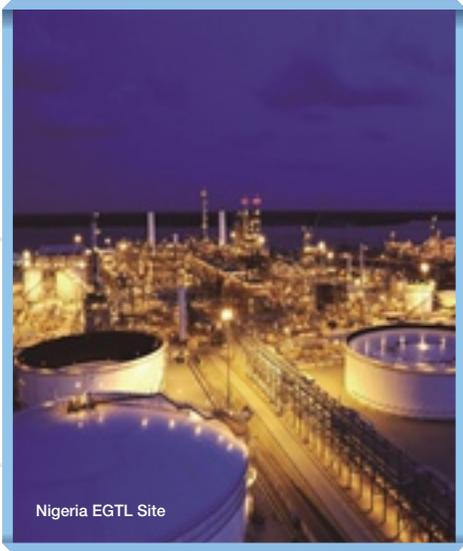


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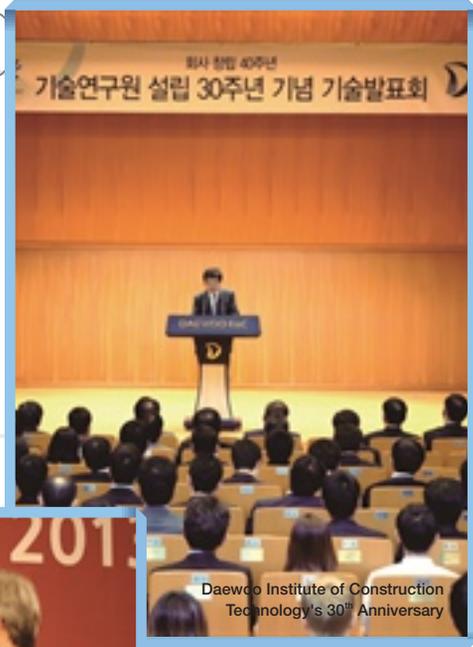
# 따뜻한 건설이야기

A Story of Warmhearted  
Construction that Changes the World



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On-site safety management

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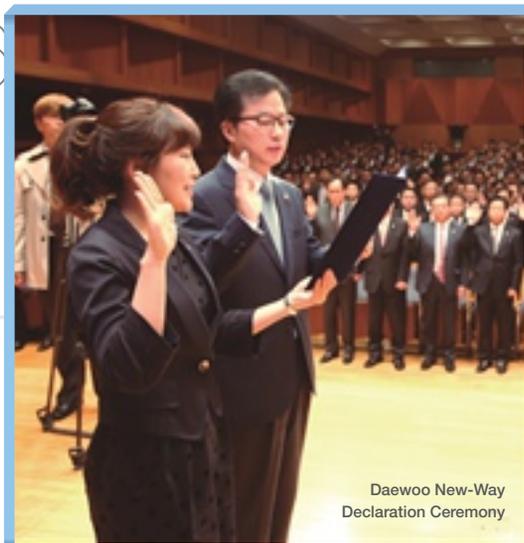
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2014 Daewoo E&amp;C's kick-off meeting for the year

Daewoo New-Way  
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# Message from the CEO



I extend my gratitude to all those who have supported Daewoo E&C through the years.

2013 brought a slower pace in global economic recovery and a prolonged decline in the domestic construction market. With the stagnant Korean construction market and heated competition in foreign markets, we at Daewoo E&C struggled to retain profitability, which is reflected in the slump in our business performance for the year. As such, all of us at Daewoo E&C are consolidating our capabilities to overcome these difficulties and create a new launch pad for growth.

To achieve this, we have been working continuously towards cost innovation and are focusing on maximizing profitability and liquidity through a strategy of selection and concentration in winning contracts. Led by the 'Corporate Value Committee' launched in 2014, we have been securing internal stability and establishing a new corporate culture. In addition, we are consolidating sustainable operations by making our firm-wide risk management system more sophisticated with the newly expanded RM Division.

We have selected international operations, technological competitiveness, developing and managing construction talent, creating economic value, environment-friendly construction, shared growth, customer satisfaction, and ethical · transparent management as the 8 core issues impacting Daewoo E&C's sustainable management. These issues are monitored and managed methodically. Furthermore, the progress we have made in these fields are disclosed with transparency in this report to enhance our communication with you, our stakeholders.

Today, companies can no longer expect continued growth in financial performance without fulfilling their social and environmental responsibilities. In response to the needs of the time, we announced the 'Daewoo New-Way' in November 2013, commemorating our 40th anniversary with compliance in corporate social, environmental and ethical responsibilities. This has fueled our efforts towards changing the way we think and innovating the way we work to establish an ethical and transparent corporate culture.

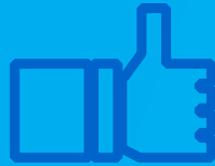
As Korea's representative construction company, we can't stress enough that each member of the Daewoo E&C family work with the utmost ethical mindset. We are strengthening our ethics policies to eradicate all corruption and illegal activities, and we strive to achieve shared growth with our business partners through fair trade policies. Daewoo E&C will continue to strictly uphold the law and do our best to build a culture of mutual development with our business partners.

2014 marks the first year of Daewoo E&C's new beginning and we are certain that we will not only to make up for slow performance in previous years but overcome obsolete practices to open an ambitious new chapter for Daewoo E&C. We will endeavor to be a company loved and respected by all stakeholders on the basis of a mature ethics and corporate culture.

Thank you.

August 2014  
President and CEO, Young-Sik Park

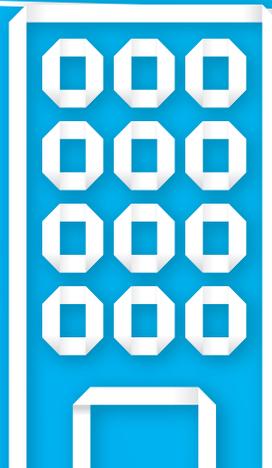




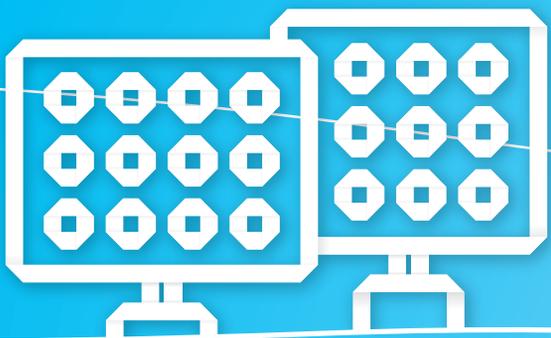
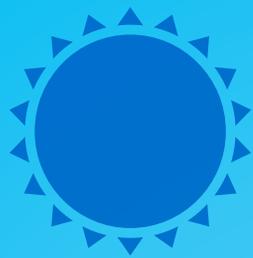
Plant Division



Civil Project  
Division



Building Works  
Division



**Power Business  
Division**

# Daewoo E&C

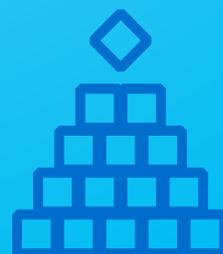
We make changes  
that bring the world more value.



**Housing Division**

08 2013-2014 Daewoo E&C Highlights

10 Company Overview



# 2013-2014 Daewoo E&C Highlights

## 01 Launching the Daewoo New-Way

On November 1, 2013, in celebration of Daewoo E&C's 40<sup>th</sup> anniversary, we launched the "Daewoo New-Way," our pledge of dedication towards fulfilling our corporate social responsibility. Detailed plans to achieve 'Future Growth' by creating economic value, 'Green Growth' through for environment-friendly construction management, and 'Shared Growth' to strengthen the firm's social responsibility were shared. In addition, all management and employees signed a pledge of action consolidating our firm-wide dedication towards ethical business operation, and fair and transparent trade practices.



## 02 Topped USD 50 billion in Cumulative Overseas Orders

Daewoo E&C became the 2<sup>nd</sup> Korean construction company ever to reach 50 billion USD in cumulative overseas orders, and did this in a record of 38 years. In the 38 years following its first overseas contract in 1976, Daewoo E&C won 423 contracts in 47 countries and has been particularly active in Africa, accounting for 35% of the total contract value from this region. Building on such progress, we have expanded and diversified our strategy proactively around the world to truly become a Global E&C Leader.



## 03 Winner of the CDP (Carbon Disclosure Project) Special Award

On November 4, 2013, at the CDP KOREA Awards, the Carbon Disclosure Project (CDP) Korea awarded Daewoo E&C with the 'Carbon Disclosure Special Award' under the new entrants category while also including us in the Climate Disclosure Leadership Index (CDLI), a rare honor bestowed on a new entrant. CDP is a global initiative to disclose carbon data with over 5,000 participating companies worldwide. Daewoo E&C hopes to strengthen our carbon stewardship by actively engaging in the CDP.



## 04 30<sup>th</sup> Anniversary of the Daewoo Institute of Construction Technology

November 2013 was the 30<sup>th</sup> anniversary of DICT which was launched in 1983 as the first of its kind in Korea to pioneer development of construction technology in Korea. DICT has been focused on developing mid to long-term core construction technologies along with evolution into an 'on the ground' research institute with strengthened links to business operations and practical applications for on-site technology. It will continue its efforts to lead the future of Korean construction through technological innovation.



## 05 Adoption of the "Labor-Management Concord Declaration" for Labor-Management Mutual Growth

In August 2013, Daewoo E&C adopted the "Labor-Management Concord Declaration" to sublate exhaustive conflicts between labor and management to build a consolidated front to overcome the stagnant crisis in both the domestic and global construction market. The declaration shows our commitment to developing an advanced labor-management culture, implementing ethics management, and obtaining mutual growth for both laborer and management.



**06**  
**First Construction Company Named as “Best Family-friendly Company”**

Daewoo E&C became the first domestic construction company to be selected and certified as the ‘Best Family-Friendly Company’ by the Ministry of Gender Equality and Family (MoGEF) in December 2013. The ‘Family-friendly Certification’ is awarded to companies with family-friendly policies that allow employees to balance work and family needs harmoniously. Upon evaluation by MoGEF, exemplary companies receive the Minister’s certification and Daewoo E&C’s family-friendly management principles were recognized accordingly in 2013.



**08**  
**Won Consecutive Contracts upon Entering the Iraq Market**

After successfully entering the Iraq market by winning the roughly KRW 790 billion contract for the Iraq AKKAS CPF (Central Processing Facility) project in August 2013, Daewoo E&C was awarded the KRW 736 billion contract for Al Faw Grand Port construction project shortly after in November 2013. Daewoo E&C proved our competitiveness in the Iraq market by winning the Zubair DGS (Degassing Facilities) – South package awarded by ENI in May 2014.



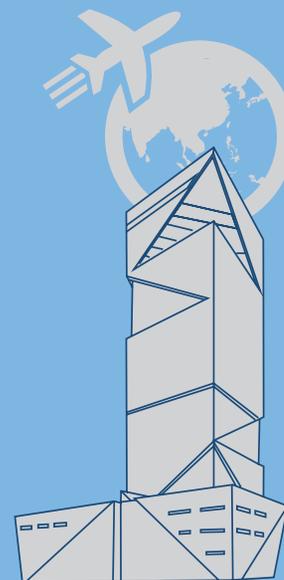
**10**  
**Achievement of 30 Million Accident-free Hours in the Papua New Guinea LNG Plant Project**

Daewoo E&C was officially recognized by the ordering organization of the Papua New Guinea LNG Plant project on March 20, 2014 for achieving 30 million accident-free hours. Through on-site safety assessment, daily discussions to prevent potential safety risks, rewards for team excellence and other activities, Daewoo E&C has worked continuously to prevent accidents from occurring, which shine through with the noteworthy accomplishment of zero injuries since construction began 3 years and 5 months ago in October 2010.



**07**  
**Completion of G-Tower, Landmark of the Incheon Songdo International Business District**

G-Tower, known as Songdo International Business District’s (IBD) representative eco-friendly building and the home of the Green Climate Fund (GCF) secretariat, was completed in February 2013. G-Tower harnesses solar PV, solar thermal, thermal and other renewable energy sources to generate 17.8% of total energy use, making it the largest building in Korea with self-generation capacity. The building has obtained Level 1 Energy Efficiency (preliminary), Level 1 Smart-building certification and 5 other preliminary eco-building certifications.



**09**  
**PRUGIO Proved to be the Most Trusted Brand by Consumers**

In the “2014 Consumer Trust Awards” held in January 2014, PRUGIO was chosen as the most trusted brand in the Apartments category. Roughly 1,200 domestic brands were evaluated with consumer surveys based on 20 fields and 248 categories. PRUGIO received outstanding scores for brand awareness, consumer preference, satisfaction, trust and multiple other evaluation items, thereby winning the honor as the most trusted brand for the first time.



**AWARD**



# Company Overview

## About Daewoo E&C

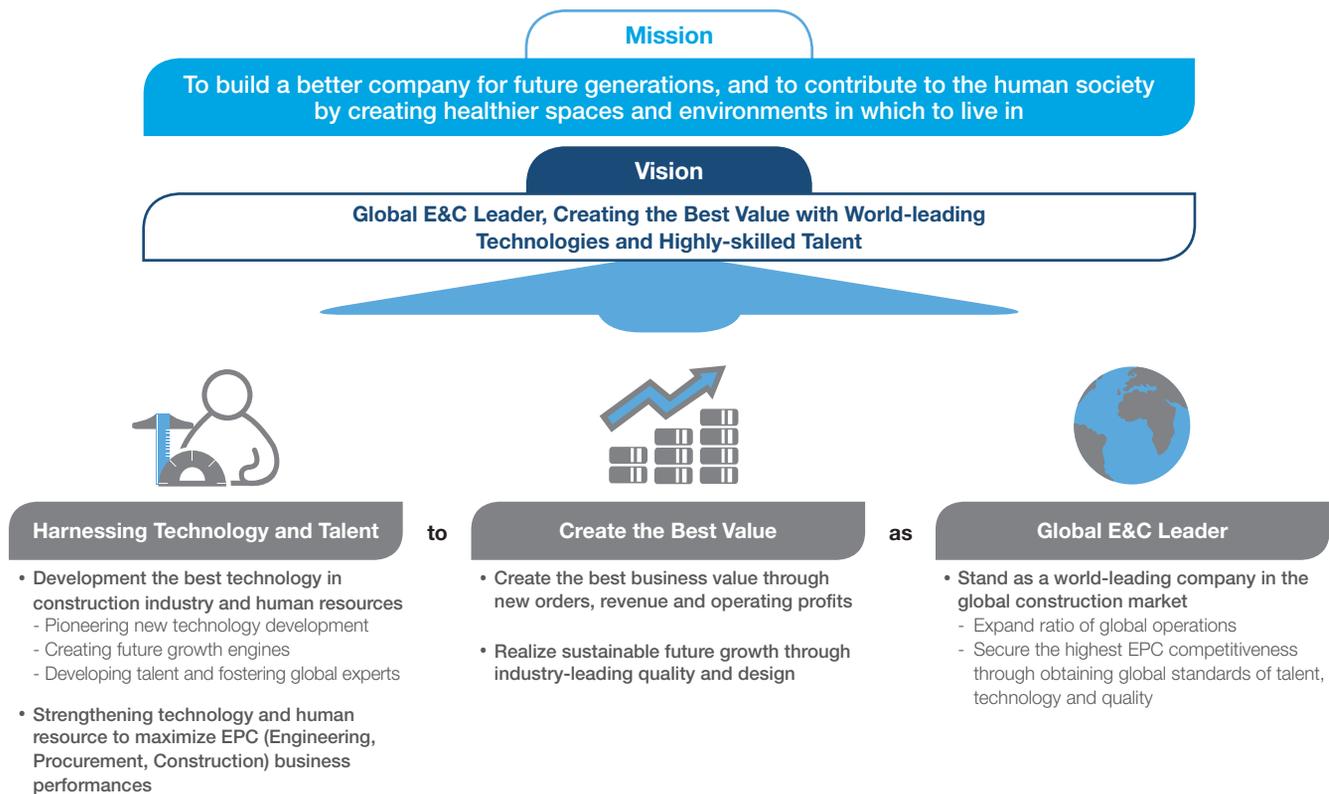
Since our establishment in 1973, Daewoo E&C has led the Korean construction industry and contributed to national development for 40 years. Based on continuous technological advances and top-notch business performance, Daewoo E&C was named 1<sup>st</sup> in the National Construction Capability Survey by the Ministry of Land Transportation and Maritime Affairs for three years running since 2006, solidifying our position as Korea's top construction company. We at Daewoo E&C are now focusing all our capacity and efforts to move beyond the domestic market into being recognized worldwide.

Overview	
(As of December, 2013)	
Company Name	Daewoo Engineering & Construction Co., Ltd.
Date of Establishment	November 1, 1973
Address	75 Saemunan-ro (Sinmunro 1-ga), Jongno-gu, Seoul, 110-713 Korea
CEO	Young-Sik Park
Branches and Affiliates	Domestic: 1 Branch. Overseas: 24 Branches, 5 Affiliates
Major Shareholder	KDB Bank (KDB Value 6 Ltd.)
Employees	4,180 persons in total (Based on permanent employees and management)
Homepage	Korean: <a href="http://www.daewooenc.co.kr">www.daewooenc.co.kr</a> English: <a href="http://www.daewooenc.com">www.daewooenc.com</a>

## Management Philosophy

Based on the philosophy of becoming the 'Global E&C Leader, creating the best value with world-leading technologies and highly-skilled talent,' Daewoo E&C strives to fulfill its corporate responsibility and to achieve sustainable growth and development.

## Vision Structure

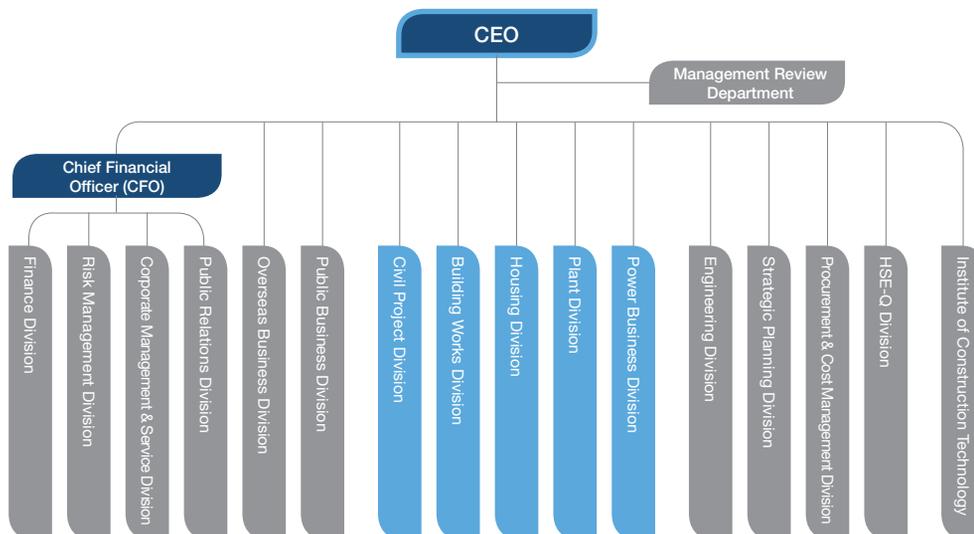


## Company Organization

In light of the new era in Daewoo E&C's growth, the company underwent a firm-wide reorganization in 2014. The Sector-based structure was replaced with a binary organization of divisions and teams to establish responsible management and to facilitate cooperation among different functions within the company. Moreover, by placing the RM Division directly under the CFO, we strengthened risk management capacity.

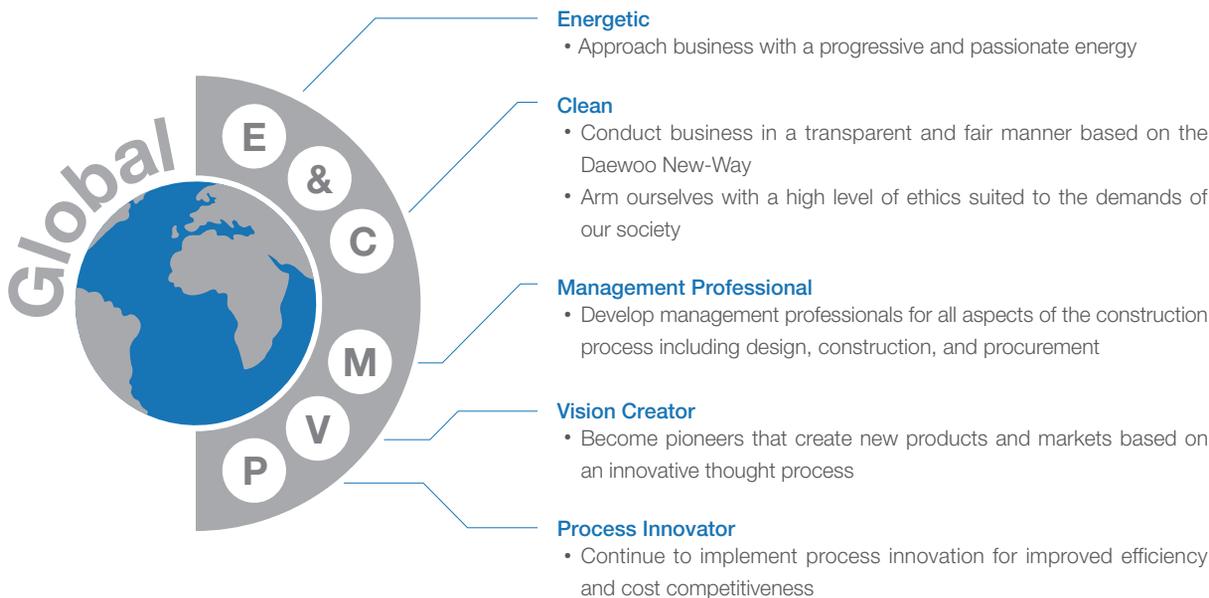
### Organizational Structure

(As of May, 2014)



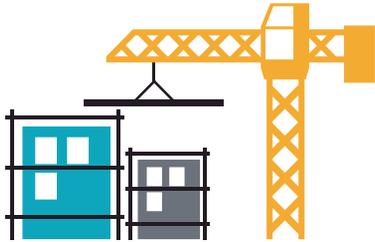
## Global E&C MVP

At Daewoo E&C, "Global E&C MVP" is our central business topic for 2014 and we have solidified our drive to overcome difficulties and grow sustainably. We will build a corporate culture based on a strong foundation of ethics in which employees progressively and actively tackle obstacles. Moreover, we are enhancing employee capacity and enacting extensive innovation in our business processes to heighten competitiveness.



# Company Overview

## Business Portfolio



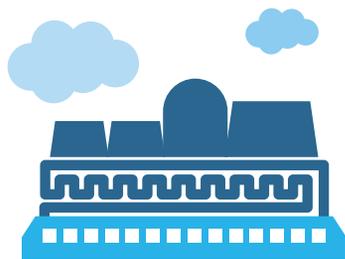
**Civil Project Business**\_ The civil engineering business recorded orders of KRW 1.77 trillion and sales of KRW 1.35 trillion in 2013, despite the depression in the Korean civil engineering market. Based on advanced technology, the Civil Project Division is currently working on important projects such as Inje Tunnel, the longest tunnel in Korea and Honam High-speed Railway, along with large-scale overseas projects such as the Boughezoul New Town Project in Algeria, the Patrind Hydroelectric Power Plant in Pakistan. In particular, Daewoo E&C secured a foothold into the Middle Eastern market by winning the order for the Al Faw Grand Port construction project in Iraq. In 2014, we aim to open new markets in Asia, South America, and Africa in addition to our existing key markets while also diversifying business fields in order to maximize our capability in winning deals.



**Building Works Business**\_ We were able to achieve stable performance in 2013 even in the face of decreased public orders, a stagnant domestic construction market and overheated overseas markets. In the domestic market, projects such as the Gwanggyo Central PRUGIO City and the Songpa Park Habio PRUGIO were developed while a diverse range of building projects regarding residential complexes, officetels, hotels, medical complexes, and commercial buildings were undertaken to successfully surpass our target in received domestic orders. In addition, Daewoo E&C was awarded 1<sup>st</sup> in Officetel Brands in the KS-Premium Brand Index hosted by the Korea Standards Association, both in 2012 and 2013. Overseas, we continued our success in key markets such as Singapore and Malaysia. Meanwhile we are in the process of expanding and diversifying into neighboring countries such as Indonesia, where we won the multi-use complex District 8 Project. In 2014, we will maintain our competitive advantage in the domestic market while diversifying overseas markets by utilizing our strategic hubs in Asia, the Middle East and North Africa.

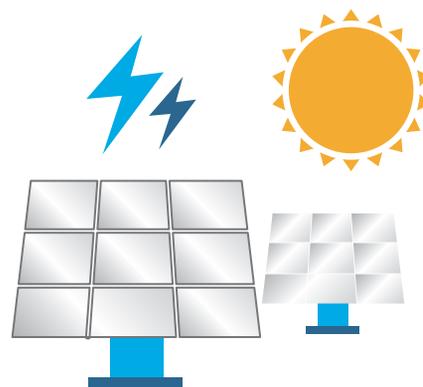
**Housing Business**\_ The housing business has solidified its position as the top housing provider in Korea and leads the industry with targeted market strategies and excellent product competitiveness leading to outstanding sales figures. Wirye New City Songpa PRUGIO, which began sales in 2013 recorded 100% sales and the large-scale 2,132 unit Changwon Marine PRUGIO also closed sales within the year. In 2014, we will continue to increase the value and utilization provided to our customer based on detailed market analysis, market-leading quality and customer-oriented communication while strengthening our position as the best apartment brand in Korea through new landmark developments such as the Yongson PRUGIO Summit and Seocho PRUGIO.





**Plant Business\_** The plant business successfully completed constructing the Nigeria EGTL (Escravos Gas To Liquid) project and the Algeria Arzew LNG project in 2013 based on world-class Oil & Gas technology and experience. It also solidified its position in key markets and pioneered new markets by winning contracts for CAFC (Central Area Field Complex) Project in Algeria, Clean Fuel Project in Kuwait, and Akkas CPF (Central Processing Facilities) Project and Degassing Project in Iraq. Moreover, Daewoo E&C's engineering competencies were acknowledged when we were awarded the first contract in FEED (Front-end Engineering and Design) to design the master plan for an oil export facility, an area traditionally dominated by global engineering leaders. The Plant Division has also continuously focused on Africa regions, especially Nigeria, to award newly opened LNG Train Projects and Offshore Projects, which is an initial business segment in Daewoo. In order to do so, it has strengthened ties with global engineering leaders to minimize risks in challenging markets and to diversify our business portfolio.

**Power Plants Business\_** With advanced technology and plentiful experience in the execution of project, the power plants business successfully won the construction of Morocco Safi coal-fired power plant and the Oman SUR generation project, and has been short-listed as a priority negotiation partner for the Nigeria Okija IPP. Furthermore, through synergy with Korea Development Bank, we are developing an Independent Power Plant (IPP) business as a new growth engine. We will work to uncover new markets and diversify our portfolio in 2014 as we develop our capacity as both project developer and EPC contractor through global IPP projects. In addition, we will strategically diversify our nuclear power portfolio by targeting domestic and overseas commercial nuclear power plant projects, nuclear plant design projects and contracts for auxiliary facilities for nuclear plants.



Changwon Marine PRUGIO



Oman SUR IPP Project



Shin-Wolsong Nuclear Power Plant

## PORTFOLIO

# Daewoo E&C makes changes that bring the world more value

Daewoo E&C is recognized worldwide for our excellent performance and competitiveness.

Warm attention to people, creative ideas for space and insights on clients and markets are why we are chosen and trusted globally.

A Global E&C leader known for our capability and value, this is the new Daewoo E&C.

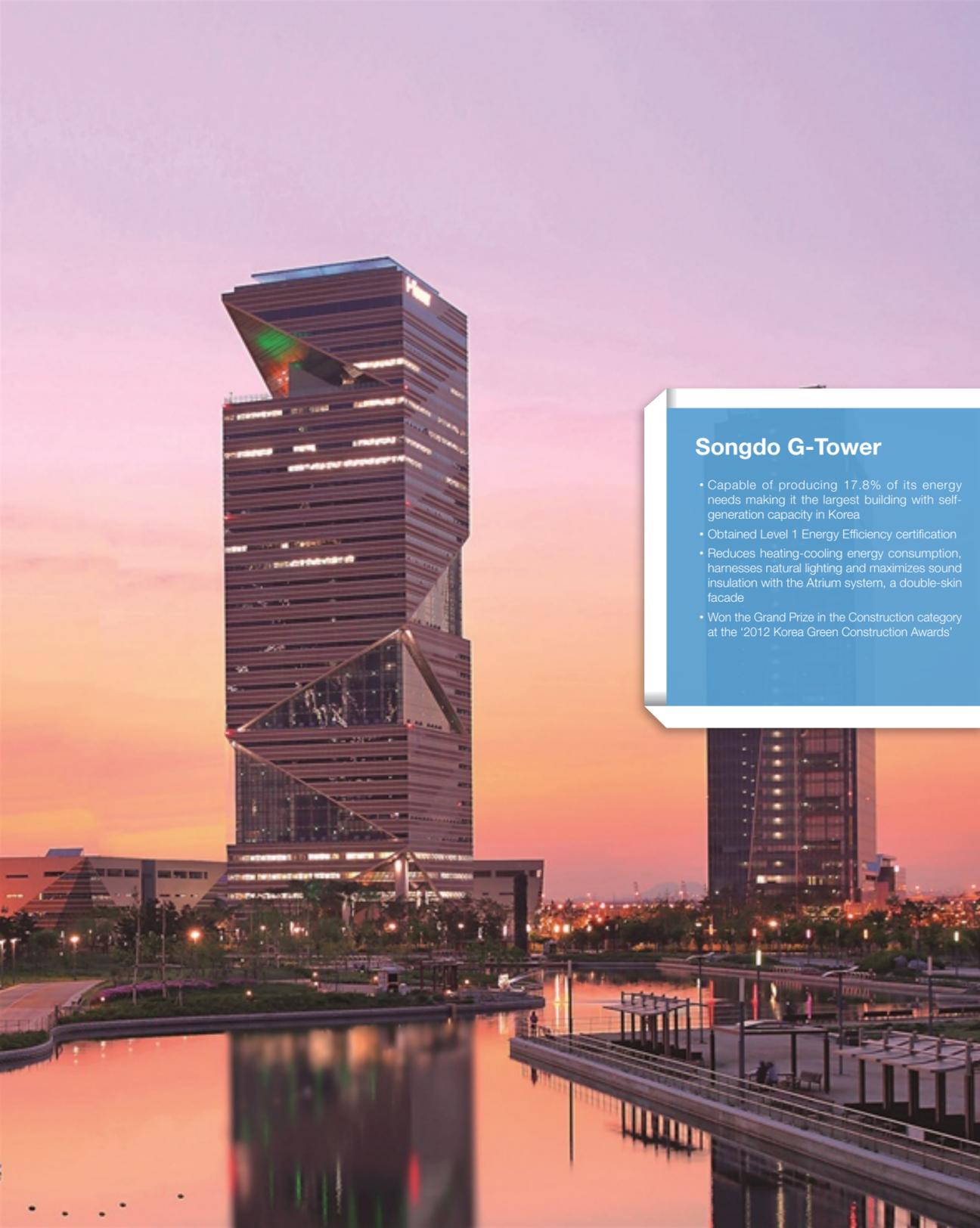
### Seoul Forest PRUGIO Complex II

- PRUGIO, Korea's leading environment-friendly brand that harmonizes the finest in cutting-edge amenities and the happiness brought by nature
- Leader in the Korean housing market with the introduction of 'Life Premium,' a housing culture product following in the footsteps of 'Green Premium' and 'My Premium'
- Most frequent recipient of the 'Most Livable Apartment' Grand Prize, ranked 1<sup>st</sup> in the Premium Brand Index
- Recipient of multiple awards in diverse categories including first recipient of the Seoul 'Excellent Design in Apartment Houses' award



PRUGIO

203



### Songdo G-Tower

- Capable of producing 17.8% of its energy needs making it the largest building with self-generation capacity in Korea
- Obtained Level 1 Energy Efficiency certification
- Reduces heating-cooling energy consumption, harnesses natural lighting and maximizes sound insulation with the Atrium system, a double-skin facade
- Won the Grand Prize in the Construction category at the '2012 Korea Green Construction Awards'



### Gwangan Bridge

- Longest double-decked bridge in Korea, 7.42 km linking Suyeoung-gu and U-dong, Haeundae in Busan
- Daewoo E&C constructed Section 5, 3.823 km and 3 ramps
- Won the Grand Prize in the Infrastructure category at the first 'Korean Land & City Design Competition' in 2009



### Morocco JL Power Plant

- A coal power plant with capacity of 700 MW per hour (two 350 MW units)
- Extension of the existing 1,320 MW JL Coal Power Plant Units 5 & 6

## ▶ PORTFOLIO HIGHLIGHTS

The Story of  
a Warmhearted Construction  
that Changes  
the World

1970



### Daewoo Center

- The largest office building in Korea at the time of completion in 1977
- A monumental structure symbolizing remarkable growth of Daewoo Group



### Garinius Medical School

- An accomplishment preceding the establishment of national diplomatic relations, signaling the entrance into Libya

1980



### Suyeong Bay Olympic Yacht Marina

- World's largest yachting center at the time of completion in 1986 (accommodates 1,500 yachts concurrently)
- Hosted multiple international sports events such as the 1986 Seoul Asian Games and the 1988 Seoul Olympics



### Pakistan Highway

- Constructed a 6-lane extended highway of 334km (350km including the connecting road)
- Pakistan's modern day 'Silk Road' project, conducted solely by Daewoo E&C

1990



### Olympic Apartment Complex

- Constructed a twelve building (456 households in total) apartment complex in Songpa-Gu, Seoul
- Used as the accommodation for athletes, executives and reporters participating in the 1988 Seoul Olympics



### Telekom Malaysia Office Building

- Constructed the office building of Malaysia's state-operated telecommunications company 'Telekom Malaysia'
- Height of 310m office building with a advanced intelligent building system and various convenience facilities

2000



### Gireum PRUGIO

- Constructed a 36 building (2,350 households in total) apartment complex in Seongbuk-Gu, Seoul
- Awarded grand prize in the 9<sup>th</sup> 'Most Livable Apartment Awards' in 2005



### Nigeria Bonny Plant

- Constructed units 1, 2, 3 of an LNG plant with a capacity of 400MMt per year
- Contributed to gas profit maximization in Nigeria through the expansion of gas generation

2010



### Shin-Wolsong Nuclear Power Plant

- Constructed Shin-Wolsong NPP units 1, 2
- Facility generates 2,000MW of electric power per hour (10 times that of Soyang River Dam)



### Sihwa lake Tidal Power Plant

- Constructed 8 sluices and 10 water turbine generators with a capacity of 254MW
- The first and largest tidal power plant in Korea





## Nigeria Bonny LNG Plant

- Constructed a 5-unit LNG plant on Bonny island in Nigeria
- Total annual capacity of 22MMt (LNG) and condensate storage facilities of 4.6 MMt (LPG)
- The construction of Units 1 & 2 was the first mega-size project to be finished on schedule in Nigeria
- Contributed to gas profit maximization by expanding the scope of Nigeria's gas generation

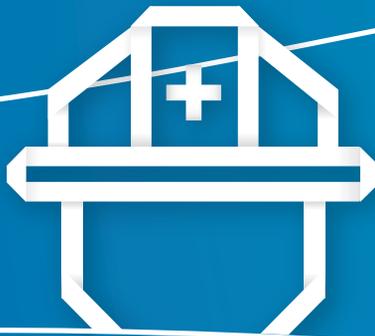
Customer Satisfaction



Global E&C Leader



Strengthening Technological Competitiveness



Developing & Managing Construction Talent



Creating Economic Value



Shared Growth



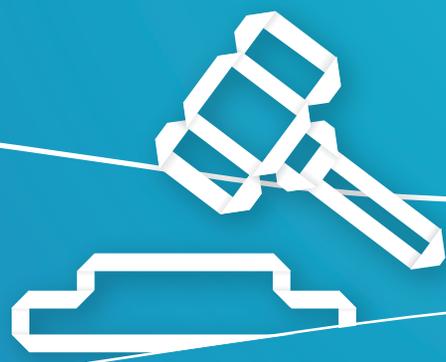
Environment-Friendly  
Construction



# Sustainability at Daewoo E&C

**We build the story of a  
warmhearted construction that  
changes the world.**

Ethical & Transparent  
Management



- 18 Material Sustainability Issues
- 22 Global E&C Leader
- 30 Strengthening Technological Competitiveness
- 38 Developing & Managing Construction Talent
- 50 Creating Economic Value
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- 64 Shared Growth
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- 76 Ethical & Transparent Management

# Material Sustainability Issues

Daewoo E&C applied the recently announced GRI G4 standard for sustainability reporting as well as internal and external stakeholder interests in identifying key sustainability issues.

## Identifying Material Issues

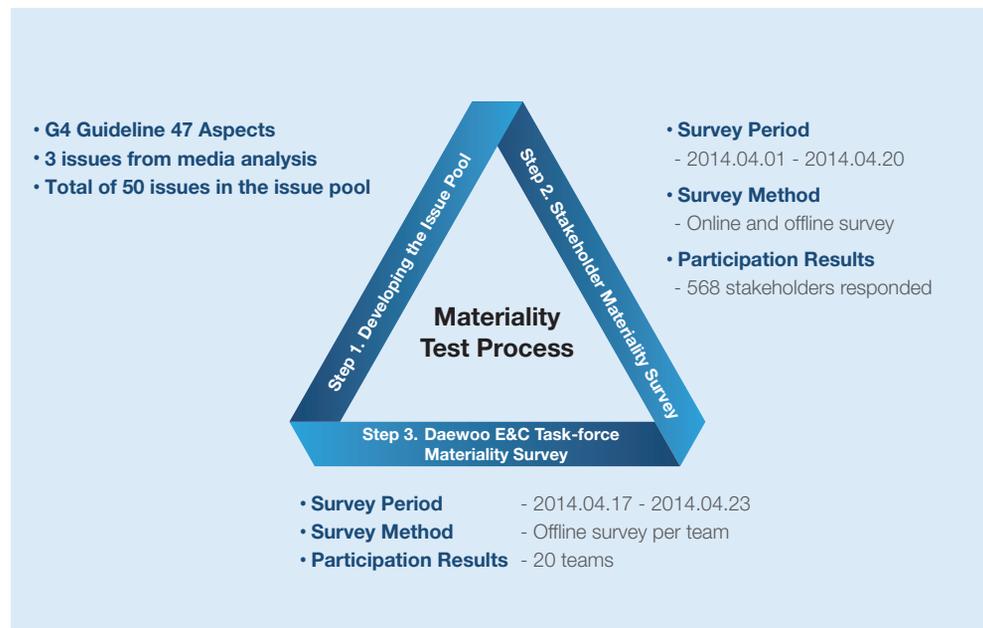
In order to identify material issues affecting the sustainability of Daewoo E&C, a materiality survey was administered to internal and external stakeholders and a task-force of 20 related teams within the firm. The results of the surveys were analyzed to identify Daewoo E&C's material sustainability issues and then incorporated in the 2013 Sustainability Report.

### Materiality Test Process

**Developing the Issue Pool\_** Before identifying material issues through the materiality test, we developed a pool of 50 issues relevant to sustainable management; a composite of 47 aspects laid forth by the GRI G4 standards (including the Construction and Real-Estate Sector Disclosures) and 3 issues selected through media analysis.

**Stakeholder Survey\_** Based on the 50 issues derived from the G4 Guidelines and media analysis, we conducted a materiality survey on the level of impact each issue had on individual decision making processes. A total of 568 people participated in the survey. Participants included Daewoo E&C's 8 core stakeholder groups: customers, employees and management, business partners, local communities, shareholders and investors, government, academia, associations and institutions, and future generations.

**Daewoo E&C Task-force Survey\_** In addition to the stakeholder survey, a materiality survey was conducted on a Task-Force Team (TFT) comprised of 20 relevant internal departments. The pool of 50 issues was evaluated for three aspects: likelihood of issue occurrence, risk severance, and business opportunity.



### Materiality Test Results

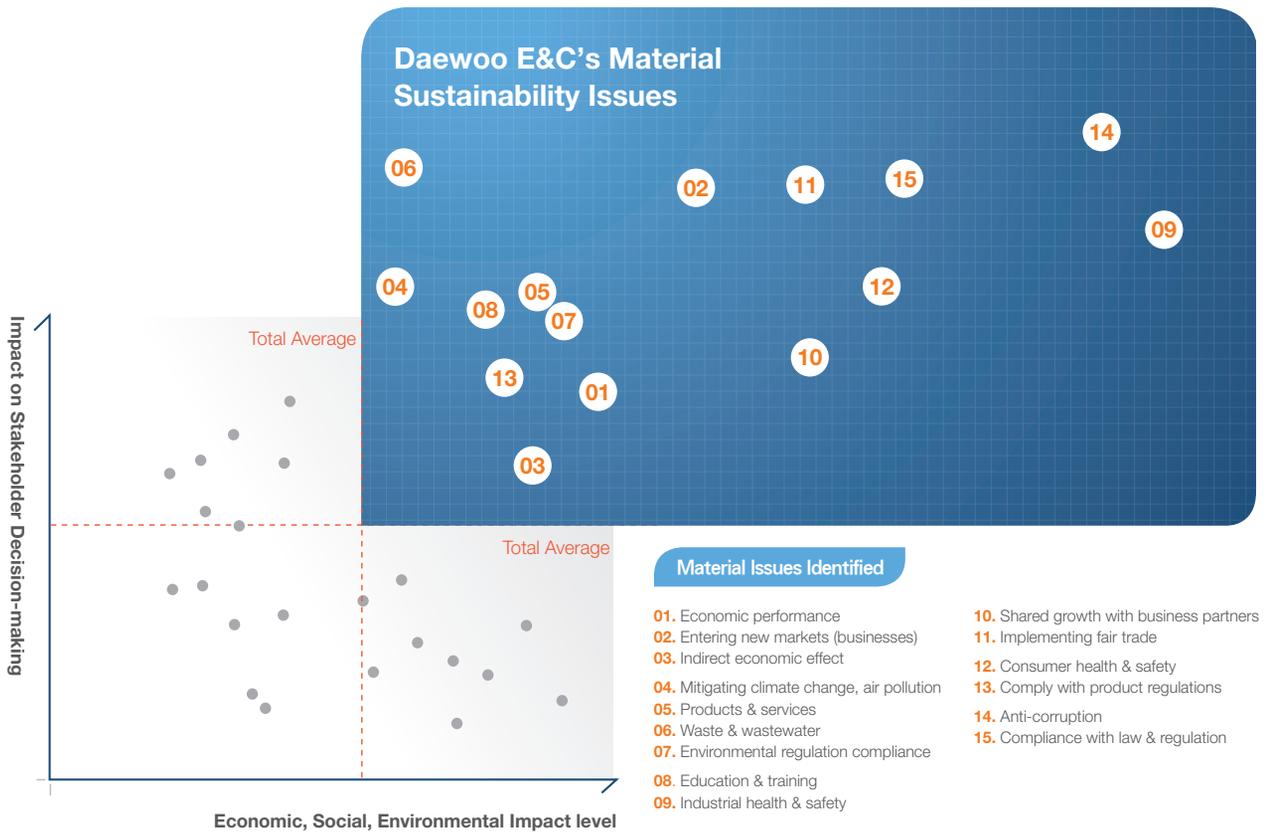
**Survey Response Analysis\_** Results from both the stakeholder survey and the TFT were consolidated to evaluate and analyze the materiality of issues in our pool of 50 sustainability issues.

**Results of Material Issue Selection\_** A total of 15 issues for which both stakeholders and the TFT responses were above the total average were identified as material issues.



**Links to disclosure\_** The 15 material issues impacting Daewoo E&C's stakeholders and business were categorized into 8 sections according to similarity and utilized in the contents of Daewoo E&C's 2013 Sustainability Report as follows: Global E&C Leader, strengthening technological competitiveness, developing and managing construction talent, creating economic value, environment-friendly construction, shared growth, customer satisfaction, and ethical and transparent management. This report discloses the activities and achievements of Daewoo E&C in these material issues within this structure

**Materiality Test**



**Report contents by material issue**

<p><b>Global E&amp;C Leader</b> p22</p> <p>02. Entering new markets (businesses)</p>	<p><b>Strengthening Technological Competitiveness</b> p30</p> <p>05. Products &amp; Services</p>	<p><b>Developing and managing construction talent</b> p38</p> <p>08. Education &amp; Training 09. Industrial Health &amp; Safety</p>	<p><b>Creating Economic Value</b> p50</p> <p>01. Economic performance 02. Entering new markets 03. Indirect economic effect</p>
<p><b>Environment-Friendly Construction</b> p58</p> <p>04. Mitigating climate change, air pollution 06. Waste &amp; wastewater 07. Abiding by environmental regulations</p>	<p><b>Shared Growth</b> p64</p> <p>10. Shared growth with business partners 11. Fair trade</p>	<p><b>Customer Satisfaction</b> p70</p> <p>12. Consumer health &amp; safety 13. Abiding by product regulations</p>	<p><b>Ethical &amp; Transparent Management</b> p76</p> <p>14. Anti-corruption 15. Abiding by laws &amp; regulations</p>

# Analysis of Material Issues

Not only does Daewoo E&C identify material sustainability issues, but each issue's external and internal impact and significance is analyzed to ascertain the status quo, we meticulously manage this process on an ongoing basis.

## External Environment, Risk and Opportunity Analysis

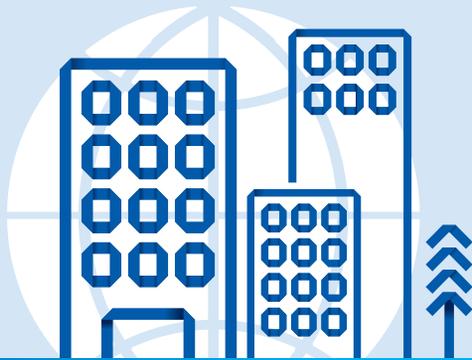
Daewoo E&C understands the external environment surrounding our material sustainability issues and is committed to identifying related risks and opportunities.

Material Issues	Specific Issues	External Environment	Risks	Opportunities
<b>Global E&amp;C Leader</b> 	<ul style="list-style-type: none"> <li>Increasing international competitiveness</li> <li>Opening new markets and diversifying</li> </ul>	<ul style="list-style-type: none"> <li>Extended depression in domestic construction market</li> <li>Continued growth in emerging markets</li> <li>Accelerated venturing of Korean firms into foreign markets</li> </ul>	<ul style="list-style-type: none"> <li>Slow growth in global markets</li> <li>Increased risks in entering new markets</li> <li>Aggressive competition among foreign firms in the global market</li> </ul>	<ul style="list-style-type: none"> <li>Sharp increase in construction demand in emerging markets</li> <li>Increased demand for overseas projects incorporating both investment and development</li> </ul>
<b>Strengthening Technological Competitiveness</b> 	<ul style="list-style-type: none"> <li>R&amp;D of core technologies</li> <li>Strengthening the link between technology and business</li> </ul>	<ul style="list-style-type: none"> <li>Increased need for on-site technology application</li> <li>Increased need for technology R&amp;D in search of new growth engines</li> </ul>	<ul style="list-style-type: none"> <li>Increased pressure for cost reduction and lower prices</li> <li>Decrease in the technological gap between new entrants such as Chinese and Indian firms</li> </ul>	<ul style="list-style-type: none"> <li>Increased competitiveness by improving construction technology</li> <li>Solidified market position by offering total solution services</li> </ul>
<b>Developing and Managing Construction Talent</b> 	<ul style="list-style-type: none"> <li>Recruiting and developing construction talent</li> <li>Strengthening employee safety management</li> </ul>	<ul style="list-style-type: none"> <li>Necessity to develop talent suited changing business environment such as overseas business and evolving bidding processes</li> <li>Nationwide increase of the interest in safety and disaster management</li> </ul>	<ul style="list-style-type: none"> <li>Reduced productivity from language and cultural barriers</li> <li>Increased risk in completing large-scale projects</li> <li>Serious disasters leading to a tarnished corporate image and costs due to suspended operations</li> </ul>	<ul style="list-style-type: none"> <li>Increased overseas market competitiveness with increased global capacities</li> <li>Minimization of accident-related litigation costs</li> <li>Improved reputation and advantage in bidding due to effective safety management</li> </ul>
<b>Creating Economic Value</b> 	<ul style="list-style-type: none"> <li>Increasing economic performance</li> <li>Contributing to indirect economic effects</li> <li>Fostering new growth engines</li> </ul>	<ul style="list-style-type: none"> <li>Poor financial performance for domestic construction firms</li> <li>Increased risk due to over-expanded operations</li> <li>Lack of vitality in the domestic market including labor and production</li> </ul>	<ul style="list-style-type: none"> <li>Difficulties in securing investments due to decreased corporate value</li> <li>Reduced profitability from the constricted domestic construction market</li> <li>Increased risk due to the diversification of overseas market and larger-scale projects</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced stability through firm-wide consolidation of risk management and monitoring</li> <li>Strengthened ties with host country by contributing to the local economy</li> <li>Securing new growth engines for Daewoo E&amp;C</li> </ul>
<b>Environment-Friendly Construction</b> 	<ul style="list-style-type: none"> <li>Effective response to climate change</li> <li>Minimizing waste</li> <li>Strict Compliance with environmental regulation</li> </ul>	<ul style="list-style-type: none"> <li>Increased climate change regulation in Korea and abroad</li> <li>Increased resource stress</li> <li>Demands for environment-friendly site management made by ordering organizations</li> </ul>	<ul style="list-style-type: none"> <li>The Greenhouse Gas and Energy Target Management Scheme, making emissions reductions obligatory</li> <li>High oil prices and resource scarcity leading to increased raw material costs</li> </ul>	<ul style="list-style-type: none"> <li>Application of carbon capture technology in bidding for power plant projects</li> <li>Added revenue from trading carbon credits</li> <li>Reduced construction cost through recycling construction waste</li> </ul>
<b>Shared Growth</b> 	<ul style="list-style-type: none"> <li>Strictly upholding fair trade</li> <li>Strengthening management for mutual growth with business partners</li> </ul>	<ul style="list-style-type: none"> <li>Diffused culture of shared growth between conglomerates and SMEs</li> <li>Government's strong will to implement economic democracy</li> <li>Increased cases of joint overseas expansion with business partners</li> </ul>	<ul style="list-style-type: none"> <li>Damage to corporate image due to collusion and unfair trade practices</li> <li>Financial losses due to fines for violating fair trade laws or restrictions on bidding</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced competitiveness through the support for business partners</li> <li>Reduced construction time and enhanced quality based on amicable cooperation with partner companies</li> </ul>
<b>Customer Satisfaction</b> 	<ul style="list-style-type: none"> <li>Increasing product and consumer safety</li> <li>Bolstering customer communication</li> </ul>	<ul style="list-style-type: none"> <li>Increased consumer interest in safety and quality</li> <li>Rapid circulation of consumer complaints and issues via social media</li> </ul>	<ul style="list-style-type: none"> <li>Injuries/ fatalities and legal disputes due to faulty construction</li> <li>Damage to brand image and loss of revenue due to consumer boycotts</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced consumer trust and competitiveness through the obtaining and maintaining quality certifications and accreditation</li> <li>Improved brand recognition and preference</li> </ul>
<b>Ethical &amp; Transparent Management</b> 	<ul style="list-style-type: none"> <li>Establishing transparent corporate culture</li> </ul>	<ul style="list-style-type: none"> <li>Frequent cases of corruption in the construction industry</li> <li>Deepening distrust of the construction industry</li> <li>Stronger trend of ethical consumption</li> </ul>	<ul style="list-style-type: none"> <li>Tarnished reputation when in case of corruption issues</li> <li>Possible disqualification in public sector bidding if unethical practices are uncovered</li> <li>Decreased employee satisfaction and morale</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced corporate reputation as a firm with integrity</li> <li>Improved employee satisfaction and morale</li> <li>Better positioned to recruit and retain outstanding talent</li> </ul>

## Progressive Matrix

Daewoo E&C has employed the following progressive matrix to systematically report the current status and also plans for the implementation of material issues. In addition, we assessed goal attainment levels by comparing activities and achievements from 2013 to the original implementation goals.

Implementation Goals	2013 Major Activities	2013 Major Achievements	2014 Goals	Goal Attainment Level
<ul style="list-style-type: none"> <li>Strengthen dominant position in key markets</li> <li>Expand entry into new markets like Central &amp; South America, and South Africa</li> </ul>	<ul style="list-style-type: none"> <li>Analyzed potential new foreign markets</li> <li>Built strategies for expansion based on key markets</li> </ul>	<ul style="list-style-type: none"> <li>Recorded cumulative USD 50 billion in overseas contracts</li> <li>Expanded key Southeast Asia markets</li> <li>Entered Iraq and Venezuela</li> </ul>	<ul style="list-style-type: none"> <li>Maintain and expand existing markets</li> <li>Diversify markets by opening new markets</li> <li>Selective bidding based on profitability</li> </ul>	
<ul style="list-style-type: none"> <li>Active development of core technologies</li> <li>Pursue site-specific, future-oriented technological innovation</li> </ul>	<ul style="list-style-type: none"> <li>Performed research requested by business divisions</li> <li>Built a R&amp;D process for site-specific technology</li> </ul>	<ul style="list-style-type: none"> <li>30<sup>th</sup> anniversary of DICT</li> <li>Performed 41 researches requested by business divisions</li> <li>Improved communication between Headquarter, sites and DICT</li> </ul>	<ul style="list-style-type: none"> <li>Continue to perform research requested by business divisions</li> <li>Develop component technologies necessary for new growth engine</li> </ul>	
<ul style="list-style-type: none"> <li>Share firm-wide core values and vision</li> <li>Foster performance-focused leaders</li> <li>Foster global talent and function specialists</li> <li>Attain domestic and foreign accident management goals</li> </ul>	<ul style="list-style-type: none"> <li>Fostered specialists for core functions</li> <li>Developed global talent</li> <li>Cultivated leadership to build performance capacity</li> <li>Evaluated partner companies' safety activities</li> <li>Implemented major accident prevention measures</li> </ul>	<ul style="list-style-type: none"> <li>Launched PPM introductory and advanced course</li> <li>Launched Special Course on Intercultural Studies</li> <li>Early-adaptation Course for foreign employees</li> <li>Opened Communication Leadership Course</li> <li>Awarded partner companies which excelled in safety management</li> <li>Implemented Permit-to-Work (PTW) system for hazardous operations and Risk Assessment</li> </ul>	<ul style="list-style-type: none"> <li>Foster global talent and function specialists</li> <li>Foster core talent and strengthen leadership skills</li> <li>Build 'one-family' corporate culture</li> <li>Obtain KOSHA 18001 certificate</li> <li>Digitize overseas HSE processes</li> </ul>	
<ul style="list-style-type: none"> <li>Revitalize Daewoo E&amp;C through enhanced corporate value</li> <li>Secure future business by uncovering new growth engines</li> </ul>	<ul style="list-style-type: none"> <li>Actively pursued IPP projects</li> <li>(Overseas) Strengthened early project risk management and improved each aspect of the EPC structure</li> <li>(Domestic) Strengthened management of records and monitoring following investment deliberation</li> </ul>	<ul style="list-style-type: none"> <li>Established power subsidiary, Daewoo Energy</li> <li>(Overseas) Expanded application of the business risk evaluation table for improved bidding competitiveness</li> <li>(Domestic) Minimization of profit volatility through risk deliberation</li> </ul>	<ul style="list-style-type: none"> <li>Gain IPP business references</li> <li>(Overseas) Solidify early project monitoring system and link to computerization</li> <li>(Domestic) Develop specialized monitoring system for dual investment and development projects</li> <li>Identify and pursue new growth businesses</li> </ul>	
<ul style="list-style-type: none"> <li>Set and reach targets for energy and resources conservation</li> <li>Zero cases of environmental law violations and accidents</li> <li>Set and reach targets for cost of waste treatment to sales ratio</li> </ul>	<ul style="list-style-type: none"> <li>Participated in the MoLIT Construction industry Greenhouse Gas and Energy Target Management System pilot project</li> <li>Implemented the Waste Management Company Registration System nationwide</li> </ul>	<ul style="list-style-type: none"> <li>Won CDP KOREA Awards (Special Award) and was included to Climate Disclosure Leadership Index (CDLI)</li> <li>Reached target of 0.23% for cost of waste treatment to sales ratio</li> <li>Achieved zero environmental penalty points</li> </ul>	<ul style="list-style-type: none"> <li>Operate test site for Greenhouse gas management system</li> <li>Achieve target of 0.21% waste treatment cost to sales ratio</li> <li>Achieve zero cases of environmental law violations and accidents</li> </ul>	
<ul style="list-style-type: none"> <li>Eradicate factors of unfair trade</li> <li>Fair selection and evaluation of partner companies</li> <li>Establish firm-wide culture of shared growth</li> </ul>	<ul style="list-style-type: none"> <li>Adopted and continuously operated of the '4 Guidelines of Fair Trade'</li> <li>Operated Unfair Trade Corruption hotline</li> <li>Maintained and strengthened mutual growth support</li> </ul>	<ul style="list-style-type: none"> <li>Raised KRW 24.2 billion for the Win-win Fund</li> <li>Held Fair Trade Compliance Resolution Conference</li> <li>Executed Contracting Law training in each bureau</li> </ul>	<ul style="list-style-type: none"> <li>Raise KRW 26 billion for the Win-win Fund</li> <li>Expand benefit sharing system</li> <li>Identify and support overseas partner companies</li> </ul>	
<ul style="list-style-type: none"> <li>Preventative quality management activities</li> <li>Increased firm-wide quality management awareness</li> <li>Enhance PRUGIO brand power</li> </ul>	<ul style="list-style-type: none"> <li>Maintained quality management system certifications (ISO 9001, KEPIC, ASME)</li> <li>Implemented firm-wide quality control surveillance</li> <li>Unified customer communication channels</li> </ul>	<ul style="list-style-type: none"> <li>Selected critical project for quality control and implemented surveillance</li> <li>Conducted procurement quality survey for domestic and overseas suppliers</li> <li>Established and operated integrated call center</li> </ul>	<ul style="list-style-type: none"> <li>Strengthening of quality support for business divisions (continued management of critical projects)</li> <li>Expand and strengthening shop inspections for purchased materials</li> <li>Operate 'Lifestyle Premiums' and the Green Library</li> </ul>	
<ul style="list-style-type: none"> <li>Establish and systemize firm-wide ethics management</li> <li>Raise employees' ethics awareness and minimize unethical actions</li> </ul>	<ul style="list-style-type: none"> <li>Began operation of Ethics Help line</li> <li>Implemented employee ethics management training</li> <li>Performed firm-wide ethics management assessment</li> </ul>	<ul style="list-style-type: none"> <li>Published the Ethics Management Guidebook</li> <li>Implemented Phase 1 of employee ethics awareness evaluation</li> <li>Implemented online employee ethics awareness self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>Execute ethics level assessment for individual business units</li> <li>Adopt Compliance Program</li> </ul>	



## Global E&C Leader

## Disclosure on Management Approach



### Goals

With focused efforts on developing global business capacities in order to grow into a Global E&C Leader, Daewoo E&C will enhance our competitiveness in the global market by solidifying our position in key markets and tactically entering new markets based on a strategy of profitability.



### Activities

Using key markets where we are dominant, Daewoo E&C is strategically broadening our markets. In addition, we conducted market analysis and established strategies to enter regions with promising markets such as CIVETS<sup>1)</sup>, MAVINS<sup>2)</sup>, TIMBIS<sup>3)</sup>, and VIP<sup>4)</sup>, that we have yet to operate in.



### Achievements

We have won continuous orders in Singapore which has led to an expansion of our key Southeast Asia market. We have successfully entered Iraq and Venezuela and are laying the foundation to win contracts. As a result, Daewoo E&C achieved USD 50 billion in cumulative overseas orders faster than any other Korean construction company.



### Plans for 2014

Daewoo E&C will employ a strategy of gradual expansion with our key markets as regional footholds in order to build and grow our global business base. Not only will we diversify by tapping into new markets, but we will secure both growth and stability by methodically taking orders based on profitability.

1) Colombia, Indonesia, Vietnam, Egypt, Turkey, Republic of South Africa

2) Mexico, Australia, Vietnam, Indonesia, Nigeria, Republic of South Africa

3) Turkey, India, Mexico, Brazil, Indonesia, Republic of South Africa

4) Vietnam, Indonesia, Philippines

## Key Achievements in Overseas Business

Daewoo E&C is strengthening our reputation as a Global E&C Leader by increasing domination of key markets and employing region-specific market entry strategies.

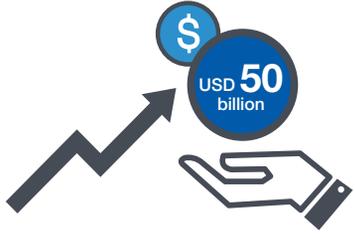
### Achieved USD 50 billion in Overseas Orders

In February 2014, Daewoo E&C became the second Korean construction company to record 50 billion overseas orders (cumulative) by winning 423 orders across 47 countries within the 38 years since our first overseas project in Quito, Ecuador. Though we entered the global market almost a decade later than industry forerunners, we were able to reach this milestone in 38 years which is 3 years less than the first company to reach it as a result of our advanced overseas contract strategy.

### Dominating the African Market

Daewoo E&C was able to record USD 50 billion in cumulative orders largely in part by our excellent performance in Africa. The breakdown of order value by continent shows that Africa accounted for USD 26.4 billion, which amounts to roughly 52% of all overseas orders. Our performance in Africa stands out as we were responsible for winning 35% of the USD 74.7 billion in orders won by Korean construction companies in Africa.

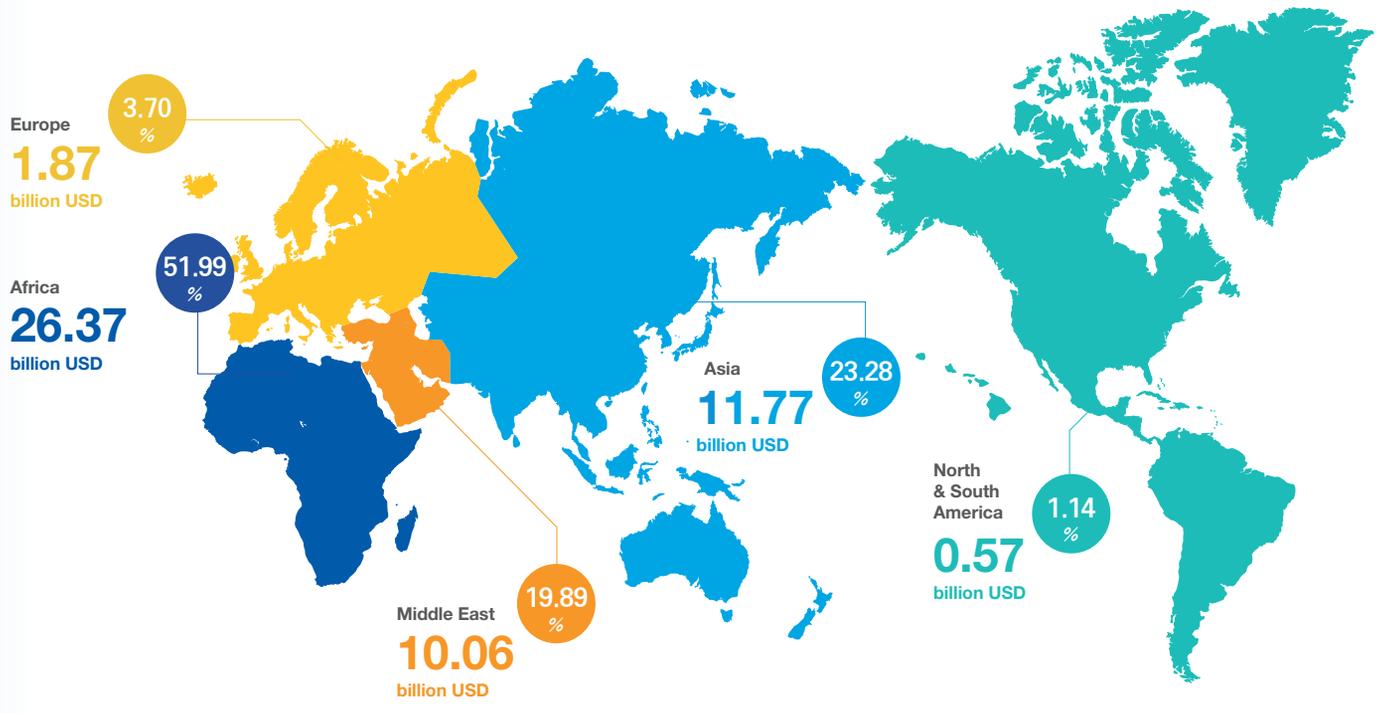
Recorded USD 50 billion in overseas orders (cumulative) in 2014



### From Africa, to the World

We built on our strength in Africa and diversified our markets to not only the Middle East and Asia, but developed markets like the U.S. and Japan. Consequently, in the five years leading up to 2014, we entered or re-entered eight new markets including Morocco, Papua New Guinea and Saudi Arabia, thereby displaying our strength in overseas sales. Daewoo E&C will continue to strengthen our dominant position in key markets such as Nigeria, Algeria, Saudi Arabia and Malaysia while simultaneously opening new markets such as South Africa and Central-South America.

Share and Value of Overseas Orders by Continent (As of February 2014)



## Overseas Business Strategy

The stagnant global economy and excessive competition in foreign markets have made it a challenging task to open new markets. However, Daewoo E&C progresses in penetrating new markets with our differentiated overseas expansion strategy and a spirit of challenge to continue writing our story of success.

## Overseas Market Strategy

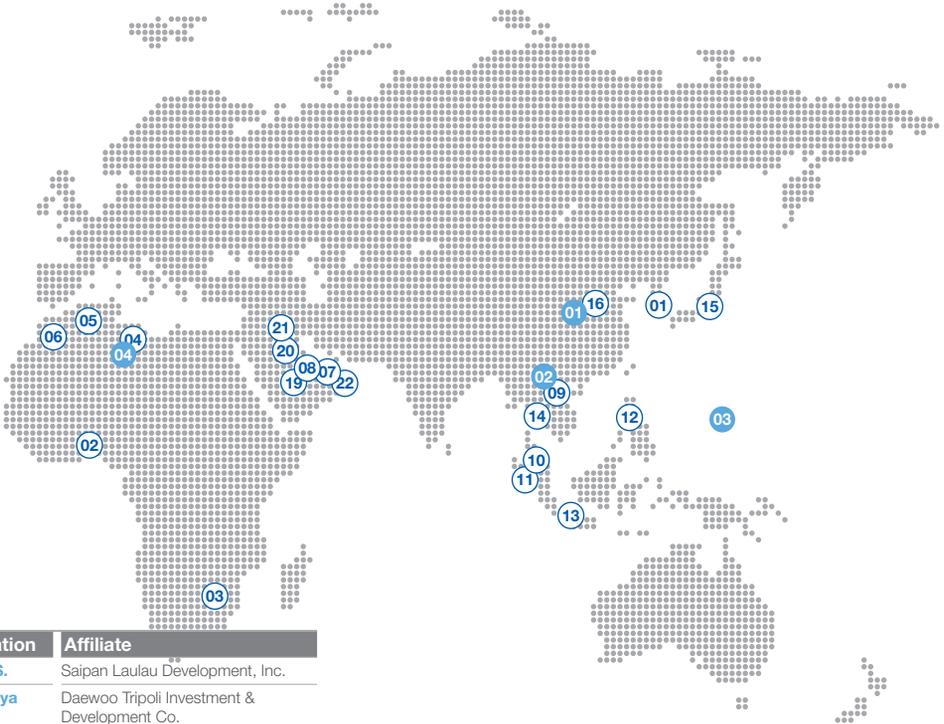
In spite of unfavorable market conditions, Daewoo E&C set an ambitious target of USD 7.2 billion in orders won for 2014, a 94% increase from the previous year. In order to achieve this, we aim to solidify our position in key markets, optimize our business portfolio by diversifying construction types, and strengthen stability and profitability in overseas business through more stringent risk management and contract selection.

### 2014 Overseas Business Strategy



## Status of overseas branches and affiliates

(As of April 2014)

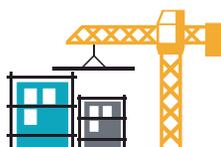


### ● Status of affiliate

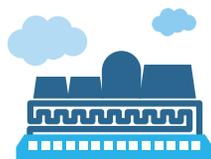
Location	Affiliate	Location	Affiliate
01.China	Beijing Lufthansa Center Co., LTD.	03.U.S.	Saipan Lulau Development, Inc.
02.Vietnam	THT Development Co., Ltd	04.Libya	Daewoo Tripoli Investment & Development Co.
03.U.S.	Daewoo America Development, Incorporated		



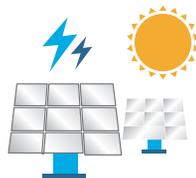
**Civil Project Division**\_ Our civil project division will establish key regional markets such as Algeria, Qatar, and the Philippines to expand our foothold in existing markets. In addition, using a targeted strategy built around our expertise in roads, subways, ports, bridges, wastewater treatment and immersion tunnels, we will enhance our competitiveness in the global civil works market.



**Building Works Division**\_ Based on our competitiveness in key markets such as Malaysia, Singapore, Libya, and Algeria, we aim to diversify markets and maximize bidding performance. We will build on relationships with existing clients to increase successful bids as well as reducing execution risks through partnerships with other domestic firms and continually build competitiveness.



**Plant Division**\_ The Plant Division aims to enhance our global competitiveness by strategically selecting projects whether they have considerable values, profitable and experience-able. To become a global plant engineering and contractor, first, the Plant division has solidified business relationships by showing faith and cooperativeness in key markets, especially Nigeria. Second, recent efforts include participation in Mega-billion projects that consist of Consortiums or Joint Ventures, for example, the CFP Project in Kuwait.



**Power Plant Division**\_ With the experience gained in key African countries, such as Nigeria, Morocco, and Libya, we will pursue emerging markets such as Southeast Asia and Central-South America. With our IPP experience, we plan to strengthen our capacity as a developer and build strategic partnerships to secure cost competitiveness and expand the implementation of strategic projects.



## Global Network

To become a Global E&C Leader, Daewoo E&C operates numerous branches and affiliates in and outside of Korea. Our 5 affiliates located in 4 countries (China, Vietnam, U.S., and Libya) and the 25 branches located throughout the world work together to expand our global business.

### Status of Branches

Location	Branch	Location	Branch
<b>01.Korea</b>	Daewoo E&C Central Korea Branch	<b>11.Singapore</b>	Daewoo E&C Co., Ltd. Singapore
<b>02.Nigeria</b>	Daewoo E&C Co., Ltd. Port Harcourt	<b>12.Philippines</b>	Daewoo E&C Co., Ltd. Manila
	Daewoo E&C Co., Ltd. Lagos	<b>13.Indonesia</b>	Daewoo E&C Co., Ltd. Jakarta
<b>03.Republic of South Africa</b>	Daewoo E&C Co., Ltd. Abuja	<b>14.Thailand</b>	Daewoo E&C Co., Ltd Bangkok
	Johannesburg	<b>15.Japan</b>	Daewoo E&C Co., Ltd Tokyo
<b>04.Libya</b>	Daewoo E&C Co., Ltd. Tripoli	<b>16.China</b>	Daewoo E&C Co., Ltd China
<b>05.Algeria</b>	Daewoo E&C Co., Ltd. Alger	<b>17.Columbia</b>	Daewoo E&C Co., Ltd Bogota
<b>06.Morocco</b>	Daewoo E&C Co., Ltd. Rabat	<b>18.Venezuela</b>	Daewoo E&C Co., Ltd. Caracas
<b>07.U.A.E</b>	Daewoo E&C Co., Ltd. Abu Dhabi	<b>19.Saudi Arabia</b>	Daewoo E&C Co., Ltd. Al Khobar
<b>08.Qatar</b>	Daewoo E&C Co., Ltd. Doha		Daewoo E&C Co., Ltd. Riyadh
			<b>20.Kuwait</b>
<b>09.Vietnam</b>	Daewoo E&C Co., Ltd. Hanoi	<b>21.Iraq</b>	Daewoo E&C Co., Ltd. Baghdad
<b>10.Malaysia</b>	Daewoo E&C Co., Ltd. Kuala Lumpur	<b>22.Oman</b>	Daewoo E&C Co., Ltd. Muscat



Algeria CAFC Project Signing Ceremony



Singapore Bendemeer Condominium (concept)

**Winning the EPC turnkey contract for the Algeria CAFC construction project**



**Winning the Singapore condominium construction**

<b>Bendemeer Condominium</b>	<b>USD 168 million</b>
<b>Alexandra View Condominium</b>	<b>USD 140 million</b>

**2013 Key Achievements in Overseas Performance**

**Algeria CAFC Project\_** Daewoo E&C signed a USD 643 million EPC turnkey contract for the Algeria CAFC construction project in October 2013. We will be the sole contractor for this plant construction project, which, over 34 months, aim to build Central Process Facilities capable of processing roughly 32,000 barrels of oil a day along with auxiliary facilities in the Berkine basin located in southeast Algeria.

**Venezuela Oil Export Facilities FEED\_** In September Daewoo E&C was awarded a USD 67.34 million contract to provide the Front-end Engineering Design (FEED) for oil export facilities by Venezuela's state-owned oil company. We will head the 12-month design phase of the project which will build oil storage, transportation and related facilities in Oricono, Venezuela' largest oil-producing region.

**Singapore Condominium Construction\_** Daewoo E&C won back-to-back contracts in one of Southeast Asia's largest construction markets, Singapore. We were awarded contracts for both the Bendemeer Condominiums worth USD 168 million and Alexandra View Condominiums worth 140 million. Thus, Daewoo E&C won 4 contracts in one year since entering the Singapore market in 2012, solidifying our dominance.

**Iraq Al Faw Grand Port Breakwater Construction\_** Daewoo E&C was awarded a USD 693 million breakwater construction contract in the southern Iraqi province of Basra in November 2013. Commissioned by the state-run General Company for Ports of Iraq (GCPI), the project to develop Al Faw Grand Port is scheduled to last 30 months. As Iraq is in the midst of post-war reconstruction, we expect demand for power plants and other infrastructure to increase exponentially and we will pursue additional orders by successfully completing this project.

**Local Tax Policy Research**

The need to understand local tax policies has increased along with the growth of our overseas businesses and the size of our projects. As a result, Daewoo E&C is minimizing tax-related risks during project execution by identifying tax issues in the countries we operate in and developing countermeasures.

**Local Tax Policy Guidebook\_** We have published a local tax policy guidebook covering 7 countries including Nigeria since 2007. This guidebook is available in both Korean and English and is used in tax management functions for the countries we operate in.

**Local Tax Policy Training\_** Starting 2014, we offer offline, employee training courses covering tax management issues in newly entered countries like Algeria, Morocco, Iraq and Kuwait. By covering topics that can arise during the execution of a project, such as foreign currency management, tax policy, preventing double taxation, and tax conventions, we provide the support needed to minimize tax risk.

## Global E&C's Hidden Strength, Overseas Business Support Organizations

Daewoo E&C has formed various business units to support the success of our overseas business and by doing so, we are fueling efforts to strengthen global capabilities.



**Overseas Project Management Team\_** The Overseas Project Management team was established in 2014 for efficient firm-wide support for overseas projects. As the control tower that comprehensively manages overseas projects, the Overseas Project Management team contributes to proactively preventing risk, and building a rapid response system.



**Global HR Management Team\_** The Global HR Support team and the Overseas Manpower team under the Corporate Management & Service Division were combined into the Global HR Management team. By overseeing recruitment and management of local talent in overseas sites, this team provides support for securing foreign talent and timely supplement of personnel. Furthermore, the Global HR Management team operates the Mobile Support TFT composed of specialists with hands-on experience for an effective initial set-up of new sites.



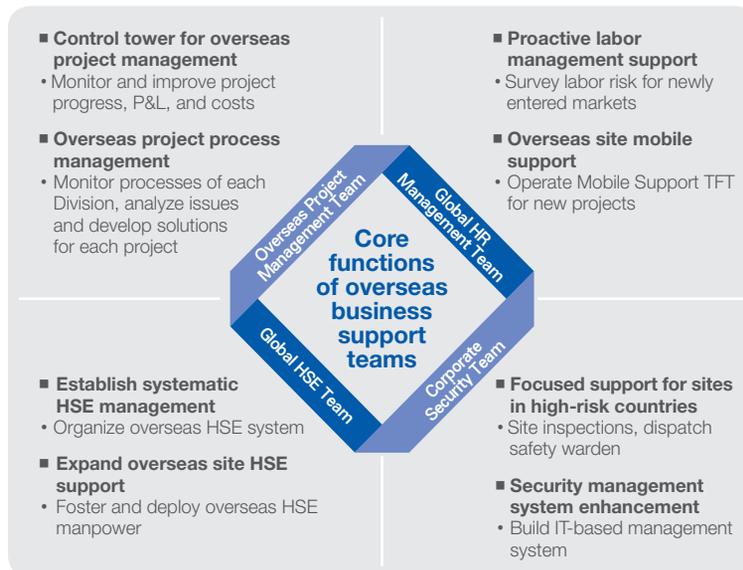
**Global HSE Team\_** To improve support for HSE(Health, Safety and Environment) in overseas sites, the Global HSE Team was newly introduced. The Global HSE Team develops HSE operations manuals and operates an online platform linked to BAROCON while also providing support to overseas sites for building a system for HSE management. In addition, the team analyzes overseas HSE manpower needs and helps place needed personnel while supporting the development of global HSE specialists by providing specialized training.



**Corporate Security Team\_** The Corporate Security team was established in order to enhance security in overseas sites to guarantee all employees have a safe working environment. The team supports building overseas site security guidelines and dispatches a security warden to high-risk sites during the project. In addition, the team operates a weekly working-level meeting with security wardens from each division and supports the effective execution of projects and safety of employees by producing Security Risk Management Systems and Response Manuals. The Corporate Security team also contributes directly to cost reduction by developing On-Site Security Plans and Procedures.



Weekly Security Meeting



## Philanthropic Activities in Overseas Sites

Daewoo E&C actively undertakes philanthropic activities in the countries we operate in to honor our social responsibility as a global construction firm. Improving infrastructure, providing daily necessities, and cleaning the environment are some of the methods by which we build ties with the local community and contribute to social development.



Free Eye Camp Cataract Surgery Support



Boughzoul Local Soccer Stadium Construction

# Africa



**Morocco JL Power Plant\_** Daewoo E&C participated in the annual 'Free Eye Camp' operated by the NGO Vision Care. From May 5th through 10th, on-site Daewoo E&C employees provided accommodations, transportation, and interpretation services during the 5-day event in the community's eye treatment.

**Algeria Boughzoul New Town\_** In June 2013, we backed the construction of a soccer stadium near Boughzoul as Algerians are avid soccer fans. We also contributed to improving local conditions by constructing a new housing facility for the military police in November.

### Philanthropic Activities in Africa

<b>Morocco_</b> JL (Jorf Lasfar) Power Plant	Other	Free cataract and other optical procedures provided
<b>Algeria_</b> Boughzoul New Town Development Project	Provision of Goods	Donated goods to local elementary school
	Infrastructure Improvement	Donated concrete for the Boughzoul area mosque expansion project
	Provision of Goods	Distributed daily necessities to those in need (sugar, oils, etc)
	Infrastructure Improvement	Built local military police barracks
	Environment clean-up	Local environment clean-up
<b>Algeria_</b> Boughzoul New Town Development Office	Infrastructure Improvement	Built local soccer stadium
	Provision of Goods	Participated in Ramadan event to help the needy
<b>Algeria_</b> Boughzoul New Town Development Office	Environment Clean-up	Tree-planting activity
	Other	Friendly soccer match with community youths near the project site
<b>Algeria_</b> El Harrach River Rehabilitation Project	Other	Friendly soccer match with community youths near the project site
<b>Nigeria_</b> Otumara	Provision of Goods	Digital equipment and vehicles supported for local police station
<b>Nigeria_</b> Port Harcourt Branch	Provision of Goods	Ejamah Community patrol car donated
<b>Libya_</b> Zwitina Combined Cycle Power Plant	Infrastructure Improvement	Used sand from project site for rehabilitation of eroded coast line
	Education Support	Provided temporary school facilities
<b>Morocco_</b> Rabat Branch	Provision of Goods	Supported youth soccer team: provided soccer balls and defibrillator
	Visit to Welfare Facility	Visited and donated goods at orphanages and youth facilities

# Middle East & Asia



Fumigation on site at the Matrade Exhibition Center



Clean-up near Boon Keng Station, Singapore

**Pakistan Patrind Hydropower Project** In September 2013, Daewoo E&C reinforced inroads for the site in order to prevent erosion for the residents of Thori village. In January 2014, we also installed protective walls at the local water source to solve water shortages and contributed to local development.

**Singapore Bendemeer Condominium** Daewoo E&C contributed to the campaign for a more pleasant city environment by cleaning up the area surrounding Boon Keng station with participation from all site workers starting April 2013.

**Malaysia Matrade Convention Center** With high heat and humidity, Malaysia is prone to the spread of contagious diseases. As such, Daewoo E&C fumigates the area around the Matrade Convention Center site 3 times a week to prevent the emergence of diseases.

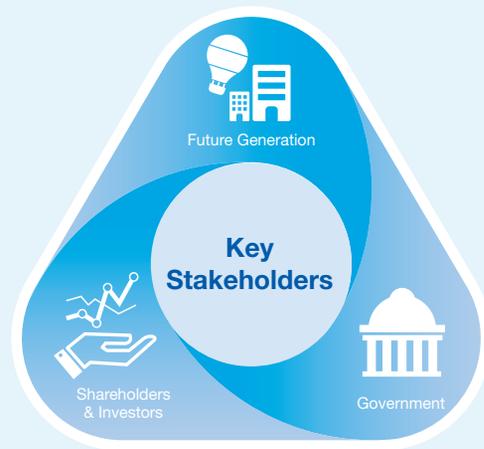
**Philanthropic Activities in the Middle East and Asia**

<b>Pakistan</b> _ Patrind Hydropower project	Education Support	Education on road safety
	Infrastructure Improvement	Reinforcement of inroads to project site
	Infrastructure Improvement	Repairs for local school roofs and roads
	Provision of Goods	Provided ambulance support for local medical emergencies
	Infrastructure Improvement	Installed protective wall for community water supply source
	Provision of Necessities	Provided electronics to residents near project site
<b>Singapore</b> _ Bendemeer Condominium	Environment Clean-up	Clean-up around nearby school and park
<b>Malaysia</b> _ Matrade Exhibition Center	Environment Clean-up	Fumigation of apartment complex near project site, 3 times a week
<b>Saipan</b> _ SLDI Inc.	Infrastructure Improvement	Supported lawn care in baseball stadiums at the local schools



## Disclosure on Management Approach

# Strengthening Technological Competitiveness



### Goals

Each Division's project was actively supported in their execution, and the foundation for Daewoo E&C's sustainable growth was built by securing core technologies that will fuel our future performance through R&D and technology development.



### Activities

In order to strengthen site-oriented R&D, we established a system of cooperation between business functions and the R&D department. Based on this system, numerous specialized research projects were carried out at the request of different business divisions, making a direct contribution to our competitiveness.



### Achievements

To commemorate Daewoo Institute of Construction Technology's 30<sup>th</sup> anniversary in 2013, our core technologies were reviewed. With calls for site-oriented R&D growing stronger, DICT took on 41 research projects requested by business divisions and contributed to quality improvement and cost reduction by supporting sites with cutting-edge technology.



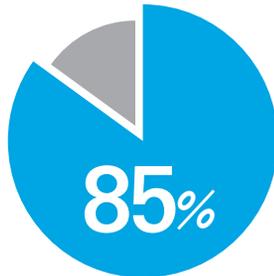
### Plans for 2014

Business divisions will be provided with tailored and effective R&D to continuously support project execution. In addition, we will help build the company's future value by strengthening core component technologies that can develop a new growth engine.

## About Daewoo Institute of Construction Technology

Daewoo Institute of Construction Technology (DICT) plays a central role in pursuing our vision of becoming a Global E&C Leader that creates the best value with world leading technologies and highly-skilled talent.

Ratio of personnel with advanced degrees

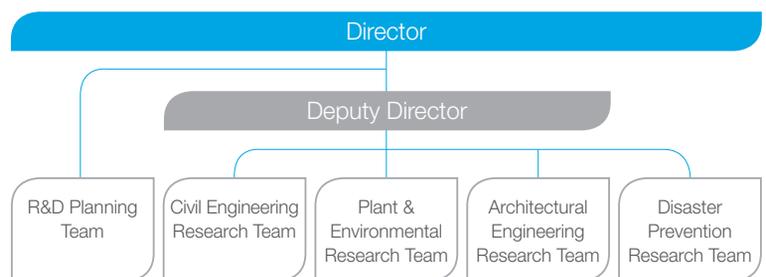


**DICT Organization** DICT is composed of five Teams under the director of the Institute. Within the Institute, the R&D Planning Team is the lead team that oversees development and management of firm-wide technology strategies whereas the Civil Engineering, Plant & Environmental, Architectural Engineering and Disaster Prevention Research Teams perform specialized research in each respective field for effective R&D management. The constituents of DICT are composed of excellent researchers who strive for technological innovation. Over 85% of the personnel have Masters Degrees or Doctorates.

### DICT Management Goals



### DICT Organization



### DICT 30<sup>th</sup> Anniversary

DICT, at the forefront of advancing Korean construction technology through continuous innovation and new technology, marked its 30<sup>th</sup> anniversary in November 2013. To celebrate this milestone, DICT hosted a technology conference at the Daewoo E&C headquarters, attended by approximately 200 employees. The conference was followed by a showcase of each division's technologies and a seminar on the firm's core technologies. During the event we introduced core technologies that are leading the Korean construction industry such as those for IPP projects, super-long span bridge and immersion tunnel technology, as well as super high rise building technologies.



DICT 30<sup>th</sup> Anniversary Ceremony

## Site-oriented R&D

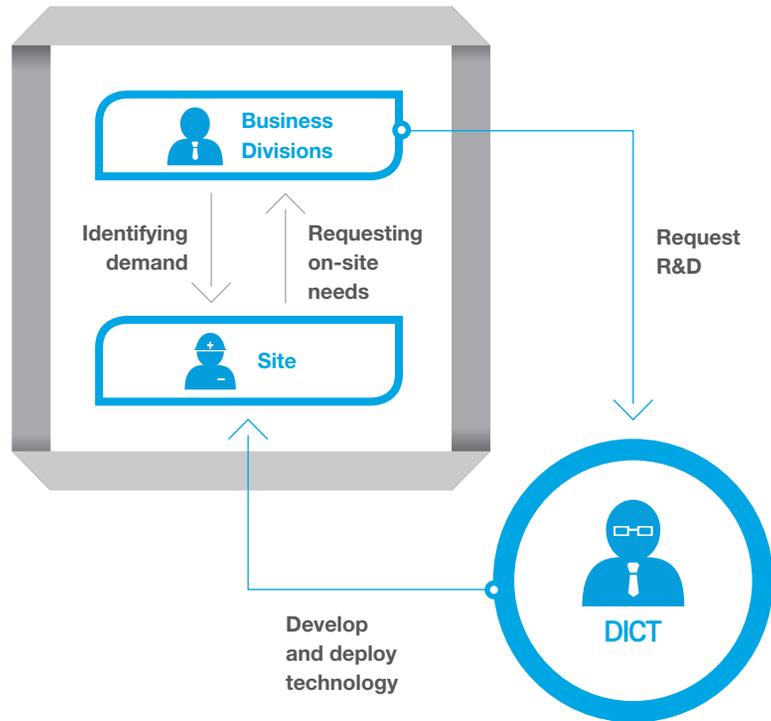
Site-oriented R&D reflects various on-site needs in construction to increase competitiveness and to reduce construction time and cost.

The number of research projects per the request of business divisions in 2013

**41**  
projects

**Site-oriented R&D Process**\_ Daewoo E&C is expanding technological support throughout all steps of project execution for improved quality and cost savings while also minimizing project risk, through strengthened communication and collaboration between project sites and DICT. In order to understand the on-site technology needs, communications between business divisions' sites and DICT were streamlined so that on-site needs could be reflected in R&D. As a result, DICT conducted 41 'research projects per the request of business divisions' in 2013. The site-oriented R&D system allows for technology development that can be deployed immediately, bolstering our competitiveness.

### Site-oriented R&D Structure



Malaysia IB Tower

### Application Case of Site-oriented R&D

#### IB Tower in Malaysia

The super-tall IB Tower in Malaysia is a clear success story of Daewoo E&C's site-oriented R&D system. Behind our success in winning contracts for Songdo ATT, KLCC Tower and IB Tower was the development and deployment of 'Building Movement Control (BMC) technology,' which enables structural displacement prediction prior to construction, maximizing the stability and serviceability of the building.

## Development of Core Technology

Daewoo E&C continues to build momentum for mid to long-term growth fueled by core technology development for the future such as offshore wind technology and waste to resource technology.

Nominated as the construction company with the most new construction technologies by the MoLIT in 2014

The number of new construction technology **18**

**Construction firm with most new technology\_** In March 2014, the Ministry of Land, Infrastructure and Transport announced that Daewoo E&C held 18 new construction technologies, the most of the top 10 Korean construction firms (based on 2013 National Construction Capability Survey). Moreover, our aerodynamic stabilizing measurement for a cable-stayed bridge in construction without stabilizing cables maximizes safety and is renowned for its advanced technology.

**Strengthening Engineering Capabilities\_** To maximize profitability, we are focusing on securing capacity in all fields of construction: E(Engineering), P(Procurement), C(Construction), C(Commissioning). Engineering is particularly important in the plant business division and we are concentrating efforts to build capacity and to expand manpower to 780 people by 2015. Partnerships with leading domestic and international engineering firms will be actively pursued to increase our competitiveness in the global market.

**Technological Achievements\_** Daewoo E&C has dedicated a portion of the R&D budget to perform mid to long-term research for our future. In particular, we actively participate in government R&D projects to contribute to furthering the Korean construction industry while also developing core technologies for the firm.

### Annual DICT R&D Achievements

(Unit: No.)

Category	Sub-categories	2011	2012	2013	Remarks
Research Projects	Division requested projects	-	29	41	
	General projects	43	19	7	
	Government projects	19	17	16	
Industrial Property Rights	New Technology	3	13	10	
	Patents	62	82	44	
Papers	International	43	44	28	
	Korea	113	116	88	
On-site support for business divisions		576	597	786	Technical & test support type
Awards		16	15	12	

### Disaster Prevention

Daewoo E&C provides total solution for structural engineering by developing technology to prepare for natural disasters such as high winds and earthquakes.

**Tuned Mass Damper (TMD) for Long-span Sea Bridges\_** TMD is installed at the top of the pylon instead of temporary tied-down cables to secure the stability of the long-span bridge under construction. Continuous resistance and stability against wind can be obtained by tuning the frequency of the TMD according to the construction stages. This stabilizing method of construction by TMD does not require temporary foundations and is thus more eco-friendly and economical while also reduces the risk of ship collisions.

**Structural Health Monitoring (SHM)\_** SHM provides appropriate countermeasures to maintain structural safety through real-time monitoring of structural movements. This technology was applied to the North-Eastern Asia Trade Tower in 2010 and the Se-bit River floating island in 2011, winning the Gold Medal at the 2011 Construction Industry Creative Innovation Competition. SHM was also applied in the Myeongdong Cathedral expansion project as a cultural artifact protection system and as a result of the successful vibration management during construction, Daewoo E&C was awarded the 'International Environment and Labor Commissioner Award' at the 2013 Construction Environment Management Best Case Competition.





CCS Pilot Plant

The number of related patents  
for CCS technology

16

The number of related patents  
for DIMS technology

22

## Plant & Environment

Eco-minded technologies are being developed to make a clean and safe world to live in such as carbon capture and storage (CCS), wastewater treatment, advanced water treatment, and biowaste to energy.

**Carbon Capture and Storage (CCS) Technology\_** CCS technology is an eco-friendly technology that captures, separates and reuses CO<sub>2</sub> produced in power plants, incinerators, and biogas treatment facilities reducing atmospheric CO<sub>2</sub>, the main cause of global warming. Our technology has been recognized widely with the Ministry of Environment's Green Certification and 16 patents. Currently, in 2014, we are operating this technology in a pilot plant in the Environmental Corporation of Incheon's Cheongna plant and will apply it to thermal IPP projects.

**Advanced Water Treatment by Membrane Separation\_** In order to provide communities with safe tap-water, we have developed the Daewoo Integrated Membrane Systems (DIMS) which can remove microorganisms and harmful contaminants. This technology received 4 certifications for New Environmental Technology from the Ministry of Environment, and 22 patents in Korea and abroad. Currently in 2014, this technology is being used in the Youngdeungpo Arisu Purification Center, jointly operated by Seoul Metropolitan Waterworks and Daewoo E&C. In addition, we are installing membrane separating purification equipment at the Donggoe Water Treatment Plant in Jindo County using DIMS technology.

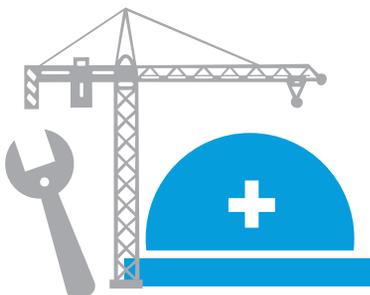
**Organic Waste-to-Energy Technology\_** Daewoo Bio-waste Total Solution (DBS) is a technology that produces renewable energy using organic waste such as sewage sludge, livestock manure, and food waste. Our exceptionally eco-friendly technology was chosen as one of the top 10 new technologies in 2009, awarded 2 Green Certifications from the Ministry of Trade, Industry and Energy (MoTIE), and was awarded Green Technology of the Year Award in 2012. After successful construction, the Daegu Food Waste and Excreta Treatment facility is now operated with DBS technology which has the highest capacity (300 tons/day) in all of Asia.

## Civil Engineering

Optimum solutions for saving costs and reducing construction time are provided by analyzing various issues that arise at construction sites.

**Super Long-span Bridge Technology\_** Daewoo E&C is working towards developing high performance concrete and on-site concrete depositing R&D. High performance concrete allows concrete deposits of up to 400m in height at once and we drastically enhanced structural health using the shape management and maintenance management program. This technology was employed in the Geoga Bridge, resulting in significant time reduction and is currently being applied to the Aphae-Amtae New Millennium Bridge zone 1 construction.

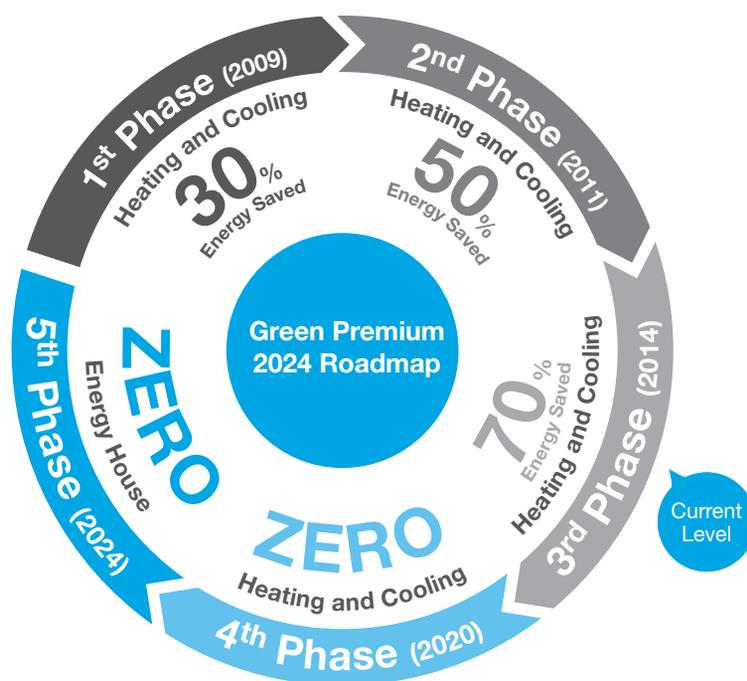
**Industrial Waste Utilization for Groundwork\_** In laying out the groundwork for construction, there is the risk that mid to long term structural safety will be damaged due to sub-terrain sinking or distortion. In response, Daewoo E&C reuses industrial wastes, such as coal ash cement and construction waste sand for high quality grounds creation and weak ground improvements. In 2013, we successfully tested dredging and reclamation using coal ash in the Saemangeum Industrial Complex Zone 2 resulting in cost reductions and stronger ground. We are currently working on a research proposal with 5 Korean power producers for 5 years, KRW 10 billion research project for coal ash utilization in land reclamation.



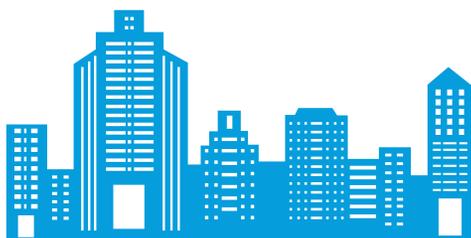
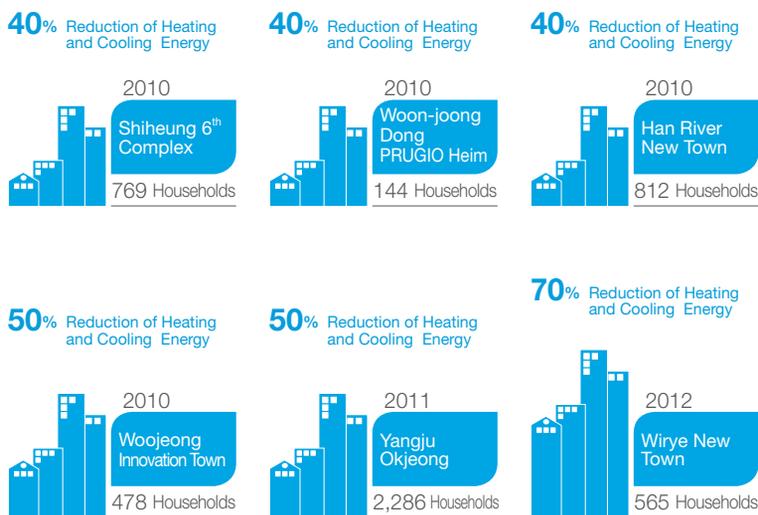
## Housing and Buildings

We are leading Korea's housing culture by developing building and housing technologies that makes the world more valuable and increases the quality of life.

**Green Premium\_** Eco-friendly, low-energy houses are being developed with technology that reduces the energy required for heating, cooling and ventilation. Our goal is to create a zero-energy house using passive technologies that reduce energy consumption and active technologies that employ new and renewable energy. In particular, insulation has been maximized using window frames combining aluminum and ABS, and this technology has been applied to projects such as Dongtan PRUGIO Heim and the LG Electronics Gangnam R&D Center.

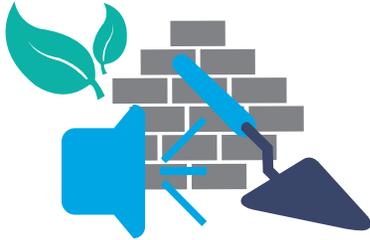


### Green Premium Homes Status



The number of buildings certified as green buildings

62



**Cross-unit Noise Reduction**\_ Having been accredited by the Korea Laboratory Accreditation Scheme (KOLAS) in Boundary Wall Noise Reduction Evaluation, Daewoo E&C analyzes noise factors in the building design phase and applies reduction measures. In addition, we have developed noise reduction design for different wall usages and a standardized construction method to manage everyday noise thoroughly. In 2014, we reinforced the functionality of the noise buffer between levels to minimize floor impact noise.

**Eco-friendly Buildings**\_ Daewoo E&C's eco-friendly building construction capacity has been proven through 3<sup>rd</sup> party green building certifications. As of May 2014, a total of 62 certifications (formal and preliminary) have been obtained and will continue to expand.

Green Building Certification Status

(as of May 2014)

Category	Building Name	Date Certified	Category	Building Name	Date Certified
LEED	Sheraton Incheon Hotel	2011.01	Preliminary Certification	Gov't Research Institute Sejong City Temporary Building Development	2012.12
Formal Certification	Eunpyeong 1-C BL	2008.06		Korea Western Power Co. Headquarters	2012.12
	Busan Univ. School of Korean Medicine	2009.03		Cheonho Station Hangang PRUGIO City	2013.01
	Pangyo PRUGIO 5 (A9-2)	2009.10		One Balmoral Condo*	2013.02
	Pangyo PRUGIO 2 (A10-1)	2009.10		Mapo Hangang PRUGIO	2013.02
	Pangyo PRUGIO 4 (B4-1)	2009.10		Songdo Central Park PRUGIO	2013.02
	Pangyo PRUGIO 3 (A9-1)	2009.12		Cheonggye PRUGIO City	2013.02
	2 <sup>nd</sup> International Campus of Yonsei Univ.	2010.06		Daejeon Jukdong PRUGIO	2013.02
	Wolgok Dream-Forest PRUGIO	2010.07		Ansan Lake Town PRUGIO	2013.03
	High1 Resort Condo Mountain	2011.03		Gangnam 2 PRUGIO City	2013.04
	Baekhyun PRUGIO Grand Bleu 1 Block	2011.07		Myeongdong District 3 Urban Renovation Project	2013.04
	Jukgok Cheong-Aram PRUGIO 1	2011.10		Kimpo Pungmu Centreville PRUGIO	2013.06
	Jukgok Cheong-Aram PRUGIO 2	2012.03		Matrade Exhibition Center**	2013.06
	High1 Casino Annex	2012.07		Ansan Central 2 Redevelopment Project	2013.07
	Heukseok Hangang PRUGIO	2012.12		Wirye Central PRUGIO	2013.08
	Bucheon Sosa PRUGIO	2012.12		Wirye Green Park PRUGIO	2013.08
	Songdo G-Tower	2013.03		Sejong City PRUGIO City	2013.08
	Cheongna PRUGIO	2013.05		Songpa Park Habio PRUGIO	2013.09
	Daeyeon Hillstate PRUGIO	2013.08		Byeolnae PRUGIO	2013.09
	Songdo Global Campus PRUGIO	2013.09		Misa Gangbyun PRUGIO 1	2013.09
	Ilsan Bit-maru	2013.12		Daegu Baseball Stadium	2013.10
Preliminary Certification	Ahyun Raemian PRUGIO	2009.08		Ansan Sungpo 3 Redevelopment	2013.11
	Bukhansan PRUGIO	2010.12		Gwanggyo Central PRUGIO City	2013.11
	Daegu Citizen Hall Renovation Project	2011.12		Mapo Hangang PRUGIO 2	2013.11
	Sinchon PRUGIO City	2011.12		Yeoksam PRUGIO City	2014.01
	Daejeon Yuseong PRUGIO City	2012.03		Yangju New Town PRUGIO	2014.02
	Myeongdong Cathedral (Diocesan Curia new wing)	2012.06		Misa Gangbyun PRUGIO 2	2014.03
	Donga Digital Media Center	2012.06		Songdo Edufore PRUGIO Site	2014.04
	Gyeongsangbukdo Gov't Building & Assembly Hall	2012.09		Gangnam Station PRUGIO City	2014.05
	Gwanak Park PRUGIO	2012.11			
	Yeonhui 1 Area Redevelopment Project	2012.12			
	Wirye New City Songpa PRUGIO	2012.12			
	Gangnam Central PRUGIO City	2012.12			

\* Obtained Preliminary Gold Level "Green Mark," Singapore's standard for green buildings

\*\* Obtained Preliminary 'Design Assessment Level' "Green Building" certification, Malaysia's standard of green buildings

The amount of CO<sub>2</sub> emissions reduced per 1m<sup>3</sup> of eco-friendly mass concrete

**79**kg-co<sub>2</sub>



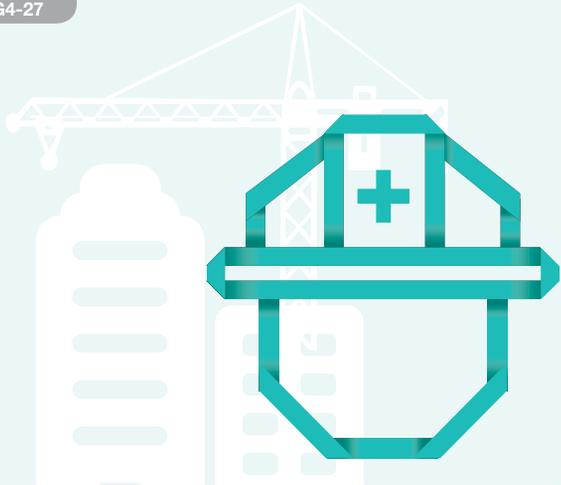
## Environment-friendly Building Materials

Daewoo E&C has made efforts to reduce resource use and to minimize greenhouse gas (GHG) emissions by developing environment-friendly building materials.

**Eco-friendly Mass Concrete** - Instead of using cement, which has high CO<sub>2</sub> emissions, an eco-friendly concrete has been developed using a combination of fly ash, blast furnace slag powder and high contents of other industrial by-products. By using industrial waste and by-products, we were able to reduce cement content by 40% compared to regular concrete resulting in 79kg less CO<sub>2</sub> per 1m<sup>3</sup>. Also, the compressive strength and durability has been improved to secure structural safety.

### Application of Technologies in Key Areas

Area	Technology	Technology Overview	Application Examples (Including third-party sites)
<b>Disaster Prevention</b>	TMD for Long-span Sea Bridges	Erection method for Long-span sea bridge construction to secure aerodynamic stability	<ul style="list-style-type: none"> <li>• Geoga Bridge</li> </ul>
	Structural Health Monitoring (SHM)	Assessment of structural safety and danger-response based on real-time monitoring	<ul style="list-style-type: none"> <li>• Hangang Floating Island</li> <li>• KEPCO new headquarters</li> </ul>
<b>Plant &amp; Environment</b>	Carbon Capture and Storage (CCS)	Capturing, separating and reusing CO <sub>2</sub> from facilities like incinerators and biogas treatment plants	<ul style="list-style-type: none"> <li>• Environmental Corporation of Incheon Cheongna plant</li> </ul>
	Advanced Water Treatment by Membrane Separation (DMB)	Advanced water treatment using Membrane Bio-reactor for safe tap-water	<ul style="list-style-type: none"> <li>• Youngdeungpo Arisu Water Treatment Plant</li> <li>• Constructing membrane-separating purification facilities in Jindo County Dongwae Water Treatment Plant</li> </ul>
	Organic Waste-to-Energy Technology	Technology to produce biogas using organic waste such as sewage sludge, livestock manure, and food waste	<ul style="list-style-type: none"> <li>• Incheon Songdo Environment Center Food Waste-to- Resource Plant</li> <li>• Multi-functional Administrative City Water Quality Restoration Renewable energy facilities</li> </ul>
<b>Civil Engineering</b>	Super Long-span Bridge Technology	Specialized concrete technology such as multi-performance antiwashout underwater concrete and construction of post towers of more than 400m in height, large-scale anchorage, etc	<ul style="list-style-type: none"> <li>• Geoga Bridge</li> <li>• Aphae-Amtae New Millennium Bridge zone 1 site</li> </ul>
	Industrial Waste Utilization for Groundwork	Reusing industrial waste like reclaimed coal ash and waste sand for high quality land fill and groundwork material	<ul style="list-style-type: none"> <li>• Gimhae Buwon-dong</li> <li>• Seowoo-Ansung road expansion PRUGIO &amp; pavement project</li> </ul>
<b>Housing &amp; Buildings</b>	Green Premium	Integrated and mixed technology for maximizing building energy efficiency to achieve low-energy buildings	<ul style="list-style-type: none"> <li>• Korea Institute Of Civil Engineering and Building Technology</li> <li>• LG Electronics Gangnam R&amp;D Center</li> <li>• Wiryae Songpa PRUGIO</li> </ul>
	Cross-unit noise reductions	Technologies to provide a pleasant living experience by reducing floor impact noise, plumbing noise, everyday noise and machinery noise	<ul style="list-style-type: none"> <li>• High1 Casino</li> <li>• Dankook University dormitory</li> <li>• Wiryae Central PRUGIO</li> </ul>
<b>Environment Friendly Building Materials</b>	Eco-friendly Mass Concrete	Eco-friendly concrete technology to use high amounts of industrial by-products instead of ordinary cement having high CO <sub>2</sub> emissions	<ul style="list-style-type: none"> <li>• Pyeongtaek Production Base Factory 2</li> <li>• Gwangyo Central PRUGIO City</li> <li>• Gimhae Buwon-dong PRUGIO</li> </ul>



## Disclosure on Management Approach

# Developing and Managing Construction Talent



### Goals

We aim to increase competitiveness by fostering global talent, function specialists and management with performance-focused leadership. In addition, we will minimize losses from accidents by achieving our annual accident-free targets.



### Activities

To foster construction function specialists, we execute specialized and intensive training courses for each function. We foster global competencies through language and intercultural education. Leadership training is provided to team leaders and site supervisors. We established measures to strengthen on-site safety management to eradicate major accidents.



### Achievements

We launched the Project Procurement Manager (PPM) introductory and advanced courses to enhance work function specialization. Special courses on cultural studies including India, Germany, and Iraq were introduced along with early-adoption courses for foreign employees. In addition, we adopted advanced safety management systems like the Permit-to-Work (PTW) system for hazardous operations in order to prevent serious on-site accidents.



### Plans for 2014

We plan to internalize our core values expressed in the 'Daewoo New-Way' by strengthening training on values. Furthermore, we will increase competitiveness by continuously reinforcing courses for global talent and function specialization while also strengthening safety management systems by obtaining KOSHA 18001 certification and enhancing overseas HSE operations.

## Strengthening Employee Competency

Daewoo E&C invests heavily in building employee capacity. We foster talent that bolsters our corporate competitiveness by providing employees with systematic education and training programs.

## Talent Development Strategy

Daewoo E&C has developed 4 Principles of Talent Development by tying in our CEO's talent management principles with our core values, business strategy, HR strategy, and performance orientation. In addition, we offer systematic support for employee development through training courses for different job functions and business areas.

### Talent Development Strategy and Goals



## 2014 Talent Development Core Tasks

In 2014, we are focusing on 4 core tasks of establishing a 'One-family' corporate culture, fostering core talent and leadership capacity, fostering global talent and function specialists, and increase training efficiency to promote talent development.



**Global Talent Development\_** Daewoo E&C operates a variety of training courses to help employees develop global capabilities. In 2013 we offered cultural courses covering India, Germany, France, and Iraq to help enhance understanding of the countries we operate in. In 2014 we launched intensive language courses for English and Spanish to foster the most fundamental skill needed for globalization, language. We plan to expand culture courses for Venezuela, Mozambique, and Kuwait.

**Construction Function Specialists Development\_** We offer business function specific courses such as Project Procurement Manager (PPM) introductory and advanced courses, contract & claim management courses, process management, and bond management to foster specialization. In 2014, we plan to launch the Project Manager (PM) course and expand the process management course to all technical personnel and make it a requirement in order to enhance firm-wide process management capacity. In addition, we will also support site management skills development by strengthening raw materials and labor management training.

**Foster Core Talent and Strengthen Leadership\_** Daewoo E&C operates leadership and talent development programs to develop core talent that will guide the future of Daewoo E&C. We newly launched communication leadership courses for team leaders and site supervisors and offer leadership courses for each job function for those newly promoted. We plan to expand overseas training opportunities for strategically important job functions and strengthen leadership training for team leaders and site supervisors in 2014.

**Establish ‘One-family’ Corporate Culture\_** We are focused on rebuilding Daewoo E&C’s unique culture of ‘one family, unified culture’ which is based on mutual trust and consideration. First, we support the early internalization of our corporate culture by focusing on sharing core values and vision during new joiner training. We have also adopted a mentoring program to help new members of the Daewoo E&C family adjust to their new responsibilities. Furthermore, employees in their 3rd year take part in the “One mind Challenge,” a refresher course on the corporate vision that promotes teamwork mentality.

### Talent Development System Improvement

**Improved Job Classifications and Career Development Program\_** We improved the job function classification and career development systems by implementing ‘JUMP,’ Job-based, Upgraded capacity, initiated Myself to become a Professional. We aim to effectively support employee capacity and career development through JUMP.

#### New Job Function Classification and JUMP System for Career Development

Area	Program	Activity
Job-based System	New Job Classification	<ul style="list-style-type: none"> <li>• Re-defined job classification system</li> <li>• Job groups based on links between functions</li> </ul>
Support to Upgrade Capacity	Rotational Job Assignment	<ul style="list-style-type: none"> <li>• Redesign rotational job assignment based on job type· position</li> <li>• Define Career Roadmap</li> </ul>
Self-led, Myself	“Wannabe (Wanna 飛, Want to fly)” Program	<ul style="list-style-type: none"> <li>• Self-development program that supports capacity building so employees can reach their own career goals</li> </ul>
Become a Professional	Daewoo University	<ul style="list-style-type: none"> <li>• Establish integrated training and development system to promote career goal realization</li> </ul>

**Develop In-house Trainers & Compensation System\_** Daewoo E&C maximizes training efficiency through in-house trainers and lecturers. With a development program for trainers tailored to different levels of expertise, we assure quality education and offer both monetary and non-monetary compensation for excellent trainers so they may continue teaching with passion.

**In-house Trainer Compensation System**

Type	Categories	Compensation Details
Monetary	Annual Teaching Excellence Award	KRW 1 million per person and award plaque
	Best Program Trainer Award	Awarded to best trainer in each program, Cultural Events Gift Card worth KRW 50 thousand and books
	In-house Champion Trainer Reward	Presented with a gift
	Award for Passion	'Thank you' cake awarded to the in-house trainer's team
	Program Development Expenses	KRW 300 thousand/person limit
Non-Monetary	Support for personal career management	Record of individual personnel data on e-HR
	Education credits	2 credits for teaching 10 hours or more (5 times or more), 1 credit for 4-10 hours
	Invitation to events/ training	Invitation to important company events and training
	Publicity	Publicized firm-wide in company newsletter and through announcements

**Improved Training Program Operation\_** At Daewoo E&C, we are making various efforts to improve training efficiency. The divisional winter job and technician training was changed to a firm-wide program, reducing cost and increasing satisfaction. We also conduct surveys on training and trainers to enhance quality and have been testing a smartphone based education satisfaction evaluation system since 2013.

**Annual Employee Training Performance**

**Total Training Hours**



**Total Cost**



**Training Hours Per Person**



**Annual Online Training Performance**

**Construction Job Training**



(Unit: No., Persons)

Type	2011	2012	2013
Programs	1,488	1,689	1,355
Participants	836	1,087	750

**General Leadership Training**



(Unit: No., Persons)

Type	2011	2012	2013
Programs	648	1,181	974
Participants	384	776	364

**Foreign Language Training**



(Unit: No., Persons)

Type	2011	2012	2013
Programs	3,153	5,347	5,297
Participants	777	1,798	1,808





**Raising Sustainability Awareness in Employees**\_ Through the voluntary firm-wide Community Service Relay program, we promote awareness on sustainable management amongst our employees. This program has grown to represent Daewoo E&C's social contribution activities and acts as a reminder of the meaning of sharing and community service as we fulfill our responsibility as the 'Warmhearted Construction Company that Changes the World.'



**2013-2014 Community Service Relay Highlights**

Date	Activity	Summary	Participants
Jun 25, 2013	Visit to Eunhye Dongsan	Caring for the disabled, upgrading facilities	60 employees from the Housing Division
Aug 21, 2013	Visit to Shinawon	Caring for the disabled, upgrading facilities	40 employees from the Finance, RM, Corporate Management & Service Divisions
Oct 24, 2013	Visit to the Mapo-gu Center for Senior Citizens Living Alone	Improve residential facilities for senior citizens who live alone	75 employees from the Overseas Business Division, Engineering Division, and PRUGIO Service
Dec 19, 2013	Sharing Briquettes of Love	Delivering heating briquettes to senior citizens living alone and recipients of livelihood protection	120 employees from the Civil Projects, Building Works, Power Business, and Corporate Management & Service Divisions
Jan 8, 2014	New Joiner Briquette Delivery Community Service	Delivering heating briquettes to senior citizens living alone and recipients of livelihood protection	102 employees, new joiners from the first half of 2014
Mar 26, 2014	Visit to Woosungwon	Cultural activities for the disabled (visit to a theme park)	60 employees from the Civil Projects, Corporate Management & Service, and RM Divisions
May 27, 2014	Visit to the Seoul City Pyeonghwa House	Caring for the disabled, upgrading facilities	70 employees from the Engineering Division
Jul 10, 2014	Visit to the Mapo-gu Center for Senior Citizens Living Alone	Improve residential facilities for senior citizens who live alone	70 employees from the Housing Division, Building Works Division, PRUGIO Service

## Managing Employee Safety

Safety is our top management priority and we strive to enhance employee safety awareness and to prevent accidents. We are building an advanced safety system by implementing safety management efforts that focus on the fundamental principles of safety and prevention.

## Talent Development System Improvement

We, Daewoo E&C place the preservation of life at the core of our business management and are committed to attaining zero accidents. To achieve these goals, safety-related operations and the status quo are being reported in monthly business performance meeting spearheaded by the CEO during which directions to prevent all major incidents are provided and supported by the management.

### 2014 Safety Management Principles

**Safety Slogan**

Building the Future of Technology and Happiness with Safety

**Incident Rate Target**

Korean Sites



Fatality rate (per 10,000 man-hour)

1.10

Overseas Sites



Major Incidents

zero



Incident rate

0.25

LTIR 0.08

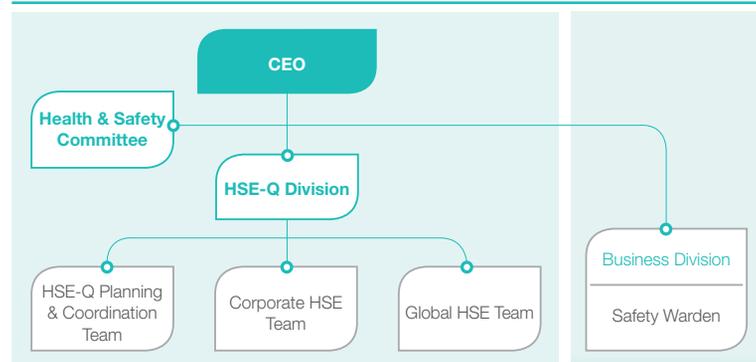
**Site Targets**

- Solidify and improve Risk Assessment activities
- Obtain KOSHA 18001 certification

- Identify and develop overseas HSE specialists
- Intensify in-depth prevention measures to root out accidents
- Develop/ operate standard global HSE System
- Digitize and secure database for overseas HSE

**HSE Organizational Structure**\_ The HSE organizational structure was revamped and related personnel was added. During the firm-wide reorganization in 2014, a dedicated HSE-Q and Overseas HSE Team was established to enhance specialization. In addition, the Health and Safety Committee develops firm-wide HSE management plans and monitors progress.

### Safety Management Organizational Structure



**Safety Innovation Declaration**\_ In June 2014, Daewoo E&C held the Safety Innovation Declaration to assert our firm-wide dedication to prioritizing safety in our business management. 370 persons, including Daewoo E&C employees, the head of the Ministry of Employment and Labor's Seoul Regional Employment and Labor Office, partner company CEOs attended to share in our declaration of commitment to safety innovation implementation. Based on the Declaration, we will strictly uphold the fundamental principles of safety and build a safety paradigm that emphasizes prevention.



Safety Innovation Declaration Ceremony

The number of personnel who completed safety-related trainings



**Safety Training** Safety training is provided for all levels of organization to improve employees' safety awareness and a total of 699 employees completed the safety-related trainings in the year 2013. In order to develop secure expertise in overseas HSE, we implemented advanced HSE trainings such as 'NEBOSH ICC,' 'TapRoot,' 'OSHA 30 Hours Construction' and built a HSE training material database. We plan to expand all levels of HSE training and to secure overseas HSE specialists through the Overseas HSE Expert Development Program in 2014.

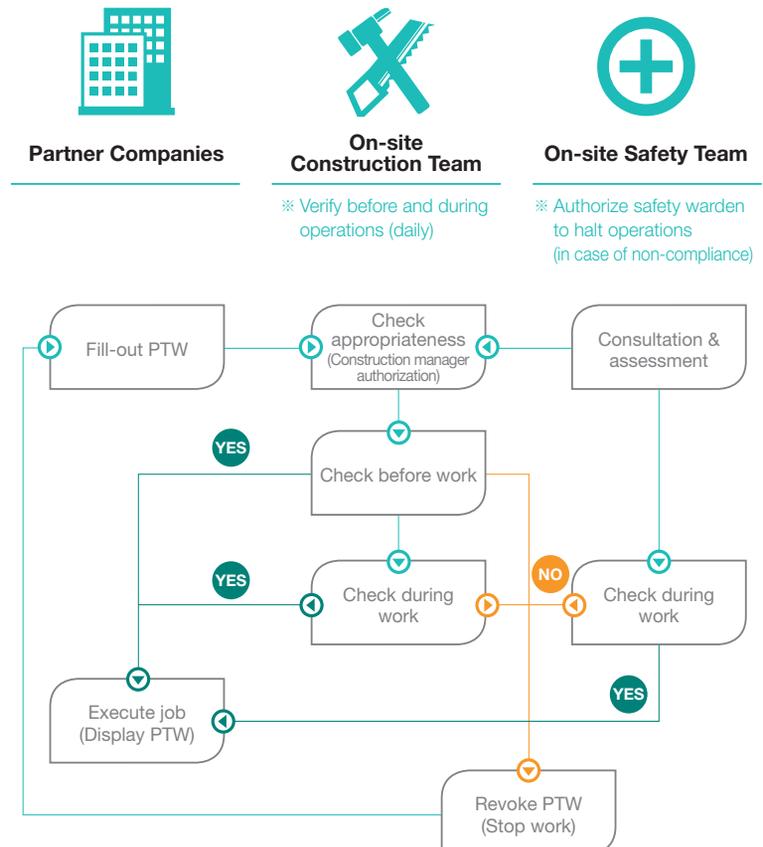
**Safety Risk Management**

Daewoo E&C is making every effort to prevent incidents and eliminate major accidents by employing a site-centric, proactive safety management culture.

**Site Inspections and Support** We perform stringent safety inspections in all of our sites. Accident Prevention Execution is the core indicator for which sites are evaluated and the results of evaluation are being shared to responsible parties. In addition, spot checks are conducted by the Safety Officers to assess whether they are implementing the CEO's safety instructions.

**PTW for Hazardous Operations** Daewoo E&C uses a Permit-to-Work (PTW) system for hazardous operations. Under the PTW System adopted in 2013, operations with high risk of danger must show that they have secured adequate safety and accident prevention measures before convening work.

**PTW Process for High-Risk Operation**



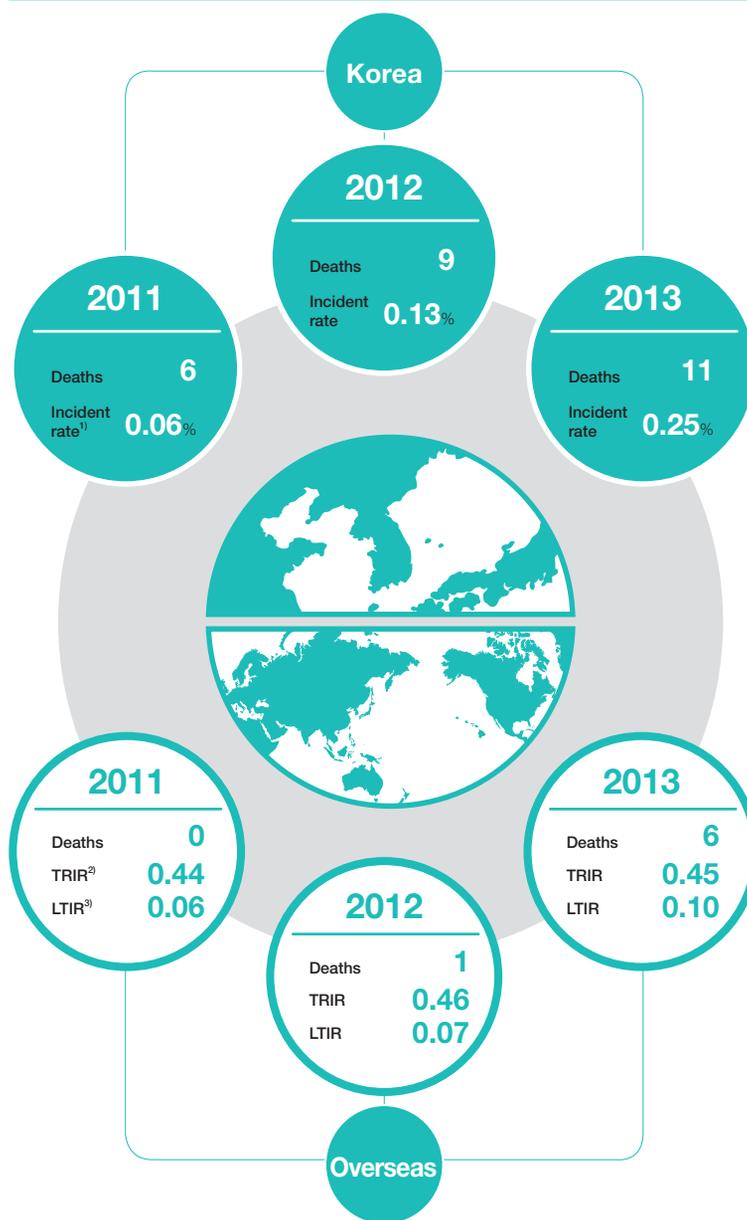
Developments and revisions  
of the HSE manual,  
procedures and guidelines

62

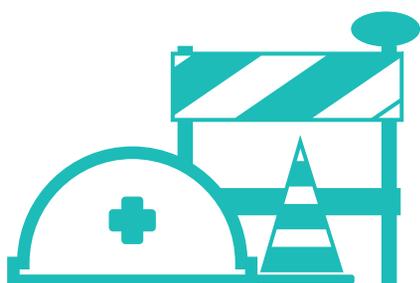
**Safety Management System Certification**\_ In 2000, Daewoo E&C became the first Korean construction company to obtain the international occupational health and safety management system certification OHSAS 18001, and we have successfully passed annual post-certification evaluation and re-certification since then every 3 years. In addition, we have developed and improved HSE manual, procedures and a total of 62 items in the guidelines, through which we plan to obtain the Korean health and safety management system certification: KOSHA 18001 by the second half of 2014.

**Current Incident Rate**\_ We have developed reporting guidelines to ensure transparent disclosure of accidents and reinforced penalties for severe accidents occur. Daewoo E&C will take every measure to prevent accidents in 2014 by actively implementing PTW system and reinforcing various risk assessment activities.

**Annual Incident Rate**



1) Incident Rate = (No. of Casualties, Converted / No. of Regular Workers) x 100  
 2) Total Recordable Injury Rate = (Fatality + Lost Workday Cases + Restricted Work Cases + Medical Treatment Cases + Occupational Illness) x 1,000,000 hours / Total Man-hours Worked  
 3) Lost Time Injury Rate = (Fatality + No. of Lost Workday Cases) x 1,000,000 hours / Total Man-hours Worked



## Overseas Site Safety Management Enforcement

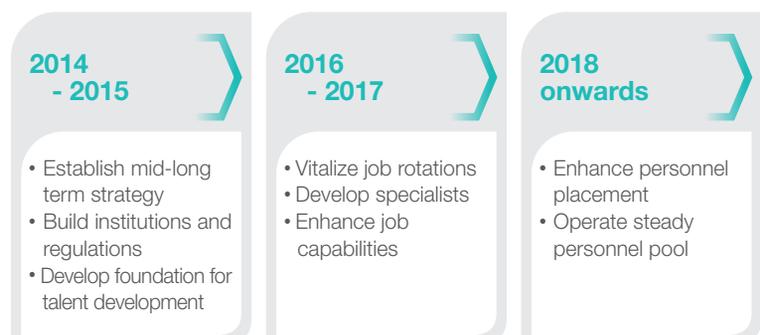
**Developing HSE Management System for Overseas Sites\_** The HSE Management System (HSEMS) allows systematic management of health, safety and environmental risks that may arise during the course of project execution. In 2013, we updated and added 22 documents to HSEMS for implementation on overseas sites and built an overseas health and safety management system for the first time, reinforcing our capabilities in global safety management.



**Overseas HSE Report\_** In 2013, we published the ‘Annual HSE Report’ which captures all HSE activities and accomplishments. The Report especially promotes heightened awareness in overseas site personnel by providing various case studies of safety accidents.

**Identifying and Developing Overseas HSE Specialists\_** As the requests for safety by commissioning entities increase along with increased on-site safety issues, securing excellent HSE personnel has become a priority. In order to secure and deploy a steady supply of HSE personnel, Daewoo E&C is implementing the ‘Overseas HSE Specialist Development Mid-Long Term Strategies.’ We will implement mid to long term strategies in order to solidify this structure.

### Overseas HSE Specialist Development Mid-Long Term Strategies



## Introduction of Risk Assessment

Daewoo E&C holds weekly Risk Assessment meetings to review work to be done the following week, identify risk and develop plans for improvement. Site supervisors, partner companies and foremen participate in this process to make possible practical fulfillment and result monitoring.

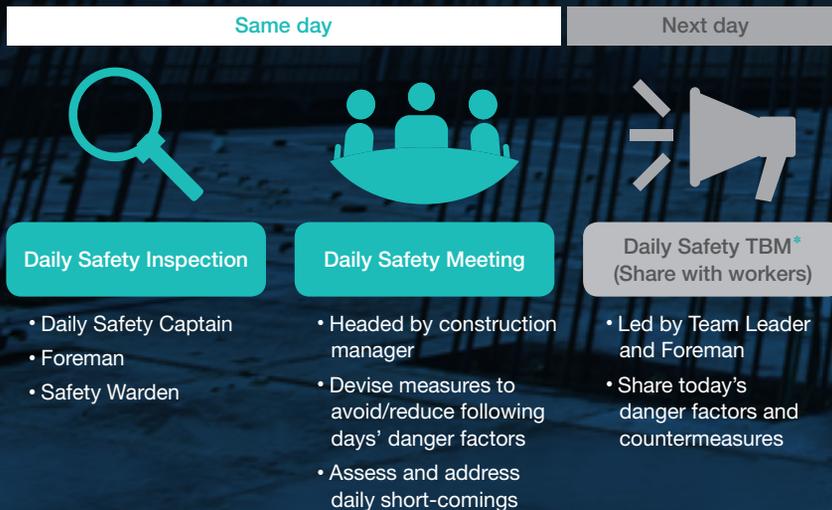
### Risk Assessment Meeting Process



## Daily Safety Meeting and Operation of Safety Captain

Through the weekly Risk Assessment Meeting and Daily Safety Meeting, we assess risk and develop countermeasures. The daily 'Safety Captain,' site foreman and safety warden constantly inspect and improve the process.

### Daily Safety Inspection and Meeting Process



\* Tool Box Meeting



대우건설 정자동오피스텔3

PRUGIO CITY



## Creating Economic Value

## Disclosure on Management Approach



### Goals

Based on active efforts to increase corporate value, Daewoo E&C is set to overcome past weak performance for sustained growth. We aim to prevent loss in profitability through systematic risk management and will bolster mid to long term competitiveness by actively identifying new growth engines.



### Activities

Daewoo E&C reviewed our firm-wide risk management structure and worked to employ a more advanced system. We chose IPP business as our new growth engine and pushed forward to uncover new opportunities for the future.



### Achievements

We identified key corporate risk factors and established a responsive action plan. In addition, we are on a firm-wide expedition to develop new growth businesses that shall increase corporate value. In particular, the establishment of our power subsidiary, Daewoo Energy, is leading our active participation in the domestic and international IPP market.



### Plans for 2014

Under the leadership of the Corporate Value Committee, we plan to select and actively develop new growth businesses for each business division. Furthermore, we will strive to build the foundation for our new risk management system to take root.

## Economic Performance

With the constricted construction market in Korea and stagnant global economy, Daewoo E&C's performance in 2013 was not our strongest. Though we do anticipate the difficult environment to continue in 2014, we will use our 'Crisis Conquering DNA' to turn risk into opportunity for Daewoo E&C to launch itself forward.

Order backlog for 2013

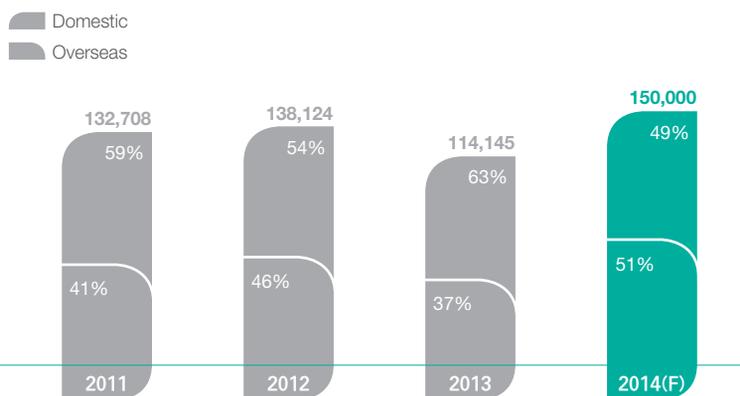
KRW **42** trillion

## Financial Performance

**New Orders\_** New orders in 2013 reached KRW 11 trillion, which is a step down from the previous year. Nevertheless, by accomplishing 14 thousand homes in the Korean market, the ratio for new domestic orders increased compared to new overseas orders.

### Annual New Orders and 2014 Target

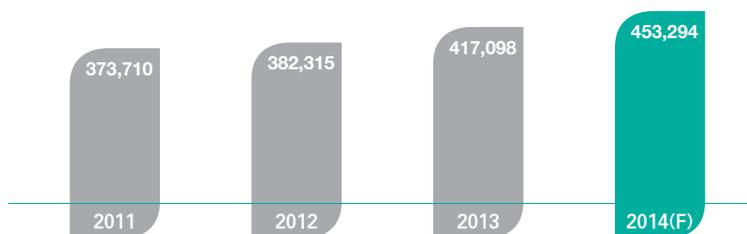
(Unit: KRW 100 million, non-consolidated)



**Order Backlog\_** The order backlog increased about KRW 3 trillion to reach KRW 42 trillion in 2013. As of February 2014, winning the Kuwait Clean Fuel project and other large-scale projects have helped us to secure roughly USD 2 billion in orders, putting us in a good position to reach our 2014 target.

### Annual Order Backlog and 2014 Target

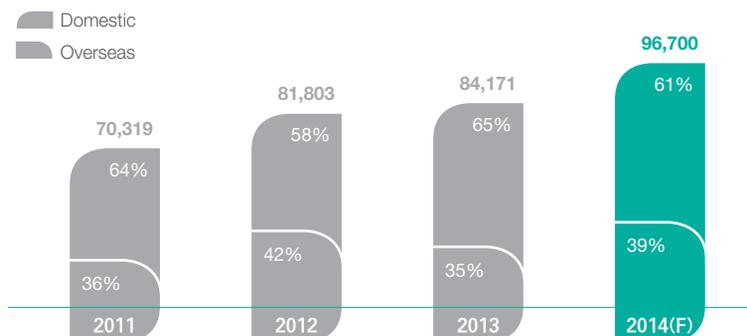
(Unit: KRW 100 million, non-consolidated)



**Sales\_** Daewoo E&C recorded nearly KRW 8.4 trillion in sales in 2013. In spite of challenging global market conditions, steady sales in housing and overseas business have helped our sales grow from the previous year.

### Annual Sales and 2014 Target

(Unit: KRW 100 million, non-consolidated)



2013 Credit Ratings

Commercial Paper

**A2+**

Corporate Bonds

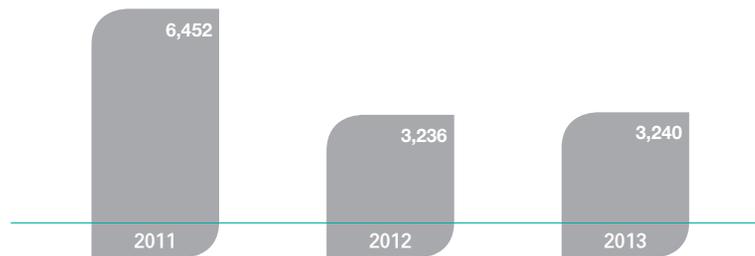
**A+**



**Liquidity** In spite of expenditures from land acquisition for housing and buildings business and redemption premium interest payments, we were able to increase our cash and liquid assets from the previous year through loan procurement.

**Annual Cash and Cashable Assets**

(Unit: KRW 100 million, non-consolidated)



**Credit Rating**

Daewoo E&C has obtained and maintained a stable credit rating from all Korean credit rating agencies based on our strong market position, plentiful order backlog and strength in financing capacity.

**Credit Rating by Agency**

(As of December 2013)

Rating Agency	Commercial Paper	Corporate Bonds	Remarks
Korea Ratings	A2+	A+	Stable
NICE Investor Services	A2+	A+	Stable
Korea Investors Services	A2+	A+	Stable

**Stakeholder Value Distribution**

At Daewoo E&C, we strive to maximize the value we provide to stakeholders. The created value is shared with various stakeholders, such as employees, partner companies, shareholders and investors, government and local communities.

**Annual Expenditure per Stakeholder Group**

(Unit: KRW 100 million)

Stakeholder	2011	2012	2013	Remarks
Employees	4,437	5,002	5,372	Salaries and benefits
Partner Companies	40,648	43,165	47,588	Materials purchase and outsourcing cost
Shareholders & Investors	1,301	914	1,040	Loan interest
Government	355	562	(1,276)	Corporate tax
Local Communities	7	42	34	Philanthropic operations, donations

## Corporate Value Committee

Daewoo E&C established the Corporate Value Committee in March 2014 in order to grow as a sustainable corporation. With the 3 core tasks of strengthening internal stability, transparency and organizational culture, we are pushing forward actively.

### 3 Core Tasks and Implementation Timeline



**Committee Composition** The Corporate Value Committee is headed by the Chief Vice President and composed of 4 sub-committees: Strengthened Financial Structure; Growth Strategy Development; Securing Global Competitiveness; and Organizational Culture Innovation. Each sub-committee is operated by a lead team with multiple related divisions participating for enhanced execution capacity.

#### Sub-committee Organizational Composition

Sub-committee	Lead Team	Participating Divisions	Goal
Strengthened Financial Structure	Financial Planning & IR Team	Finance, RM Divisions	Develop financial policies and roadmap
Growth Strategy Development	Corporate Planning Team	Strategic Planning, Five business divisions	Establish mid-long term strategy and action plan
Securing Global Competitiveness	Overseas Business Strategic Planning Team	Overseas Business, Strategic Planning, Five business divisions, Overseas Business, Corporate Management & Service, Procurement & Cost Management, Finance Divisions	Enhance bidding competitiveness and EPC management capacity
Organizational Culture Innovation	Communication Team	Public Relations, Corporate Management & Service, Strategic Planning Divisions	Reestablish and solidify corporate culture

#### [Interview] Kyung Taek Lim, Chief Vice President



The Corporate Value Committee aims to channel the discussions taking place within our organization on how to enhance our corporate value, identify clear action items and share the action plans discussed in the committee for firm-wide implementation. I hope that all Daewoo E&C members will play an active role and fervently discuss action items not only relevant to their division, but to others as well, so that we may develop specific yet integrated ideas.

## Securing New Growth Engines

In line with our efforts to increase corporate value, we at Daewoo E&C are identifying businesses that will become our growth engines for the future. Under the lead of the Strategic Planning Division's Future Strategy Team, a taskforce team (TFT) comprised of Planning & Coordination Teams from the five business divisions develop detailed plans for securing new growth engines in businesses.

### Civil Project Division

**Tidal Power Business\_** Tidal power is an environment-friendly generation technology that harnesses the difference in tides to generate electricity by building tidal barrage. The Sihwa Lake Tidal Power Plant constructed by Daewoo E&C is an ultra large scale power plant that generates 552 million kWh of electricity annually, replacing 860 thousand barrels of oil imports and reducing roughly 310 thousand tons of CO<sub>2</sub>.

**Environment-Friendly Green Business\_** Sewage reclamation and reuse, bio-energy business, and the construction of a comprehensive 'Waste Treatment Town' are some of the promising business fields. Daewoo E&C will focus on winning contracts in both Korea and overseas markets based on our advanced technologies in water treatment and biogas generation along with our expertise in project execution.

### Building Works Division

**Lease and Operations Business\_** We plan to reduce the risk of unsold property and secure profitability by adding real estate sales and lease operations to our existing portfolio of construction management. To bring our plan to action, we seek to tailor lease operations to project characteristics whilst searching for methods of trust management through the establishment of subsidiaries, funds and REITs.

**Planning · Proposal Based Development Business\_** By building strategic partnerships with other industries, we will secure a network of outstanding tenants and strategic investors. Based on this, we can minimize the sales and leasing risks entailed in large-scale commercial developments and also build a stable base for profitability. In the mid to long term, we plan to expand the pool of commissioning entities we have a strategic relationship with and expand business opportunities by enhancing our capacity to identify potential projects.

### Housing Division

**Green Premium\_** GHG emissions from buildings are responsible for 25.6% of national emissions which means that there is a high potential for climate change mitigation in green buildings. Accordingly, we endeavor to do our part in responding to climate change and lead the green housing market through our Green Premium strategy in developing 'zero-energy houses' by 2024.

**My Premium\_** With an aging society and an increase in single-person households, housing needs are becoming more diverse. In light of the changing market, we are developing tailored housing options that reflect individual needs. With products that intrinsically consider the needs of our residents, PRUGIO offers premium service that is intricate and like no unique.

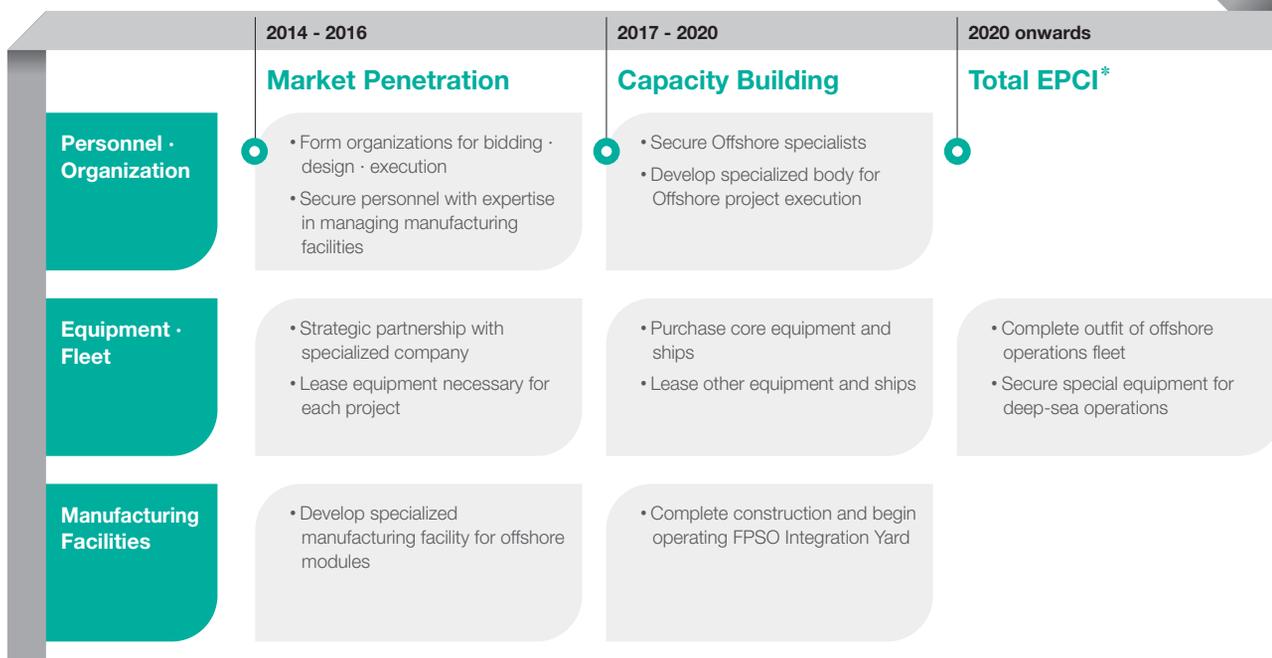
**Life Premium\_** In the future, we believe housing will no longer simply be a roof over your head, but evolve into a service full of new and diverse experiences. As such, Daewoo E&C offers a wide range of lifestyle services, events and common facilities to support communities within housing complexes and ultimately upgrades the apartment lifestyle.



## Plant Division

**Offshore Business\_** Offshore Business, as a newly rising business segment in categories, is Daewoo E&C's initial market footstep in 2014. The business sectors are divided into platforms which are installed on deep-sea surface, vessel including FPSO (Floating Production System and Offloading), and subsea facilities. The Plant division is now systematically pursuing business diversification by building a phased strategy to secure core business components such as personnel and organization, equipment and fleet, and manufacturing facilities.

### Phased Offshore Business Execution Strategy



\* EPCI : Engineering, Procurement, Construction and Installation

## Power Business Division

**IPP Business\_** Daewoo E&C is going beyond construction-based business by choosing to develop Independent Power Producer (IPP) business as our growth engine. We are working towards building business planning, construction, financing and operations capability for comprehensive project execution capacity. Through such efforts, we aim to consolidate our role in the Korean market by continuing to participate in the government's long term electricity procurement planning and by utilizing our synergy with KDB Bank to set ourselves apart in the market.



Pocheon IPP Combined Cycle Power Plant Concept

**Founding of Daewoo Energy Co., Ltd** In order to launch into the IPP business, Daewoo E&C founded Daewoo Energy Co., Ltd, a solely financed energy subsidiary, in 2013. As a special purpose company that specializes in natural gas power and the installation and supply of new and renewable energy, it will be responsible for commercial operation IPP power plants.

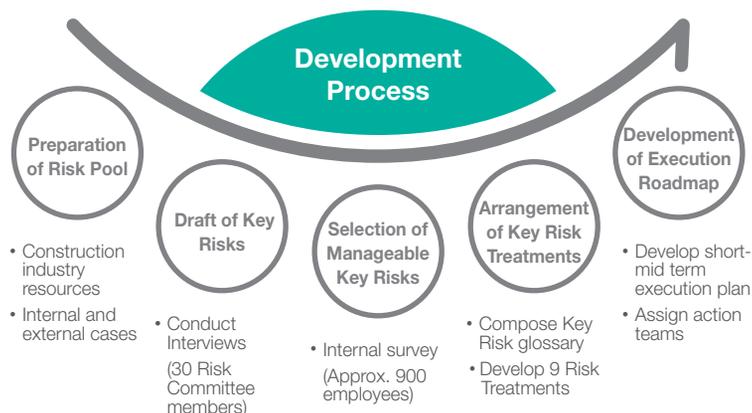
**Pocheon Combined Cycle Power Plant** In 2013, Daewoo E&C was awarded the IPP contract for the Pocheon Combined Cycle Power Plant. Upon completion of the plant, Daewoo E&C will hold the right to generate and sell electricity for 30 years, which will generate additional revenue. This project was expedited as a result of the synergy between Daewoo E&C and our largest shareholder and financial advisor, KDB Bank. We are confident that it will contribute to stabilizing electricity supply in Korea.

## Enterprise Risk Management

As the global economic situations keeps on fluctuating and the proportion of global business increases, systematic risk management is becoming more crucial. Daewoo E&C reviewed the Enterprise Risk Management system and built a risk response structure based on the core risk factors in 2013.

### Establishment of Enterprise Management System

We established the Enterprise Risk Management system to enhance internal stability and to increase business success through proactive risk response. We ascertained the status of risk management through the analysis of internal and external conditions and identified key risk factors that need special attention through interviews and surveys in order to develop action plans.



**Identifying Key Risks\_** Before selecting our key risk, we reviewed financial and non-financial factors that may affect our management and then set up the Risk Pool. After that, we chose key risks through company-wide surveys and interviews. The seven key risks include 'insufficient project preparation,' 'low-price bidding' and 'legal dispute' among others. (Please see Seven Key Risks table below). These risks are monitored quarterly at the Risk Management Committee and reviewed annually.

**Developing Risk Treatments\_** To effectively manage the 7 key risks, 9 risk treatments were developed. The check-list, which is a collection of risk factors that can possibly affect project execution, will contribute to managing project risks systematically. Furthermore, we have enhanced strategic project performance indicators to verify responsible parties. In addition, we expect to prevent loss in profitability by strengthening monitoring and managing limit of cost and liquidity.

### Identification of Key Risks and Developing Risk Treatments

#### Key Risks

01. Insufficient pre-contractual preparation
02. Low-price bidding
03. Erroneous investment decision
04. Country risk of overseas project
05. Liquidity
06. Fluctuation in market price
07. Legal disputes and compensation liability

#### Treatment

##### Checklist

01. Create country risk database based on project evaluation table
02. Improve overseas project evaluation table
03. Implement checklists for feasibility study and new markets
04. Classify project 'poisonous clauses' and countermeasures

##### Establish system-policy

05. Enhance Key Performance Indicators (KPI)

##### Monitoring

06. Monitor construction cost indicators
07. Re-evaluate cash flow in managed projects

##### Limits

08. Manage pre-tax profit target
09. Manage debt and project financing limits

## Indirect Economic Effects

Daewoo E&C's influences on the national economy include production, value-added, and job creation.

2013  
Job creation effect

57,801



2013  
Local hires in overseas sites

4,087



2013  
Production inducement effect

KRW 12.4 trillion

2013  
Value-added inducement effect

KRW 3.9 trillion

**Revitalizing Local Economies**\_ Daewoo E&C contributes to local economies by creating jobs and purchasing from local companies. Applying the Bank of Korea's job creation coefficient, Daewoo E&C created a total of 57,801 jobs in 2013. Moreover, through our compliance with local employment standards in overseas operations, we also contribute to job creation in foreign countries. As of the end of December 2013, we contributed highly to local economies around the world by employing 4,087 local laborers in 41 sites in 14 countries. Moreover, we support capacity building for local workers and assist their growth into construction experts.

(Source: Bank of Korea reference year Industry Input-Output Tables (I/O), construction industry employment inducement coefficient 10.5/KRW 1,000 million)

**Production and Value-added inducement effect**\_ The production inducement effect refers to the amount of production directly and indirectly induced by an additional unit of final demand arising from that company. In 2013, Daewoo E&C's production inducement effect reached KRW 12.4 trillion. In addition, the value-added inducement effect, which measures the direct and indirect creation of value-added by business activities, amounted to KRW 3.9 trillion in 2013.

(Source: Bank of Korea reference year Industry Input-Output Tables (I/O), construction industry employment inducement coefficient 10.5/KRW 1,000 million)

**Building National Infrastructure**\_ Daewoo E&C benefits the society by saving time, logistics costs, fuel costs and by increasing accessibility between regions through the construction of national infrastructure such as bridges, railways, ports and so on. Geoga Bridge, which opened in 2010 to link Busan and Geoje island, is a good example of increased regional accessibility contributing to economic vitality. Geoga Bridge reduced the moving distance between the two cities from 160km to only 60km and reduced travel time from 3.5 hours to 40 minutes. According to the 2012 Gyeongnam Social Survey, Geoga Bridge was evaluated highly for dispersing traffic and vitalizing local tourism.



Geoga Bridge



## Environment-Friendly Construction

### Disclosure on Management Approach



#### Goals

Daewoo E&C is minimizing our impact on the environment by achieving annual targets for energy and resource conservation, as well as waste reduction. In addition, we strictly comply with environmental regulations to build trust as an Environment-Friendly construction company.



#### Activities

We are actively participating in global efforts to combat climate change by participating in the Ministry of Land, Infrastructure and Transport's pilot Greenhouse Gas and Energy Target Management Scheme. In addition, we expanded the Waste Management Company Registration System nationwide to make special efforts to minimize the environmental impact of waste discharge.



#### Achievements

In 2013, we were awarded the Special Award in the CDP KOREA Awards and added to the Climate Disclosure Leadership Index (CDLI). We were also able to exceed our waste treatment cost to sales ratio target by systematically reducing waste and recorded zero environmental penalty points through our strict compliance with environmental regulations.



#### Plans for 2014

We plan to select a test site for a GHG management system and launch full-scale emissions reductions activities. In addition, we will visit new sites within three months of ground-breaking in order to support the establishment of an environmental management system and to ensure enhanced capacity in on-site environmental management.

## Responding to Climate Change

Daewoo E&C is participating in the global response to counter climate change through systematic assessment and management of GHGs.

**Climate Change Response System\_** Daewoo E&C's climate change response is led by the head of the HSE-Q Division who oversees compliance with domestic and foreign GHG regulations, data disclosure, operation of GHG inventory and all firm-wide climate change-related activities. During the annual "Environmental Management Activities Evaluation of Management," our activity accomplishments in combating climate change are assessed and related plans are applied to action items.

**GHG Management System\_** Daewoo E&C has been operating a GHG Inventory System within BAROCON since 2012 in order to calculate and manage GHG emissions. Through this system, energy use at headquarters and on-site is collected as data for detailed calculations of GHG emissions.

**Climate Change Risk and Opportunities\_** Daewoo E&C analyzes and manages possible risk and opportunities from climate change. Regulation risks, possibility of physical change, corporate reputation, changes in consumer behavior are some of the various risk and opportunities that are taken into account in our climate risk response. We will continue to monitor climate change-related external factors and respond in a timely manner to minimize risk and increase competitiveness as an environment-Friendly construction company.

### Analysis of Climate Change Risks and Opportunities

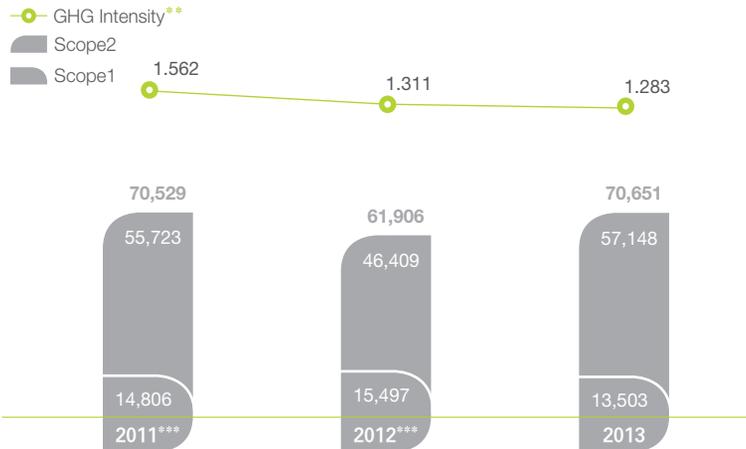
	 <b>Risks</b>	 <b>Opportunities</b>
 <b>Regulation</b>	<ul style="list-style-type: none"> <li><b>Greenhouse Gas and Energy Target Management Scheme:</b> Cost incurred for improving GHG inventory</li> <li><b>Emissions Trading Scheme:</b> Penalties for exceeding emissions cap</li> <li><b>Green Building Construction Support Act:</b> Cost incurred for improving GHG inventory</li> </ul>	<ul style="list-style-type: none"> <li><b>Greenhouse Gas and Energy Target Management Scheme:</b> Reduced electricity cost with GHG reduction and offset penalty expenses with compliance</li> <li><b>Renewable Portfolio Standard:</b> Business opportunities due to growth in renewable energy market</li> <li><b>Green Building Construction Support Act:</b> Can gain comparative advantage with existing eco-friendly and low energy technology</li> </ul>
 <b>Physical Change</b>	<ul style="list-style-type: none"> <li><b>Increased average rainfall:</b> Increased construction time due to flooding, negative impact on business durability due to increased moisture</li> <li><b>Temperature increase:</b> Increased fugitive dust, negative impact on quality due to construction material damage</li> <li><b>Changes in natural resources:</b> Instability in construction material sourcing, increase in construction time and cost</li> </ul>	<ul style="list-style-type: none"> <li><b>Increased average rainfall:</b> Increased demand for post-disaster restoration and damage reduction facilities</li> <li><b>Temperature increase:</b> Increased demand for high function insulation and low energy building construction suited for high temperatures</li> </ul>
 <b>Other</b>	<ul style="list-style-type: none"> <li><b>Reputation:</b> Increased demands for non-financial data disclosure and damage to reputation for non-disclosure</li> <li><b>Changes in consumer behavior:</b> Barriers to market entry due to insufficient response to consumer demand for environment-friendly buildings</li> </ul>	<ul style="list-style-type: none"> <li><b>Reputation:</b> Maintaining a good corporate image results in higher brand value and sales</li> <li><b>Changes in consumer behavior:</b> Increased demand for low-carbon, environmentally friendly buildings leading to growth in related markets</li> </ul>



**GHG Emissions Management\_** GHG emissions are managed through the GHG Inventory System within the Integrated Construction Management System. GHG emissions include direct emissions within the control of the firm, and indirect emissions from electricity and thermal energy purchased from external sources. We have a detailed system for monitoring GHG which breaks down emissions by business divisions, buildings and energy sources.

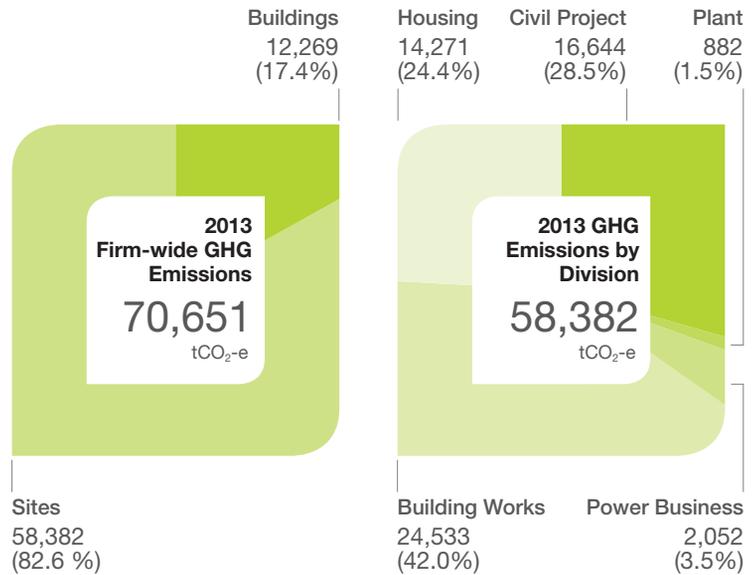
**Annual Firm-wide GHG Emissions\***

(Unit: tCO<sub>2</sub>-e, tCO<sub>2</sub>-e/KRW 100 million)

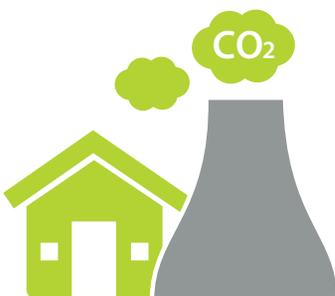


\* GHG Emissions = Scope 1 + Scope 2  
 \*\* GHG Intensity = GHG Emissions / Domestic Sales  
 \*\*\* Emissions for 2011-2012 were recalculated due to changes in operations boundary and parameters. As such, figures vary from the 2012 Sustainability Report

(Unit: tCO<sub>2</sub>-e)



**GHG Emissions Reduction\_** Though emissions increased 14% from the previous year due to the increase in the number of Building Works Division sites and sites with GHG emissions-intensive processes, our overall GHG intensity improved due to aggressive reduction activities. In 2014 we will set a GHG reductions target and apply it to a pilot site. We will also add GHG management performance to the Site Safety and Environment Evaluation to ensure that reductions are made at each site.



2013 Achievement of CDP participation

Included in **CDLI**  
**Carbon Disclosure  
 Special Award**  
 Recipient

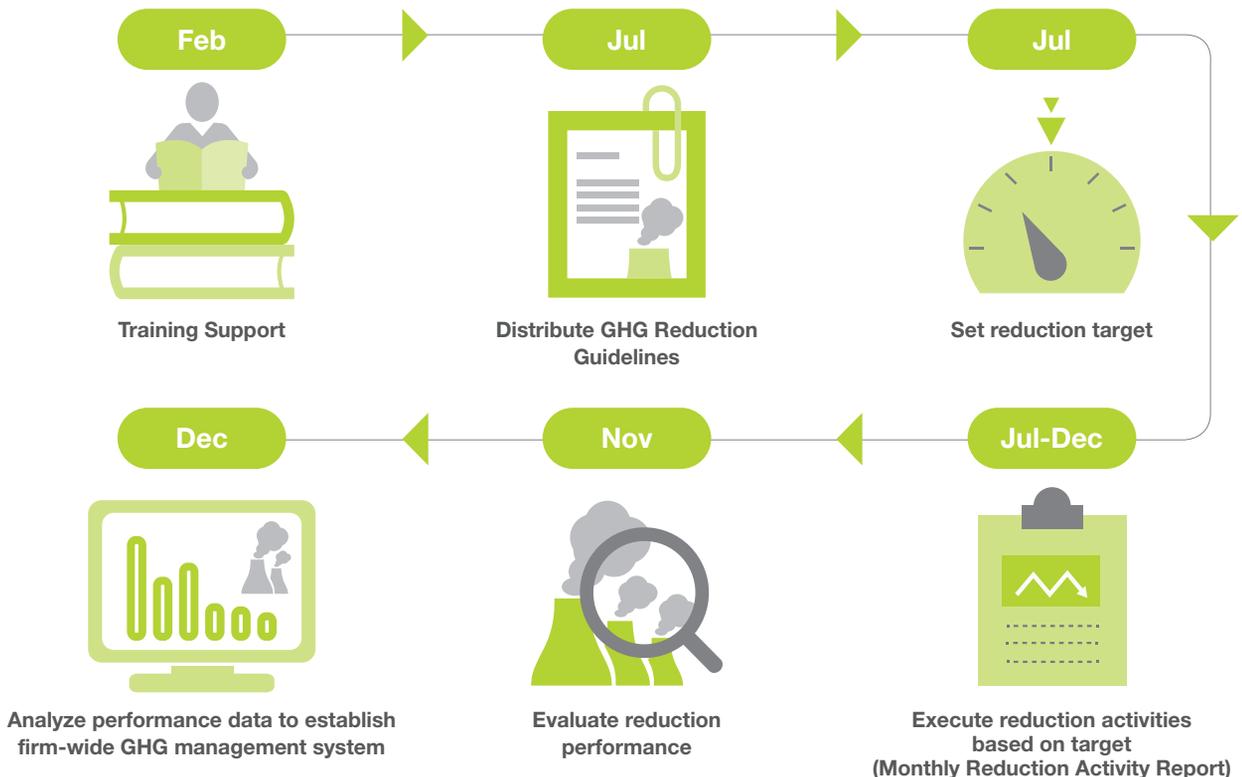
**Carbon Disclosure Project (CDP)**\_ In November 2013, not only was Daewoo E&C awarded the “Carbon Disclosure Special Award” at the CDP KOREA Awards, but we were added to the Climate Disclosure Leadership Index (CDLI), a rare achievement for a new entrant. We trust that our excellent performance in the CDP will improve investor trust in Daewoo E&C.

2013 CDP Korea Awards ceremony



**Construction Industry Greenhouse Gas and Energy TMS Pilot**\_ Daewoo E&C signed an MoU to participate in Greenhouse Gas and Energy Target Management Scheme (TMS) pilot for the construction industry in July 2013 with the Ministry of Land, Infrastructure and Transport (MoLIT), the Korea Infrastructure Safety Corporation and 8 Korean construction firms. Based on the MoU, 10 sites were selected for the pilot and will be the centers for emissions reductions activities. We have already developed and distributed GHG Reduction Guidelines to each site. Each site will set its own reduction target for systematic monitoring of progress.

2014 GHG Management Pilot Site Operation Plan



## Waste Treatment

Daewoo E&C is minimizing waste with resource-efficient land reclamation technology. We also promote lawful waste treatment by implementing our Waste Management Company Registration System nationwide.

2013 waste treatment cost to sales ratio

**0.15%**

**Waste Treatment Policy\_** Daewoo E&C thoroughly manages waste produced during construction operations by sorting and storing waste based on type and required treatment method. In addition, we have set a target to minimize waste production and monitor progress of waste treatment cost per sales accordingly. In 2013 we recorded 0.15% for waste treatment cost and sales ratio, which outperformed the target of 0.23% and for 2014, we set a target for 0.21%.

**Waste Management Company Registration System\_** To insure legal and transparent waste treatment, we have been operating our Waste Management Company Registration System since 2011. In 2013, we expanded this nationwide and have conducted evaluations of the existing 62 registered companies to identify excellent or poor performance as a way of incentivizing appropriate waste treatment.

**Resource-saving Landfill Technology\_** Daewoo E&C has developed technology to reuse construction waste which minimizes waste production while also reducing cost. Coal ash, waste sand and other industrial byproducts can be reused as landfill for foundation works and ground works and many sites in Korea have successfully adopted this technology.

### Resource-saving Landfill Technology Overview

Category	Characteristics, Sites Applied (Including third-party sites)
Construction of High Quality Ground Work Using by-products	<ul style="list-style-type: none"> <li>■ Faulty sand from sites, calcium carbonate and various other industrial by-products are reused as material for ground construction</li> <li>• Improved construction efficiency and improved ground strength</li> <li>• Used as a variable material based on construction conditions for improved safety, constructability, and economics.</li> </ul> <ul style="list-style-type: none"> <li>■ Sites applied : Gimhae Buwon-dong PRUGIO, Gimhae Lottemart access road, Amore Pacific Cheonan Factory, Gimhae Bubong District groundwork</li> </ul>
Coal Ash Utilized for Large-scale Groundwork Construction	<ul style="list-style-type: none"> <li>■ Mixed Coal ash dredge land reclamation technique: Mixed coal ash and dredge input for reclaimed land ground construction</li> <li>• Faster reclamation and stronger ground</li> <li>■ Coal ash utilization for vertical and horizontal draining techniques: improve weak ground using a mixture of coal ash and sand</li> <li>• Increased cost competitiveness due to reduced residual subsidence and sand costs compared to PBD</li> <li>■ Sites Applied: Gimpo Hakwoon Industrial Complex 4 (Horizontal draining using coal ash), preparing for contract support for Saemangeum development project (Coal ash mixed dredge land reclamation construction)</li> </ul>

**Waste Treatment Performance\_** Daewoo E&C manages annual waste volume and cost through the Waste Management System, which is linked to the Korea Environment Corporation's Allbaro System for waste management. We manage treatment of construction waste (from all sites), commercial waste, and hazardous waste treatment performance on an annual basis and strive to reduce waste by monitoring performance compared to the annual waste treatment cost to sales ratio target.

### Resource-saving Landfill Technology Overview

Category	Unit	2011	2012	2013
Waste Volume	ton	705,648	700,082	474,200
Treatment Cost	KRW 100 million	120	115	85

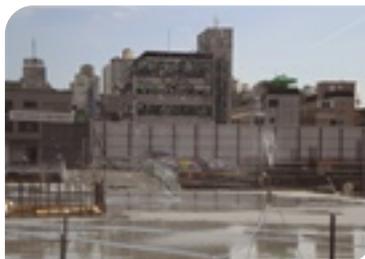


## Environmental Regulation Compliance

At Daewoo E&C, we effectively manage the various different environmental impacts of construction sites, such as fugitive dust and noise, with the goal of achieving zero legal violations and environmental accidents.

**Dust Management**\_ We conduct ‘Special Inspections on Dust Control’ in springtime when fugitive dust is especially problematic. Inspections ascertain the level of management and any issues found are to be reported to the domestic HSE Team within one week. In 2014, we will strengthen fugitive dust management by conducting additional special inspections in the autumn.

### Fugitive Dust Management Activities

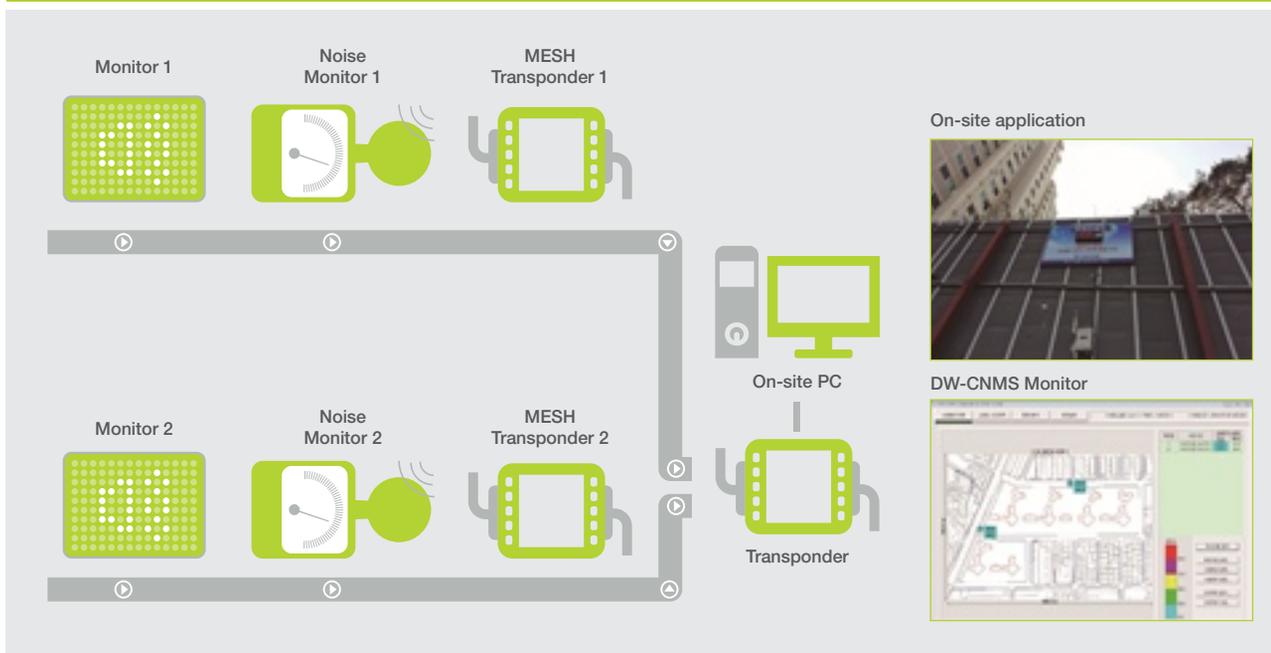


### Recognition from Local Government



**Construction Noise Management**\_ In 2011, Daewoo E&C developed the Daewoo Construction Noise Management System (DW-CNMS) for the first time in Korea. Comprised of a 3D Noise Forecast program and management program, DW-CNMS allows us to successfully manage noise throughout the construction process. DW-CNMS was utilized in numerous sites including the Mapo Raemian PRUGIO project and the new wing of the diocesan curia at the Myeongdong Cathedral project.

### Daewoo Construction Noise Management System (DW-CNMS)



**Legal Compliance**\_ At Daewoo E&C, we set the same stringent target for environmental compliance every year: zero incidents and zero violations. As a result of our thorough management, we recorded zero penalty points (PQ deductions) in 2013. In 2014, we will continue our “zero record” by visiting new sites within 3 months as early operations have higher risk, all the while providing support in the establishment of environmental management systems.



## Shared Growth

## Disclosure on Management Approach



### Goals

Daewoo E&C's supply chain is comprised of partner companies from which we procure materials and construction partner companies. We strive to promote a culture of shared growth throughout the whole supply chain by eradicating unfair trade and providing fair and rational standards in our partner company selection and appraisal process.



### Activities

We fully adopted the '4 Guidelines of Fair Trade.' We monitor the implementation of these guidelines by operating a hotline for unfair trade. Furthermore, we provide various support for shared growth such as training, technology and funding based on our partner companies' needs.



### Achievements

To alleviate partner companies' financial difficulties, we operate the 'Win-win Fund' where we have raised KRW 24.2 billion. We have strengthened our firm-wide resolve for fair trade by holding a "Fair Trade Compliance Resolution Conference" in each division and we also provided Contracting Law training for all site government affairs officers.



### Plans for 2014

We plan to strengthen the foundation for shared growth by expanding the benefit sharing system. In addition, we will actively identify and support overseas partner companies, as well as adopting a voluntary compliance program to upgrade our internal management efforts.

## Fair Trade Compliance

Daewoo E&C leads efforts to establish a fair trade culture through fair and transparent supply chain management.

**Fair Trade Compliance Policy\_** Daewoo E&C has adopted the '4 Guidelines of Fair Trade' to fundamentally eradicate all risk of unfair trade practices. Furthermore, in selecting and working with business partners, we prioritize local firms to support SME growth for balanced national development.

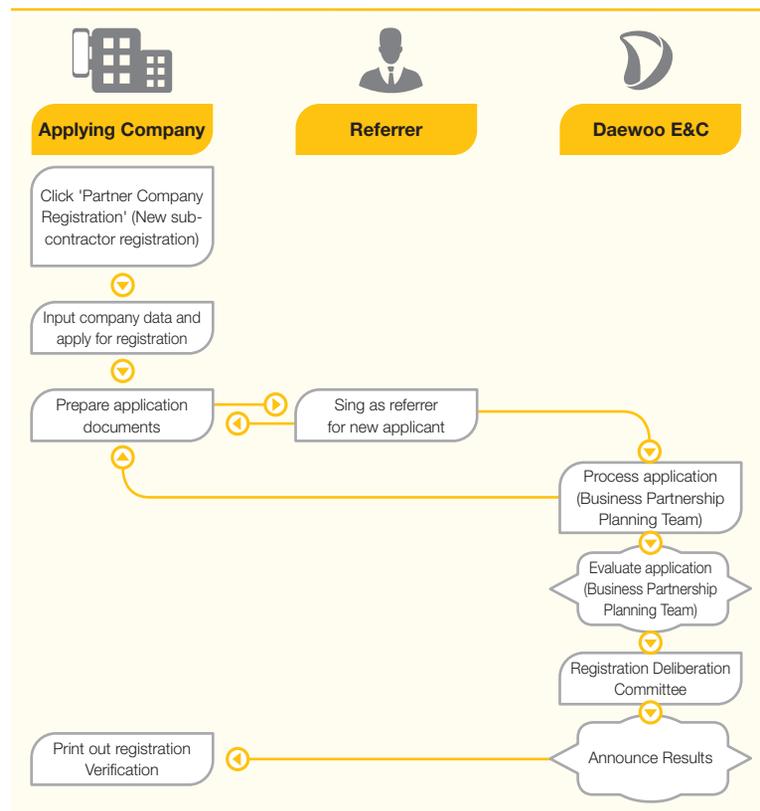
### Key Fair Trade Activities and Plans

2013	2014 (Planned)
<ul style="list-style-type: none"> <li>• Adopted benefit sharing system</li> <li>• Adjusted unit price of supplied goods appropriately</li> <li>• Improved cash payment ratio to 88%</li> <li>• Reduced payment period over 1 day from prior year</li> </ul>	<ul style="list-style-type: none"> <li>• Expand benefit sharing system</li> <li>• Adjust unit price of supplied goods appropriately</li> <li>• Reduce payment period over 1 day</li> <li>• Adopt Compliance Program</li> </ul>

**Fair Trade Compliance Resolution Conference\_** In October 2013 we held divisional Fair Trade Compliance Resolution Conferences to raise awareness on fair trade and to solidify a culture of transparent contracting. Attended by about 90 employees and management, the conference was an opportunity for us to share our resolve for shared growth.

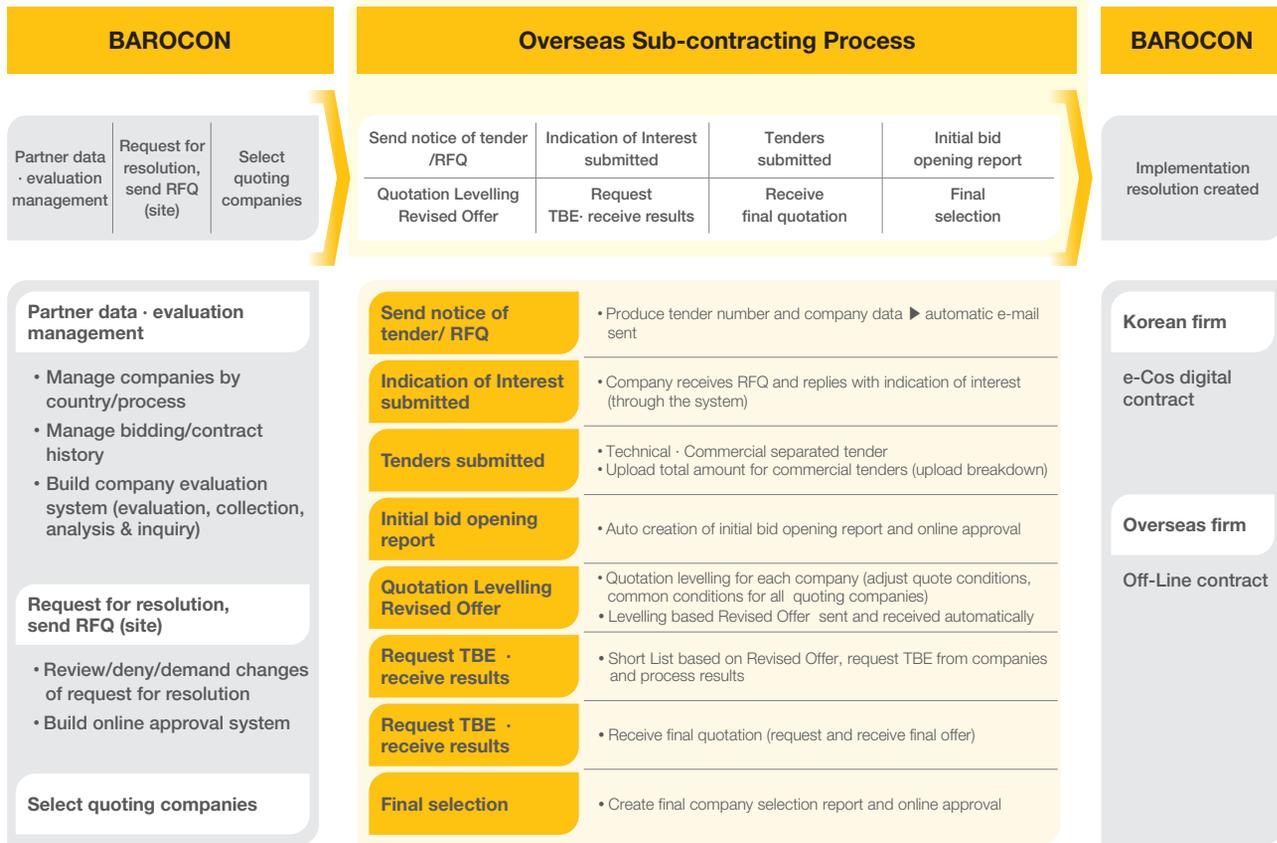
**New Partner Company Registration\_** We hold an open call for new partners once a year on our partner cooperation website, 'DW-eCoS.' Companies that respond to the open call are evaluated online and tentative partner companies are selected. Tentative partner companies are then fairly evaluated by the Business Partnership Planning Team and the Registration Deliberation Committee for final selection as a new Daewoo E&C partner.

### New Partner Company Registration Process



**Overseas Partner Company Selection\_** In 2014, we are working to build an online overseas sub-contracting system to digitize overseas contracting processes. This system will be incorporated into our integrated construction management system, Barocon, and will include notice of tender, evaluation, company selection and contract process services contributing to uniformity and efficiency of firm-wide operations globally.

**Overseas Sub-contracting Process**



**Employee Fair Trade Training\_** To raise awareness on fair trade issues, we offer compliance training regulations such as Fair Transactions in Subcontracting Act to interested employees in partner companies. In addition, as subcontracting regulations become more stringent, we provide annual training in 4 regions for site government relations officers on subcontracting.

**Reporting Fair Trade Non-compliance\_** We added a dedicated banner and opened the 'Daewoo Shinmungo' on the partnership website, 'DW-eCoS,' so that business partners can report cases of unfair trade. We protect the identity of complaint filers by limiting the authority to process or view complaints. In 2013, we had one fair trade violation and paid approximately KRW 2.5 billion in fines. We will strictly uphold fair trade to ensure such incidents do not recur.

**Adoption of Benefit Sharing System\_** The Benefit Sharing System was launched in October 2013 to solidify a culture of shared growth with our business partners. When a partner company registers a project of interest in the recommendations corner in DW-eCoS, the Benefit Sharing Deliberation Committee chooses the best partner company for execution based on evaluation. Selected partners are offered technical assistance, increased supply, joint patents and additional points during partner evaluation.

## Win-win Management with Partner Companies

We pursue shared win-win growth with our business partners by providing systematic and practical support in education, finance and management.

**Education Support\_** We offer various educational programs based on the size and demand of our partner company. Programs to enhance job skills are offered continuously and special invitational courses on business management skill areas are available for the CEO's of outstanding partner companies. We also provide online training for partner company employees who may not be able to attend offline training.

**Technological Support\_** Daewoo E&C fully supports partner companies' technological advancement through joint technology research and technology transfer. For example, in 2013, we held a technology seminar for 80 outstanding partner companies and shared our dedication to providing technical support and detailed areas for cooperation.

**Financial Support\_** Through the 'Win-win Fund,' we provide loans at rates lower than the market. In 2013, the entire fund of KRW 24.2 billion was disbursed, showing active partner company interest in the Fund. As such, we plan to increase the fund by KRW 1.8 billion in 2014 to reach a total of KRW 26 billion to support our partners.

**Communication Support\_** Roundtable meetings with partner company CEOs and partner company win-win growth conferences are some of the various channels we manage to broaden communication with our partner companies. In 2014, as in 2013, we held the Major Partner Company Win-Win Partnership Meeting and shared our policies and activities relating to win-win growth.

### Overseas Subcontracting Process

Category	2013 Activities and Accomplishments	2014 Plans
 <b>Education &amp; Technological Support</b>	<ul style="list-style-type: none"> <li>• Online training (1 time, 300 persons)</li> <li>• Cluster training (1 time, 86 persons)</li> <li>• Job function capacity building (286 persons)</li> <li>• Training at partner's site (108 times, 807 persons)</li> <li>• Technical support (5 joint research projects, 3 technology transfers)</li> </ul>	<ul style="list-style-type: none"> <li>• Employee job function capacity building</li> <li>• CEO safety training</li> <li>• Cluster training for partner company executives                             <ul style="list-style-type: none"> <li>-Diversify trainees outside of site managers</li> </ul> </li> <li>• Partner company technical support                             <ul style="list-style-type: none"> <li>-Expand eligibility for joint research and technology transfer</li> <li>-Provide technology consultations- support improvement of partners' own technology</li> </ul> </li> </ul>
 <b>Financial Support</b>	<ul style="list-style-type: none"> <li>• Supported operations by providing KRW 18 billion with no interest · no guarantee loans before Chuseok holidays</li> <li>• Raised KRW 24.2 billion for the Win-win Fund (Interest 1.55% lower than the market)</li> <li>• Extended Network Loan with Korea Exim Bank</li> <li>• Reduced contract guarantee insurance rate from 10% to 5% for top business partner</li> </ul>	<ul style="list-style-type: none"> <li>• Raise KRW 26 billion for the Win-win Fund (Provide loans at 1.47% lower than market)</li> <li>• Sign new Network Loan agreement</li> <li>• Exempt top business partner from contract guarantee insurance, reduce guarantee rate from 10% to 5% for outstanding partners</li> </ul>
 <b>Communication Support</b>	<ul style="list-style-type: none"> <li>• Operated partner company CEO Academy (4 times, 71 persons)</li> <li>• Roundtable for sub-committee and different construction type (5 times)</li> <li>• Capacity building for partner companies' site managers (86 persons)</li> </ul>	<ul style="list-style-type: none"> <li>• Roundtable for sub-committee and different construction type</li> <li>• Roundtable for CEOs of outstanding partner companies</li> </ul>



Training for Partner Company Employees



Partner Company CEO Academy

## Advancing Sustainability in Partner Companies

We support sustainability in our partner companies in order to build a healthy corporate ecosystem. Sustainability factors are therefore reflected in evaluations and we have strengthened our inspections of ethics and safety as part of our responsibility as a Global E&C Leader.

**Partner Evaluation\_** Labor, safety, environment, ethics management and other sustainability factors are included in our partner company evaluations. Partners are evaluated once annually with a semi-annual partial evaluation and are graded as top, outstanding, and unqualified. Companies with excellent evaluation results receive benefits such as no-bid contracts and exemption from contract guarantee insurance which act as incentives for better performance.

### Partner Company Evaluation Content

#### 1. Partial Evaluation: For companies with construction records in the first half

(Prior Nov – current year April)

Evaluation Category		Evaluation Items			
Construction capability, Site management capability	Construction management	Quality management	Labor · safety · environment · materials · heavy equipment management	Management evaluation	

#### 2. Annual Evaluation: For companies with construction records in the past year

(Prior Nov – current year Oct)

Evaluation Category		Evaluation Items				
Site	Construction capability, Site management capability	Construction management	Quality management	Labor · safety · environment · materials · heavy equipment management		Management evaluation
HQ	Quality (defects), Safety · Environment management, cooperation and contribution	Safety management	Quality	Cooperation	Contribution	Finance-credit Suitability

**Penalties for Unqualified Companies\_** Safety, labor practices, anti-trust and other sustainability factors are all clearly communicated in our criteria for disqualifying companies and revoking partnership, both of which are also strictly enforced. Daewoo E&C, as an exemplary construction company in Korea, will continue to encourage partner companies to fulfill their corporate responsibility and will endeavor to instill the culture of sustainability amongst our partners.

### Screening Criteria for Partner Companies

- 0 ✓ Companies that withhold pay or other related issues
- 0 ✓ Companies that have caused financial loss or reputational damage to Daewoo E&C
- 0 ✓ Companies that have not addressed significant defects or request for repair
- 0 ✓ Companies that collude with other companies and spread misinformation
- 0 ✓ Companies with repeated safety accidents (More than 3 major incidents-year or accident leading to more than 3 deaths and companies with unsatisfactory safety reviews for 2 consecutive years)
- 0 ✓ Companies that cause major damage to quality or the environment



**Partner Company Safety Management\_** We are making strenuous efforts towards partner company safety management. During site inspections, we calculate the violation index for partner companies and penalize inadequate companies by limiting bidding rights, and imposing disciplinary actions. In addition, we hold quarterly 'Safety Inspection days' during which our CEO visits the sites to raise safety awareness in both our employees and the partner company employees.

**Partner Company Violation Management Index**



Management of Violation Index	Disciplinary action depending on total points
<ul style="list-style-type: none"> <li>• Violation index = (no. of inappropriate cases ÷ no. of people) X 10</li> <li>• If ranked in the lower 10%: 1penalty point</li> <li>• If ranked in the lower 5%: 2penalty point</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Penalty point: Caution</li> <li>• 2 Penalty points: Warning (send official document)</li> <li>• 3 Penalty points: Request for submission of safety improvement plan and a report on the outcome</li> <li>• 4 Penalty points: Limit the bidding (2 months)</li> </ul>

**Ethics Management Campaigns\_** In order to instill a high level of ethics in our supply chain, we launched the "Clean Holidays Campaign" and the "Healthy Family Event Notification Culture Campaign." We conduct ethics management inspections in our headquarters and sites and we prevent potential unethical actions by prohibiting our employees and management from explicitly announcing family events such as weddings or funerals to those in partnering companies.

**Strengthening Action Against Unethical Behavior in our Supply Chain\_** We have developed strict disciplinary measures for unethical actions by our partner companies in order to build a transparent partnership culture. Depending on the severity of the offence, actions ranging from fines to criminal punishment, bidding restrictions, halting business relations and disqualification as a business partner as well as other strong actions can be taken against partner companies when deemed to be highly unethical.

**Partner Company Ethics Inspection\_** To raise ethical awareness on both an individual level and organizational level, we conduct 1 on 1 talks with employees and management of our business partners to assess the status of ethics management. We also select employees from our partners to take part in surveys and individual talks as a way of expressing Daewoo E&C's commitment to ethics management and also of supporting the growth of an ethical mindset for the individual.

## Customer Satisfaction

### Disclosure on Management Approach



#### Goals

Daewoo E&C considers customer satisfaction a top management priority and therefore we are reinforcing preemptive quality management and firm-wide quality awareness activities. Moreover, we are working to strengthen our brand power by maximizing consumer trust.



#### Activities

We have maintained our quality management system certifications (ISO9001, KEPIC, ASME) and reevaluated our firm-wide quality management activities. In addition, we strived to improve customer satisfaction through various communication activities with customers.



#### Achievements

We conducted quality management audits, surveys of domestic and foreign suppliers, and proceeded with preventive purchase quality activities, as well as the selection and surveillance of critical project for quality control. We developed and implemented a proprietary online quality management program, and performed supplementary and advancement training for quality managers, as per the Construction Technology Management Act. In addition, we held quality manager function training and regional quality management training. In total, 1,504 persons were trained in quality management in 2013. Furthermore, we established an integrated call center to expand accessibility for customers and in 2013, we answered a total of 219,381 customer queries.



#### Plans for 2014

We will expand supplier production facility inspections and hands-on support for projects in newly entered markets for more advanced quality management. We will also continue to increase and strengthen support to priority quality management sites and minimize defects through continuous inspection and evaluation.

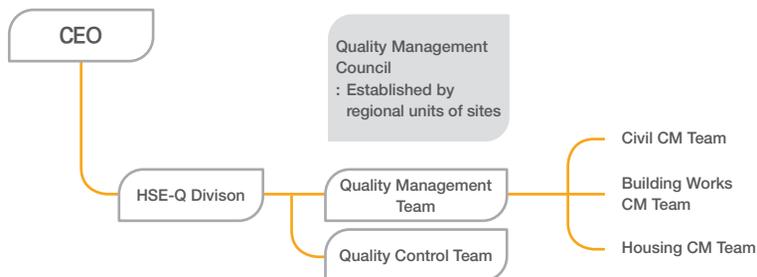
## Customer Health and Safety

Daewoo E&C enforces strict quality and post-construction activities as part of our efforts to provide customers with safe products and services.

### Quality Management System and Policy

At Daewoo E&C, we focus on gaining advantage in quality competition through technology. Our policy is to maintain the highest quality competitiveness through continuous improvement, made possible through the participation of all employees and management in our quality management activities. The Quality Management Team, each business division's CM Teams, and the Quality Management Council work together to implement Daewoo E&C's quality policy.

#### Quality Management Organizational Structure



#### Main Functions of the Quality Management Organization



**Advancement of the Quality Management System\_** Daewoo E&C's quality management system is based on the Quality Manual, Daewoo Process Mapping System (DPMS), the Procedure document, and Daewoo Total Management System (DTMS) which is comprised of guidelines for systematic and efficient operations. In addition, the operating performance of quality management system is reported during firm-wide Management Evaluation Committees.

**Quality Management Training\_** To improve awareness and expertise in quality management among employees, diverse training methods are being employed in the form of online, group and site visit training. In 2014, we will continue to administer regional quality management training that is site-oriented and practical.

#### Annual Quality Management Training Performance

(Unit: No. of Persons)

Type	2011	2012	2013
Online quality management training	323	717	1,156
Quality manager advancement training	222	412	187
Quality manager function training	-	-	261



## Construction Quality Management

**Quality Management Audits\_** We secure quality by conducting quality management audits of Headquarters, domestic and overseas sites, and business partners. Through the 'Continuous Inspection System,' we monitor priority sites and rapidly deploy improvement actions. Each site prepares an annual target management plan by which they are evaluated. The results are included in future plans as part of the Plan-Do-Check-Act (PDCA) based process for continuous quality improvement.

### Annual Quality Management Audit Implementation Status (Unit: No. of times)

Category	2011	2012	2013
HQ	87	97	112
Domestic Sites	42	31	22
Overseas Sites	16	13	20
Partner Companies	15	14	13

### Supplier Quality Evaluation & Preventive Procurement Quality Assurance

**Activities\_** To ensure the quality of procured items and to identify excellent suppliers, supplier quality evaluations are conducted on 'DW-eCoS.' We also manage factory inspections, company visits and training. In particular, we implemented domestic and overseas vendor quality evaluation through our procurement teams. We plan to expand and strengthen these activities.

### 2013 Supplier and Procurement Quality Management Performance



**Overseas Site Quality Management\_** We focused our management of overseas priority quality management sites and provided quality management personnel and technology support to improve the level of quality management in each business division and at each site. In the future, we will strengthen quality support for sites in newly entered countries.

## Post-construction Quality Management

**Minimizing Housing Defects\_** We are implementing a range of actions to minimize defects in housing ranging from quality inspection and evaluation to a Mobile Inspection System that allows progress, defect, and records management. To prevent defects and also to increase customer satisfaction in the process, we host various quality control events involving our customers, some of which include pre-move-in quality control by housewives, defect prevention in common areas, move-in exhibitions and home visits.

### Pre-move-in Quality Control Process



**New Defect Management System\_** By developing a new defect management system, we enabled defect management and real-time monitoring. In particular, the new system was synced with the Mobile Inspection System in 2013 for more efficient defect management services.

**New Defect Management System Overview**

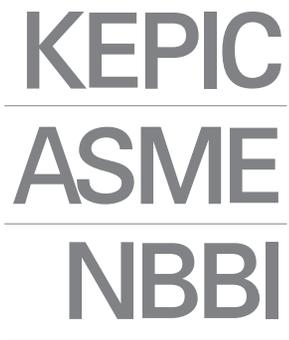


**Standardization of Quality Management & Enhanced Site Support\_** We have developed and revamped our quality-related operational manuals for design, price quotations, product standards and such for structured quality management activities. To strengthen site support, we conduct quality evaluation for new sites and those close to completion, concentrating on core defects. Furthermore, we hold construction reporting meetings for mechanical and electrical partner companies in order to prevent safety accidents. Quality and defect training will also be provided to partner companies.

**Quality Management System Certification**

Daewoo E&C was the first Korean construction company to obtain ISO 9001 certification and we have continuously applied and maintained ISO 9001 and KS Q ISO 9001 in all our businesses. For Plant and Power facility EPC projects, we obtained and maintain ASME certification for non-nuclear fields. Our nuclear power quality management system also gained KEPIC, ASME and NBBI, allowing us to participate in the particularly fastidious field of nuclear power plant construction and maintenance work. In addition, we obtained nuclear power design quality certifications for piping (KEPIC MN) and structure (SN), and in 2012, we became the first Korean E&C to win a contract for general engineering design of an operating nuclear power plant. We went on to win a contract for exporting a research reactor design in 2013 which we successfully completed by solidifying our excellent quality management system for nuclear power design and construction.

Operation of nuclear power quality certification systems



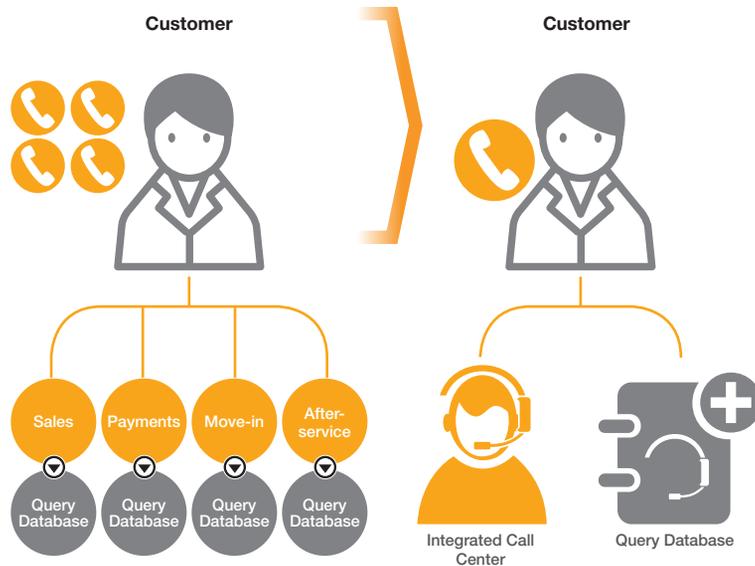
## Customer Communication

With customer satisfaction as our top priority, Daewoo E&C strives to provide our customers with the best service.

### Listening to Customers

**Establishing an Integrated Call Center\_** In March 2013, we launched the Integrated Call Center to maximize efficiency in our customer service system. The Integrated Call Center allows for unified management of the entire customer experience ranging from sales, contracts, move-in to after-service. Moreover, the received queries and comments are digitized and managed systematically, serving as a solid platform to reinforce customer communication.

#### Annual Online Customer Query Response Performance

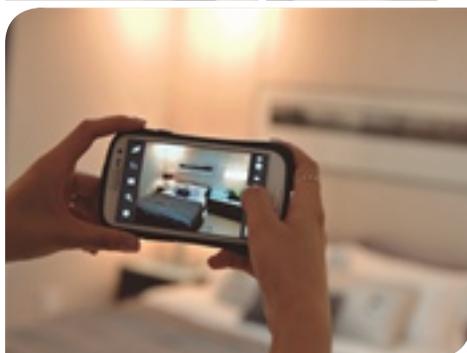


#### Annual Online Customer Query Response Performance

Category	Unit	2011	2012	2013
Queries received	No.	2,963	1,889	4,134
Average response time	Days	11	10	11

**Customer Satisfaction Survey\_** According to the annual National Customer Satisfaction Index (NCSI) published by the Korea Productivity Center, we ranked 3<sup>rd</sup> in the construction industry in 2013, same as 2012. We will work closely with our customers to provide differentiated service and maximize satisfaction.

**Family Garden\_** In order to develop housing products that meet our customers' needs, we operate the 'prosumer' group, "Family Garden." Family Garden, comprised of the Housewife Quality Control Group, has been operating on and offline since 2006 and has roughly 150 members as of 2014. Members visit our main model homes and provide us with product evaluations and ideas for improvement. In 2013, we conducted 4 tasks from which we collected ideas and administered 7 online surveys to assess appliance use. In addition, the 10 most active members were invited to a leadership club held 7 times during which members would visit our model homes, experience and evaluate our product, contributing to the review and improvement of our new kitchen design.



Family Garden

### Customer Service Activities

**Life Premium\_** We developed our ‘Life Premium’ service to go beyond hardware-based services such as simple defect repairs. With the intention of satisfying the 3 principle housing needs of customers – existence; relation; and growth – our Life Premium services received recognition in 2013, when we were awarded the prestigious Grand Prize in the 2013 Korea Housing Service Awards, Service Development category.

#### Life Premium Overview

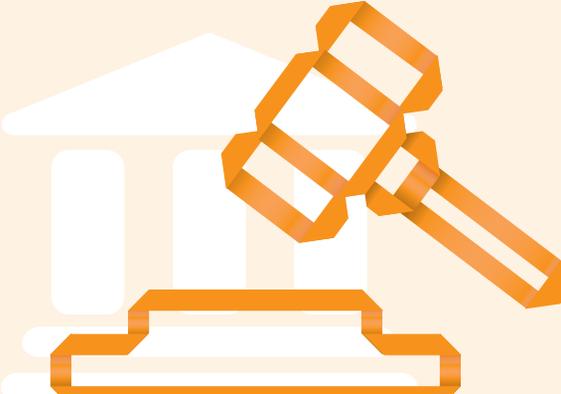
Housing Needs	Existence 		Relation 		Growth 	
	Guideline	Healthy Life	Comfort Life	Active Life	Social Life	Creative Life
Concept	Safe and comfortable living environment	Convenient and easy service	UZ Center and Planning for added vitality	Support system for communication with neighbors and community events	Cultural activities that bring special joy	Pride in enjoying the outdoors
Product-Services	<ul style="list-style-type: none"> <li>• Healing Forest</li> <li>• Essay Walkway</li> <li>• Seniors' Playground</li> <li>• Remember Tree</li> <li>• Kids' Belt</li> <li>• Sprout's Stop</li> <li>• Kids' Safety Classroom</li> </ul>	<ul style="list-style-type: none"> <li>• Family Love service</li> <li>• Endless Love service</li> <li>• Love Nature service</li> <li>• Love the Sky service</li> <li>• Handy-man service</li> </ul>	<ul style="list-style-type: none"> <li>• Bike-sharing</li> <li>• Uz Center</li> <li>• Uz Planning</li> <li>• Fitness Trainer</li> <li>• Everyday-fitness Center</li> <li>• Kid's Traditional Chinese class</li> <li>• Aerobics class</li> <li>• Yoga class</li> </ul>	<ul style="list-style-type: none"> <li>• Complex Welcome Party</li> <li>• Story telling</li> <li>• Concerts</li> <li>• Bubble Show</li> <li>• Cheery Sports Meet</li> <li>• Korean farm dance</li> <li>• Lifestyle information for residents</li> <li>• Kids' Conference</li> <li>• Hand Memory</li> <li>• Green Library</li> <li>• One-point golf lessons</li> </ul>	<ul style="list-style-type: none"> <li>• Free rental of everyday cultural goods</li> <li>• Cooking class</li> <li>• Beauty class</li> <li>• Bicycle class</li> <li>• Brunch Cinema</li> </ul>	<ul style="list-style-type: none"> <li>• Petting Zoo</li> <li>• Glass House</li> <li>• Together Workshop</li> <li>• Mid-forest School</li> <li>• Gardening School</li> <li>• Tending vegetable gardens</li> </ul>

**Uz Planner\_** Uz is how we express our customer-centric housing service through the combination of the words ‘you’ and ‘needs.’ The Uz Center, located in our apartment complexes, is a convenience space where we plan to foster a higher quality of life in residents and to contribute towards community revitalization. The center offers various facilities such as fitness centers and office supply stores, and by providing such facilities we suggest a healthy individual life style whilst promoting interaction among residents.

**Green Library\_** We operate the ‘Green Library’ in PRUGIO apartment complexes to support children’s reading. The library is stocked with quality books from best-sellers to critically acclaimed books, all readily available to residents. In addition, we run the “Dreaming Books” campaign which is an event where households are asked to donate books to the Green Library in exchange for Cultural Events Gift Certificates. We plan to make the Green Library even more unique, to the point where it becomes a representative icon of our housing services.



Green Library



## Ethical & Transparent Management

### Disclosure on Management Approach



#### Goals

We put our best efforts into ensuring that ethical and transparent management is more than a slogan for us, rather an internalized part of our corporate culture. We will establish a firm-wide foundation of awareness, enabling individuals to voluntarily incorporate ethics management into their work, based on their own high standards of ethics.



#### Activities

We operate the Ethics Help line in order to give everyone access to a direct report channel for any unethical acts. Furthermore, we conduct ethics awareness assessment of all employees in order to ascertain our firm's ethics management status and to develop action plans for improvement.



#### Achievements

In order to assist employees' ethical work conduct, we have published and distributed the Ethics Management Guidebook. We also conducted ethics awareness assessment of all employees and management to identify tasks for improvement. Moreover, we worked to strengthen awareness by operating a year-round ethics self-assessment program for employees.



#### Plans for 2014

We plan to monitor corruption risk through ethics conditions in individual business units. To further enhance ethics awareness and to prevent corruption, we will conduct 1 on 1 meeting with employees from both Daewoo E&C and our partner companies. In addition, we will introduce the Compliance Program to further strengthen our ethics management.

## Ethics Management System

Ethics management is one of the pillars of Daewoo E&C's core management principles and we endeavor to be a clean and transparent company. We have established an Ethics Charter and a Code of Conduct, along with an implementing organization to effectively facilitate the internalization of ethics management.

**Ethics Management Principles**\_ Daewoo E&C's internal ethics regulations (corporate regulations) are established upon our Ethics Charter that provides guidance to employees on proper conduct and decision making. The Ethics Charter also acts as the basis for the Ethics Code of Conduct which defines ethics principles for different stakeholders such as shareholders and investors, customers, competitors, employees and the nation. In addition, through such ethics regulations, we provide clearly defined guidelines, reporting methods, and disciplinary actions to help employees implement ethics management in their day to day work.

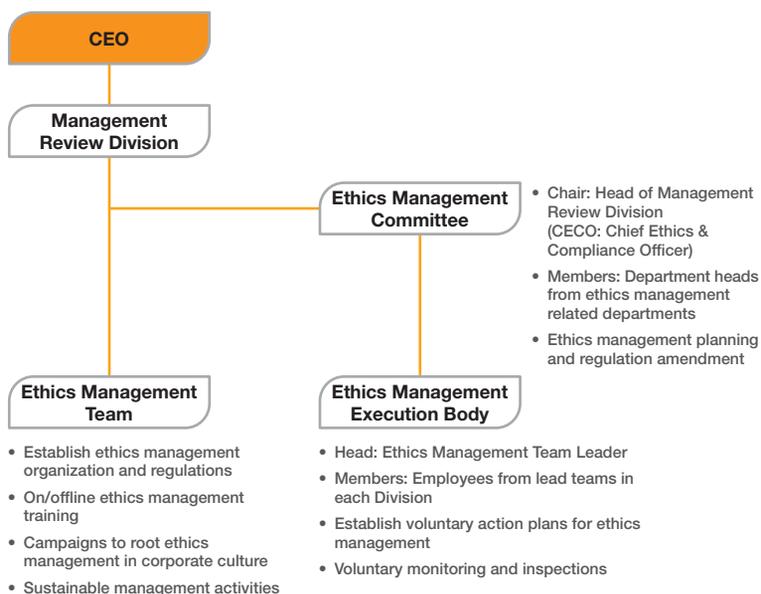


### Daewoo E&C Ethics Charter

- We will conduct all functions in a fair and transparent manner to build an ethical corporate culture.
- We will respect our customers and do our utmost to implement customer management that will move them.
- We respect the human rights of individuals and will take the lead in protecting disadvantaged and promoting equality.
- We uphold all international and national laws governing human rights, the environment, culture and the economy.
- We will not misuse our status to treat our stakeholders unjustly.
- We will fulfill our responsibility as members of the society and contribute to local community development.
- We will be Daewoo E&C talent who continuously executes the core values of challenge and passion, autonomy and accountability.

**Ethics Management Organizational Structure**\_ In 2013, we founded the Ethics Management Team under the Management Review Division. Dedicated to overseeing firm-wide ethics management, the Ethics Management Team is responsible for internal ethics regulations, employee ethics training, ethics management campaigns and other related activities. We also have the Ethics Management Committee, chaired by the head of the Management Review Division, which develops firm-wide ethics management action plans and related regulations. To further disseminate ethics management throughout the firm, we established the Ethics Management Execution Body which is constituted by representatives from the lead team in each business division.

### Ethics Management Organizational Structure



## Raising Ethics Awareness

We employ ethics management training and assessment in order to promote an ethical corporate culture and likewise employee action, thereby ensuring that our ethics management does not simply remain as a slogan.

The number of employees that completed ethics management training in 2013

# 6,169

**Ethics Management Training\_** To increase a sense of ethics in our employees, we provide ethics management training. We conduct online training for all employees, including our CEO, and have recorded close to a 100% completion rate. Starting in 2013, the Ethics Management Team has begun conducting offline training tailored to job functions and positions.

### Annual Employee Ethics Training Performance

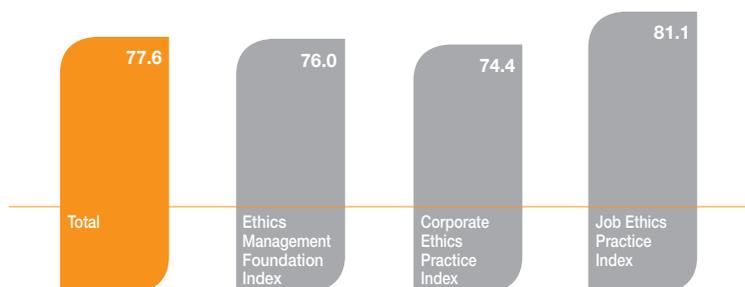
Type	Category	Unit	2011	2012	2013
Online Training	Trainees	No. of persons	3,512	4,466	6,169
	Completion	%	95.7	99.8	99.6
Offline Training*	Completion	No. of persons	-	-	2,623

\*Offline training launched in 2013

**Ethics Awareness Assessment\_** To ascertain where we stand and to develop action plans for the future, we conducted an employee ethics awareness assessment. The results of the survey show that in 2013, the ethics awareness score was 77.6 points, thus indicating that we have reached the institutionalization level. We will focus our attention on assessment items that showed relatively poor performance to improve ethics management. In the future, we plan to continue assessing ethics awareness.

### Ethics Awareness Assessment Results

Overall Score	Level
90 - 100	Maintain status
80 - 89	Taking root, need minor improvements
<b>70 - 79</b>	<b>Institutionalization*</b>
60 - 69	Introduction
Below 59	No response to ethics



\*Institutionalization denotes that an ethics related institutional framework is in the process of being put in place and has room for improvement.

**Online Ethics Awareness Self-assessment\_** We operate an online ethics awareness self-assessment program for individual employees as a means to build a common understanding of ethics management and to foster a culture of voluntary action. On the third week of every month, we conduct a survey on the internal network and provide five levels of ethic awareness results. This is an ongoing program to ensure that we are constantly working to raise ethics awareness.

## Ethics Management Program

Daewoo E&C operates various programs for ethics management to effectively take root in individual employees and in our corporate culture.

**Ethics Management Guidebook**\_ In 2013, we published and distributed the Daewoo Ethics Management Guidebook to raise awareness and increase understanding. The book outlines the concept of ethics management and the need for ethical practices in line with trends in ethics management both in and outside of Korea. In particular, the Guidebook elaborates on 31 ethical dilemmas that can arise in real life and illustrates ways to deal with them, making the Guidebook a practical resource.

**Posting Ethics Briefs**\_ Starting September 2013, we began posting ethics management briefs highlighting important trends in and outside Korea on the intranet for our employees' reference. We share relevant news on regulations and policies, competitor trends, and good-bad cases on a regular basis in order to raise interest amongst employees.

### Activities for Ethics Management to Take Root in Daewoo E&C Culture

#### Ethics Management Guidebook



#### Clean Holidays Campaign

We prohibit receiving gifts from stakeholders such as partner companies around the holidays in order to establish a clean corporate culture. HQ and site offices perform surveillance in order to prevent such incidents.



#### Healthy Drinking Culture '119' Establishment

We firmly promote the 119 campaign of '1 type of alcohol, 1 round, be home by 9 PM' within our firm.



#### Prohibit Notifications of Family Events to Stakeholders

For just business transactions, we prohibit employees from notifying the partner company of personal or family related events such as weddings as it may be construed as a request for gifts. Announcements for immediate family members may only be made internally.



#### Voluntary Compliance Pledge on Ethics Management

All Daewoo E&C staff and management have taken part in the Ethics Management Voluntary Compliance Pledge. By taking the pledge, we are committed to practicing ethical management and making this part of our corporate culture.



#### Posting Ethics Briefs

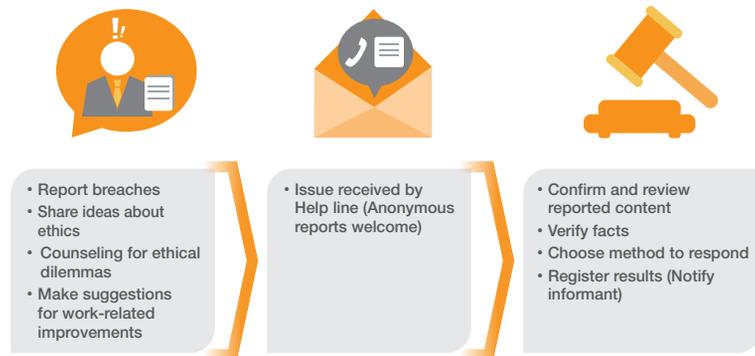
By continuously providing employees with the latest news in ethics management, we encourage both heightened awareness and increased interest in the issue.

## Monitoring Corruption Risk

Daewoo E&C has established a prompt reporting and response structure for addressing ethics management infringements and we effectively manage corruption risk by conducting firm-wide status assessments. In 2014, we will adopt the Fair Trade Voluntary Compliance Program so that ethics management can take root throughout our supply chain.

**Ethics Help line\_** We operate the Ethics Help line to make it easier for employees to report unethical management practices or other unfair issues they witness. Not only is it a tip-line, it also acts as a support line that offer employees guidance in case they find themselves in an ethical dilemma. The Help-line can be accessed through multiple channels including the company website, intranet, phone, and mail, and we strictly protect the identity of informants which adds to the increase in effectiveness. In 2014, we plan to adopt a reward system to further promote the use of Ethics Help line.

### Ethics Help line Process



### Ethics Help Line Reporting Channels

- 
  - **Online**
    - Company website ▶ Customer Center ▶ Cyber Audit Office (<http://www.daewooenc.co.kr>)
    - Company website ▶ Ethics Helpline Board (<http://ethics.daewooenc.com>)
    - Baronet (Internal intranet) ▶ Ethics Help line Board
    - Business partner cooperation system (DW-eCoS) -> 'Daewoo Shinmungo'
- 
  - **Dedicated Ethics hotline**  
+82-2-2288-5151
- 
  - **Mail**  
Ethics Management Team, Daewoo E&C, 75, Saemunan-ro (Sinmunno1-ga), Jongno-gu, Seoul, Korea

**Business Unit Ethics Assessment\_** We have begun conducting ethics assessments for individual business units in order to ascertain our current level of ethics and points for improvement. HQ teams, sites, regional units and subsidiaries are reviewed on ethics regulations compliance and their participation in ethics campaigns. We plan to use the results as an ethics management indicator when evaluating by division.



01

02

02

03

- 01. Launching the Daewoo New-Way
- 02. Anti-Corruption Training for Executive Members
- 03. Ethics Management Committee

### Daewoo E&C's Efforts in Building an Ethical & Transparent Company

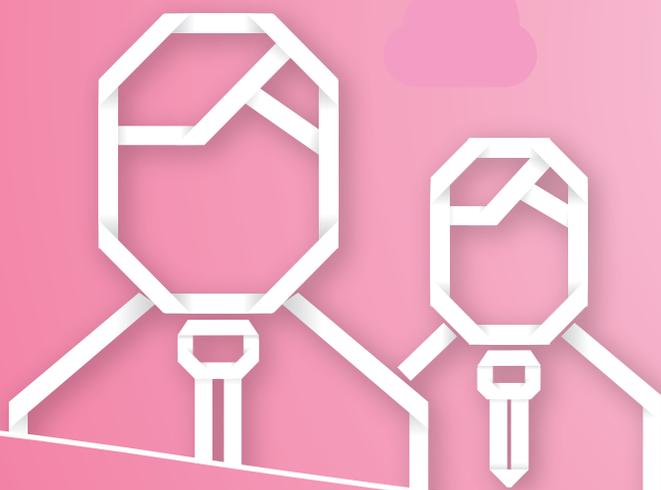
In today's business environment, companies must meet higher standards of ethics and morality. For companies that are active in the global market, ethical management is no longer a choice but a requirement. Daewoo E&C is pushing to enhance transparency by bolstering legal compliance and anti-corruption efforts. Employee ethics training, ethics awareness assessment, business unit ethics assessment are part of our structured approach towards ethics management. We aim to progress from raising awareness and assessing our current level of ethics to implementing a Compliance Program that strengthens internal control and fundamentally prevents corruption altogether.





# Sustainability Performance

In pursuit of harmonious development in the economy, environment and society, Daewoo E&C's sustainability begins with integrity and honesty.



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# Sustainable Management

## Sustainable Management System

**Daewoo New-Way\_** On November 2013, in celebration of Daewoo E&C's 40<sup>th</sup> anniversary, we launched the Daewoo New-Way to position ourselves in a new era of growth. We fully comprehend the need for both financial and non-financial performance including social and environmental impact and we have built a launch pad to grow into a sustainable company with all management and employees having signed a pledge of action to consolidate our firm-wide dedication towards sustainability. We will continue to pursue sustainable management systematically, based on the Daewoo New-Way, in order to become a Global E&C Leader that does its utmost to fulfill social, environmental and ethical responsibility.

### Daewoo New-Way Structure



**Sustainable Management Organization\_** Daewoo E&C's sustainable management is led by the Ethics Management team within the Management Review Division. The Ethics Management Execution Body is composed of representatives from 21 related teams to form the basis for firm-wide implementation. Furthermore, we hold regular workshops to fortify the Ethics Management Execution Body's awareness in sustainability, and through a closely linked network of cooperation among teams, we prepare our sustainability report whilst responding to external sustainability evaluations.

## Stakeholder Engagement

Daewoo E&C defines 8 key stakeholder groups including customers, employees, and business partners that have direct and indirect impact on our business. In order to pursue sustainable management in a systematic manner, we have established communication channels to ascertain stakeholder interests and expectations and to reflect them in our business operations.

### Stakeholder Definition & Communication Channels

<p><b>Definition :</b> Part of Daewoo E&amp;C's family who creates a future together; foothold of the company's existence</p> <p><b>Responsibility :</b> Provide the best residential environment and product service for customer satisfaction</p>  <p>Customer</p> <p>Integrated call center, PRUGIO website, model house, SNS, etc.</p>	<p><b>Definition :</b> True owner of Daewoo E&amp;C who provides financial capital</p> <p><b>Responsibility :</b> Disclose information in accurate and timely manner through transparent management</p>  <p>Shareholders &amp; Investors</p> <p>General shareholders' meeting, annual report, IR conference, analyst meeting, etc.</p>	<p><b>Definition :</b> The most valuable human resources that compose a company; a partner for sustainable management</p> <p><b>Responsibility :</b> Improve employee satisfaction by strengthening their capabilities and enhancing quality of life</p>  <p>Employees</p> <p>Labor Union, in-house newspaper, intranet, grievance management system, etc.</p>	<p><b>Definition :</b> Partner who supports our operation by supplying energy and resources</p> <p><b>Responsibility :</b> Provide technological &amp; administrative support and establish a transparent, fair relationship for partners' growth</p>  <p>Business Partners</p> <p>DW-eCoS, Partner meeting, etc.</p>
			
<p><b>Definition :</b> Residents of our sites' surrounding communities and where our housing products are located; beneficiaries of sustainability activities</p> <p><b>Responsibility :</b> Actively pursue philanthropic activities and contribute to community development</p>  <p>Local Community</p> <p>Community Service Corps, ethical management website, monthly volunteering activities, etc.</p>	<p><b>Definition :</b> Organizations with expert knowledge of the construction industry; subject of continuous cooperation</p> <p><b>Responsibility :</b> Cooperate with the academic community and pursue joint R&amp;D with various associations; remain active in associations</p>  <p>Academia, Association, Organization</p> <p>Conference, seminar, association activities, etc.</p>	<p><b>Definition :</b> Provider of a stepping stone for further growth based on stable regulatory and social environment</p> <p><b>Responsibility :</b> Create jobs, pay taxes, comply with laws and regulations; contribute to national sustainable development</p>  <p>Government</p> <p>Government committees, participation in policy research, joint partnership programs, etc.</p>	<p><b>Definition :</b> Leaders of tomorrow; all entities that should not be neglected from a long-term perspective</p> <p><b>Responsibility :</b> Contribute to economic growth, social stability and integration</p>  <p>Future Generations</p> <p>Job fair, career website, student ambassadors, SNS, etc.</p>

**Identifying Stakeholders' Material Issues\_** Daewoo E&C conducts stakeholder surveys and interviews from which we identify our key sustainability issues. Identified issues are reflected in both our sustainability report and in the development of action items to improve sustainability. The identification process is further explained in pages 18-19 of this report.

# Economy

## Governance

**Shareholder & Investor Management** As of December 2013, Daewoo E&C's largest shareholder in KDB Value 6, Ltd., financed by KDB Bank and holding roughly 51% of our shares, increased business outputs through the creation of synergy in stable governance. In addition, to ensure stakeholders' rights, we operate a dedicated IR website which offers timely updates on our financial performance such as orders, sales and profits. All information required for disclosure by law is shared on the Financial Supervisory Service's Depository of Korea's Corporate Filings (DART) system and is available to the public.

### Major Shareholders

(As of December 2013)

Shareholder	Shares Owned (%)	Business Relationship with Daewoo E&C
KDB Bank (KDB Value 6 Ltd.)	50.8	None
SEBT Investment Ltd.	12.3	None
Kumho Tires Co., Inc.	4.4	None
Kumho Petrochemical Co., Ltd	3.5	None
Asiana Airlines, Inc.	2.2	None
The Korea Development Bank Life Insurance Co., Ltd	0.8	None

**Board of Members Composition** As of March 2014, the Daewoo E&C Board of Directors (BoD) is composed of 2 internal directors, 4 external director, 1 other director, making a total of 7 members. Roughly 57% of the BoD are external directors and we maintain the majority in external directors. External directors are selected transparently by the External Director Nominating Committee and our CEO Young-Sik Park has joint duties as BoD chairperson.

### BoD Composition

(As of March 2014)

Type	Names	Birth	Career Overview	Reason for Appointment
Internal Directors	Young-Sik Park	1957.02	Current : CEO & President, Daewoo E&C Previous: Planning-Sales Business head	CEO of the firm
	Kyung Taek Lim	1956.02	Current : Chief Vice President, CFO Previous: KDB Bank VP of Consumer Banking	CFO of the firm
External Directors	Soon Jik Kwon	1950.03	Current : External BoD member, NH Investment and Securities Co., Ltd Previous: Vice Bureau Chief, Donga Newspaper Editing Bureau External BoD member, KB Securities	Advertising, marketing expert
	Sun Tae Jeong	1956.10	Current : Lawyer, Kim Chan & Lee Previous: 29 <sup>th</sup> Legislation Minister	Legal expert
	Khan Park	1949.04	Current : Director, Haekwan Foundation Previous: Director, Bank of Korea Financial Transaction Bureau Advisor, Merrill Lynch Seoul	Finance expert
Other Directors	Hong Kee Jee	1948.09	Current : President, Korea Federation of Water Science and Engineering Societies Previous: Vice President, Yeungnam University, External Relations President, Korea Water Resources Association	Engineering expert
	Hyung Jong Kim	1958.04	Current : Division head, KDB Private Equity Fund Previous: Division head, KDB M&A Division	Shareholder

**BoD Committees**\_ Daewoo E&C operates the Audit Committee and External Director Nominating Committee to secure a transparent governance structure. The Audit Committee is made up of 2 external directors and 1 other director and is supported by the Strategic Planning Audit Team. The External Director Nominating Committee is made up of 5 directors; 1 internal, 3 external and 1 other director. The External Director Nominating Committee seeks out candidates who have expertise and a strong sense of ethics as potential BoD external directors.

#### BoD Committees

(As of March 2014)

Committee Name	Function	Members
Audit Committee	Audit firm's accounting and operations	Khan Park, Soon Jik Kwon, Hyung Jong Kim
External Director Nominating Committee	Nominate external director candidates during the General Meeting	Young-Sik Park, Sun Jik Kwon, Sun Tae Jeong, Khan Park, Hyung Jong Kim

**BoD Performance**\_ In 2013, 18 BoD meetings were held to discuss Daewoo E&C's important management issues. 66 issues were decided upon with the very high attendance rate of 97%. During the same period, the Audit Committee convened 5 times and the External Director Nominating Committee convened once, thereby fulfilling committee functions.

#### Annual BoD Performance

Category	Item	Unit	2011	2012	2013
BoD Meeting	Meetings convened	No.	20	15	18
	Agenda items	No.	67	55	66
	Attendance	%	94.1	92.8	98.6
Audit Committee	Meetings convened	No.	7	6	5
External Director Nominating Committee	Meetings convened	No.	1	-	1

**BoD Remuneration**\_ Remuneration for the different internal and external directors, auditors and other members of the BoD is given within the remuneration ceiling decided upon during the General Meeting. Retirement pay is under the provision of Article 30 of the Articles of Incorporation which states that executive retirement pay is to be decided at the General Meeting. We disclose compensation data in our Annual Report including total executive compensation, average compensation per person (over KRW 500 million) and individual compensation figures.



# Environment

## Environmental Management System

**Environmental Management Policy\_** Daewoo E&C puts environmental and human value first in practicing our environmental policy to implement an Environmental Management System for legal compliance, pollution prevention, and climate change response. In addition, we set annual environment targets which we share both internally and externally so we may monitor and improve our performances.

### Firm-wide Environmental Management Policies and Targets



#### Environmental Management Policy

- Operate Environmental Management System based on ISO 14001 and comply with environmental regulations
- Prevent and eradicate environmental pollution from construction
- Reflect and act on stakeholders' opinions on the environment and climate change



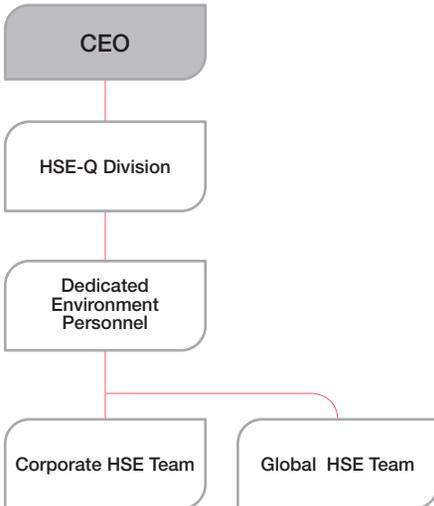
#### Environmental Management Target

- Aim for zero violations and zero environmental accidents
- Set and meet targets for energy and resource conservation
- Set and meet target for sales to waste treatment cost ratio

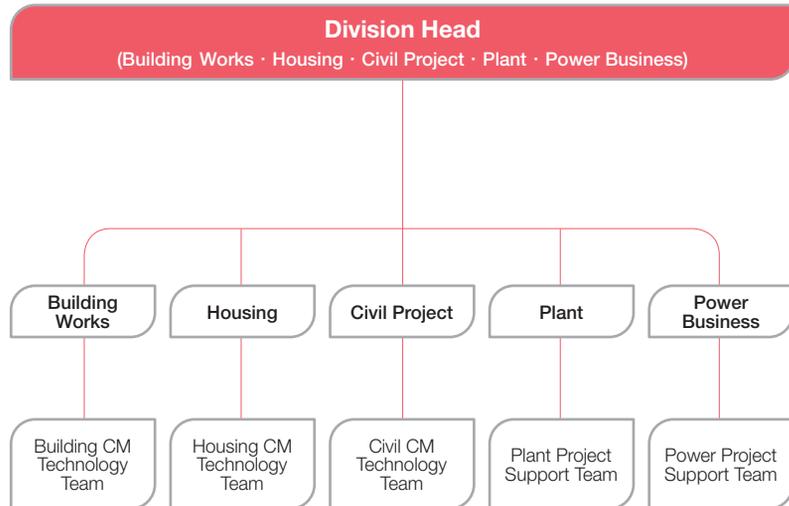
**Environmental Management Organization\_** The HSE-Q Division's HSE Team is the lead Team responsible for managing the operation of the Environmental Management System. Also as overseas operations grow, we have launched our Global HSE Team in order to strengthen environmental management in overseas sites. In addition, each Division has a lead environmental team such as the Building CM Technology Team or the Plant Project Support Team that work to systematically manage environment issues throughout the firm.

### Firm-wide & On-site Environmental Management Organization

#### Firm-wide



#### On-site



**Environmental Management Performance Evaluation\_** Once a year, we hold a firm-wide, all-division Environmental Management Activities Evaluation during which we ascertain the current status of our activities and identify action plans for improvement. Through the evaluation, we appraise each Division's usage and the validity of our Environmental Management System. Discussions are held when improvements are needed.

**Environmental System Management Certification\_** Since becoming the 1<sup>st</sup> construction company in Korea to obtain ISO 14001 for our Environmental Management System in 1997, we have maintained our certificate in all facilities including HQ and all sites around the world through annual recertification evaluations. In 2013, we were evaluated by an independent evaluation agency for 5 HQ teams and 11 sites, all of which successfully met all certification requirements.

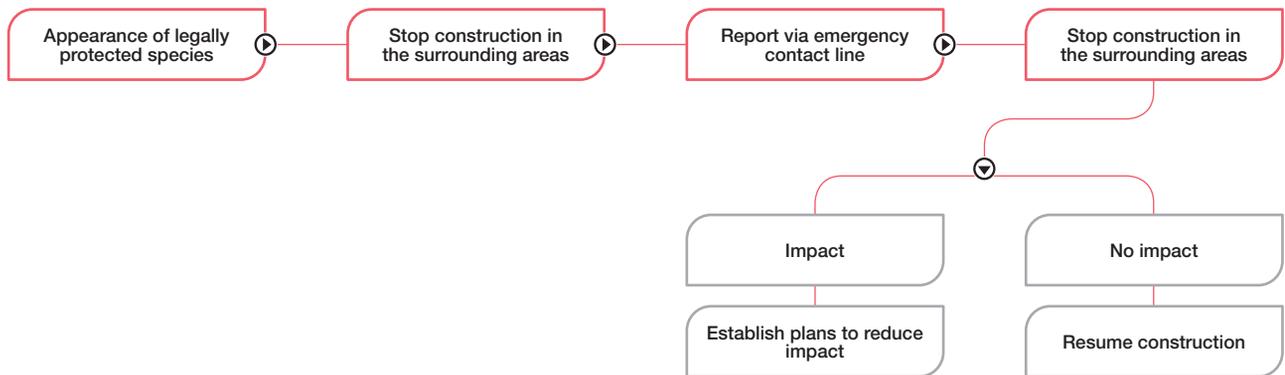
**Environmental Performance Evaluation\_** We link environmental performance evaluation results to compensation calculations and select sites that excel in safety and environmental performance to present the President’s Award and a cash prize. Moreover, safety and environmental performance is included in the annual Business Division Management Evaluation which determines the amount of bonuses distributed to each division.

**Environmental Campaign\_** We host environmental events for each Division, Team and site in an effort to preserve the local community’s environment and to establish an environment-friendly corporate culture. In 2013, 3,935 employees participated in environmental events to clean streams, public roads, reservoirs, and so forth.

### Managing Biodiversity

Daewoo E&C strictly complies with the Wildlife Protection Act and is carrying out a number of activities to protect endangered species living in surrounding areas of construction sites. Prior to construction, we conduct an environmental impact assessment during which we ascertain the biodiversity status of the surrounding area and prepare action plans to limit any damage. During the construction of the new KEPCO headquarters, we used boulder and trees to create 6 wild life habitats around the site.

#### Biodiversity Protection Process



### Managing Hazardous Chemicals

Hazardous chemicals used during construction processes include Bentonite Slurry, paints, oils, epoxies, and industrial strength adhesive. At Daewoo E&C, we developed internal manuals for hazardous chemical management by which we identify hazardous chemicals and store them safely. In addition, waste oil, waste lacquer and other such designated wastes are stored in facilities that meet regulations and then are disposed of by an external, specialized waste treatment firm.

### Environmental Accident Response Process

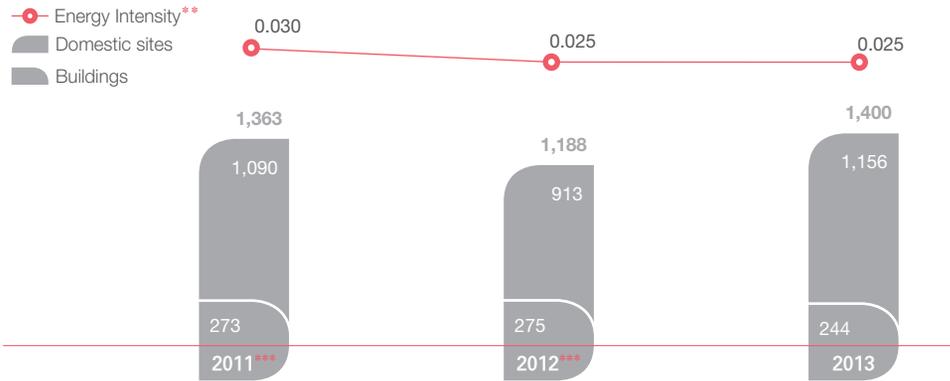
If a major environmental accident takes place, it is addressed rapidly according to the reporting and accident response processes set forth in our Environmental Management Procedures document. Responsible parties are penalized in accordance with the Site Management Activity Evaluation guideline and the Environmental PQ Management guidelines.

## Resource Efficiency

**Managing Energy Consumption\_** We manage energy consumption by site, building and energy source. In order to raise awareness and prevent inefficient energy use, we operate an energy conservation program for all HQ and DICT employees.

### Annual Firm-wide Energy Consumption\*

(Unit: TJ, TJ/KRW 100 million)



\* Energy Consumption = Scope 1 + Scope 2  
 \*\* Energy Intensity = Energy Consumption / Domestic Sales  
 \*\*\* Energy consumption figures for 2011-2012 differ from the 2012 Sustainability Report due to the reflection of changes in operations boundary and parameters.

### 2013 Energy Consumption Breakdown



**Material Use Management**\_ Some of the key materials we manage for the efficient use of resources include ready-mixed concrete, rebars, cement, asphalt concrete, and sand. In addition, we have developed eco-friendly mass concrete that utilizes industrial by-products with minimum cement content. We have applied this development in 14 sites in Korea between 2011 and 2013, consuming a total 125,300 m<sup>3</sup> of eco-friendly mass concrete.

#### Annual Materials Use

Category	Type	Unit	2011	2012	2013
General material consumption	Ready-mixed Concrete	m <sup>3</sup>	2,795,812	1,817,168	2,160,913
	Rebars	ton	282,354	325,735	370,800
	Cement	ton	181,754	201,075	209,206
	Asphalt concrete	ton	451,327	451,192	189,869
	Sand	m <sup>3</sup>	210,819	187,937	247,399
Eco-friendly material consumption	Eco-friendly mass concrete	m <sup>3</sup>	18,200	12,400	94,700

**Water Consumption Management**\_ We manage firm-wide water consumption based on accurate data. We recommend that all sites use rainwater to minimize water use and to control water quality, whilst also employing an external specialty company to strictly manage the quality of the water we discharge. As a result, we have had no major incidents from wastewater discharge.

#### Annual Water Use

(Unit: m<sup>3</sup>)

2011	2012	2013
668,974	1,070,244	1,084,057



## Society: Employees

### Employment

We strive to create jobs and secure diversity amongst our employees by implementing a female employee quota for recruitment, and talent recruitment from different regions. In addition, we hold 'recruitment concerts' during which candidates are evaluated solely on their presentations skills and not their résumés. Those who pass the recruitment concert are exempted from the document evaluation stage in the spirit of open recruitment promotion. In addition, we held a job fair for foreign students studying in Korea in October 2013 and were able to secure global talent from 2,500 participants.

#### Annual Employee Composition

(Unit: No. persons)

Category		2011	2012	2013	Remarks
Total Employees		5,780	6,115	6,449	
Type of Employment	Executives	101	91	64	
	Full-time	3,724	3,961	4,117	Specialized Executives included
	Contracted	230	306	384	Contracted Executives included
	Etc.	1,725	1,757	1,884	
Employment by region	Domestic	4,656	4,932	5,194	
	Overseas	1,124	1,183	1,255	
Female management		51	65	72	Over section-chief
Foreigners in management*		-	19	28	G1, G2 Levels
New hires	Male	1,095	1,379	1,506	
	Female	220	276	249	
Retirement and resignation	Male	115	123	128	Full-time only
	Female	9	2	8	Full-time only

\*Job positions for foreign employees are ranked from G to G4, with G1 and G2 as management

#### Annual Diversity Profile

(Unit: No. persons)

Category		2011	2012	2013	Remarks
Females		575	651	710	
Seniors		386	457	488	Over age 55
Foreigners		31	81	110	Not included in total head count
Handicapped persons		50	68	77	

**Post-retirement Support**\_ Daewoo E&C operates the HR Policy Improvement TFT where important issues of employees' company service are discussed. In particular, since the legal retirement age will be raised in 2016, we are working to reform wage structures in response to the change. We offer contract positions to retired employees who hold special expertise. The number of rehired retirees has steadily increased over the past 3 years. We are working to develop a diversified retirement fund system utilizing banking industry pension insurance and other products in order to ensure economic stability after retirement.

#### Annual Retiree Rehire Status

(Unit: No. persons)

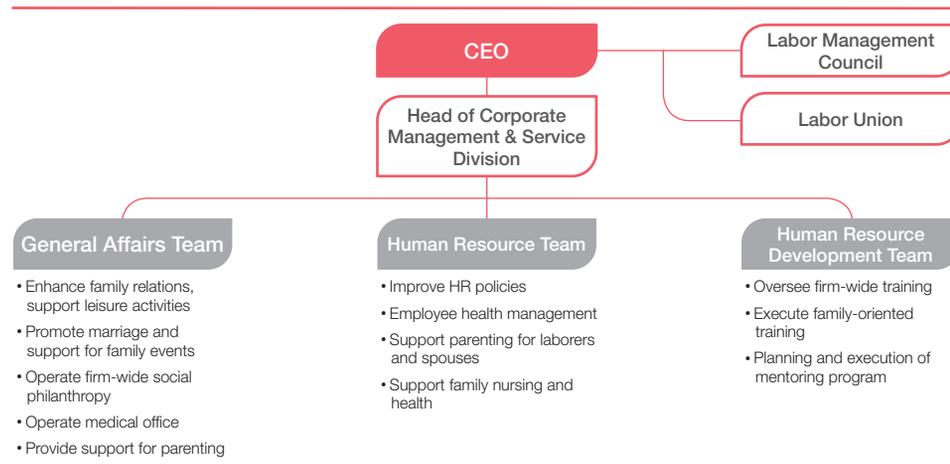
Category	2011	2012	2013	Remarks
Rehired Retirees	749	842	860	Rehire with new employment status after site closure

## Employee Welfare and Benefits

Daewoo E&C supports work-life balance through family-friendly management practices. We operate various family-oriented programs for which we were awarded the Best Family-Friendly Company designation in the Ministry of Gender Equality and Family (MoGEM)'s 'Family-friendly Certification' program in December 2013, marking the first such occasion in the construction industry.

**Family-friendly Management Organization**\_ Based on the high level of interest in family-friendly management from top management, the General Affairs Team, Human Resource Team and Human Resource Development Team of Daewoo E&C all work together to achieve a family-friendly corporate culture. In addition, the Labor Management Council and Labor Union operate the monthly 'One Mind Council' to discuss key agendas related to family-friendly management and develop specific action plans accordingly.

### Family-friendly Management Organization



**One Family Corporate Culture**\_ We operate a wide variety of internal communication programs to promote a one family corporate culture. We provide newly hired employees with mentoring services to ease the adjustment period to our corporate culture. We also operate an online communication channel, Open Room, for employees to share grievances. In 2014, we plan to organize a TFT to actively reestablish a 'one family company' culture and we will provide monthly cultural events for employees, set dates for 'Lunch with the CEO,' prepare birthday gifts for employees, and offer various programs such as healing yoga.

**Work Environment Improvement**\_ Daewoo E&C amended internal regulations in 2013 to improve working conditions. In addition, we revamped HQ facilities such as the lobby and the restrooms for employee comfort, improved on-site cafeteria menus and upgraded labor attire for employee satisfaction.

**Family-friendly Programs**\_ The Daewoo E&C Family-friendly program is composed of both basic and specialized components. Such components include employee health support, parenting support (spouses included), child care and education support, nursing and family healthcare support, family relations improvement support, marriage encouragement and support for family events, family-related philanthropy and other items for a well-rounded and comprehensive welfare and benefits program.

### Family-friendly Programs

#### Basic Components

- Employee health support: Medical checks, group insurance, smoking cessation program
- Childbirth support for employees and spouses: (Spousal) Child birth leave, prenatal care CD and baby gifts, provision of nursing rooms and lounges
- Childcare and education support: Parenting leave, childcare expenditure support, in-house invitational education for children, tuition support and congratulatory gifts for high school, college – age children

#### Specialized Components

- Family nursing and health support: Medical checks for spouses, family health expenditure support, medical expense support for disabled family members, healthcare training, leave of absence (to care for ill family members, etc)
- Support for family leisure activities: Family invitational events, 'Family love' leave (1 day paid leave for family vacation), vacation expenses and accommodations support, events for children, in-house club activity support
- Encouraging marriage and support for family events: Couple management services, wedding expense and wedding gifts, support for family funerals

**Family-friendly Culture Satisfaction Survey\_** In 2013, we conducted an employee satisfaction survey on the firm's family-oriented programs. 897 employees responded to the online survey which evaluated employee awareness of the program, ease of use and satisfaction. Results showed that, though most employees were aware of the programs, not many regarded the benefits as 'easy to access.' The survey results will help us improve the program in the future.

**Childbirth and Parenting Leave\_** We actively encourage employees to utilize childbirth and parenting leave. We put our best efforts forward to ease the transition back to work whilst preventing gaps in operations and as a result, 98.5% of our employees that took childbirth leave in 2013 returned to work.

**Annual Childbirth and Parenting Leave Usage**

Type	Categories	Unit	2011	2012	2013
Childbirth leave	Persons on leave	No. persons	160	198	204
	Persons returned from leave	No. persons	157	195	201
	Return to Work rate	%	98.1	98.5	98.5
Parenting Leave	Persons on leave	No. persons	10	10	35
	Persons returned from leave	No. persons	7	11	17
	Average leave	No. days	209	243	244

**Evaluation and Compensation**

Daewoo E&C does not discriminate between genders in determining wage and we promote an objective and fair performance evaluation system based on job functions. According to performance and capability-oriented evaluation results, each employee is assigned to a level by which we implement differentiated salary increments. In 2013, our new hires received 380% of Korea's minimum wage standard and we will continue to operate along the lines of a rational wage structure.

**Performance Evaluation Structure**

<b>Performance Evaluation</b>	<ul style="list-style-type: none"> <li>• <b>Executives: Team Leaders: Site Supervisors: MBO based evaluation</b> <ul style="list-style-type: none"> <li>- Evaluation of target management and performance</li> </ul> </li> <li>• <b>Team members: Contribution to team</b> <ul style="list-style-type: none"> <li>- Evaluation of contribution in meeting organization's targets</li> </ul> </li> </ul>
<b>Capability Evaluation</b>	<ul style="list-style-type: none"> <li>• <b>Core capability evaluation</b></li> <li>• <b>Leadership capability evaluation</b></li> <li>• <b>Functional capability evaluation</b> <ul style="list-style-type: none"> <li>- Made evaluation sets specific to job functions more detailed and systematic (20 items ▶ 2 items)</li> </ul> </li> </ul>

**Labor-Management Relations**

Daewoo E&C respects the rights of all laborers and guarantees all employees the freedom to join or leave the Labor Union. Since the establishment of the Labor Union in 1999, we have achieved a record 15 years of zero disputes and conflicts, thanks to our fair and rational labor-management culture.

**Labor Management Council\_** We have operated the Labor Management Council since 1999 to represent all employees and September 2013 marked the 8<sup>th</sup> such session. The Labor Management Council strives to create a fun, lively and cohesive workplace by establishing a healthy labor-management culture that creates win-win value for all by finding a common ground for cooperation on important issues. In particular, employee representation in the Council was increased from 8 to 9 persons in the 8<sup>th</sup> session in order to support a wider collection of opinions.

### Annual Labor-Management Relations Status

Category	Sub-categories	Unit	2011	2012	2013
Labor Union membership		%	30.7	26.2	26.4
Labor-Management Council Performance	Sessions convened	No.	4	4	4
	Agenda items	No.	4	4	4

**Labor-Management Concord\_** In an effort to overcome the prolonged economic downturn through labor-management cooperation, we adopted the Labor-Management Concord in August 2013 at the One Mind labor-management council. Based on the Concord, Daewoo E&C will continue our efforts to establish an advanced labor culture, implement ethics management and achieve win-win growth between labor and management.

### Labor Practice and Human Rights

**Labor & Human Rights Policy\_** Daewoo E&C strictly upholds Korea's Labor Standards Act along with international standards for labor such as the International Labour Organization (ILO) Conventions governing child labor, and we ban all forms of child labor and forced labor in all of our sites worldwide. In addition, we joined the UN Global Compact (UNGC) in 2013 to declare our dedication to fulfilling our social responsibility to uphold human rights and labor rights.

**Overseas Labor Risk Management\_** We are strengthening the management of our foreign employees' labor conditions in order to ensure successful completion of overseas projects. We conduct labor risk surveys in newly entered markets to enable successful personnel management throughout our projects. The Saudi Arabia SADARA TANK project is one such successful case of our overseas labor management system. We published a corporate policy guidebook for local staff as per the local government's requests and prevented unnecessary labor-management disputes.

**Collecting Internal & External Grievances\_** Daewoo E&C manages the grievances from both internal and external stakeholders as received through our Cyber Audit Office. Amongst the grievances processed in the past 3 years, there were 2 labor-related issues which turned out to be complaints regarding the treatment of cleaning contractors in our sales office. The issue was resolved amicably through our prompt response.

#### Annual Grievances Processed by the Cyber Audit Office\*

(Unit: No.)

Category	2011	2012	2013	Remarks
Labor Practices	1	1	-	Complaint regarding treatment of cleaning contractors
Customer Complaints	2	19	7	
Business Partners	5	5	2	
Local Communities	3	-	-	Complaint on defective pavement at construction site
Etc.	2	1	-	

\*Simple cases of slander, defamation and groundless claims excluded

**Sexual Harassment Prevention Training\_** To protect the human rights of our female employees, we implemented online training on harassment prevention for all employees globally. In 2013, a total of 6,169 received training.

#### Annual Sexual Harassment Prevention Training Participation

(Unit: No. Persons, %)

Category	2011		2012		2013	
	Completion	Completion rate	Completion	Completion rate	Completion	Completion rate
Domestic	3,043	95.1	4,905	98.7	4,897	99.5
Overseas	469	100	1,134	99.8	1,272	100
Total	3,512	95.7	6,039	98.9	6,169	99.6

# Society: Local Communities

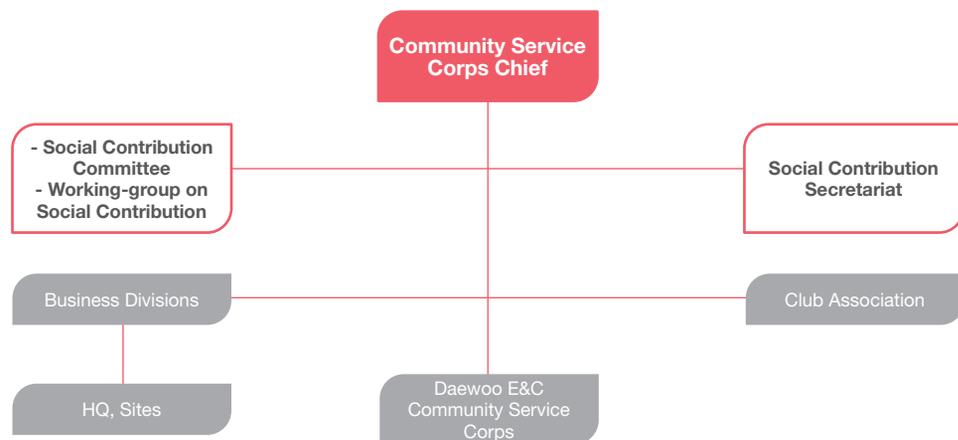
## Contribution to Local Communities

Daewoo E&C engages in philanthropic works for the disadvantaged members of our society whether it be disabled persons or welfare facilities and we promote employees' voluntary participation.

**Social Contribution Principles\_** At Daewoo E&C, we identify environmental protection, increased community convenience, and every day safety as our core areas for social contribution. We are also pursuing various programs to contribute to the underprivileged. We encourage voluntary participation from our employees and develop programs in line with the characteristics of the construction industry to achieve meaningful corporate citizen behavior. In 2014, we will extend our social contribution activities from simple donations to strengthening employee participation and building a cooperative partnership with stakeholders, paving the way to mutual growth with the community.

**Social Contribution Organization\_** Formed to improve employee participation in social contribution activities, our social contribution organization is headed by the Chief of the Daewoo E&C Community Service Corps and is comprised of the Social Contribution Committee, Working-group on Social Contribution and Social Contribution Secretariat. We also operate the Daewoo E&C Community Service Team made up of each business division, HQ, and clubs to maximize employee participation. The Community Service Team develops core social contribution programs unique to Daewoo E&C and systematically implements such activities.

### Social Contribution Organizational Structure



**Social Contribution Performance\_** Participation and donation amounts in social contribution increase each year at Daewoo E&C. In particular, we had active participation in the firm-wide Community Service Relay in 2013, which led to the doubling in average service hours per person compared to 2011 figures.

### Annual Social Contribution Performance

Category	Sub-categories	Unit	2011	2012	2013
Social Contribution Activity Outcomes	Annual participation	No. Persons	7,187	10,637	11,927
	Total investment	KRW 100 million	7	42	34
	Average activity time	Hours	1.5	2.9	3.3
Donations	Arts and culture	KRW 100 million	3.5	25.2	0.3
	Etc.	KRW 100 million	-	-	33.6

## Social Contribution Program

**Firm-wide Community Service Relay\_** The Community Service Relay program is an employee participatory program launched in 2012 for meaningful contribution that extends beyond simple donations. Operated year-round, the Relay program is central to spreading a culture of sharing.

### Community Service Relay Performance and Plans

Category	2012	2013	2014 (Planned)
Implementation	78 times (HQ 43, Sites 35)	99 times (HQ 23, Sites 76)	120 times
Participants	1,379 Persons	1,826 Persons	2,200 Persons

**Sharing Briquettes of Love\_** In December 2013, we donated 20,000 heating briquettes to a low-income town with many senior citizens living alone to bring warmth to our neighbors. Among those briquettes, 120 of our employees hand-delivered 3,000 of them to share our love with the less fortunate.

**Seoul City Job Day for Middle School Students\_** In May 2013, we signed an MOU with the Seoul City Education Office to help foster happy education and provided opportunities for students aspiring to become construction professionals to visit construction sites and experience the job. The event, which took place in July 2013, was attended by 91 students and included technology field trips and site visits.

**Happy Together Blood Donation Campaign\_** We have been holding regular blood drives for HQ and site employees to participate in every June and November since 2006. In 2013, we donated all blood donation certificates that were gathered during the campaign to leukemia patients through the Seoul National University Children's Hospital Foundation.

**1 Firm for 1 Barracks Movement\_** Since 1996, we have maintained cooperative activities with the Korean Capitol Defense Command. Not only do we donate goods, but we have provided services to improve sports facilities, therefore utilizing our construction expertise for social contribution. In 2012, we also offered career training to the soldiers stationed at the Command to assist with career development after discharge from the military.

**Seoul Mecenat Arts Walk\_** 'Open the Lobby and Fill it With Art' was the theme for the Arts Walk Event held by the Seoul Foundation for Arts and Culture when we participated in in November 2013. To support the event, we, indeed, opened our headquarters lobby to the public and held a mecenat event, providing visitors in the Gwanghwamun area near our headquarters with high quality cultural events such as pop opera concerts and harp recitals.



## Society: Customers

### Customer Information Protection

Daewoo E&C stringently manages customer information. We conduct information security training for all employees and employees from partner companies in conjunction with ethics management training. 6,169 employees completed training. In 2013, We strengthened protection by appraising our current personal information management system and implementing action items for further improvement. We will continue to provide training on protecting personal information and conduct regular and spot inspections to establish a firm system for privacy protection.

## Society: Product Stewardship

**Asbestos Management**\_ We are strictly managing asbestos to minimize harm since we signed the Voluntary Agreement for Managing Asbestos in Buildings with the Ministry of Environment in 2010. During demolition or building repairs, we commission specialized companies to conduct pre-inspections and remove asbestos. We have dedicated supervisors who oversee the removal of asbestos and provide specialized training to onsite personnel in charge of asbestos management. Prior to removing asbestos, we hold an information session for the residents in order to provide a thorough explanation and to receive their feedback. In addition, we distribute promotional materials about our asbestos management to local communities.

#### Key Activities for Asbestos Removal

Pre-construction	During Construction	Post-construction
<ul style="list-style-type: none"> <li>• Preliminary analysis of asbestos content and establish work plans</li> <li>• Distribute promotional materials to surrounding communities</li> <li>• Hold information sessions to provide explanation and receive feedback</li> </ul>	<ul style="list-style-type: none"> <li>• Appoint managers and supervisors</li> <li>• Monitor air quality in and outside of the working area</li> </ul>	<ul style="list-style-type: none"> <li>• Analyze and publish the result of onsite air quality analysis</li> <li>• Establish an improvement plan in case the result exceeds the standard</li> </ul>

**Sales & Marketing Policy**\_ Daewoo E&C complies with all domestic and foreign laws governing advertisement. We work to develop marketing strategies that maximize advertising impact. For the sales advertising campaign of PRUGIO, we employed a unique newspaper advertising design policy to enhance the uniformity of the advertising campaign whilst maximizing communication impact. In 2013, to mark the 10<sup>th</sup> anniversary of the launch of PRUGIO, we held a promotional campaign on the internet which strengthened our brand leadership.

**Sales & Marketing Violations**\_ In June 2013, we received a warning from the Fair Trade Commission for posting on our website that the size of Daeyeon Hillstate PRUGIO was larger than it is in reality. We will work to comply with marketing and sales regulations in order to ensure consumer rights.

# Appendix

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# Sustainability Performance Table

## Economic Performance

Category	Details	Unit	2011	2012	2013	Remarks
Orders	New orders	KRW 100 million	132,708	138,124	114,145	
	Order backlog	KRW 100 million	373,710	382,315	417,098	
Sales	Domestic sales ratio	%	64.2	57.7	65.4	
	Overseas sales ratio	%	35.6	42.0	34.6	
	Misc. sales ratio	%	0.2	0.3	0.0	
Sales by business division	Total firm-wide sales	KRW 100 million	70,319	81,803	84,171	
	Civil Project Division	KRW 100 million	18,451	13,551	13,436	
	Building Works Division	KRW 100 million	13,443	16,665	20,913	
	Housing Division	KRW 100 million	12,934	14,786	19,996	
	Power Business Division	KRW 100 million	8,580	18,343	13,931	
	Plant Division	KRW 100 million	16,769	18,253	15,708	2011 figures based on Petrochemical Division
	Other	KRW 100 million	142	205	186	
Stakeholder value distribution	Employees	KRW 100 million	4,437	5,002	5,372	Salaries and benefits
	Business Partners	KRW 100 million	40,648	43,165	47,588	Materials purchase and outsourcing cost
	Government	KRW 100 million	1,301	914	1,040	Loan interest
	Local Communities	KRW 100 million	335	562	(1,276)	Corporate tax
	Government	KRW 100 million	7	42	34	Philanthropic operations, donations
BoD operation performance	Meetings convened	No.	20	15	18	
	Agenda items	No.	67	55	66	
	Attendance	%	94.1	92.8	96.6	
Audit Committee Meetings	No. convened	7	6	5		
External Director Nominating Committee Meetings	No. convened	1	-	1		

## Environmental Performance

Category	Details	Unit	2011	2012	2013	Remarks
GHG emissions	Total site emissions	tCO <sub>2</sub> -e	56,851	48,172	58,382	Scope 1+2
	Total building emissions	tCO <sub>2</sub> -e	13,678	13,734	12,269	Scope 1+2
	Total emissions	tCO <sub>2</sub> -e	70,529	61,906	70,651	Scope 1+2
	GHG intensity	tCO <sub>2</sub> -e/KRW 100 million	1.562	1.311	1.283	Total emissions / Domestic Sales
Energy consumption	Total site consumption	TJ	1,090	913	1,156	Scope 1+2
	Total building consumption	TJ	273	275	244	Scope 1+2
	Total consumption	TJ	1,363	1,188	1,400	Scope 1+2
	Energy intensity	TJ/KRW 100 million	0.030	0.025	0.025	Total consumption / Domestic sales
Water consumption	Water	m <sup>3</sup>	668,974	1,070,244	1,084,057	
General material consumption	Ready-mixed Concrete	m <sup>3</sup>	2,795,812	1,817,168	2,160,913	
	Rebars	ton	282,354	325,735	370,800	
	Cement	ton	181,754	201,075	209,206	
	Asphalt concrete	ton	451,327	451,192	189,869	
	Sand	m <sup>3</sup>	210,819	187,937	247,399	
Eco-friendly material consumption	Eco-friendly concrete	m <sup>3</sup>	18,200	12,400	94,700	
Waste	Volume treated	ton	705,648	700,082	474,200	
	Treatment cost	KRW 100 million	120	115	85	

\* Emissions and energy data for 2011-2012 were recalculated due to changes in operations boundary and parameters. As such, figures vary from the 2012 Sustainability Report

## Social Performance

Category	Details	Unit	2011	2012	2013	Remarks
Total Employees		No. persons	5,780	6,115	6,449	
Type of Employment	Executives	No. persons	101	91	64	
	Full-time	No. persons	3,724	3,961	4,117	Specialized Executives included
	Contracted	No. persons	230	306	384	Contracted Executives included
	Etc.	No. persons	1,725	1,757	1,884	
Employment by region	Domestic	No. persons	4,656	4,932	5,194	
	Overseas	No. persons	1,124	1,183	1,255	
Employee diversity	Male	No. persons	5,205	5,464	5,739	
	Female	No. persons	575	651	710	
	Seniors	No. persons	386	457	488	Over age 55
	Foreigners	No. persons	31	81	110	Not included in total head count
	Handicapped persons	No. persons	50	68	77	
New hires	Male	No. persons	1,095	1,379	1,506	
	Female	No. persons	220	276	249	
Retirement/resignation	Male	No. persons	115	123	128	Full-time only
	Female	No. persons	9	2	8	Full-time only
Training and education performance	Total training hours	Hours	1,866,002	703,996	757,485	
	Total Cost	KRW million	4,093	4,896	4,390	
	Training per person	Hours	323	115	117	Total training hours / total number of employees
Childbirth leave	Persons on leave	No. persons	160	198	204	
	Persons returned from leave	No. persons	157	195	201	
	Return to Work rate	%	98.1	98.5	98.5	
Parenting Leave	Persons on leave	No. persons	10	10	35	
	Persons returned from leave	No. persons	7	11	17	
	Average leave	No. days	209	243	244	
Labor Union membership		%	30.7	26.2	26.4	
Domestic	Deaths	Persons	6	9	11	
	Incident rate <sup>1)</sup>	%	0.06	0.13	0.25	
Overseas	Deaths	Persons	-	1	6	
	TRIR <sup>2)</sup>	Million hours	0.44	0.46	0.45	
	LTIR <sup>3)</sup>	Million hours	0.06	0.07	0.10	
Social Contribution Activity Outcomes	Annual participation	No. Persons	7,187	10,637	11,927	
	Total investment	KRW million	7	42	34	
	Average activity time	Hours	1.5	2.9	3.3	
Donations	Arts and culture	KRW 100 million	3.5	25.2	0.3	
	Etc.	KRW 100 million	-	-	33.6	
Customer Satisfaction Survey Result		Rank	4 <sup>th</sup>	3 <sup>rd</sup>	3 <sup>rd</sup>	National Customer Satisfaction Index (NCSI)

1) Incident Rate = (No. of Casualties, Converted / No. of Regular Workers) x 100

2) Total Recordable Injury Rate = (Fatality + Lost Workday Cases + Restricted Work Cases + Medical Treatment Cases + Occupational Illness) x 1,000,000 hours / Total Man-hours Worked

3) Lost Time Injury Rate = (Fatality + No. of Lost Workday Cases) x 1,000,000 hours / Total Man-hours Worked

# Assurance Statement

## Introduction

DNV GL Business Assurance Korea Ltd. (hereinafter “DNV GL”) is commissioned to carry out the assurance engagement of 2013 Sustainability Report (hereinafter “the Report”) of DAEWOO ENGINEERING & CONSTRUCTION CO., LTD. (hereinafter “Daewoo E&C”). This engagement focused on the information provided in the Report and the underlying management and reporting processes. Daewoo E&C is responsible for the collection, analysis, aggregation and presentation of all information within the Report. DNV GL’s responsibility in performing the work follows terms of reference and scope of work agreed. The assurance engagement is based on the assumption that the data and information provided to us is complete, sufficient and authentic. Daewoo E&C’s stakeholders are the intended recipients of the assurance statement.

## Scope of Assurance

This Assurance Engagement covered data from the calendar year 2013. The scope of DNV GL’s Assurance Engagement includes only for operations under control in Korea the review and assessment of followings:

- Evaluation of the reporting principles for defining the sustainability report content and the quality as described in Global Reporting Initiative (GRI) Sustainability Reporting Guidelines G4
- Verification of disclosures indicated in the GRI Index to demonstrate that the Report is prepared ‘In accordance’ with the GRI Guidelines (Core option) (Aggregated level of data that refers to the period between January and December 2013)
- Verification of data sets on the performance table in page 100-101 of the Report against the high level data aggregated

## Limitation

The engagement excluded the sustainability management, performance and reporting practices of Daewoo E&C’s suppliers, contractors and any third-parties mentioned in the Report. DNV GL did not interview external stakeholders as part of this Assurance Engagement. Any financial information from Daewoo E&C’s annual report and company reporting on operations in 2013-2014 or other sources are not included in the scope of the Assurance. Economic performances based on the financial data were cross-checked with internal documents and the audited financial statements. The aggregation and calculation process for building economic performances is reviewed and tested by the verification team. The baseline data for Environmental and Social performance are not verified, while the aggregated data are used for the verification. DNV GL expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

## Verification Methodology

The Assurance Engagement was planned and carried out in accordance with the DNV GL Verification Protocol for Sustainability Reporting (VeriSustain™ V.4.1) with Moderate level of assurance. As part of the verification, we challenged the sustainability-related statements and claims made in the Report and assessed the robustness of the underlying data management system, information flow and controls. DNV GL has examined and reviewed documents, high level data and other information made available by Daewoo E&C. We visited Daewoo E&C Head office in Seoul, Korea in June 2014 and performed sample-based audits of;

- The process for determining the materiality of the contents to be included in the Report;
- The process for generating, gathering and managing the quantitative and qualitative data included in the Report.
- The accuracy of data verified.

## Conclusion

In DNV GL’s opinion, and based on the scope of this Assurance Engagement, the Report provides a reliable and fair representation of Daewoo E&C’s sustainability strategy, policy, practices and performance in 2013. Further conclusions and observations on the Adherence to the principles for defining report content as set forth in GRI G4 are made below;

### Stakeholder Inclusiveness

DAEWOO E&C has engaged with a wide range of stakeholders. Such 8 main stakeholder groups as Customers, Employees, Suppliers, Local community, Shareholders-Investors, and Government, Academic society-Industry association-Institutes, Future generation are identified in the Report. Daewoo E&C’s each business unit-department identifies the interest of stakeholders by engaging them with various ways. In our view, the level at which the Report adheres to the principle of Stakeholder Inclusiveness is ‘Good.’

**Sustainability Context:**

Daewoo E&C has grouped material aspects into core issues in terms of sustainability context. The risks and opportunities of the core issues are analyzed and objectives, key activities, major performances and action plans in 2014 are presented in the Report. Daewoo E&C is recommended to set the long term goals and quantified targets to properly manage the core issues. Providing the information on the management of material aspects disclosed in the previous report can help stakeholders have better view on sustainable management of Daewoo E&C. In our view, the level at which the Report adheres to the principle of Sustainability Context is 'Fair.'

**Materiality**

Daewoo E&C has formed 50 issue pool based on GRI G4 guideline and sector supplement and media research carried out. Results of stakeholder survey and Internal Task Force survey are mapped out to prioritize the material aspects. The process finally brings out 15 material aspects. The engagement with stakeholders associated with international projects and business is recommended since the international projects contributed substantial portion to the total revenue in 2013. Consideration of sustainability risks and opportunities needs to be taken into the materiality determination process. The assurance team also recommends Daewoo E&C to integrate the negative issues in the press into materiality determination process and the investigation result and response plan into the sustainability strategy. In our view, the level at which the Report adheres to the principle of Materiality is 'Fair.'

**Completeness:**

Material aspects derived from materiality determination cover significant economic, environmental and social impacts within the reporting boundary and scope. Daewoo E&C needs to expand the reporting boundary and scope to international project, especially environmental performance data. In our view, the level at which the Report adheres to the principle of Completeness is 'Fair.'

**Opportunities for Improvement**

The following is an excerpt from the observations and opportunities reported to Daewoo E&C's management in addition to the recommendations expressed above. However, these do not affect our conclusions on the Report and are provided to encourage continual improvement.

- To enhance the current stakeholder engagement activities and to establish a formal process so that the output of the process is made use of for the preparation of sustainability report.

**Statement of Competence and Independence**

DNV GL is a leading provider of sustainability services, including the verification of sustainability reports. Our environmental and social assurance specialists operate in over 100 countries. DNV GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV GL maintains complete impartiality toward stakeholders interviewed during the verification process.

July 2014

Seoul, Republic of Korea

**In-Kyoon Ahn**

Country Manager

A handwritten signature in black ink, appearing to read "In-Kyoon Ahn".

# Independent Assurance Statement on Greenhouse Gas Emissions



## Third Party's Verification Statement

### Introduction

Korean Foundation for Quality (hereinafter 'KFQ') has been engaged by (Daewoo E&C) (hereinafter the 'Company') to independently verify its 2013 Report on Quantity of emitted Greenhouse Gas from places of business nationwide (hereinafter 'Inventory Report').

It is the responsibility of the Company's management to compile the Inventory Report and the emission quantity report by "Greenhouse Gas and Energy Target Management Scheme" run by the government of Korea and KFQ's responsibility is provision of opinions on the Inventory Report after verification according to ISO 14064-3 and national scheme.

### Verification Scope

KFQ's verification was focused on all of the greenhouse gas emission sources (direct emission and indirect emission) controlled by the Company's places of business nationwide.

### Conclusion/Opinion

Based on verification process according to the ISO 14064-3, KFQ obtained reasonable basis to express the following conclusion on the greenhouse gas emission data in the Inventory Report.

- 1) The Company's 2013 Report on Quantity of emitted Greenhouse Gas was documented in accordance with "Greenhouse Gas and Energy Target Management Scheme" run by the government.
- 2) According to materiality assessment on quantity of greenhouse gas emitted from every Company's places of business nationwide in 2013, material discrepancy is less than the criteria of 5.0% for an organization that emits under 500,000 tCO<sub>2</sub>eq in accordance with "Greenhouse Gas and Energy Target Management Scheme"
- 3) According to the information and data regarding greenhouse gas emission in the Inventory Report, no unreliable significant error, omission, or impropriety were found. Therefore, KFQ conclude and confirm its verification with total material discrepancy of less than 5.0%.

[Unit : ton CO<sub>2</sub>eq]

Report Year	SCOPE 1	SCOPE 2	SUB TOTAL	SCOPE 3	TOTAL
2013.1.1.~2013.12.31	13,503	57,148	70,651	183,986	254,637

※ [SCOPE 3 was verified by Company's GHG Control Instruction (Rev 02)]

April 15<sup>th</sup>, 2014

CEO Daehyun Nam  
Korean Foundation for Quality (KFQ)

# GRI Index



## General Standard Disclosure

※Refer to page 102-103 for detailed information on external assurance

Standard Disclosure	Description	Page	External Assurance
<b>Strategy and Analysis</b>			
G4-1	Provide a statement from the most senior decision-maker of the organization (incl. strategy relates to sustainability, impacts of the activities in relation to the stakeholders).	4-5	✓
<b>Strategy and Analysis</b>			
G4-3	Report the name of the organization.	10	✓
G4-4	Report the primary brands, products, and services.	12-13	✓
G4-5	Report the location of the organization's headquarters.	10	✓
G4-6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	24-25	✓
G4-7	Report the nature of ownership and legal form.	10	✓
G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	12-13, 24-25	✓
G4-9	Report the scale of the organization, including: <ul style="list-style-type: none"> <li>Total number of employees</li> <li>Total number of operations</li> <li>Net sales (for private sector organizations) or net revenues (for public sector organizations)</li> <li>Total capitalization broken down in terms of debt and equity (for private sector organizations)</li> <li>Quantity of products or services provided</li> </ul>	10, 51	✓
G4-10	a.Report the total number of employees by employment contract and gender. b.Report the total number of permanent employees by employment type and gender. c.Report the total workforce by employees and supervised workers and by gender. d.Report the total workforce by region and gender. e.Report whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors. f.Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).	92	✓
G4-11	Report the percentage of total employees covered by collective bargaining agreements.	94	✓
G4-12	Describe the organization's supply chain.	64	✓
G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	110	✓
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization.	56	✓
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	107	✓
G4-16	List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: <ul style="list-style-type: none"> <li>Holds a position on the governance body</li> <li>Participates in projects or committees</li> <li>Provides substantive funding beyond routine membership dues</li> <li>Views membership as strategic"</li> </ul>	109	✓
<b>Identified Material Aspects and Boundaries</b>			
G4-17	a.List all entities included in the organization's consolidated financial statements or equivalent documents. b.Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	109-110	✓
G4-18	a.Explain the process for defining the report content and the Aspect Boundaries. b.Explain how the organization has implemented the Reporting Principles for Defining Report Content.	18-19	✓
G4-19	List all the material Aspects identified in the process for defining report content.	19	✓
G4-20	For each material Aspect, report the Aspect Boundary within the organization, as follows: <ul style="list-style-type: none"> <li>Report whether the aspect is material within the organization</li> <li>If the Aspect is not material for all entities within the organization (as described in G4-17)</li> <li>Report any limitations regarding the aspect boundary within the organization</li> </ul>	22, 30, 38, 50, 58, 64, 70, 76	✓
G4-21	For each material Aspect, report the Aspect Boundary outside the organization, as follows: <ul style="list-style-type: none"> <li>Report whether the Aspect is material outside of the organization</li> <li>If the Aspect is material outside of the organization, identify the entities, groups of entities or elements for which the Aspect is material</li> <li>Report any specific limitation regarding the Aspect Boundary outside the organization</li> </ul>		✓
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	60, 90	✓
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	110	✓
<b>Stakeholder Engagement</b>			
G4-24	Provide a list of stakeholder groups engaged by the organization.	85	✓
G4-25	Report the basis for identification and selection of stakeholders with whom to engage.	85	✓
G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	18-19, 85	✓
G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	22, 30, 38, 50, 58, 64, 70, 76	✓
<b>Report Profile</b>			
G4-28	Reporting period (such as fiscal or calendar year) for information provided.	110	✓
G4-29	Date of most recent previous report (if any).	110	✓
G4-30	Reporting cycle (such as annual, biennial).	110	✓
G4-31	Provide the contact point for questions regarding the report or its contents.	Inside back cover	✓
G4-32	a.Report the 'in accordance' option the organization has chosen. b.Report the GRI Content Index for the chosen option (see tables below). c.Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines.	105-106	✓
G4-33	a.Report the organization's policy and current practice with regard to seeking external assurance for the report. b.If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided. c.Report the relationship between the organization and the assurance providers. d.Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report.	102-103	✓
<b>Governance</b>			
G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	86-87	✓
<b>Ethics and Integrity</b>			
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	77	✓

# GRI Index

## Specific Standard Disclosure

※ Refer to page 102-103 for detailed information on external assurance

Material Aspects	DMA and Indicators	Indicator Detail	Page	External Assurance	Omission
<b>Indicators</b>					
Economic Performance	DMA	Disclosure on management approach	50	✓	
	G4-EC1	Direct economic value generated and distributed	51-52	✓	
	G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	59	✓	
	G4-EC3	Coverage of the organization's defined benefit plan obligations	92	✓	
	G4-EC4	Financial assistance received from government	N/A		Not Applicable
Indirect Economic Impacts	DMA	Disclosure on management approach	50	✓	
	G4-EC7	Development and impact of infrastructure investments and services supported	57	✓	
	G4-EC8	Significant indirect economic impacts, including the extent of impacts	57	✓	
<b>Environment</b>					
Emissions	DMA	Disclosure on management approach	58	✓	
	G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	60	✓	
	G4-EN16	Indirect greenhouse gas (GHG) emissions (Scope 2)	60	✓	
	G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	104	✓	
	G4-EN18	Greenhouse gas (GHG) emissions intensity	60	✓	
	G4-EN19	Reduction of greenhouse gas emissions	60	✓	
	G4-CRE3	Greenhouse gas emissions intensity from buildings = sum of annual kilograms CO2 equivalent / sum of floor area (m2) or number of people	60	✓	
	G4-CRE4	Greenhouse gas emissions intensity from new construction and redevelopment activity = sum of annual CO2 equivalent emissions (tonnes) / sum of annual turnover from the construction activities (millions)	60	✓	
	Effluents and Waste	DMA	Disclosure on management approach	58	✓
G4-EN22		Total water discharge by quality and destination	91	✓	
G4-EN23		Total weight of waste by type and disposal method	62	✓	
G4-EN26		Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	91	✓	
Products and Services	DMA	Disclosure on management approach	30	✓	
	G4-EN27	Extent of impact mitigation of environmental impacts of products and services	35	✓	
	G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	91	✓	
Compliance	DMA	Disclosure on management approach	58	✓	
	G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	63	✓	
<b>Society</b>					
<b>Labor Practices and Decent Work</b>					
Occupational health and safety	DMA	Disclosure on management approach	38	✓	
	G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	44	✓	
	G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	46	✓	
	G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	48	✓	
	G4-LA8	Health and safety topics covered in formal agreements with trade unions	44, 94	✓	
	G4-CRE6	Percentage of the organization operating in verified compliance with an internationally recognized health and safety management system	46	✓	
Training and education	DMA	Disclosure on management approach	38	✓	
	G4-LA9	Average hours of training per year per employee by gender, and by employee category	41	✓	
	G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	40	✓	
	G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	94	✓	
<b>Society</b>					
Anti-corruption	DMA	Disclosure on management approach	76	✓	
	G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	78	✓	
	G4-SO4	Communication and training on anticorruption policies and procedures	78-79	✓	
	G4-SO5	Confirmed incidents of corruption and actions taken	N/A		Not Applicable
Anti-competitive Behavior	DMA	Disclosure on management approach	64	✓	
	G4-SO7	Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes	66	✓	
Compliance	DMA	Disclosure on management approach	76	✓	
	G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	66	✓	
<b>Product Responsibility</b>					
Customer privacy	DMA	Disclosure on management approach	70	✓	
	G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	98	✓	
	G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	N/A		Not Applicable
Compliance	DMA	Disclosure on management approach	70	✓	
	G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	98	✓	

# The UN Global Compact

In February 2013, Daewoo E&C joined the UN Global Compact (UNGC). By upholding the 10 Principles on human rights, labor, environment, and anti-corruption and participating in the global standard, we show our dedication to corporate social responsibility.



## UN Global Compact 10 Principles & Related Activities

Area	Principles	Activities	Page
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights.	<ul style="list-style-type: none"> <li>Expressly states in the Daewoo E&amp;C Ethics Charter that “We uphold all international and national laws governing human rights, the environment, culture and the economy”</li> </ul>	77, 95
	2. Businesses should make sure they are not complicit in human rights abuses.	<ul style="list-style-type: none"> <li>Firm-wide sexual harassment prevention training for all employees</li> </ul>	
Labor	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	<ul style="list-style-type: none"> <li>Abide by Korean Labor Standards Act</li> <li>Operation of Labor Union and Labor-Management Council</li> </ul>	94-95
	4. Businesses should uphold the elimination of all forms of forced and compulsory labour.	<ul style="list-style-type: none"> <li>Abide by the International Labor Organization’s Convention Concerning the Prohibition and Immediate Actions Toward the Elimination of the Worst Forms of Child Labor</li> </ul>	95
	5. Businesses should uphold the effective abolition of child labour.	<ul style="list-style-type: none"> <li>Abide by Korean Labor Standards Act</li> </ul>	
	6. Businesses should uphold the elimination of discrimination in respect of employment and occupation.	<ul style="list-style-type: none"> <li>Expand employment from different regions and high school graduates</li> <li>Operation of family-friendly welfare and benefits program</li> </ul>	92-94
Environment	7. Businesses should support a precautionary approach to environmental challenges.	<ul style="list-style-type: none"> <li>Participate in MoLIT’s Greenhouse Gas and Energy Target Management Scheme (TMS) pilot for the construction industry</li> <li>Obtain and maintain firm-wide environmental management system certification</li> </ul>	61, 88-89
	8. Businesses should undertake initiatives to promote greater environmental responsibility.	<ul style="list-style-type: none"> <li>Operation of the Waste Management Company Registration System</li> <li>Environmental compliance and accident minimization</li> <li>Environment campaigns for each division, team and site</li> </ul>	62-63, 89
	9. Businesses should work against corruption in all its forms, including extortion and bribery.	<ul style="list-style-type: none"> <li>Green Premium Roadmap and zero-energy house development</li> <li>Development and utilization of eco-friendly mass concrete</li> <li>Develop CCS technology</li> <li>Develop biowaste to energy technology</li> </ul>	34-37
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.	<ul style="list-style-type: none"> <li>Ethics Help Line operation</li> <li>Employee Ethics Awareness Assessment</li> <li>Business unit ethics condition evaluation</li> <li>Publish and distribute the Ethics Management Guidebook throughout the firm</li> </ul>	77-81

# ISO 26000

Daewoo E&C has implemented the ISO 26000, the international standard for Corporate Social Responsibility (CSR), in order to further promote CSR as a Global E&C Leader and corporate citizen. ISO 26000, unlike other management certification systems, is not enforceable and is comprised of seven core subjects: organizational governance, human rights, labor practices, the environment, fair operating practices, consumer issues, and community involvement and development. Daewoo E&C will use ISO26000 as guiding principles to further strengthen sustainable management.

Core Subject	Issues	Related Activities	Page
Governance		Operation of Audit Committee and Outside Director Recommendation Committee under the Board of Directors	86-87
Human rights	Due diligence	Operate Ethics Help line, conduct employee ethics awareness assessment	78, 80
	Human rights risk situations	Ethics awareness assessment conducted for individual organizational units	80
	Avoidance of complicity	Include sustainability factors in partner company assessment, penalize unqualified partner companies	68-69
	Resolving grievances	System for receiving grievances including Ethics Help line, 'Open room,' and Online Audit Office	80, 95
	Discrimination and vulnerable groups	Female employee quota for recruitment, recruitment of talent from different regions, hold 'recruitment concert'	92
	Civil and political rights	Comply with Korea Labor Standards Act, ILO standards	95
	Economic, social and cultural rights	Operation of family-friendly programs, childbirth and parenting leave policy	93-94
	Fundamental principles and rights at work	Comply with Korea Labor Standards Act, ILO standards, conduct sexual harassment prevention training	95
Labor practices	Employment and employment relationships	Comply with Korea Labor Standards Act, ILO standards	95
	Conditions of work and social protection	Improve working conditions, family-friendly programs, conduct employee satisfaction surveys	93-94
	Social dialogue	Operation of Labor Union, Labor-Management Council, adoption of Labor-Management Concord	94-95
	Health and safety at work	Operation of Health and Safety Committee, PTW system for risky operations, and risk evaluation	44-45, 48
	Human development and training in the workplace	Provide training and education based on talent development strategy	39-40
Environment	Prevention of pollution	Abide by environmental laws, Strengthen management of Air, Water, Waste, and Asbestos, Noise & Vibration Management	62-63, 98
	Sustainable resource use	Utilization of eco-friendly mass concrete, develop groundwork techniques using industrial byproducts	34, 91
	Climate change mitigation and adaptation	Participate in the MoLIT's Greenhouse Gas and Energy Target Management Scheme (TMS) pilot for the construction industry	61
	Protection of the environment, biodiversity and restoration of natural habitats	Environmental regulation compliance and establishment of wild animal protection guidelines	63, 89
Fair operating practices	Anti-corruption	Preparing Compliance Program, operation of the Daewoo E&C 'Shinmungo' for grievance management	65-66
	Responsible political involvement	Business division membership in relevant associations and academic societies	109
	Fair competition	Adopted '4 Guidelines of Fair Trade,' held Fair Trade Compliance Resolution Conference in each division	65
	Promoting social responsibility in the value chain	Application of sustainability factors in partner company evaluation, penalize unqualified partner companies	68-69
	Respect for property rights	Adopted benefit sharing program, operation of the Daewoo E&C 'Shinmungo,' regional sub-contracting law training	66
Consumer issues	Fair marketing, factual and unbiased information and fair contractual practices	Comply with domestic and foreign laws on advertisement	98
	Protecting consumers' health and safety	Signed the Voluntary Agreement for Managing Asbestos in Buildings with the Ministry of Environment, established asbestos management process	98
	Sustainable consumption	Green building certification, established and implemented Green Premium Roadmap	35-36
	Consumer service, support, and complaint and dispute resolution	Operation of integrated call center, conduct pre-move-in quality control activities, operation of Family Garden	72, 74
	Consumer data protection and privacy	Conduct information security training for both own employees and business partners' employees	98
	Access to essential services	Sharing briquettes of love, blood drive, support for cataracts operations	28-29, 97
	Education and awareness	Operation of Housewife Quality Control Group, move-in exhibition, Family Garden	72, 74
Community involvement and development	Community involvement	Firm-wide community service relay, conduct social contribution activities in overseas sites	28-29, 42-43
	Education and culture	Participation in the Seoul Mecenat Arts Walk, operation of Green Library	75, 97
	Employment creation and skills development	Seoul City Job Day for Middle School Students event, participation in 1 Firm for 1 Barracks Movement	97
	Technology development and access	Adoption of benefits sharing program, support for construction of local soccer stadium	28-29, 66
	Wealth and income creation	Expand local hiring, comply with local labor standards in countries of operation	57
	Health	Support for cataracts operations, clean-up around sites, pest control activities	28-29
	Social investment	Support for construction of local soccer stadium, build national infrastructure such as roads and ports	28-29, 57

# Membership

Division	Division
BUILDING WORKS DIVISION	Korea Construction Value Engineering Research Institute, Korea Military Supplies Cooperative, Korean Institute of Illuminating and Electrical Installation Engineers, Korean Institute of Electrical and Electronic Material Engineers, IBS Korea, Society of Air-Conditioning and Refrigerating Engineers of Korea, Korean Association of Air Conditioning Refrigerating and Sanitary Engineers, Korean Society of Living Environment System, Korea Institute of Ecological Architecture and Environment, Korea Green Building Council, Korea Society of Geothermal Energy Engineers, Korean Institute of Electrical Engineers, Korea Institute of Construction Engineering and Management, Korean Recycled Construction Resource Institute, Korea Institute for Structural Maintenance Inspection, Korea Society of Disaster Information, Architectural Institute of Korea, Council on Tall Buildings and Urban Habitat, Korea CPTED Association, Korea Institute of Building Construction, Korean Association For Apatial Structures, Korea Institute of Healthcare Architecture, Korea Planners' Association, Korea Facility Management Association, Korean Council on Tall Building and Urban Habitat, Korean Housing Association, Korean Solar Energy Society, Korea Association of Procurement and Supply Management
CORPORATE MANAGEMENT & SERVICE DIVISION	Seoul Integrated Disaster Prevention Association, Korea Emergency Plan, Korea Construction Quality Association, Korean Society for Construction Quality, Society for Environmental Construction, Construction Safety Officer Committee, Construction Safety Manager Committee, Association of Construction Safety Manager, Korea Industrial Safety Association, Korea Nuclear Quality Association, Korea Employer Federation
PUBLIC BUSINESS DIVISION	Korea Specialty Contractors Association, Korea Information & Comm Contractors Association, Korea Electrical Contractors Association, Korea Fire Facility Association, Korea Federation of Construction Contractors, Korea Facilities Maintenance Association, Construction Association of Korea, The Construction Management Association of Korea, Construction Economy Research Institute of Korea
DICT	Korea Industrial Technology Association, Korea Construction New-Technology Association, Korea Concrete Institute, Earthquake Engineering Society of Korea, Korea Institute of Construction Technology, Korea Institute of Science and Technology Information, Architectural Institute of Japan, Information Exchange Society in The Building Center of Japan, Japan Association of Wind Energy, Japan Society of Civil Engineers, American Concrete Institute, American Society of Civil Engineers, International Federation for Structure Concrete, Building SMART Korea, Korea Organic Resource Recycling, Association, Acoustical Society of America, International Association for Bridge and Structural Engineering (IABSE)
POWER BUSINESS DIVISION	Korea Office of Offshore Wind Power, Korea Electric Association, Korea Atomic Industrial Forum, Korean Nuclear Society, Korean Radioactive Waste Society, Korea Coating Experts Society, Korea Project Management Association, Korea Nuclear Association For International Cooperation
ENGINEERING DIVISION	Korea Electric Engineers Association, Engineering Financial Cooperative, Korea Engineering and Consulting Association
PROCUREMENT & COST MANAGEMENT DIVISION	Korea International Trade Association
FINANCE DIVISION	Korea Listed Companies Association, Listed Companies CFO Forum, Korea Association For Chief Financial Officers
STRATEGIC PLANNING DIVISION	Federation of Korean Industries, Korea Chamber of Commerce and Industry, Korea Federation of Construction Contractors, Engineering Financial Cooperative, Korea-Indonesia Economic and Political Forum
HOUSING DIVISION	Korea Housing Association, Korea Remodeling Association, Korean Institute of Landscape Architecture, Korea Society of Environmental Restoration Technology, Korean Institute of Traditional Landscape Architecture, Korea Green Roof & Infrastructure Association
CIVIL PROJECT DIVISION	Korean Society of Civil Engineers, Korean Tunneling and Underground Space Association, Korean Geotechnical Society, Korea Road & Transportation Association, Korean Society of Road Engineers, Road Engineering Association of Asia & Australasia, Korea Road Forum, Korean National Committee on Large Dams, Korean Wetlands Society, Korea Water Resources Association, Korea Water and Wastewater Works Association, Korea Railway Association, Korea Ports & Harbors Association, Korean Society of Coastal and Ocean Engineers, Korean Society of Hazard Mitigation, Korea Association of Waste to Energy Technology
PLANT DIVISION	Korea Institute of Plant Engineering & Construction, Korea Gas Union, Korea Plant Industries Association (PEA Club)
OVERSEAS BUSINESS DIVISION	Korea-Middle East Association, Korea Plant Industries Association, Korea-Vietnam Friendship, International Contractors Association of Korea, Korea-Arab Society, Korea-Algeria Association
HSE-Q DIVISION	Construction Safety Organization of CEOs, Maekyung Safety & Environment Institute, Korea Industrial Safety Association, Construction Safety Manager Committee, Association of Construction OHS Manager, The Society for Environmental Construction, Korea Safety Supervisor Association, KOSHA 18001 Council

# Consolidated Subsidiary List

(As of December 2013, Unit: KRW million)

Company Name	Main Business	Total Assets
Daewoo Steel Tech Co., Ltd	Steel structure manufacture, equipment lease	84,256
Daewoo Songdo Hotel Co., Ltd	Hotel business	176,774
PRUGIO Service Co., Ltd	Construction and maintenance	8,526
Korea Infrastructure Management Co., Ltd	Storage and logistics service	4,327
Dogokdong PFV Co. Ltd	Building construction	225,656
Foodream Co. Ltd	Food and beverage industry	4,460
Busan Hi-technology Industrial Complex Development Co., Ltd	Real estate development and sales	108,619
Gangdong Project PFV Co., Ltd	Building construction	67,732
Imgo Development Co., Ltd	Sports service	-
Daewoo Energy Co., Ltd	Electricity generation	-
Daewoo America Development, Inc.	U.S. development business	5,882
Daewoo Tripoli Investment& Development Co.	Libya Tripoli hotel	180,880
THT Development Co.,Ltd	Real estate investment and development	115,536
Saipan Lualau Development, Inc.	Saipan golf resort	72,403

# About This Report

This Report is Daewoo Engineering and Construction Co., Ltd.'s (hereinafter referred to as Daewoo E&C) third corporate sustainability report since the first one was published in 2012. Publishing the sustainability report on an annual basis allows for Daewoo E&C to reflect on the sustainability of our operations, as well as transparently communicating our efforts and accomplishments to external stakeholders. Daewoo E&C, "The Warmhearted Construction that Changes the World," will continue to uphold our commitment and fulfill our duties as a corporate citizen, growing together with our stakeholders.

**Reporting Standard** Daewoo E&C's sustainability report is based on the Global Reporting Initiative (GRI) G4 Guidelines released in 2013 and Construction & Real Estate Sector Supplement. Moreover, in terms of the 'accordance' principles set forth in the G4 Guidelines, this report fulfills the 'In Accordance – Core' level of disclosure. Further details are provided in the GRI Index (pages 105–106).

**Reporting Period** This report contains key sustainability activities and achievements from January 1, 2013 to December 31, 2013. For quantitative performance data, 3 recent years were disclosed for trend analysis by year. Qualitative information from the first half of 2014 was included when deemed significant.

**Reporting Scope** This report covers all domestic and foreign sites and buildings where Daewoo E&C operates. Qualitative environmental data, however, is limited to the domestic sites and buildings in operation as of 2013 (total 284 sites, 7 buildings). Financial data is reported based on K-IFRS standards for Daewoo E&C separately.

**Assurance** To ensure accuracy and credibility of the reported content, assurance was attained from DNV GL Business Assurance Korea Ltd., a specialized, independent assurance organization. The Independent Assurance Statement is available on pages 102–103 of this report. The Assurance Report verifies that this report meets GRI G4 Guidelines 'Core' accordance level.

## Report's Key Characteristics

This corporate sustainability report faithfully addresses the core issues laid out in the GRI G4 Guidelines. The reporting process was streamlined based on a participatory materiality test process that includes internal and external stakeholders and also relevant internal staff. Issues identified in this process were used as the pillars in the Report to strengthen the materiality of disclosed information. In addition, a Progressive Matrix to reflect external factors in analyzing core issues was utilized in order to systematically disclose goals, activities and plans.

#### **Questions about the Report**

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