Development of technology of overcoming difficulties in combustion to improve solid fuel efficiency at 50t/d commercial solid fuel applied facility (KC Eco Energy)
- Collection of valuable metal by solution extract after manufacturing medium oil desulfurization catalyst (KC Enviro Services)
- Low cost/ high efficient process system of crystal silicon solar power waste module and process technology development (KC Solar Energy)

R&D status



R&D personnel **31**



Investment cost **1.7** mUSD

R&D achievements

Title	Right holder	Reg. date	Reg. no
1 Independent micro grid distribution panel	KC Cottrell	2015.04.24	No. 10-1516802
2 Heat exchanger piping support structure	KC Cottrell	2015.05.12	No.10-1521282
3 Modular Hybrid energy power supply system operating method	KC Cottrell	2015.11.16	No.10-1570833
4 Waste catalyst integrated cleaning device at medium oil desulfurization and depressurized desulfurization process	KC Cottrell	2015.08.25	No. 11-548503

Modular Hybrid energy power supply system development and Assurance

KC Cottrell participated in 'Modular Hybrid energy power supply system development and assurance' project as an energy development project by the Ministry of Trade, Industry and Energy. Besides KC Cottrell, S Energy, Samsung SDI, Intec FA, Korea Electro technology Research Institute, Myongji University and Chonbuk National University. Korea Institute of Energy Technology Evaluation and Planning played a supervision role and assurance complex was installed at Jam-Island in Jinhae Bay in March 2015. Modular Hybrid energy power supply system is a complex power generating system that can make optimal combination and cope with load increase considering the size of complex, natural environment and loading condition. Since the installation, it is expected that electric energy can be sufficiently used in an area where sound power supply is difficult.

Patent application (Cases)



Patent registration (Cases)



Front view of Modular Hybrid energy power supply system of Jam-do, KC Cottrell

Expansion of business portfolio

Establishment of KC Eco Logistics In October 2015, KC Eco Logistics was founded to collect and deliver waste and obtained license for such area. KC Eco Logistics would be an efficient strategy to the growth of domestic waste handling market and to create synergy in the domestic environment services division. It aims to grow as a general environment logistics company by composing nationwide network.

Nationwide logistics network of environment resource



Ethical Management

Ethical management and ethical awareness are utmost important to earn trust from stakeholders in the contemporary management environment. KC Green Holdings enacts the code of ethics to improve ethical awareness and performs ethical education. We will enhance credibility from stakeholders with transparent and honest ethical management



Ethical education participation rate of employees
69.7% (increased 110 over last year)

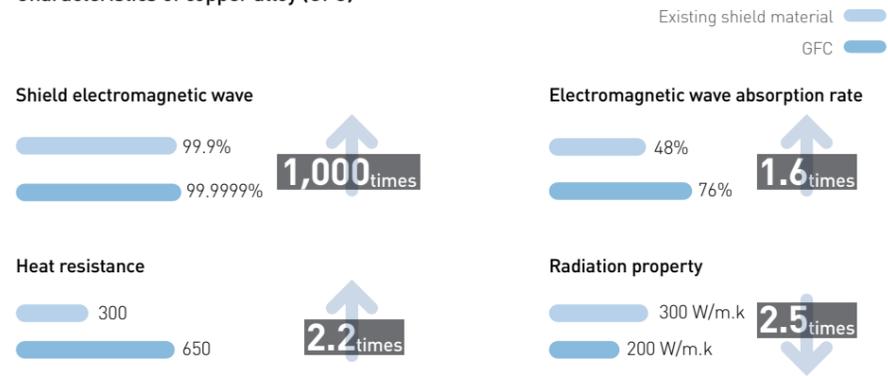


Case of corruption
0 case

*GFC(Green Ferrous Copper): the copper alloy which KC Glass & Materials produces

Metallic material business KC Glass & Materials started metallic material business since February that produces cable copper plate and electromagnetic shield copper alloy to prevent malfunction of precision machines and electromagnetic. It will diversify customers and products with the application of copper alloy materials.

Characteristics of copper alloy (GFC)



Changwon Enertech Incinerating facility

Equity investment to Changwon Enertech KC Hanmi Environment invested equity to Changwon Enertech to treat additional 84 tons of waste. And, it can produce SRF production and steam production for 300 tons/day and 50 tons/ hour.

Expansion of facility

KC Enviro Services started operating plant in Hwachi. Waste treatment facility of Hwachi Plant of Environment Service was designed in FBC (Fluidized Bed Combustor) type that is optimized for liquid and sludge waste. Thanks to the completion of Hwachi Plant, additional 84 tons of waste can be treated at KC Enviro Services. Main structure of Hwachi Plant was produced at KC Envirotech E&C(Fushun) to reduce the cost of construction. Waste heat can be supplied to adjacent factories which may increase sales. KC Eco Energy will complete leachate treatment facility in 2016. It is a facility to make chemical treatment of leachate from landfill process, which may prevent environmental pollution and may reduce leachate treatment cost.

Code of ethics

KC Green Holdings established the code of ethics to make clean and transparent company and shared it with affiliates. For all employees to recognize the need of ethical management, KC Green Holdings progresses on the presentation or improves on the code of ethics to share the definition and the need of ethical management with affiliates.

Chapter 1 Basic attitude of employees	Basic attitude of employees to understand mission, vision and core value and to achieve them
Chapter 2 Fair trade and fair competition	Attitude to participate in market competition in a just and fair mind seeking mutual win-win with partners without engaging in any bribery, embezzlement or other corruption activities
Chapter 3 Responsibility to customer and shareholder	Responsibility to provide better value for customer and shareholder with management innovation and efficient management
Chapter 4 Social responsibility	Willingness to recognize economic, social and environmental responsibility and achieve targets for sustainable management
Chapter 5 Application of ethical management	Description of establishment of code of ethics, its objective and target to all affiliates of KC Green Holdings



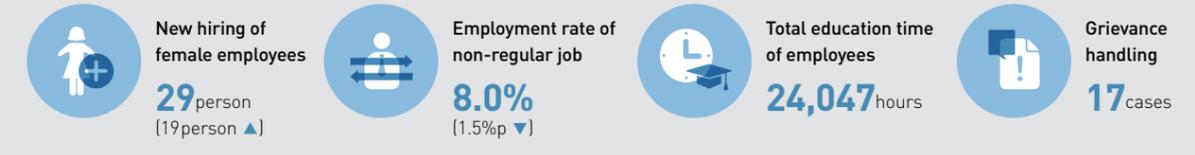
The Code of ethics of KC Green Holdings - KC Cottrell (Anseong factory) Signature of employees

Ethical education

KC Green Holdings and affiliates carry out a periodical internal education to improve ethical awareness of employees including business manner education and sexual harassment prevention education. In 2015, total 490 employees from 11 companies have had an internal ethical education. The number increased by 110 over 2014 and KC Green Holdings will make a continual effort to improve the ethical awareness of employees.

Employees

Respect and investment to employees are social responsibility and also are the most important investment for growth and development. KC Green Holdings make efforts to invest 'people' such as working environment improvement and job creation with recognition that people are the most important resource.

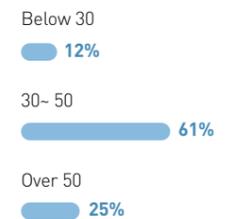


KC Green Holdings makes every effort to respect every employee's human right and to provide equal opportunity. In 2015, total number of employees of KC Green Holdings and affiliates is 1,119. While the total number increased, the number of non-regular jobs decreased. It was 8.0% which was 1.5% point decrease over 2014. While the number of female employees decreased, 29 new female employees were hired which made the number increase by 19 compared to the previous year. In 2015, 7 and 6 female employees used maternity leave and childcare leave. Return rate after childcare leave was 100%. KC Green Holdings makes effort to develop woman friendly corporate culture. KC Green Holdings never discriminates people from sex, religion and social status and provides equal opportunity to practice sustainable personnel management.

Information of employees

Category	Classification	2013	2014	2015
Employment	No. of total employee (person)	1,182	1,111	1,119
	Employment of disability (%)	0.5	2.4	4.2
	Contractual worker (person)	216	94	89
	New hiring (person)	137	133	192
	Average continual work years (years)	6.2	7.2	7.2
Retirement / turnover	Retirement rate (%)	6.3	4.8	10.2
	Turnover rate (%)	6.2	11.7	16.1
Female / childbirth	No. of female employee (person)	150	159	158
	No. of new hired female employee(person)	26	10	29
	No. of female manager (person)	42	35	34
	No. of maternity leave (person)	7	1	7
	No. of childcare leave (person)	3	0	6
	Return rate after childcare leave (%)	100	-	100
Management and labor communication	No. of employees in the labor union (person)	410	391	343
	Ratio of labor union subscription (%)	34.7	35.2	30.7

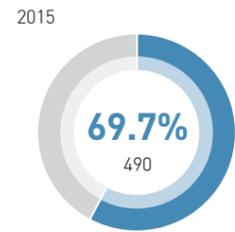
2015 employee composition by age



Execution of ethical education

Business division	Affiliate	Education	Time (count)	Attendant (person)
Environmental engineering	KC Cottrell	Business manner education	2 (1)	98
		Business manner education	2 (1)	38
	Anseong Factory	Sexual harassment prevention education	1 (1)	22
		Personal information protection education	1 (1)	13
	KC Air Filter Tech	Sexual harassment prevention education	1 (1)	11
	KC Cottrell Vietnam	Company culture	2 (2)	24
		Harmony in working	2 (4)	24
Environmental service	KC Enviro Services	Sexual harassment prevention education	1 (1)	30
	KC Eco Energy	Sexual harassment prevention education	1 (1)	58
	KC Hanmi Environment	Transparent transaction with stakeholders	2 (2)	46
	KC Landfill Service	Sexual harassment prevention education	1 (1)	8
Environmental production	Clestra Hauserman	Sexual harassment prevention education	1 (1)	20
		Ethical management standard education	1 (team education and disclosure)	130
	KC Glass & Materials	Sexual harassment prevention education	1 (2)	65
		Personal information protection education	1 (2)	65
		KC Thermal	Sexual harassment prevention education	1 (1)

Participation of ethical education to affiliates



Based on 12 affiliates where ethical education is obligatory

Fair trade

KC Green Holdings makes efforts to create sustainable performance through transparent and fair trade. To improve ethical awareness of employee, we embody fair trade and fair competition in the code of ethical to stress fair trade and competition. As a means of fair trade per affiliate, KC Cottrell invites more than 3 bidders in bid and takes strict confidentiality measure on the estimated price (basic price). KC Glass & Materials also sets at least 3 bidders in bid and requests partners to cooperate transparent mutual win-win by sending compliance letter of ethical management.

Corruption and violation of regulation

6 violation cases of regulations were detected in affiliates in 2015 and about 16,985 USD of penalty was paid and 1 month suspension of business was sanctioned for the designated waste treatment. While there was unintended violation, we make an effort to prevent recurrence.

Corruption and violation of regulation



Customer and Partners

Due to rapid management environment change and intensification of regulation in the contemporary, customer requirements have ever increased. To satisfy customers, authentic value must be delivered and ethical and fair cooperation with partner as 'companion' is required. KC Green Holdings makes effort to deliver genuine value with optimized products and services and supports partners to achieve such value.



As a customer survey result of KC Cottrell
Overall 'Satisfaction'
and above



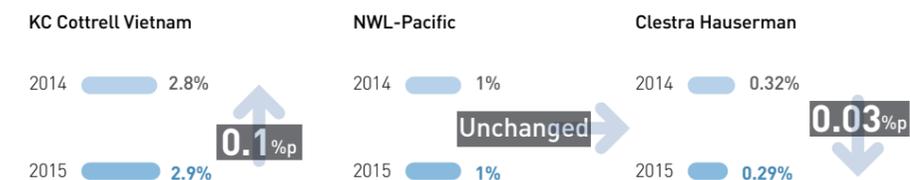
Korea South-east Power Co.
- KC Cottrell KOSEP World Class
investment (2015-2017)
15 mUSD

Communication

KC Green Holdings weighs high on stability and development of partners. With mutual win-win and cooperation, services and products of KC Green Holdings would have higher value. Through active communication with partners, we listen to their grievance and requirements. Periodic discussion, workshop and questionnaire survey are carried out by affiliate. As for KC Air Filtertech, they hold an annual dialogue for quality improvement to 87 partners. KC Glass & Materials pays incentives if joint target is achieved.

Customer satisfaction

At the customer questionnaire survey by KC Cottrell, the result was 'Very Satisfaction' and 'Satisfaction' in all areas. In particular, the kindness of staff and customer response had high points. As for the product defect rate, KC Cottrell Vietnam increased by 0.1% point from 2.8% in 2014 to 2.9% in 2015, but NWL-Pacific kept 1%. Clestra Hauserman reduced by 0.03% point with 0.29% compared with the last year.



Grievance handling process

KC Green Holdings and affiliates developed grievance handling process to improve working environment of employees. The management team received personal grievance and it was solved through management report and grievance committee. As a result, total 17 cases were handled in 2015 (KC Eco Energy, KC Glass & Materials and KC Hanmi Environment). We will make an effort to provide employees with pleasant and comfortable workplace.

Unity activity of employees

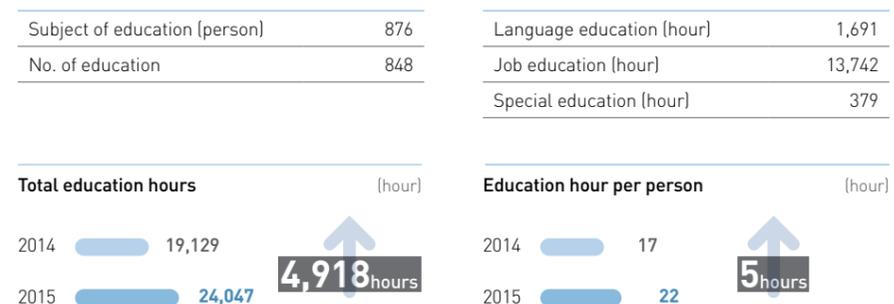
Environmental service affiliates of KC Green Holdings hold sports event annually for networking and unity of employees in different affiliates. Besides, KC Cottrell India hosts Family Day, KC Cottrell Taiwan hosts sports event and Nol-Tec Systems makes effort to develop joyful working environment through satisfaction survey of employees.



Sports event of environment service affiliates

Education for employees

KC Green Holdings promotes education plan to each personnel. And, it enacts training and education regulation and provides language and special education as well as job capability empowerment with equal opportunity.



KC Cottrell education system

Category	Education per rank	Job education				Other education			Qualification education		
		Core personnel education		Outsourcing education		All employees			Optional course		
Officer	New director and head of corp. education	Compulsory				Safety education (4), sexual harassment prevention education (compulsory)	KMS	Mentoring activity	Internal technical education	Language/ job related qualification acquisition (option)	
Team head	Team head education	Personnel exchange with affiliates/ overseas seminar	Special degree course	Engineer compulsory course	Manager compulsory course						Job capacity empowerment course
Senior level	New team head education										
Manage	Negotiation education										
Assistant manager	New employee education										
Employee											

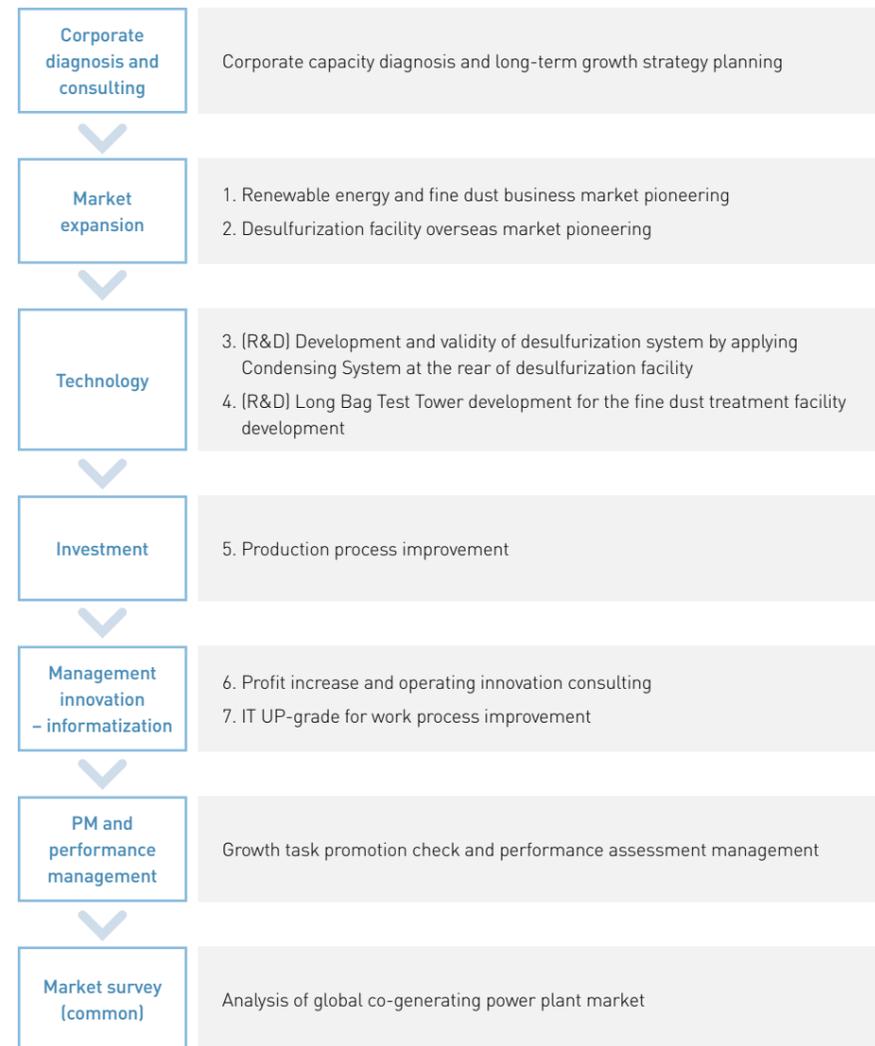


KC Cottrell was awarded the 'best mutual growth partner company of this year'

Mutual growth

Thanks to the effort for providing best services and products with customers, KC Cottrell was awarded the 'best mutual growth partner company of this year' by the National Commission for Corporate Partnership. As an excellent partner of POSCO, we contributed to develop productivity and was recognized for the achievement of joint entrance to overseas market with the 2nd and the 3rd partners.

KOSEP World Class (KWC30) is a program by Korea South-East Power to select excellent small and medium standing companies to develop as a global hidden champion. It is progressed in two sessions from 2015 to 2017, and the total investment will be 1.53 mUSD. By the support of Korea South-East Power, KC Cottrell achieves productivity increase, cost reduction and job creation effect through internal capacity diagnosis, long-term growth strategy planning, domestic and overseas market analysis and operation innovation consulting.



Environment

As all management activities of a company affect environment, companies are required to manage pollution material effectively as well as developing eco-friendly product. Business of KC Green Holdings had direct and indirect impact on environment. We have a sense of mission of keeping global environment and make effort to minimize adverse environmental impact.



KC Green Holdings and affiliates spare no effort for development and investment to minimize environmental pollution materials in the workplace as well as for the protection of sustainable and clean global environment.

2015 environment communication activity with affiliates

KC Enviro services, KC Hanmi Environment	KC Eco Energy	
Participation in technical forum to improve waste management system by the ministry of environment	Participation in government policy presentation on safety and environment	Organizing Honam regional committee of Korea Industrial Waste Resource Mutual Cooperative

Environmental management system

KC Green Holdings' affiliates set environment management as the corporate management policy with ISO14001, environmental management system and make continual improvement of environmental management with specific target. In 2015, NWL-Pacific received the certification in addition. Thus, total 10 companies received ISO14001 certification.

Affiliates' environment certifications

ISO14001	KC Cottrell (including workplace), Lodge Cottrell UK, KC EnviroServices, KC Landfill Service, KC Enviro Construction, KC Hanmi Environment, KC Eco Energy, KC Glass & Materials, NWL-Pacific (2015), Clestra Hauserman
Green technology certificate	KC Glass & Materials
Excellent recycling product GR certificate	KC Glass & Materials

TMS (Tele-monitoring system)

KC Environ Services and KC Glass & Materials install 24-hours monitoring system on 7 major air pollutants such as dust, sulfur oxides and nitrogen oxides in order to minimize pollution materials.

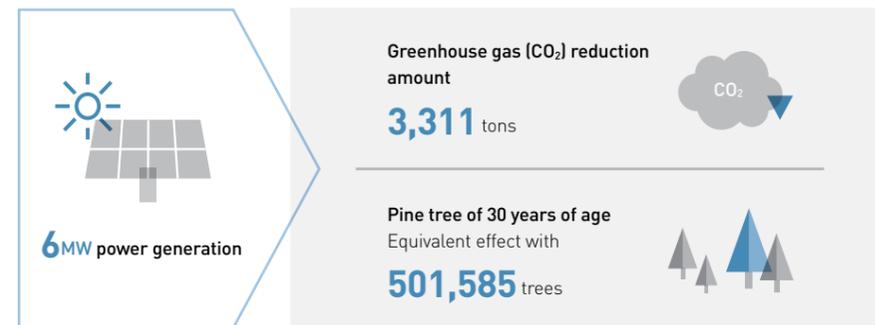
Renewable energy (KC Solar Energy solar power plant)

KC Solar energy, the affiliate of renewable energy in KC Green Holdings manages and operates solar power plant facility. Solar power produces eco-friendly energy. As solar power is infinite, it shows continual growth. In 2015, GMK 11.5 MW was constructed and it attempts to penetrate into various markets besides large solar power plants.



GM Korea 11.5MW Solar power plant

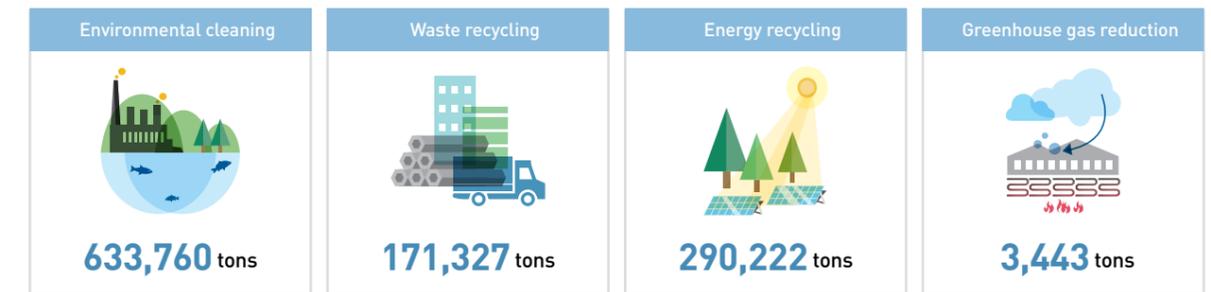
Solar power plant managed and operated by KC Solar Energy



Environment improvement through product and service improvement

Company	Improvement activity	Effect
KC Enviro Services	RKS ID FAN INVERTER applied	Reduction of power consumption
KC Hanmi Environment	SDR bottom dust treatment system improvement	Reduction of labor cost and packing cost of 25,478 USD
KC Glass & Materials	Reuse of disposable wood pallet	Reduction of 6,794 USD

2015 Environmental business performance



Environmental performance per affiliate

Affiliate	Category	Details	Treatment/production	Unit	Remark
KC Enviro Services	Environmental cleaning	Waste incineration	43,144	ton	
	Energy recycling	Reuse of waste heat (steam)	83,544	ton	
	Waste recycling	SCR catalyst remanufacturing	230	m³	
KC Landfill Service	Environmental cleaning	Waste landfill	422,540	ton	
		Water pollutant	25,056	ton	Treatment of leachate
KC Enviro Construction	Waste recycling	Reuse of construction waste (aggregate, filling powder, scrap, Wnon-ferrous, waste plastic, waste wood)	85,000	ton	
KC Hanmi Environment	Energy recycling	Reuse of waste heat (steam)	36,900	ton	
	Environmental cleaning	Waste incineration	24,630	ton	
		Waste oil	20,923	ton	
KC Eco Energy	Environmental cleaning	Waste incineration	25,419	ton	
		Construction waste treatment	81,269	ton	
	Energy recycling	Reuse of waste heat (steam)	50,516	ton	
		Waste recycling	Construction waste recycling	53,136	ton
KC Glass & Materials	Waste recycling	SFR production	2,863	ton	
		Waste glass recycling	44,402	ton	
	Environmental cleaning	Sales of waste	50	ton	
		Water pollutant (waste water)	16,599	ton	
		General waste (waste treatment sludge and waste synthetic resin)	114	ton	
	Energy recycling	Designated waste dust and waste oil	103	ton	
		Waste heat boiler installation (Energy cost reduction)	2.6	TJ	
Renewable energy production	Waste heat boiler installation (Greenhouse gas, CO ₂ reduction)	133	TCO ₂		
	Sales of solar power energy	171,500	kwh		

Community

In the contemporary society, a company can achieve sustainable growth when they perform social responsibility along with creating economic profit. As the sympathy and consent of local society is required in the business of KC Green Holdings, we spare no effort for the local development and for participating in local events. We will continue to carry out systematic social responsibility management through CSR Initiative and strategy development

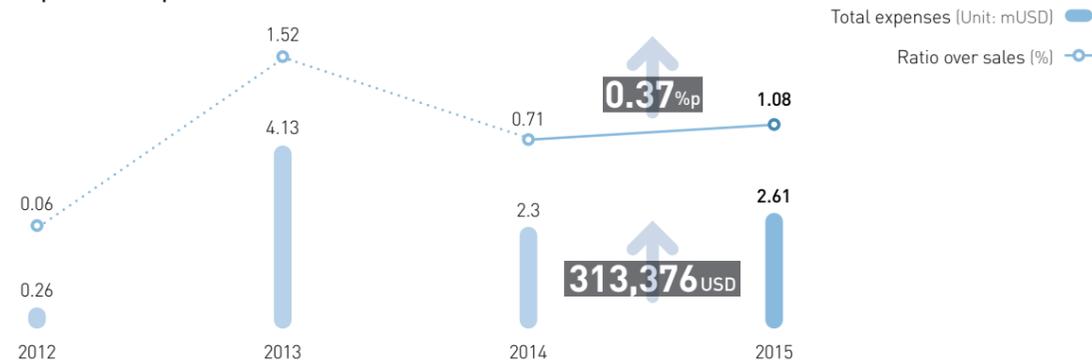


KC Enviro Services
Selected as
excellent employment company



Local event participation and support
20 cases

Environment protection expenses



Energy consumption [TJ]

Category	2012	2013	2014	2015
Fuel energy	331	343	211	209
Electric energy	451	463	7,835	328
Other (renewable energy)	40	100	5,187	745
Total energy consumption	787	907	13,234	1,282
Remark		20 companies reported	18 companies reported	16 companies reported

Waste generation [ton]

Category	2012	2013	2014	2015
General waste	19,966	101,903	30,395	47,644
Designated waste	1,516	3,859	30,673	7,630
Total waste generation	24,876	105,762	61,068	75,340
Remark		11 companies reported	8 companies reported	9 companies reported

Water consumption [ton]

Category	2012	2013	2014	2015
General water	-	-	280,173	271,802
Recycling water	-	-	47,750	65,802
Total water consumption	387,459	397,048	327,923	337,604
Remark		20 companies reported	18 companies reported	16 companies reported

Greenhouse gas discharge [tCO₂eq]

Category	2012	2013	2014	2015
Direct discharge	72,410	141,405	177,934	162,863
Indirect discharge	14,323	19,239	20,341	21,770
Total discharge	86,733	160,662	198,275	184,633
Remark		7 companies reported	4 companies reported	5 companies reported

Water pollutant discharge [mg/l]

Category	2012	2013	2014	2015
COD	52.8	103.8	247	238.2
BOD	25.4	19.4	378	281.3
T-N	69.6	105.6	418	284.2
T-P	0.6	1.1	4	3.8
Remark	Total 5 companies report - KC Cottrell(Anseong Factory), KC Enviro Services, KC Hanmi Environmnet, KC Glass & Materials and Clestra Hauserman			

Air pollutant generation

Category	2012	2013	2014	2015
NOx (ppm)	114.4	129.1	137	140
SOx (ppm)	41.0	36.2	37	50.4
Dust (mg/m ³)	8.4	26.5	20	14.8
Remark		7 companies reported	6 companies reported	5 companies reported

* The number of reporting company was changed as KC Cottrell US was merged by Nol-Tec Systems and KC Eco Logistics Co., Ltd. was established.

KC Green Holdings carries out various social contribution activities to solve social problems such as local environment cleaning, low income level support, solitude aged support and local society development.

Contribution to stable employment

KC Green Holdings has an interest in youth unemployment and employment security issues and makes various efforts to solve such social problems. Dongyoung Seo, president of KC Cottrell had a chance to share opinions with young job seekers at the 'Youth Sketch Talk Concert' for Industrial Environment Job Expo in October 2015 organized by the ministry of environment. And, KC Enviro Services was selected as an excellent employment company by achieving high employment rate through the young generation and priority employment of local residents. KC Glass & Materials achieved employment stability by succeeding the existing workers when they acquired a metallic material business.



1. KC Enviro Services selected as excellent employment company
2. Dongyoung Seo, president of KC Cottrell at 'Youth Sketch Talk Concert'



Donation of solar power plant at Nham Son Kindergarten

Environment improvement through donation activity

KC Solar Energy built 3kw solar power plant facility for the disabled living facility in Gimpo, Gyeonggi-do in February last year. It can save 1,019 USD of electric bill and enable people to enjoy better life. In November 2015, at the 10th anniversary of the foundation, KC Solar Energy visited Vietnam and donated 3kw solar power facility and hot water boiler at Nham Son Kindergarten in Dong Huong. As the electricity is expensive in Vietnam, it is expected that they could improve quality of education through reduction of electricity bill and it can improve environment of Dong Huong area through eco-friendly energy use.

Sharing activities per affiliate

KC Green Holdings	<ul style="list-style-type: none"> • Support Baroque orchestra
Nol-Tec Systems	<ul style="list-style-type: none"> • Christmas toy and food shelf
KC Enviro Services	<ul style="list-style-type: none"> • Donation to revive Yeosu Sea • Environment protection head office • donation to ecosystem and environment report event by climate change • Local resident • 1 local resident filial tourism and sports events support • local youth association support
KC Hanmi Environment	<ul style="list-style-type: none"> • Scholarship to child head of household • rice donation at Chuseok • Campaign donation to low income family for summer • Local event support -Gyeongnam Opera support
KC Landfill Service	<ul style="list-style-type: none"> • Chilgok-ri silver club event support • Hwaseong-si resident club event support
KC Eco Energy	<ul style="list-style-type: none"> • Support to silver center and event of resident day • Support sports event at Jochon-dong and Dongsan-dong • Local police development committee and Jeonju District Police school violence prevention committee activity support
KC Glass & Materials	<ul style="list-style-type: none"> • Local love sharing event • Social welfare fund support to vulnerable class and solitude aged • Connection for 1 company 1 social corporation to improve self-help of social corporation
NWL - Pacific	<ul style="list-style-type: none"> • Support of group home

APPENDIX

38	KC Green Holdings' Affiliates
42	Financial Information
46	Independent Review Opinion
47	GRI G4
49	Registered Association and Awards

KC Green Holdings' Affiliates

Environmental engineering division



KC Cottrell Korea

Since its foundation in 1973 as an environmental plant company, it provides gas treatment facility removing sulfur, nitrogen oxides and industrial heat exchange and powder transfer facility.

- 📍 Fl.12, Digital Cube, 34, Sangnamsan-ro, Mapo-gu, Seoul
- 🌐 www.kc-cottrell.com



KC Air Filtertech

It makes efforts to make bright air and clean sky with customized services in air pollution prevention facility (dust collector) such as Bag Filter, Bag Cage, Diaphragm Valve, Venturi.

- 📍 [212-31, Nae-dong] Fl. 3, Changseong Tech, 183, Ojeong-ro, Oejong-gu, Bucheon-si, Gyeonggi-do
- 🌐 www.kcairfiltertech.com



KC Cottrell Taiwan

For last 20 years, it has carried out projects in air pollution prevention area focusing on EPC and A/S technical service. From 2008 onwards, it was recognized its technical ability while supplying electric dust collector, desulfurization and ash treatment facility to Hsinta Power Plant in Taiwan.

- 📍 14F-5, No.77, Sec.1, Xintai 5th Rd., Xizhi Dist., New Taipei City
- 🌐 www.kctw.com.tw



KC Cottrell India

KC Cottrell India makes efforts to preoccupy environmental facility market that is expanded together with large power production. It aims to be a leader in desulfurization and denitrification facility market.

- 📍 Spazedge Tower-B 5F, Suite No 506, 513-514, Gurgaon, Haryana-122002, India
- 🌐 www.lodgecottrellpvt.com



Nol-Tec Korea

It is a powder transfer system specialized company including Bottom & Fly Ash that provides total solution. It expands its business area through Pneumatic Handling System to achieve sustainable growth.

- 📍 [Seoknam-dong] 33-3, Geonji-ro 97beon-gil, Seo-gu, Incheon
- 🌐 www.noltec-korea.co.kr



Changchun KC Envirotech (KC Cottrell China)

KC Cottrell China has developed its status in China by supplying more than 150 products including electric dust collector, bag filter, desulfurization facility, waste water treatment facility and waste incineration.

- 📍 No.9576 Donghuancheng Rd., Changchun Economy & Development Zone, Changchun City, Jilin Province, 130033, P.R. China
- 🌐 www.cckc.com.cn



Lodge Cottrell UK

Lodge Cottrell succeeded the commercialization of electric dust collector for the first in the world in 1913. Since then it has established its prestige in the European air pollution market for more than 100 years. In line with market change, it expands its business to renewable energy system such as biomass.

- 📍 Trinity Point East, Halesowen, B63 3HY, United Kingdom
- 🌐 www.lodgecottrell.co.uk



Nol-Tec Systems

It supplies all facilities for powder and particle material transport, loading and mixture. Recently, it stabilizes its business using Pneumatic Conveying System.

- 📍 425 Apollo Drive Lino Lakes, MN 55014, USA
- 🌐 www.nol-tec.com



KC Energy Technology

KC Energy Technology was founded in 2015 by the merger of KC Cottrell and Tienhai and has developed its status as general environment company in Chinese market and overseas markets for desulfurization and denitrification facility.

- 📍 21st F Arsenal Tower, No. 69th, Zizhuyuan Rd, Haidian District, Beijing, China
- 🌐 www.kc-energy.com.cn



KC Cottrell Vietnam

It is the first environment facility company in Vietnam. To protect future environment of Vietnam with growth potentiality, it supplies optimal air pollution prevention facility.

- 📍 3F, SIMCO Building, 28 Pham Hung Street, My Dinh 1 Ward, Nam tu Liem District, Ha Noi, Vietnam
- 🌐 www.kc-cottrell.com.vn

Environmental service division



KC Enviro Services

It produces energy through stable treatment (incineration) of industrial waste and carries out waste catalyst remanufacturing and refurbishment of landfill site. It creates value by safe treatment and recycling of waste resources.

- Factory 1: (Wolnae-dong) 310-73, Jindallae-gil, Yeosu-si, Jeollanam-do
- Factory 2: 1322, Hwachi-dong, Yeosu-si, Jeollanam-do
- www.kc-enviro.com



KC Hanmi Environment

It plays a leading role in environmental cleaning at Yeongnam and Honam area through stable treatment of industrial waste with its one-stop service system for collecting, delivering and handling general, designated waste, waste water and waste oil.

- 103, Jayumyeok 6-gil, Masanhoiwon-gu, Changwon-si, Gyeongsangnam-do
- www.kc-enviro.com



Changwon Enertech

KC Hanmi Environment owns 40% of equity of the company. Since the acquisition of the equity, it improved facility through 34 mUSD size investment in 2016. It supplies steam from general and designated waste incineration, SRF production/ incineration with customers.

- Nammyeon-ro 113beon-gil, Uichang-gu, Changwon-si, Gyeongsangnam-do



KC Eco Energy

It engages in collection and delivery of general and designated waste, waste incineration and interim treatment of construction waste. It produces SRF and operates SRF boiler to produce steam and electric power generation. It has solidified its status in the waste energy market.

- 765-1, Yeoui-dong, Deokjin-gu, Jeonju-si, Jeollabuk-do
- www.kc-enviro.com



KC Landfill Service

Under the slogan of safety and complete treatment, KC Environment Development engages in final treatment of waste (landfill) according to strict compliance of law and responsible services to protect global environment.

- #303, 155, Byeongjeomjungang-ro, Hwaseong-si, Gyeonggi-do
- www.kc-enviro.com



KC Eco Logistics

It engages in industrial waste collection and delivery of the capital area. It collects market information through network with many workplaces as well as domestic partners for strategic use.

- 1576-4, Seohae-ro, Cheongbuk-myeon, Pyeongtaek-si, Gyeonggi-do

Environmental manufacturing division



KC Glass & Materials

KC Glass develops new materials such as cook top ceramic board and optical glass materials based on bottle glasses and glass frits performing the mission as a green company.

- 1105, Seongjin-ro, Ipjang-myeon, Seobuk-gu, Cheonan-si, Chungcheongnam-do.
- www.asglass.co.kr



KC Thermal

KC Thermal makes efforts to increase efficiency of energy device such as refinery, petro-chemical plant and power generating plant by supplying pneumatic heat exchanger and other industrial devices worldwide.

- Office: #609, Owners Tower, 16-5, Sunae-dong, Bundang-gu, Seongnam-si, Gyeonggi-do
- Factory: 253, Singi-ri, Seoun-myeon, Anseong-si, Gyeonggi-do



Clestra Hauserman

Clestra Hauserman produces partition and ceiling material to care for customers' health and global environment for the requirements and condition of customers.

- Fl. 14, Sewoo Bldg, 115, Yeouigongwon-gu, Yeongdeungpo-gu, Seoul
- www.clestra.com



NWL-Pacific

NWL Pacific produces constant current transformer, automatic control panel and plasma power device, which are essential part of electric dust collector. With more than 80 years of experience and technology, it makes effort to produce highly reliable products and services.

- 89-20, Singiyangchon-gil, Seoun-myeon, Anseong-si, Gyeonggi-do
- www.nwlpacific.co.kr

Renewable energy division



KC Solar Energy

It performs power plant system construction from small housing power system to MW commercial power plant system and carries out O&M project to contribute to reduce greenhouse gas and global warming.

- Fl. 11, Digital Cube, 34, Sangamsan-ro, Mapo-gu, Seoul
- www.kc-solarenergy.com

Financial Information

Independent Auditors' Report

English Translation of a Report Originally Issued in Korean

To the Shareholders and the Board of Directors of KC Green Holdings Co., Ltd:

We have audited the accompanying consolidated financial statements of KC Green Holdings Co., Ltd. and subsidiaries (the "Group"). The financial statements consist of the consolidated statements of financial position as of December 31, 2015 and 2014, and the related consolidated statements of comprehensive income, consolidated statements of changes in shareholders' equity and consolidated statements of cash flows, all expressed in Korean won, for the years ended December 31, 2015 and 2014. The Group's management is responsible for the preparation and fair presentation of the consolidated financial statements, and our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the Republic of Korea. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, based on our audits and the reports of other auditors, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Group as of December 31, 2015 and 2014, and the results of its operations and its cash flows for the years ended December 31, 2015 and 2014, in conformity with Korean International Financial Reporting Standards ("K-IFRS").



March 16, 2016

KC GREEN HOLDINGS CO., LTD. and Subsidiaries

Consolidated Financial Statements

Years ended as of
December 31,
2015 and 2014

(in Korean won)

	2014	2015
ASSETS		
Non-current assets		
Property, plant and equipment-net	146,482,889,068	169,333,692,058
Investment in real estate	12,286,285,493	12,270,728,366
Non-current account receivables - net	-	16,577,967,501
Investments in associates	15,395,885,264	14,580,775,689
Goodwill	34,759,670,635	37,287,647,264
Other intangible assets	1,124,625,160	989,304,335
Derivative financial assets	-	77,497,729
Deferred tax assets	7,568,695,407	11,745,670,908
Other non-current financial assets	10,986,882,010	8,371,878,147
Other non-current non-financial assets	1,096,456,461	849,583,040
Total non-current assets	229,701,389,498	272,084,745,037
Current assets		
Inventories	12,576,130,506	7,958,956,122
Account receivables - net	73,547,104,663	69,600,381,202
Due from customers for contract work	46,912,644,721	25,854,919,384
Other current receivables	17,948,127,959	20,177,643,294
Current derivative financial assets	274,770,976	148,086,734
Current tax assets	463,398,977	2,465,230,938
Other current financial assets	10,979,519,644	10,877,784,597
Cash and cash equivalents	45,105,774,970	41,147,017,142
Total current assets	207,807,472,416	178,230,019,413
Total assets	437,508,861,914	450,314,764,450
EQUITY		
Equity attributable to owners of the parent	145,345,345,792	153,879,162,562
Issued capital	11,217,490,000	11,217,490,000
Capital surplus	50,754,464,811	45,386,780,020
Other reserves	5,437,043,323	6,052,186,041
Retained earnings	77,936,347,658	91,222,706,501
Non-controlling interests	48,753,285,976	41,942,425,204
Total equity	194,098,631,768	195,821,587,766

Notice to Readers

This report is effective as of the auditors' report date. Certain subsequent events or circumstances may have occurred between the auditors' report date and the time the auditors' report is read. Such events or circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to the auditors' report.

KC GREEN HOLDINGS CO., LTD. and Subsidiaries
Consolidated Statement of Profits and Losses

Years ended as of
December 31,
2015 and 2014

(in Korean won)

	2014	2015
LIABILITIES		
Non-current liabilities		
Other non-current provisions	20,511,312,277	21,038,606,469
Other non-current liabilities	-	2,711,925,960
Non-current account payables	-	9,641,910,259
Long-term borrowing	48,574,306,000	56,246,307,000
Convertible bond	2,006,168,210	2,073,262,976
Post-employment benefit obligations	8,686,622,578	8,521,906,518
Derivative financial liabilities	21,566,318	6,926,793
Other non-current financial liabilities	3,623,543,421	5,582,413,300
Total non-current liabilities	83,423,518,804	105,823,259,275
Current liabilities		
Other current provisions	-	12,504,039
Short-term borrowings	29,948,478,687	23,250,724,065
Account payables	66,613,554,521	46,747,805,483
Other current liabilities	19,720,442,297	25,052,783,170
Advance from customers	34,465,329,523	44,192,169,020
Current tax liabilities	4,610,190,927	1,737,869,233
Derivative financial liabilities	175,915,387	51,991,421
Current portion of long-term liabilities	4,452,800,000	7,613,590,000
Other current non-financial liabilities	-	10,480,978
Total current liabilities	159,986,711,342	148,669,917,409
Total liabilities	243,410,230,146	254,493,176,684
Total equity and liabilities	437,508,861,914	450,314,764,450

	2014	2015
CONSOLIDATED NETPROFIT		
Operating income	384,115,293,983	377,659,976,421
Sales	381,800,057,874	373,391,951,570
Gain from valuation of associates	771,100,876	1,502,005,987
Rental	1,544,135,233	2,766,018,864
Operating expenses	366,311,091,561	361,538,446,867
Cost of sales	322,769,686,715	314,540,753,758
Loss from valuation of associates	1,219,659,161	215,415,277
Selling, general and administrative expenses	42,321,745,685	46,782,277,832
Profit from operations	17,804,202,422	16,121,529,554
Other income	5,559,947,065	7,554,308,320
Other expenses	(6,158,983,545)	(9,129,551,364)
Financial income	1,042,320,413	1,081,705,039
Financial costs	(2,334,166,918)	(3,028,484,178)
Profit before income tax	15,913,319,437	12,599,507,371
Income tax expense	15,887,516,116	(813,546,088)
Profit for the year	25,803,321	13,413,053,459
COMPREHENSIVE INCOME(LOSS)		
Items that will not be reclassified subsequently to income(loss):	(3,787,154,411)	1,215,068,667
Re-measurement factor on defined benefit plans	(3,787,154,411)	1,215,068,667
Items that will be reclassified subsequently to income(loss):	522,808,151	289,351,013
Currency translation differences	485,408,166	569,334,035
Equity changes in equity method investee	(43,599,877)	(326,126,093)
Net change in fair value of financial assets	78,851,975	34,724,242
Net change in fair value of interest swap	2,147,887	11,418,829
TOTAL OTHER COMPREHENSIVE INCOME(LOSS)	(3,264,346,260)	1,504,419,680
TOTAL COMPREHENSIVE INCOME(LOSS)	(3,238,542,939)	14,917,473,139
Profit attributable to:		
Owners of the parent	2,447,603,158	13,605,615,532
Non-controlling interests	(2,421,799,837)	(192,562,073)
Profit for the year	25,803,321	13,413,053,459
Total comprehensive income attributable to:		
Owners of the parent	920,465,990	14,190,156,818
Non-controlling interests	(4,159,008,929)	727,316,321
Total comprehensive income for the year	(3,238,542,939)	14,917,473,139
Earnings per share(in Korean Won)		
Basic	111	615
Diluted	111	615

Independent Assurance Statement

The Business Institute for Sustainable Development (BISD), led by the Korea Chamber of Commerce & Industry, submits the assurance statement by the request of assurance of 'the independent assurance institute' for '2016 KC Green Holdings Sustainable Management Report' (hereinafter referred to as 'Report').

Purpose The Assurance Opinion is to check any material error or bias in the contents of the Report, and to suggest opinion if KC Green Holdings' sustainable management issues are suitably extracted and reported through the independent assurance procedure.

Responsibility and independency The Report is on the promotion of sustainable management, efforts, performance and future plan of sustainable management of KC Green Holdings in 2015. And KC Green Holdings takes full responsibilities for the preparation of the Report. In the performance of assurance procedure of the Report and supplying assurance opinion to the management, BISD has no any interest with KC Green Holdings for the purpose of benefit except for the independent assurance to keep independency and autonomy of providing opinion.

Assurance criteria and restriction BISD performed the assurance based on 3 principles of AA1000AS(2008) including inclusivity, materiality and responsiveness and the principle of contents and quality of Report in Global Reporting Initiative(GRI) G4.

The assurance was performed to KC Green Holdings and its affiliates. The scope of assurance is restricted to performance in the Report, and previous data and online information was excluded even though it was referred to. And, greenhouse gas emission which was verified by the 3rd party institution is not included.

Main assurance procedure BISD reviewed contents of interview and provided documents. The main procedure includes the followings.

- Review on the application of internal sustainable report criteria
- Review on the information in the Report and information collection process
- Review on the materiality test procedure, main issues and related internal policy
- Interview and check specific data through site inspection

Assurance opinion BISD carried out the assurance according to the procedure in the assurance report and if necessary, revision on the report was made. On this basis, it was determined that there is no material error in the Report and the Report is in accordance with GRI G4 Core criteria.

Assurance opinion based on AA1000APS principle is as follows.

Inclusivity: In the promotion of sustainable management, does it comply with the participation of stakeholder for the responsible and strategic response?

- KC Green Holdings defines stakeholders and receives opinions from key stakeholders including customers, government, employee, partner, shareholder and local community, which were figured out through communication channel.
- BISD did not find any omitted stakeholder in the communication channel of KC Green Holdings.

Materiality: Does the Report contain material issues affecting stakeholders in the sustainable management?

- KC Green Holdings finds main issues of sustainable management through the materiality test and figured out main issues through opinion collection from stakeholder questionnaire survey.
- BISD did not find any omitted issues in the materiality assessment process.

Responsiveness: Does it properly respond to stakeholders' issues?

- KC Green Holdings figured out the effect of management activities on stakeholders and performed activities to respond. And, they disclosed performances.
- BISD did not find any improper respond to demand and request of stakeholders in the main issues.

Recommendations As long as it does not affect assurance result, BISD makes the following recommendations

- KC Green Holdings is an environment engineering specialized company and many business activities are related to sustainability. As new environment technologies and new business lead to meaningful performance to environment and society, it is necessary to share performance with stakeholders actively. At the same time, it is expected for KC Green Holdings to grow in harmony with economy, society and environment by the continual development of social contribution programs related to environment.
- It is necessary for KC Green Holdings to stress and report sustainable management activities in new business areas according to the rapid change of management environment. For this purpose, it is recommended to report key issues of KC Green Holdings promptly after precise analysis of materiality.
- KC Green Holdings held the first stakeholder dialogue to discuss sustainability of the company. At the dialogue, the management and CSR experts figured out improvement measures and various activities to improve sustainable management performance were reported. It is expected to promote reliable sustainable management continually.

July 2016

The Business Institute for Sustainable Development President
Chun, Subong




GRI G4 Index

General index

Category	Index no.	Index name	Page	Remark
Strategy and analysis	G4 1	Declaration of top decision making on organization and strategy of sustainable	6-7	
Organization profile	G4 2	Organization name	12	
	G4 3	Representative brand, product and service	10-11	
	G4 4	Head office / head quarter address	12	
	G4 5	The number of country where organization engages in business and country specially related to sustainable management operating business	12-13	
	G4 6	Organization ownership type and legal type	12,14	
	G4 7	Market to provide service (Geographical distribution, industrial area, customer and beneficiaries)	12-13	
	G4 8	Organization size (employee, sales, capital, products and services)	12-13,44	
	G4 9	No. of employee by type (contract type and sex, employment type and sex, worker and supervised worker, region and sex and self-employed in law), serious change of number of employees	27	
	G4 10	Ratio of workers subject to collective bargaining	27	
	G4 11	Explanation of organization supply network	29	
	G4 12	Serious change in organization size, structure, ownership and supply network during report period	None	
	G4 13	Existence and execution method of preliminary preventive method and principle	20	Safety preventive activity
	G4 14	Economy, environment, society charter, principle or other initiatives which organization subscribes or supports	50	
G4 15	Information of subscription of main associations	50		
Important issues and report boundaries	G4 16	List of entity in the organization's consolidated financial statements or equivalent documents or entity in the organization's consolidated financial statements or equivalent documents but not mention in the report	12	
	G4 17	Report principle application method in the report contents, aspect boundaries decision process and report contents decision process	16,17	
	G4 18	List of important aspects figured out in the process of decision of report contents	17	
	G4 19	Description of aspect boundaries in organization by each important aspect	18	
	G4 20	Description of aspect boundaries other than organization by each important aspect	18	
	G4 21	Effect of revised report of information from the previous report and reason for revised report	None	
	G4 22	Important change in scope and aspect boundaries after the previous report period	34	
Stakeholder participation	G4 23	Participating stakeholder list	16	
	G4 24	Main stakeholders and reason for selection	16	
	G4 25	Participation method of organization's stakeholder (participation frequency by type and by stakeholder group)	16	
	G4 26	Important issue response and result raised by stakeholder participation including the publication of the report (main issue per stakeholder)	8-9	
Report profile	G4 27	Reporting period	2	
	G4 28	Publication date of recent report	2	
	G4 29	Reporting cycle	2	
	G4 30	Contact for report or contents of report	2	
	G4 31	GRI Index (option, GRI Content Index, independent assurance report)	49	
	G4 32	External assurance policy and activity, scope and criteria of assurance, relation with reporting organization and assurance organization, role of top decision maker and the management to ensure reliability of the report	48	
Governance structure	G4 33	Organization chart of top decision maker including committee and list of committee in charge of economy, society and environment related issues (remark representative issue per committee)	12,14	
	G4 34	Wage policy and assessment criteria to top governance organization and high rank officers	14	
Ethics and integrity	G4 35	Code of conduct or code of ethics	25	

Affiliates membership and certification

Specific index

Category	Aspect	Index no.	Index name	Page	Remark
DMA	DMA	G4	DMA Reason for importance of aspect, impact of significant decision and impact mgmt method, management policy effect assessment system, assessment result and related adjustment report	19, 21, 25, 27, 29, 31, 35	
Economy	Economic performance	G4	EC1 Economic value creation and distribution	4-5	
Environment	Energy	G4	EN3 Direct energy consumption in organization	34	
		G4	EN8 Amount of intake per supply source	34	
	Water resource	G4	EN10 Total amount and ratio of reused and recycled water	34	
		G4	EN15 Direct greenhouse gas emission	34	
		G4	EN16 Indirect greenhouse gas emission	34	
		G4	EN19 Greenhouse gas reduction	32-33	
	Waste water and waste	G4	EN21 NOx, SOx and other main air pollutant emission	34	
		G4	EN23 Waste emission by type and treatment method	34	
	Product and service	G4	EN27 Environment impact reduction activity and performance of product and service	32	
	Compliance	G4	EN29 Amount and number of sanction by violation of environment regulation	26	
Logistics	G4	EN30 Serious environment impact of product, raw material delivery and resource transportation	4	102,874tCO ₂ eq emission	
Society-Labor practices and labor right	Employment	G4	LA1 No. of new hiring, no. of changeover and ratio by age, sex and region	27	
		G4	LA3 Childcare leave per sex, return rate and continual service rate	27	
	Workplace safety and health	G4	LA7 Occupational disease occurrence rate or vulnerable worker	20	
		G4	LA9 Average training hour per year to one worker per sex and category of worker	28	
	Labor practice and grievance handling procedure	G4	LA16 No. of grievance filed, discovered and solved on working environment by the official grievance handling system	28	
Society-Human right	Investment	G4	HR2 Worker training hours for human right policy and procedure in workplace and number of trained workers	26	
Society-Society	Sanction	G4	S08 Fine imposed by violation of law and regulation and no. of non-monetary sanction	26	
Society-Product responsibility	Product and service labeling	G4	PR5 Customer satisfaction questionnaire survey result	29	

Affiliates membership and certification	Membership association	Certification
KC Green Holdings	Korea Chamber of Commerce and Industry The Business Institute for Sustainable Development (BISD), Seoul Chamber of Commerce, Listed company association	
KC Cottrell Korea	Seoul Chamber of Commerce, Korea Environment Preservation Association, Korea Electric Technology Association, Korea Environment Industry Association, Doosan Heavy Industry Association, Korea Association of Machinery Industry, Korea Construction Engineers Association, Korea Chamber of Commerce and Industry The Business Institute for Sustainable Development (BISD), Korea Carbon Capture and Storage Association, Korea Association for Chief Financial Officers, Korea Construction Association, Korea Electrical Contractors Association, Association of High Potential Enterprises of Korea, Korean Council on Latin America & the Caribbean, Korea International Trade Association, Korea Engineers Club	ISO 9001, ISO 14001, OHSAS 18001, KOSHA 18001
KC Air Filtertech		ISO 9001, CLEAN workplace, risk assessment
Changchun KC Envirotech		ISO 9001
KC Cottrell Vietnam		ISO 9001
KC Cottrell India	Korean Association in India, KOCHAM India, Korea India Green Tech Forum, Indo-Korean CSR Forum	ISO 9001
Lodge Cottrell UK		ISO 9001, ISO 14001
KC Enviro Services	Korea Industrial Waste Resources Mutual-Aid Association, Yeosu Industrial Complex Environment Committee, Yeosu Small and Medium Enterprise Committee, Plant & Mechanical Contractors Financial Cooperative of Korea	ISO 9001, ISO 14001, OHSAS 18001
KC Landfill Service	Korea Industrial Waste Landfill Association	ISO 14001
KC Enviro Construction	Korea Construction Waste Mutual Cooperative, Korea Construction Resource Association, Korea Special Construction Association	ISO 9001, ISO 14001
KC Hanmi Environment	Korea Industrial Waste Resources Mutual-Aid Association, Korea Industrial Waste Water Treatment Association, Changwon Chamber of Commerce & Industry, Masan Free Trade Zone Office Enterprise Association, Gyeongnam Environmental Engineers Association, Korea Fire Safety Association, Korea Electric Engineer Association, Korea Energy Engineer Association, Gyeongnam Opera Sponsor Association, Gyeongnam Joint Fund Association, Social Welfare Fund Association	ISO 14001, KOSHA 18001
KC Eco Energy	Jeonbuk Environment Preservation Association, Jeonbuk Environment Engineer Committee, Jeonju Enterprise Environment Committee, Korea Industrial Waste Resources Mutual-Aid Association, Korea Industrial Waste Resources Mutual-Aid Association, Korea Construction Waste Mutual Cooperative, Korea Electric Engineer Association, Korea Energy Engineer Association, Jeonju Chamber of Commerce & Industry, Jeonju Wanju Complex Firefighting Association, Jeonju Industrial Complex Safety and Health Managers Association	ISO 14001, risk assessment, aggregate quality certification
KC Eco Logistics	Gyeonggi Cargo Transport Association, Gyeonggi Cargo Mutual Cooperative	
KC Glass & Materials	Korea Industrial Safety Association, Daejeon Chungnam Environment Preservation Association, Korea Fire Safety Association, Korea Quality Foundation, Korea Automated Combined Association, Korea Industrial Promotion Association, Korea Part Material Investment Committee, Korea Ceramic Technology Institute, Directors of Research Institute Association, Chungnam Northern Chamber of Commerce, Red Cross Korea, Overseas Martyrdom Korean Commemorating Committee, Korea Trade Association, Korea Electricity Engineering Association, Factory Directors Association, Chungnam Economic Forum Association, Daejeon Chungnam Technology Management Club	ISO 9001, ISO 14001, KOSHA 18001, Green technology certification, excellent recycling product, GR certification, KS certification
KC Thermal		AS/NZS 1400, AS/NZS ISO 9001, AS/NZS 4801, OHSAS 18001
Clestra Hauserman		ISO 9001
KC Envirotech E&C (Fushun)		ISO 9001, ISO 14001, KOSHA 18001
NWL Pacific	Korea International Trade Association, Electric Construction Association, Korea Ozone Association	ISO 9001
KC Solar Energy	Korea Solar Power Industry Association	

KC Green Holdings 



This report was printed on
FSC™ certified eco-friendly
paper using bean-oil ink.