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Korea Rail Network Authority

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Korea Rail Network Authority

Sustainability Report 2012

2012 SUSTAINABILITY REPORT

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Rail, Hope toward Tomorrow

ABOUT THIS REPORT

Background and Purpose of Sustainability Report

This report is the fourth sustainability report released by Korea Rail Network Authority (KR), which has published sustainability reports since 2008. The report includes KR's economic, environmental, and social efforts and achievements of sustainable management. KR has been practicing socially responsible management since 2007, when it joined the UN Global Compact (UNGC), and has published a sustainability report every year from 2010. KR will continue to publish the report every year to express its will for sustainable management.

Overview of Report

The period covered by this report is from January 1, 2011 to December 31, 2011 and as for indicators significant for time-series analysis, data for three years from 2009 to 2011 is included. For economic and environmental aspects, the main headquarters and five local headquarters were surveyed and for the environmental aspect, all 264 construction sites were surveyed. The reason why the number of construction sites covered by this report decreased from 267 of 2010's report is that the number of construction sites whose data is available decreased because some construction is completed. The currency unit used in this report is Korean won (USD1=KRW 1,137 as of April 9, 2012).

Standards of Guidelines of Writing the Report

This report was written based on GRI (Global Reporting Initiative) G3.1 guidelines and the principles of UNGC and ISO 26000 guidelines were also referred. The fact is stated in the report. In addition, in order to secure the credibility of the content of this report, verification was conducted on this report by independent and objective verification authorities. The result is stated in this report.

History of KR's Sustainability Reports

Publication of the first Sustainability Report September, 2008

Rail Network

Publication of the second Sustainability Report October, 2010



Publication of the third Sustainability Report August, 2011



Further Information and Contact

For those who have any opinions or inquiries about the report, please contact the Management Strategy Department of the Result Management Group under the Planning and Innovation Office (manager Hee-hyun Yang). You can contact him through the following numbers or addresses. You can access information about KR's economic, environmental, and social efforts and achievements on KR's web-site.

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Message from the CEO



Respectable Stakeholders of KR!

••

I am very pleased to introduce to you the results of KR's activities for sustainable growth and a happier world for all, through this report.

KR's core values are sustainable management, professionalism, and mutual trust. All our employees work hard to construct of eco-friendly railways under the slogan of "low carbon green growth", based on the best capacity and expertise. We also make efforts for co-existence and cooperation with small-and-medium-sized companies, for shared growth.

We will carry out our social responsibility to the fullest through change and innovation and lead green growth by constructing eco-friendly railway.

"Sustainable management" is KR's representative core value and management principle.

Sustainable management is KR's management principle which means fulfilling responsibility with given projects for the nation and society and innovating continuously for the growth and development of the railway industry, based on fundamentals and principles. We will ceaselessly implement the plan to establish of the second national railway network, which will enable you to travel between major cities across the country within one and a half hours by 2020. Then, Koreans will be able to commute to anywhere in the country. We will also reestablish our business portfolio based on swift understanding of rapidly-changing trends in and out of the country and will suggest the direction for the development of the rail industry through concentrating our capacity on promising business areas such as high-speed railways, transformation of conventional railways into high-speed railways, and overseas railway projects. KR will serve the public and secure profitability at the same time through dramatically reduced costs based on efficient construction plans, appropriate design, design VE, and 6-sigma innovation, and through creating new profits on the basis of active implementation of efficient development and use of railway properties, development of station influence areas, and overseas railway construction projects.

KR is leading the construction of eco-friendly railways and green growth with its "professionalism"

KR is continuing to build capacity for its standards and procedures to be the world's standards and accumulating new knowledge and technology based on creativity and innovation. It has also actively pursued eco-friendly design with by conducting a thorough environmental impact assessment from the phase of design, based on expanding of the concept of eco-friendly railways to include Life-Cycle. Plus, KR has been making efforts to reduce green house gas emissions to respond to climate change while creating green profit models, through the calculation of carbon footprints on railway material and construction equipment, establishment of a green house gas inventory, implementation of the Honam High-Speed Railway CDM (Clean Development Mechanism) project, and expansion of the application of clean and renewable energy. In addition, it has put efforts in the improvement of areas near railways through measuring and managing noise and vibrations of running trains and has been enhancing environment management through environmental impact assessments even after the completion of railways. KR also takes lead in the construction of eco-friendly railways and green growth, for example, it has made shut-down railways areas and facilities into bicycle lanes, eco-forests, and eco-trails, returning them to local communities.

Based on "mutual trust", KR has been fulfilling customer satisfaction and social responsibility.

KR has been transparently disclosing management information to serve customers' right to know, through a variety of channels for posting, including the web-site, news letter, and twitter. It puts top priority on customers' opinions in executives' decision-making process, with its customer management system (Sorisaem), the first-ever patented customer management system among public institutions. It also established an SME support center to build cooperative partnerships with affiliate companies, including development of new products with guaranteed purchase by KR, technological support, and joint launch of overseas projects, and has been leading the materialization of a fair society, making efforts to prevent unfair contracts between general contractors and subcontractors and delay of payment, as an ordering body. KR has also been sincerely performing its responsibility and role as a social public enterprise, such as contribution to job creation in the private sector and revitalization of the national economy, through early execution of payment and continuous expansion of investment in railways.

KR will always be with you as a global partner and leader of sustainable management, for the realization of a safe and comfortable world made by railways. Thank you very much.

Korea Rail Network Authority Chairman & CEO Kwang Jae Kim

2011 Highlights

1/

Declaration of 2020 Global Management Strategy



KR reestablished its business portfolio on December 1, 2011 and mapped out and declared "2020 Global Management Strategy", to successfully respond to the rapidly-changing business environment and lead sustainable management. KR's new global vision is "realization of railway powerhouse based on establishment of railways which can connect any place across the country within 90 minutes of travel", and, KR has set four strategic goals and 18 strategic tasks and been making company-wide efforts to fulfill the goals.

2/

Expansion of the Green Railway Network



In 2011, KR successfully carried out construction projects of Gyeongbu High-Speed Rail, inter-city railways in Daejeon and Daegu Metropolitan cities, and high-speed railways in the metropolitan area and Jeolla provinces, as part of its efforts to achieve the goal of a nation-wide railway network that connects any area within 90 minutes of travel time. It also succeeded in opening a total of five railway lines on time, including the opening of a double track electric-powered railway on the Jeolla line. KR will continue to provide convenient transportation to the public through expansion of the green railway network and lead development of local economies and low carbon green growth.



Full-Fledged Penetration into the Global Market



KR's challenge to the world! KR has expanded the areas of orders received from overseas to railway design projects and project management of countries in Southeast Asia, Africa, and South America, which had been concentrated on supervision and consultation of China's high-speed railway. KR has laid the foundation for diversification of overseas business with seven contracts from six countries and based on that, it has been strengthening its global prestige.



Economical Construction of Railways and Attainment of Financial Soundness



KR has established a comprehensive plan of financial management for resolution of construction debt which is caused by KR's high ratio of independent funding for railway construction projects, which amounts to 50-60%. In addition, operation of a team in charge of KR's financial structure has helped KR to secure financial soundness based on reasonable planning which takes users' demand into account, economical design, aggressive asset development, and efficient financial management.



Achievement of the Lowest Accident Rate



KR has strengthened its responsibility through restructuring local organizations in charge of quality and safety into a general department for construction, to thoroughly brace itself for accidents. In addition, the number of levels of management of areas vulnerable to accidents was simplified from nine to three. The cycle of inspection for different levels was adjusted and an organization exclusively in charge of accident inspection has been operated. Such an enhanced quality and safety management system has enabled KR to achieve the lowest accident rate at 0.142, about one fifth of the average of domestic construction companies at 0.7.



Construction of Green Railway which Considering the Ecosystem



KR has been making efforts to return shut-down railway sites and areas to nature and local communities, through ecosystem restoration projects. In 2011, it succeeded in creating a comfortable resting place for local communities with completion of projects which restored the ecosystem in the areas near the closed-down Gyeongchun line and built bicycle lanes along the closed Jungang line. KR will keep focusing on constructing of eco-friendly railways and projects for restoring of the ecosystem.



The Second Foundation and Enforcement of Organizational Reform



KR declared the second foundation on November 2, 2011, to lead the changing global trend, expansion of the transportation network, with a focus on railway and green growth. On the day, KR reaffirmed its will to be the leader of the 21st century railway Renaissance, with concentration of its capacity according to the CEO's six management principles, "efficient construction planning which takes demand into account, economical design without excessive facilities, safe construction without accidents, attainment of financial soundness through creating profits, improvement of fundamentals based on creativity and innovation, and shared growth with partners on the basis of transparency and trust".



Awarded as the Best Supporter for SMEs



KR has been leading the Korean government's drive for a fair society, through actively resolving SMEs' difficulties with operation of head-quarters-run SME support centers that cover all the project sites, and implementing the joint contracting system in cooperation with main contractors to increase opportunities for SMEs to participate in rail-way construction businesses. KR was awarded as the best supporting organization for SMEs in recognition of its efforts, by the Ministry of Knowledge Economy and the Shared Growth Committee.

Korea Rail Network Authority

KR Overview

Company Overview

As of December 31, 2011

	, ,
Name of Institution	Korea Rail Network Authority
Date of Foundation	January 7, 2004
Chairman & CEO	Kwang Jae Kim
Formation	Quasi-Government Agency (no change since founding)
Current State of Budget	8.3227 trillion won
Government Investment	3.5126 trillion won
Number of Employees	1,396

Maior History

Major Histor	У
July 2003	Proclamation of Framework Act on the Development of Railway Industry and Korea Rail Network Authority Act
January 2004	Establishment of KR
April 2004	Opening of the 1st phase segment of the Gyeongbu High Speed Railway (from Seoul to Daegu)
June 2005	Winning Chinese railway contract for the first time
December 2006	Opening of subway for the whole segment of the Gyeongbu line (from Suwon to Cheonan)
May 2007	Test-run of train on the connecting segment of the Trans-Korean railway
May 2009	Groundbreaking of the Honam high speed railway
August 2010	Beginning of construction of test lines for magnetic levitation railway
November 2010	Opening of the 2nd phase segment of the Gyeongbu high speed railway (from Seoul to Busan)
August 2011	Appointment of the 4th CEO
October 2011	Opening of electrified double track railway on the Jeolla line (from Iksan to Yeosu)
November 2011	Declaration of the 2nd foundation
December 2011	Proclamation of 2020 Global Management Strategy

Introduction of KR

KR was established in January 2004, according to the Framework Act on the Development of Railway Industry (No. 9772) and Korea Rail Network Authority Act (No. 9391). From the very beginning, KR has been sincerely fulfilling the purpose of its foundation – promotion of Korean public's convenient use of transportation and healthy development of the national economy, through efficient implementation of construction and management of railway facilities and all related projects.

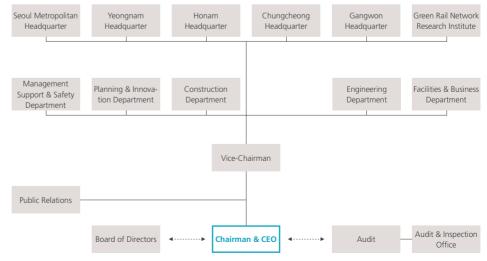
Right after KR's foundation in 2004, it successfully opened the first phase segment of the Gyeongbu high speed railway and in 2005, it started to enter overseas markets by winning a contract of supervision in China's railway construction. In 2009, KR broke ground for the construction of the Honam line of high speed railways and in 2010, it opened the second phase segment of the Gyeongbu line, to succeed in making the whole segment of the Gyeongbu line into high-speed and electrified railways. In response to rapidly-changing trends in the global railway market, in 2011, KR reestablished its business portfolio focusing on highly promising businesses, such as high speed railways construction and overseas projects. KR also declared the second foundation and 2020 Global Management Strategy and has finished preparation to lead the world, going beyond Korea.

				2011
2004 Opening of the 1st phase segment of the Gyeongbu line	Entry into overseas market Winning a contract for supervision of China's railway	2009 Starting the construction of the Honam high speed railways	Successfully making the whole segment of the Gyeongbu line into high-speed and electric-powered railways Opening of the 2nd phase segment of the Gyeongbu line	Declaration of 2020 Global Management Strategy The 2nd Foundation

Organizational Structure

KR is composed of the headquarters (4 head offices, 3 departments), affiliated institutions (5 local head offices), and secondary institution (1 research institute). The headquarters and secondary institutions are located in Daejeon and affiliated institutions are distributed to Seoul, Busan, Suncheon, Daejeon, and Wonju. Meanwhile, a Chinese branch office (Facility & Businesses Department) manages the ongoing supervision service and carries out strategic activities to win more contracts. KR conducted the restructuring of the organization in November 2011, to enhance the efficiency of management, according to three principles – small but strong organization, innovative organization for creating of future values, and competitive and technologically professional organization.

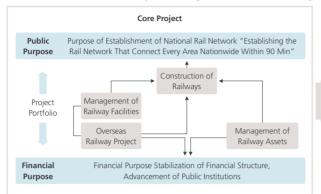
Organizational Structure

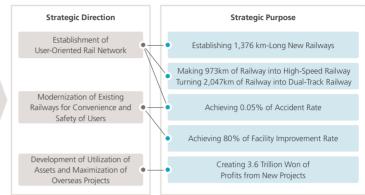


Major Projects

KR set 2020 Global Management Strategy in 2011 and has been strengthening the competitiveness of Korea's rail industry based on a renewed business portfolio focusing on four highly promising core businesses, to actively respond to the changing environment of the rail industry.

Connection between Core Project, Strategic Direction, and Strategic Purpose





Major Projects and Results

Overseas

Railway

Business

Introduction

Major results

Content

In 2011, KR produced results from its four core businesses, construction of railways (domestic railways), management of railway facilities (improvement of facilities and maintenance), railways asset management (development of railway assets and station influence areas), and overseas railway projects (construction of foreign railways), which fulfill the purpose of KR's foundation.

Construction of Railways	Introduction Content	A project for expansion of railways with construction of high-speed and conventional railways, based on the plan for establishment of the national rail network Establishment of national rail network, connecting to trans-Korea railways and inter-continental railways, establishment of logistics rail network, construction of light-weight electric-powered railways	224 → 374 16
	Major results	Opening of five railways lines on time, including the double-track electrified railways for the Jeolla line, groundbreaking for the Metropolitan high speed railways, and introducing high-speed railways to main railways including the Gyeongchun line	TANARAM ME
Management of Railway	Introduction	A project for maintenance of railway facilities and improvement of railway performance, for the purpose of operation and safety of railways	
Facilities	Content	Improvement of facilities for conventional railways, maintenance of high-speed/conventional/special-purpose railways	
	Major results	Conduct of assessment of anti-earthquake performance on 264 places, building three-dimensional cross-walks, installing screen doors in four places and noise barriers in 16 places.	
Management of Railways	Introduction	A project for management of assets through rental and sale of state-owned assets and for creation of profits through development of station-influence areas	lm.
Assets	Content	Development of railway assets, development of station influence areas, utilization of unused land along railway, and development and utilization of land with shut-down railways	
	Major results	Creation of 7.2 billion won of profits from utilization of railway assets, 6% increase year on year, through active management of assets, including development of land with the shut-down the Gyeongchun line, groundbreaking of the Gwangmyeong Station development project, selection as the supervisor of the Seogang/Gongdeok Stations development project	

A project for winning overseas contracts based on domestic capacity of railway construction

construction (EPC), and share investment

the U.S., based on a consortium with SMEs

Design, supervision, technological support, Project management (PM), engineering, procurement, and

Winning seven contracts of foreign railway projects including actual design contract in Nepal, project management and consulting contract in Paraguay, and seeking opportunities for contracts with Brazil and



Korea Rail Network Authority

2020 Global **Management Strategy** for Sustainable **Management**

Workshop for Executives



Declaration Ceremony of Vision and Strategy



Briefing of Vision and Strategy to **Employees**



Education of Core Values



KR 2020 Global Management Strategy

KR established and proclaimed 2020 Global Management Strategy in December 2011, reflecting changes in the world railway market, including the decision of the establishment of the second railways network to connect any places in Korea within 90 minutes of travel, pursuit of 100% localization of core technologies of high speed railway, change in transportation policy with railway as the main pillar, and growth of the world railway industry centered around turning conventional railway into high speed rail. The new management strategy which includes 2020 global vision, four strategic goals, and 18 strategic tasks was established by the CEO's leadership and active participation of all employees and was shared company-wide through briefings to all employees and

2020 Vision System Map

Vision	Realizing Rail Powerhouse through Establishment of Railway Network Connecting Any Places in Korea within 90 minutes of Travel				
Core Values	Sustainable Management		Professiona	llism	Mutual Trust
CEO's Six	01. Efficient Construction Planning Ta Actual Operation into Account				nomical Design without Excessive illities
Management	02. Accident-Free Safe Construction	<u> </u>	Second 05. Se		curing Financial Soundness through eation of Profit
Principles	03. Improving Fundamentals through Creativity and Innovation		Forward		ared Growth Based on Integrity d Trust
Strategic Goals	·Building 1,376km-long New Railways	5	into Dual	73km-long Ra Track Rail, 80'	ilways into High-Speed Rail, 2,047 % of Improvement Rate on of Profits from New Projects
Strategic Direction	Establishing Rail Network for Passengers		zing Existing engers' Conv and Safety		Developing Asset Management and Maximizin Opportunity for Entry into Global Market
	Establishing Convenient and Safe Railways		Making Existing Railways into High-Speed and Dual-Track Rail Improving Decrepit, Accident- Prone, and Unsafe Facilities Maximizing Return on Investment in Railway Construction		Making Profits from State- Owned Assets
Strategic Task Projects	Efficient Investment through Appropriate Design and Construction				Diversifying Development Proje of Station Influence Areas
	Systematic Management of Quality, Safety, Construction, and Environment				Pursuing Competitive Oversea Business
	Moving Hearts of Customers, Going Beyond Customer Satisfaction		Establishing Labor-Management Relation Based on Co-Existence and Trust		Strategic Financial Management for Reduction of Debt
Strategic Task Function	Securing World-Class Railway Technology Capacity	Advancing Information Service Based on IT Achieving High Transparency, from Low Grade of Integrity		n Service	Enhancing Creativity, Innovatio and Management Support
	Nurturing Leaders of Rail Industry				Fulfilling the Best Social Respon

Internalization of Core Values

KR connected three core values, sustainable management (national level), mutual trust (customer level), and professionalism (company level) to the CEO's three management philosophies in 2011 and expanded application of the core values company-wide, suggesting six management principles. From 2011 to 2012, KR has conducted education of the core values to all employees, as a compulsory course for promotion and as a result, the core values set the standards of working and played the role of catalyst for implementation of strategies.

Map of Connection between Purpose of Foundation, Core Values, and Management Philosophy



Change in Railway-Related Indicators

Note	2011	2020
Total Length(km)	3,571	4,934
Rate of Duoble Track(%)	52.4	79.1
Electrified Rate(%)	66.4	85.0

•

Change in Share of Rail Transportation

Unit: %

2008		
	Rail	Road
	15.9 ▶ 27.3	81.4 ▶ 69.3
2020	Marine Transport	Air Transport
	Marine Transport : 0.2 ▶ 0.2	Air Transport : 2.5 ▶ 3.2

•

Economic Benefits Unit: 100 million won / year

45 338	Benefit from Reduced Travel Time	ŀ
45,550	Time	

Benefit produced by reduced time of travel

14,715 Benefit from Reduced Cost of Driving

Benefit produced by saving cost of oil and depreciation expenses

2,045 Benefit from Reduced Cost of

Benefit produced by reduced number of death toll and casualties

6,217 Benefit from Reduced Environmental Costs

Benefit from reduced amount of air pollutant emission

68,315 Total

Trillion Won

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Economic Benefits for Local Economies

	Construction Phase
About 233 Trillion Won	Production Inducement Effect
About 1.98 Million People	Job Creation Effect
About 35 Trillion Won	Wage Inducement Effect
	Operation Phase
About 91	GRDP Expansion Effect

Blueprint for 2020 Global Management Strategy

KR does its best to realize of "fast, safe, and convenient railways", the basic mission given by the public. When 2020 Global Management Strategy is fulfilled, major cities across the country will be connected into one metropolitan region, where any place in the region can be accessed within 90 minutes of travel.

By 2020, major cities of metropolitan economic blocs will be connected through a green rail network and a transportation and logistics system centered on railway will be established. With the foundation for low carbon green growth put into place, 7.774 tons of green house gas emissions from transportation will be reduced annually and 2.59 TOE tons of energy will be saved annually. In addition, by 2020, balanced growth between regions will be promoted based on the connection of major cities around the country within 90 minutes of travel, which will be enabled by opening of the Gyeongbu, Honam, and Metropolitan high speed railway lines and introduction of high-speed trains to conventional railways.

		2010	2020
Economic Bloc of	Benefited Population	60%	83%
90 Minutes Travel	Benefited Area	30%	76%
Economic Bloc of	Benefited Population	74%	96%
2 Hours Travel	Benefited Area	55%	90%

2011-2020 Plan for Establishment of National Rail Network



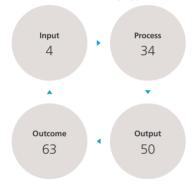
Comprehensive Results Management System



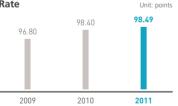
Current Status KPI by Points

Customer	34	Activities	68
Result	34	Growth	15

Current Status of KPI by Types



Company-Wide KPI Achievement Rate Unit:



Organizational System for Sustainable Management

KR's sustainable management is controlled by Management & Strategy Team of Performance Management Division under Planning and Innovation Headquarter and multidirectional efforts are made in order to accomplish economic, environmental, and social responsibilities by each department including construction planning, quality and safety management, and management supporting departments.

Practice System for Sustainable Management

KR has effectively carried out sustainable management through establishment of a system for implementation of management strategies and operation of the results management system and been spreading consensus on sustainable management in and out of the company, through customized education for employees with different charges, seminars and workshops, and application for relevant awards. KR will continue to reestablish the business portfolio and upgrade the operation system of management strategies for sustainable growth, actively responding to the changing environment.

Results Management of Sustainable Management

KR set practical tasks for measuring economic, environmental, and social results and key performance Index (KPI) in the process of establishing 2020 Global Management Strategy and has been monitoring the results in real time through a comprehensive results management system. The results are sent to the department in charge of the monitoring and used for internal evaluation of different departments.

The number of KPI implemented in 2011 is 151, 20 more than the number of 2010. At the beginning of every year, KR analyzes the results of the prior year and excludes indexes that already reached the goal or have insignificant meaning currently. Then, it newly reflects economic, environmental, and social issues to set the KPI for the year. The company-wide KPI fulfillment rate in 2011 was 98.39, 0.09 increase compared to the previous year, which shows that KR is sustainably growing. KR will continue to carry out sustainable management and to realize the global vision by 2020.

Achievement Rate by Major Index

Area	Result Index	Unit	2011 Goal	2011 Results	Achievement Rate	2012 Goal
	Length of New Railway	Km	13	13	100%	27
	Saving of Budget	100 million won	4,386	5,299	120.8%	5,347
Economy	Accident Rate at Construction Sites	%	0.128	0.142	90.1%	0.110
	Profits from Utilization and Development of Railway Assets	100 million won	791	733	92.7%	796
	Environment Management Index	Points	110.4	113.1	102.4%	118.1
	Green House Gas Reduction Rate	%	1.0	5.8	580.0%	10
Environment	Number of Environment Regulation Violation	Number	0	0	100%	0
	Construction Waste Recycling Rate	%	93.44	95.60	102.3%	96.47
	Customer Satisfaction	Points	93.89	95.40	101.6%	95.86
C	National Transparency	Points	8.50	8.81	103.6%	9.2
Society	Employee Satisfaction	Points	77.28	73.70	95.4%	77.78
	Rate of Securing Core Talents	%	31.5	31.5	100%	33

Korea Rail Network Authority

Advancement of Governance

The Board of Directors



Person in Charge of Executive Appointment

CEO	President
Auditor	President
Executive Board Member	CEO
Non-Executive Board Member	Minister of Land, Transport and Maritime Affairs

CEO Evaluation Categories

	-
Sense of Ethics	Suggestion of Goal & Direction
Service Mind for Customers	Strategic Way of Thinking
Professionalism	Management of Asset and Organization
Business Mind	Ability to Carry out Policies
Recognition and Understanding of Problems	Ability to Adjust and Integrate

Current Status of the Board of Directors

KR operates an advanced board of directors to secure transparency in management. The board is composed of the best experts, for maximization of management results and the appointment process is carried out very fairly.

Composition of the Board

As of March 2012, KR's board of directors consists of six executive members (excluding one executive auditor) and seven non-executive members. All of them are experts in transportation, finance, construction, policy, law, management and quality and they have been efficiently leading management of KR.

Current Status of Board Members

Category	Name	Role in the Board (Expertise)	Major Career	
	Kwang Jae Kim(M)	CEO & Head of Board	Deputy Minister for Aviation Policy and Director General for Transportation Policy at Ministry of Land, Transport, and Maritime Affairs	
	Byung-soo Oh(M)	Vice-Chairman	Executive Director of Construction Office, KR	
Executive Board	Young-woo Kim(M)	Executive Director of Planning & Innovation Headquarter	Director of Planning & Adjustment Office, KR	
Members	Young-kook Kim(M)	Executive Director of Construction Headquarter	Executive Director of Seoul Metropolitan Headquarter, KR	
	Kang-youn Choe(M)	Executive Director of Engineering Headquarter	Head of Test and Certification Center, Korea Railway Research Institute	
	Geun-sik Kang(M)	Executive Director of Facility & Business Headquarter	Director of Planning & Adjustment Office, KR	
	Seog-am Lee(M)	Finances	Leader of High Speed Railway Planning Team, Ministry of Construction and Transport	
	Bang-seung Yang(M)	Law	Member of Research Committee, Law & Policy Research Institute	
Non-Executive Board Members	Gye-geun Cho(M)	Management	Vice Research Commissioner, Korea Economic Research Institute	
	Gwang-mun Han(M)	Quality	Director, Defense Agency for Technology & Quality	
	Gwang-seo Park(M)	Traffic	Auditor, Korea Housing Guarantee	
	Man-hyung Huh(M)	Policy	Professer, Chung Ang University	
	Taek-gwan Lee(M)	Environment & Safety	Auditor, Korea Environment Corporation	

Appointment of Board Members

KR has a fair executive appointment committee in place for appointing the best executives. The members of the appointment committee are selected among non-executive board members, non-governmental commissioners, governmental commissioners through resolution of the board. The committee set evaluation criteria for executive nominees and conducts document screening and in-depth interviews on nominees selected through open recruitment. Final nominees are recommended by the committee to the person with authority for appointment and the person selects the best nominee as the member of the appointment committee. In 2011, the best transport expert was appointed as CEO through this process and experts in different fields, who can effectively suggest management policies were appointed as non-executive board members.

Recommendation Process for Executive Nominees

Setting a Plan for Operation of the Appointment Committee
Selecting appropriate evaluation criteria from total 19 requirements for duty performance

Open Recruitment

-Announcement on newspaper and websites of KR., Ministry of Land, Transport, and Maritime Affairs, Ministry of Strategy and Finance, and Ministry of Public Administration and Security

Document Screening
-Conducting document screening for each category of requirements

In-depth Interview
-Conducting in-depth interview for 30 minutes per nominee

KR Overview

Five Major Management Information Provided by the Board

Human Resources Affairs

Current status of different positions years of service, age, etc.

Financial Affairs

A variety of financial indicators including asset and debt

Budget

Amount of asset allocation and execution

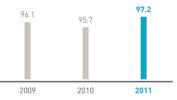
Construction

Process, total cost, interface

Asset

Profit from fees, records of land purchase, etc.

Grade of Activities by Non-Executive Board Members Unit: points



System of Evaluation on Executive **Board Members**

Leadership 50%

Leadership evaluation, customer indicators, ethical indicators, creativity & innovation indicators

Achievement 50%

Contribution to government's management evaluation, contribution to achievement of management strategy, achievement of duty performance

Operation of the Board

KR performs the deliberation function, one of the duties for the board of directors, with thorough briefing in advance and offering of management information. In particular, it has been strengthening the board's independence and responsible management through expanding non-executive board members' participation in management and maximizing the utilization of expertise.

Advancement of Operation of the Board

KR holds preliminary briefings for non-executive board members a week before the opening of regular board meeting and reflects their opinions on decision-making. In 2011, seven briefings for non-executive board members were held, resulting in three revisions of bills, ten policy suggestions, 214 requests for explanation, and ten provisions of additional information. In addition, to support non-executive board members' participation in management, an exclusive website for them was established and five major management information is offered any time. To promote non-executive board members' participation in management, KR monitors their participation index and the index recorded 97.2 points in 2011, 1.5 point increase from that of the previous year. According to the Act on Operation of Public Institutions, the CEO of KR signed a contract for performance-based pay with executive board members and paid different bonuses according to their achievement and pays service allowance and allowance for participation in board meeting to non-executive board members.

Result Indicators of the board

Result Indicator	Unit	2009	2010	2011
Number of Board Meetings	Number	16	14	11
Items on Agenda for Board Meetings	Number	68	57	32
Ratio of Preliminary Deliberation	%	100	100	100
Ratio of Revised Agenda for Resolution	%	10.3	7.0	9.4
Participation Rate for Board Meetings	%	95.6	90.3	95.7
Participation Rate of Non-executive Board Members	%	95.8	95.3	92.9
Ratio of Non-executive Members' Remarks	%	48.2	39.9	44.6
Management Consultation of Non-executive Members	Number	15	18	18
Management Suggestions by Non-executive Members	Number	68	68	89
Number of Reflection of Non-executive Members' Opinions	Number	37	39	42

Utilization of Non-Executive Board Members' Expertise and **Operation of the Communication Channel**

KR has been creating the best management results through operation of the management committee that utilizes the expertise of non-executive board members. They exert their expertise by participating in seven management committees including the conflict management committee and financial risk management committee and play the role of enhancing the achievement of the management committee. In addition, to promote reflection of employees' opinions and suggestions on the board and management committees, a variety of communication channels including a chat room with CEO, workshop for all employees, and labor-management consultation have been strengthened.

Seven Management Committees

Management Committee	Operation Indicators		
Executive Appointment Committee	Recommending CEO & non-executive board members		
Conflict Management Committee	Suggesting ways to resolve conflicts and succeeded in resolving five conflicts		
Financial Risk Management Committee	Reaching three resolutions including plan to issue annual railway facility bond		
Auditor Appointment Committee	Reaching resolution for plan to select outside auditors		
Internal Evaluation Committee	Deliberating internal evaluation on 36 departments		
Customer Value Committee	Assessment of CS management and suggesting recommendations for improvement		
Budget & Bonus Screening Committee	Saving expenses budget and deliberating increase amount of import		

Korea Rail Network Authority

Ethical Management

Naming for Ethical Management (Shinbaram – meaning excitement, shin(信) means trust in Chinese character)

信바람



creating a trustworthy company for the public and an exciting workplace for employees with ethical management

System of Ethics Norms



3C Views and PDCA Views of Ethical management

3C	Code of conduct Compliance check organization Consensus by ethics education
PDCA	1. Plan 2. Do 3. Check 4. Action

Ethical Management Contain



Shinbaram Ethical Management

KR will be a public institution trusted and beloved by the public by strictly practicing ethical management. In 2011, KR effectively operated the ethical management system and succeeded in raising its rating by 39 levels in the transparency evaluation by the Anti-Corruption and Civil Rights Commission. Because of the characteristics of construction projects, which are usually causing inconvenience to the public and complaints, KR's transparency rating had been among the lowest in the past. However, thanks to KR's efforts for ethical management, it could be able to take mid-to-high place in the transparency ranking for the first time since its foundation.

Implementation System of Ethical Management

KR gave the name "Shinbaram" to its ethical management in 2011 and established the ethical management strategy system based on the CEO's strong drive for ethical management. Under the vision of ethical management, "realization of Shinbaram KR which is transparent, clean, and trusted by the public", KR set mid-and-long-term strategies for ethical management and established a core strategy with 3C views.

Operation of the Effective Ethical Management Strategy System

For effective implementation of the core strategies, KR has been operating the ethical management system with PDCA points. At the beginning of every year, the whole company and each department establish plans to carry out ethical management and the plans are actually implemented company-wide. The department in charge of ethical management utilizes the ethical management system to evaluate each department's ethical activities in real time and gives feedback to them. Departments with good ethical management performances are given awards and departments with poor performances are given integrity mentoring trainings.

System of Ethical Management Operation



2011 Goal 8.50 Points on the Anti-Corruption and Civil Rights Commission's Transparency Evaluation **Establishment of** Improvement of Monitoring and **Core Strategy Settlement of Trans-**Rewarding for **Ethics Norms and** Areas Vulnerable to with 3C Views **Parent Culture** Achievements Infrastructure Corruption PDCA Operation System for ·Establishing company-wide ethical management Establishing ethics norms and organization in Implementation of implementation plan charge of their implementation **Core Strategies** ·Establishing ethical management Improving systems in areas prone to corruption implementation plans for different departments Waging Integrity education and campaign ·Creating a handbook for management of results

Action

-Sharing achievements of ethical management and giving feedbacks
-Connecting internal evaluation of ethics activities and rewarding
-Carrying out mentoring education for departments with poor record

Check

-Self-assessment and evaluation of integrity -Holding monthly integrity risk management meeting -Always monitoring the ethical management system

Integrity Education on Affiliate Companies



Integrity Campaign

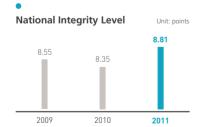


Integrity Ombudsman

Jun-hyeon Jeong
Dankook University(Law)
Beom-su Jang
Korea Infrastructure Safety & Technolog Corporation(Civil Engineering)
Gyeong-bok Kim
Ilsin Accounting Company(Accounting
Woo-je Kim

Seoul National University of Science &

Technology(System)



Results of the Implementation of Ethical Management

KR has continuously revised ethics norms, efficiently reorganized organization in charge of ethics, and advanced infrastructure for implementation of ethical management. In addition, KR has created better results than last year, with a variety of activities for ethical management including integrity ombudsman.

Modification of the Ethical Management Infrastructure

KR has been continuously improving ethics norms, including revision of ethics norms, rules for operation of personnel rules, guidelines on dealing with public interest disclosure, and guidelines on corruption and criminal reporting. In particular, KR heads off corruption cases by strengthening the criteria of the amount of bribery subject to disciplinary measures from one million won to 100,000 won. Plus, to effectively secure implementation capacity and results of ethical management, ethical management activities are reflected on internal department evaluation and tasks of planning for ethical management and improvement of related systems were transferred from integrity supervision department under the audit office to the innovation/ethics team of Performance Management Division under Planning & Innovation Headquarter.

Activities to Settle Ethical Management

KR introduced compulsory integrity education program to raise the sense of ethics and 98% of all employees completed the on-line integrity education program. High-ranking official with positions higher than director completed an additional five hours of integrity education per person. A variety of company-wide ethics activities were carried out, including asset registration of high-ranking officials, mentoring departments with poor ethics activities records, integrity education for affiliate companies, integrity lingo service, and integrity campaign during corruption-plagued periods. In addition, KR has been complying with the Political Funds Act which bans offering political funds under the name of a corporation. In particular, KR introduced the one-strike-out system based on its firm will to implement ethical management and under the system, KR disciplined seven employees engaged in corruption cases (1 reprimand, 2 pay cuts, 1 suspension, 2 dismissal, and 1 expulsion).

Company-Wide Integrity Campaign



Operation of the Integrity Ombudsman

KR has been making efforts to improve unreasonable systems and practices from the perspective of the public, through successful operation of the integrity ombudsman system since 2007. In 2011, the integrity ombudsman carried out 14 regular activities and two on-site activities and contributed to the raised anti-corruption index of KR to 9.42, 1.16 point increase compared to the previous year, through suggestion for improvement in land-related areas and observation of deliberation of designs applying to win the bid for dual-track electric-powered railway on the Seohae line, for which the level of corruption risk increased.

Results of the Implementation of Ethical Management

KR checks its various ethical management activities through the integrity risk management commission presided over by the audit and the ethical management system and swiftly establishes improvement measures based on analysis of weaknesses. In addition, the reward for employees with excellent integrity activities records was expanded and the casebook of good examples was published and shared company-wide. As a result, in the 2011 integrity survey, KR recorded 8.81 points, 0.46 point increase from the previous year, and 39 levels higher ranking year on year.

Index of Audit Office's Performance



Audit Activities and Point of Result Evaluation

Point	Evaluation indicators
Input	Involved personnel and period compared to annual plan
Process	Common law, completion rate of plans, audit ethics
Output	Personnel measures, corrected amounts, number of system improvement

e-Audit System



Internal Audit System

KR established the audit office under control of the audit and monitors in vulnerable areas through the e-audit system, to strengthen internal checks. Based on these efforts, KR has been enhancing its ethics and transparency and practicing responsible management.

Improvement of the Operating System of Audit

In 2011, the audit laid the foundation for systematic implementation of internal audit activities, with overhaul of rules related to audit activities including operation rules of audit standards, guidelines on audit work processing, and guidelines on corruption reporting and criminal reporting. In addition, for raised effectiveness of audit results, KR established an independent result management system to assess the result of audit activities based on calculation of input-process-output-result.

Strategic Audit Activities

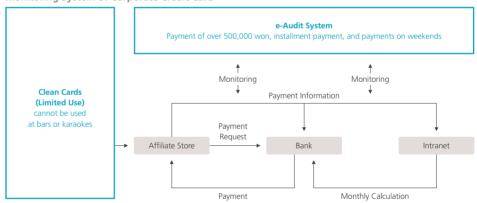
The audit office analyzes 20 types of risk into five-level vulnerability classes and selects priorities on risk factor, which are reflected on annual audit plans. That is, six highly influential and risky areas – construction management, contract management, personnel organization, pay and benefits, design management, and asset – are managed in priority every year.

The office heads off corruption factors through conducting corruption influence assessment when internal rules are established or revised. In 2011, the office gave suggestions on 41% of all the rules in 2011, achieving "excellent" grade in the anti-corruption measure, evaluation of the Anti-Corruption and Civil Rights Commission.

It also carries out audit activities for improving management, saving a total of 126 billion won, including 5.20 billion won in the comprehensive audit and 6.7 billion won in the general audit. It improved 11 systems as well, including conditions of payment to materials and equipment companies.

Furthermore, the office monitors the use of company credit cards through the e-audit system. It prevents unaudited payment over 500,000 won, installment payments, payments made on weekends and payments irrelevant with company duties. The office also strengthened the system for transparent use of company cards, through improvement of the audit system which requires input of the other party's company in the case of entertainment for customers.

Monitoring System of Corporate Credit Card



Share of Audit Result and Giving Feedback

The audit office shares the results of the audit through releasing the whole document of the internal audit on the intranet and publishing and distributing an audit casebook. In particular, the office checks the execution of audit results, through thoroughly reviewing the improvement of practices that are pointed out in the internal audit and outside audit. Plus, the office pursues audit of achievement to improve tasks, going beyond the simple audit that focuses on comments. To this end, the office awards good examples found out in internal audits.

Korea Rail Network Authority Participation of Stakeholders

Process of Participation of Stakeholders

KR has been developing sustainable management based on communication with all stakeholders. The meaning of stakeholder is clearly defined and the gap between different understandings is being narrowed through various participatory activities and active communication.

Step 1

Establishing Stakeholders and Communication Channels

Identifying stakeholders
Defining major stakeholders
Defining communication channels
for different stakeholders

Step 2 Research on Stakeholders

Direct communication (Face-to-face, Non-face-to-face) Indirect communication (Media research, Benchmarking, Criteria survey)

Step 3 Drawing out Sustainability Issues

Internal perspective (Level of importance of project, level of urgency, level of influence) -External perspective (Level of influence, level of satisfaction, expectations)

Stakeholder and Participation Channel

KR categorizes stakeholders into four major customers, in line with trends of the value of railways and carries out strategic sharing activities based on utilization of communication channels which take characteristics of each stakeholder into account. KR realizes management activities participated by stakeholders, based on active communication with stakeholders.

Classification of Stakeholders and Participation Channel

Classification	Value Influencing Customer	Value Producing Customer	Value Conveying Customer	Value Purchasing Customer
Definition of Customer	·Central government, experts, media ·Local governments, local residents	·Employees ·Affiliate companies	·KORAIL	·Ordering customers in and out of the country
Value Given by KR	Expansion of rail network, budget execution Adjustment of rail network, opening on time	·Satisfaction, reward, sense Oof mission ·Transparency, co-existence and cooperation	·Construction of high-quality railways	·Provision of railway service ·Fulfillment of social responsibility
Value Given to KR	Expansion of investment in railways ·Various licensing and approval	·Capacity, mutual support ·Enhancement of competitiveness	·Maintaining cooperative relations	·Creation of profits ·Raising brand value of rail
Major Communica- tion Channels	Policy discussion Briefing for local residents, public hearing for local residents	·Intranet, workshop ·Electronic procurement system, shared growth council	·Railway policy adjustment council, working-level council	Posting of management information, sorisam Website, blog

Major Off-line Councils



Conflict Management Committee

nt

FunctionParticipantsEffect

Resolving social conflicts caused in the railway construction projects

Value influencing customers (Experts, Local residents)

Completing projects on time through prevention of conflicts and early resolution through conflict resolution process

Resolution of difficulties and cooperation between KR and affiliate companies

Value producing customers (Affiliate companies) Participants

Realization of shared growth through resolution of affiliate companies' difficulties and identification of cooperation items

Function • Shared Growth Committee





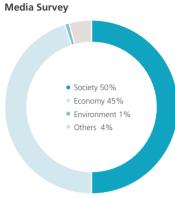
Railway Working-Level Committee

Function
 Participants

Railway safety, regular consultation with KORAIL including maintenance of facilities

Participants Value conveying customer (KORAIL)

Prevention of accidents based on close cooperation in the phase of railway construction before operation of trains and resolution of conflicts



Research of Stakeholders

KR conducted media analysis and survey on stakeholders to find out what stakeholders think of KR's sustainable management activities and what they demand to KR. KR will continue to carry out sustainable management that can maximize value creation, through listening to more stakeholders and actively reflecting their opinions on management.

Media Survey

A Media survey was conducted on new articles about KR that have been released to the public on 12 domestic newspapers and the year 2011 was surveyed, in line with the period covered by this report. According to the survey, stakeholders have demonstrated many activities and expectations related to social and economic aspects. KR will continue to actively disclose its activities and achievements in relation to environmental responsibility and will expand outside.

Classification	Content of Major Articles		
Society	Customer satisfaction activities, enhancement of product value, information protection, contribution to society, development of local communities including donation, nurturing, evaluation, reward, improvement of working environment, shared growth, relation with affiliate companies including co-existence		
Economy	Expansion of sales, implementation of new businesses, economic growth and investment including improvement of profits, contribution to direct economic value of stakeholders, including job creation, transparent and trustworthy activities including governance, compliance with rules & laws, anti-corruption, ethics		
Environment	Activities to respond to climate change, ecosystem restoration project, cooperation activities with NGO		

KR Covered by Media



Actively Attracting Private Funds for the Construction of Railways including High Speed Railways

I will turn KR into a state-owned corporation that maximizes the efficiency of management and business, based on reduction of debt through profitable businesses, with solidifying our determination of the 2nd foundation the company again. To this end, I will identify and eliminate factors that cause high costs in each business area and carry out an all-out reform on organizations to focus on on-site projects. Furthermore, I will attract the private sector to make it participate in railway construction projects and minimize the burden of railway construction projects on the national economy by creating profitable models.

Financial News, October 2011.



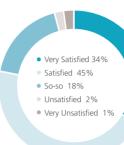
KR and Siheung in Conflict Surrounding Entry into Soraepogu through Sorae Bridge

KR and Siheung-si(city) of Gyeonggi Province are engaged in a conflict surrounding the entry of tourists of Soraepogu through Sorae Bridge, a state-owned property. The Metropolitan Office of KR announced that it will pursue strong administrative measures including a claim of 480,000 won for demolition of illegal facilities that were built by Siheung-si. Siheung has installed illegal facilities on Sorae Bridge and its entry road, state-owned property, and blocked passengers. KR sent a warning document to Siheung-si, which says that if Siheung installs illegal facilities again without approval, it will take legal actions.

The Kookmin Ilbo October, 2011. KR conducted a survey on major stakeholders in March 2012, to review KR's sustainable management activities and seek desirable direction, through identification of expectations and main issues of stakeholders in and out of the company. A total of 268 respondents expressed their opinions on satisfaction level, strengths, weaknesses, and suggestions for further growth for KR's sustainable management. KR will continuously reflected precious VOC of stakeholders demonstrated in the survey on its management activities.

Economic Responsibility

In terms of KR's fulfillment of economic responsibility, 79% of respondents said they are satisfied. While improvement of management efficiency was evaluated by 48% of respondents as a successful area, 26% of respondents said that KR has to make more efforts for improvement of management profits. KR will continue to fulfill the economic responsibility as a public corporation based on a sound financial structure and profitability through creative innovation and process improvement.



Very Satisfied 35%

- Satisfied 42%
- So-so 20%
- Unsatisfied 3%

Environmental Responsibility

In terms of environmental responsibility, 77% of respondents said that they are satisfied. While KR's eco-friendly management system that covers green design to restoration of ecosystem was highly evaluated by 47% of respondents, 36% of respondents demanded more efforts for enhancement of sustainable and eco-friendly investment.

Social Responsibility

78% of respondents said that they are satisfied with KR's activities to fulfill social responsibility for co-existence. 42% of respondents highly evaluated KR's customer satisfaction management, in terms of the spread of consensus of social responsibility, 33% demanded more responsibility and efforts to cooperate with various stakeholders.



Very Satisfied 21%

- Satisfied 35%
- So-so 34%
- Unsatisfied 8%
- Very Unsatisfied 2%

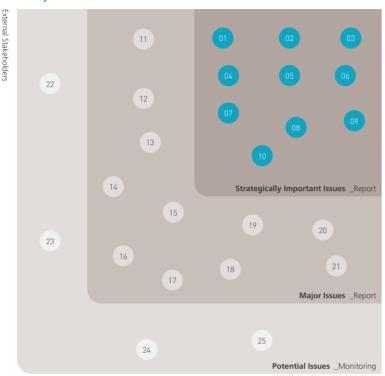
Responsibility for Employees

In terms of fulfillment of responsibility for employees, 76% of respondents said they are satisfied. While they generally highly evaluated KR's efforts for improvement of safety and health of workplaces, 47% demanded more efforts for labor-management relation based on trust and cooperation. Considering the result of the survey, KR will do its best to establish labor-management relation of harmony and trust.

Drawing out Sustainability Issues

KR conducted a materiality test to select and manage important issues related to sustainable management. It has been actively responding to strategically important and major issues with relevant departments and details are disclosed in the report, to release the of the activities.

Materiality Test



Internal Stakeholders

Zone | Strategically Important Issues : Issues that have a big influence on KR and its stakeholders and necessitate systematic activities and result management

Zone $\,$ II $\,$ Major Issues : Issues that are likely to emerge as strategically important issues $\,$

Zone III Potential Issues: Issues that are not major issues currently but necessitate regular monitoring

Zone |: Strategically important Issues

- 01. Strengthening sense of ethics · transparency
- 02. Continuous implementation of customer satisfaction activities
- 03. Spreading awareness of eco-friendliness
- 04. Improving operating profits
- 05. Shared growth and co-existence · cooperation
- 06. Reasonable labor-management relationship
- 07. Expanding public interest projects and contribution to society
- 08. Fair recruitment
- 09. Reducing green house gas emissions and responding to climate change
- 10. Realizing eco & green railways for low carbon green growth

Zone || : Major Issues

- 11. Efficiency of management through reform of public corporation
- 12. Management of risks through preemptive response
- 13. Fair distribution of achievements and return to society
- 14. Safe working environment
- 15. Active efforts to deal with customer complaints
- 16. Assessment of influence on contribution to society
- 17. Response to environmental and natural disasters
- 18. Activities to promote biodiversity
- 19. Enhancement of communication between various stakeholders
- 20. Efforts to carry out businesses that take the environment into account
- 21. Spread of meritocratic organizational culture

Zone III: Potential Issues

- 22. Protection of customer information and improvement of access
- 23. Saving and recycling of resources
- 24. Resolution of employees' difficulties
- 25. Establishment of family-friendly corporate culture

List of Strategically Important Issues

No.	Category	Core issues	Page
1	Economy	Strengthening ethical · transparent management	15~17, 57
2	Economy	Improving operating profits	25~26
3	Environment	Spreading awareness of eco-friendliness	41~42
4	Environment	Reducing green house gas emissions and responding to climate change	38~39
5	Environment	Realizing eco & green railway for low carbon green growth	43
6	Society	Fair recruitment	48
7	Society	Reasonable labor-management relationship	52
8	Society	Shared growth and co-existence · cooperation	58~61
9	Society	Expanding public interest projects and contribution to society	62~65
10	Society	Continuous implementation of customer satisfaction activities	54~56

Economic Responsibility

Leaping Forward Strongly And Flying High Overwhelmingly

Despite the wave of credit rating downgrades for domestic companies, only KR's foreign credit rating was raised from A (stable) to A1 (positive) by the global credit rating institution Moodys. Based on a sound financial structure, KR will realize a global railway powerhouse and create jobs in the private sector through expanding investment in railway, entering into foreign railway markets, and securing world-class railway technology.

Our Approach

KR has been making efforts to achieve soundness, profitability, and growth for the fulfillment of economic responsibility. Only when profitability is created, sustainable growth can be achieved.

Our Strategy

Securing Soundness: KR has been carrying out operational tasks of comprehensive mid-and-long-term debt management measures to secure financial soundness and checking the progress rate through the risk management system. According to the check, KR recorded better achievements in major indicators including sales, operating profits, and job creation compared to the previous year.

Strengthening Profitability: KR has expanded profit through efficient asset management and development projects and reduced the budget through optimization of the size of facilities and creative innovation.

Pursuing Growth: KR has completed five construction projects on time through dramatic improvement of the quality and safety management system and has won seven global service contracts in countries such as Nepal and Cameroon, based on efforts to secure world-class capacity.

Our Performance Progress

Unit	2009	2010	2011	2012(goal)
				2012(9001)
100 million won	6,368	5,896	7,326	8,832
%	67.87	72.58	75.37	78.73
100 million won	667	684	733	796
100 million won	4,258	4,722	5,299	5,345
km	3,456	3,624	3,571	3,598
%	0.170	0.128	0.142	0.110
%	-	73.75	75.04	78.79
100 million won	21	369	76	100
	% 100 million won 100 million won km %	% 67.87 100 million won 667 100 million won 4,258 km 3,456 % 0.170 % -	% 67.87 72.58 100 million won 667 684 100 million won 4,258 4,722 km 3,456 3,624 % 0.170 0.128 % - 73.75	% 67.87 72.58 75.37 100 million won 667 684 733 100 million won 4,258 4,722 5,299 km 3,456 3,624 3,571 % 0.170 0.128 0.142 % - 73.75 75.04

Our Future Plan

KR will continue to do its best to become a global railway institution recognized not only in Korea but also world-wide, through efficient operation of the virtuous cycle of soundness, profitability, and growth.





Economic Responsibility

Achievement of Soundness

Efforts to Improve Financial Structure

Apr. 2008	Carrying out "Survival, 200 Billion Profit Creation Project"
May 2010	Forming and operating a team exclusively in charge of improvement of financial structure
Jul. 2010	Newly establishing a department exclusively in charge of debt management (Finance Strategy Team)
Oct. 2011	Holding employees' discussion on improvement of financial structure
Dec. 2011	Establishing 2020 Global Manage- ment Strategy and comprehensive mid-and-long-term debt manage- ment measures

Three Indicators of Mid-and-Long-Term Financial Management



Efforts to Secure Financial Soundness

KR is a quasi-governmental agency that is commissioned for the implementation of railway construction by the government, for offering of convenient transportation to the public and it has been expanding the rail network across the country with government budget and self-procured resources. As such, KR's financial structure is greatly affected by the government's investment plans and the ratio of sources of funding. In detail, 50% of the fund for the Gyeongbu and Honam high speed railways and 60% of funds for the Metropolitan high speed railways were raised by issuing bonds. However, the fee for the use of high speed railways paid by KORAIL, the main source of income for KR, fails to cover even 28% of the interest cost of already issued bonds. Therefore, as the length of high speed railway construction gets longer, KR's debt also increases. Under these circumstances, KR held a discussion on the improvement of the financial structure in October 2011. All KR employees attended the meeting and offered their ideas for improvement of KR's financial structure. Based on the result of the discussion, the comprehensive mid-and-long-term financial management measures were established in December 2011.

N2000	May 2010	Jul. 2010	0ct. 2011	Dec. 2011
Apr. 2008 Implementing "Survival, 200 Billion Profit Creation Project"	Creating a team exclusively in charge of Improvement of financial structure	Creating a team exclusively in charge of debt management (Finance Strategy Team)	Holding employee discussion on improvement of financial structure	Establishing 2020 Global Management Strategy and comprehensive debt management measures

Establishment of Comprehensive Mid-and-Long-Term Financial Management Measures

KR established a management goal from the perspective of finance, which is, securing financial soundness through maximization of profit creation and set the size of debt, EBITDA, and interest coverage ratio as three major management indicators to achieve by 2020. In addition, KR has been carrying out 13 operational tasks for the achievement of four strategies, advancement of finance, saving of costs, expansion of income, and support from the government budget.

Comprehensive Mid-and-Long-Term Financial Management Measures

Risk Management Goal	•	Securing financial soundness through maximization of profit creation							
Three Major Management Indicators 2020	•	Size of deb	Size of debt (27 trillion ▶ 21 trillion) EBITDA (400 billion ▶ 1 trillion) Interest coverage ratio (0.12 ▶ 1.0)						
Four Major Strategies	•	Advancement of Finance		Saving of Costs		Expansion of Income		Support from the Government Budget	
13 Operational Tasks	•	Minimizing financial costs Managing financial risks		Reducing construction costs -Improving the method of prepayment -Saving maintenance costs		-Setting an assessment system of fees for use of railways -Diversifying development projects -Maximizing profit through utilization of state-owned assets -Diversifying foreign businesses		-Supporting interest costs of pre- investment -Government support for all maintenance costs -Raising the ratio of government support	

^{*}EBITDA: Earnings Before Interest, Taxes, Depreciation and Amortization

Mid-and-Long-Term Achievement Goal of Four Major Strategies

Unit: 100 million won

Core indicator	2011	2012	2013	2015	2020
Advancement of Finance	8	13	16	14	-
Saving of Costs	1,421	1,719	2,036	719	469
Expansion of Income	3,681	4,043	4,551	10,789	18,584
Support from the Government Budget	675	749	12,503	2,024	1,956

Risk Management System

				검색	엑셀 📵 🛭	전페이지
◆ 9	합명	전체		•	 버전(REV) 	최신 💌
◆ ≙	태구분	●심각	●경계 ●주의	● 관심		
4위형명 -	현	и	주관부서	담당처장	당당팀	당당팀장
-7123	위기수준	위험도	+C+4	864/8	808	0000
3월 성립(•	3절	기획혁신본부 생과관리처	박인서	혁신/윤리부	전진호
현	•	5점	기획혁신본부 기획에산처	신철수	재무전략부	김종윤
손실, 점원	•	9점	설사업본부 자산개발사업	김효식	과산개발운영 박	윤혁천
입 및 해외	•	6절	설사업본부 해외철도사업	오제목	사업총괄부	성영석
변에 따른	•	15점	!지원안전실 종질안전경 :	김창결	종질안전부	유동호
현	•	1점	(영지원안전실 비상계획)	박홍건		김현기
스템 마비	•	5점	기획혁신본부 정보관리처	미영주	정보기획부	한병회
테러 정보(•	7점	기획혁신본부 정보관리처	미영주	정보기획부	지옥배
업에 대한	•	2점	홍보실 언론홍보	김재규		이현철
리위형	•	6절	시설사업본부 시설계획처	검동훈	투자비관리부	장형식
장 안전사:	•	9점	(지원안전실 종질안전경)	김창결	안전지원부	박석현
업 품질환:	•	2점	(지원안전실 품질안전명)	김창길	품질안전부	벽증기

Four Major Areas of Risk Management



Meeting on Budget Reduction



Operation of the Company-Wide Risk Management System

KR effectively responds to company-wide risks such as financial risk, through establishment and operation of ERM (Enterprise Risk Management). The level of risk is determined based on comprehensive consideration of the level of impact and incidence and a response procedure for each risk level was established. At level D, the interest stage (purple), the head of the department in charge of risk management, at level C, the attention state (green), a director in charge of risk management, and at level B, the alert state (orange), the director of the head office lead the formation of emergency control bodies for each field. At level A, the serious phase (red), the CEO directly commands a company-wide emergency control body. In particular, financial risks are the focus of the risk management, based on full-time monitoring of the financial market and cooperation and information exchange with relevant institutions.

Financial Risk Monitoring System

Company-wide Risk Management through
System

Dividing level of risk of different types into four levels
(serious - altert - attention - interest)

-finance \cdot investment \cdot construction \cdot facility management

-Management through risk management risks

Full-time Monitoring of Financial Market

Regularly holding financial risk management committee

-Deliberation · resolution of experts in and out of the company

-Holding the committee meeting any time when major risks take place

In the case of unusual situation, CEO directly reports

Cooperation with Relevant Institutions & Enhancement of Information Exchange

High Speed Rail Division of the Ministry of Land Transport, and Maritime Affairs

·Global Financial Division, Public Policy Division of the Ministry of Strategy and Finance

•Regular exchanges with investment banks and securities firms

03/

Publication and Utilization of Financial Risk Response Manual

·Continuous monitoring of trends in the financial market

·Definition of financial risks and systematic and effective response

Achievements through the Effort to Secure Financial Soundness

KR's most important financial achievement in 2011 is the spread of consensus on the need for improvement of the financial structure throughout the company. KR was able to save budgets and create profits across all business areas, thanks to active efforts to eliminate complacent attitudes toward accumulated debts and to resolve the debt problem. In addition, for fundamental resolution of financial risks, KR has been carrying out PR activities for the introduction of the KTX competition system, which will enhance its service through fare reduction, higher fee for use of railways, and competition.

Achievements of Budget Reduction and Profit Creation

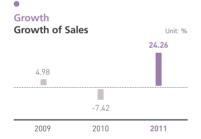
Category	Item	Detail	Amount
	Maintenance Cost	Saving costs of consumables including energy and office supplies	20.9 billion won
Budget Reduction	Personnel Expenses	Personnel Expenses Reducing number of workers	
	Design VE	Design VE Economical design	
	Business Cost	Improving construction methods	330.8 billion won
	Financial Cost	Optimizing timing of procurement	3.3 billion won
	Railway Asset	Expanding occupation & use fees	72 billion won
Profit Creation	Engineering	Expanding foreign businesses and profit from light- weight electric-powered trains	12.3 billion won
	Fee for Use of Railways	Expanding fee for use of railways	300.2 billion won

Creation of Economic Benefits and Balance of Distribution

Stability Debt Ratio (Debt/Asset) Unit: % 72.58 75.37

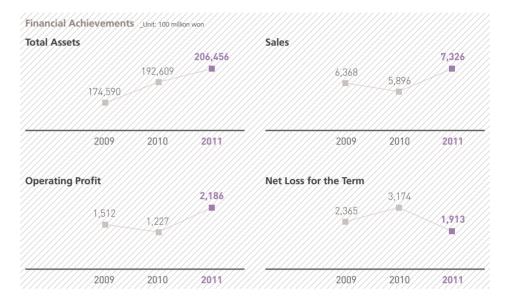






Creating Various Economic Benefits

KR recorded 732.6 billion won of sales in 2011, more than 140 billion won of increase year on year, thanks to company-wide efforts. Net loss for the term drastically decreased and total assets and operating profit increased compared to the previous year. KR will continue its efforts to secure further financial soundness through strategic financial management.



Distribution of Economic Benefits for Revitalization of Economy

KR has been creating landmark achievements in a variety of fields with its multidirectional activities for job creation in the private sector. Job creation has been achieved in four sectors including expansion of investment in construction of railways, outsourcing, establishment of partnership with the private sector, and the vulnerable at construction sites. Total 99,306 jobs have been created through project of budget execution, private projects, project of station-influence area development, and utilization of unused railway facilities in the investment expansion sector, through record management, maintenance of the information system and office buildings, and protection of major national facilities in the outsourcing sector, through public-private consortium for overseas railway projects, and public-private joint research of technological products in the sector of establishment of partnership with the private sector, and through provision of job opportunities at construction sites in the sector of the vulnerable. For resolution of rising unemployment rate amidst the economic crisis, KR has put a large amount of budget into construction sites to vitalize not only the direct employment at the construction sites but also indirect employment including service jobs from outsourcing companies. In this way, KR has been fulfilling its social responsibility as a public institutions based on creation of a virtuous cycle of economic revitalization, that has the process of creation of income ▶ creation of consumption ▶ increase in investment ▶ creation of jobs.

Virtuous Cycle of Economic Revitalization



Job Creation Performance

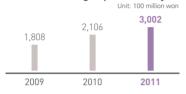
Unit: number of person

Classification	Expansion of Investment	Outsourcing	Partnership with	The Vulnerable at	
	in Railway Construction		the Private Sector	Construction Sites	
Number of Regular Workers Employed	36,942	-	87	-	
Number of Non- Regular Workers Employed	61.472	491	16	298	

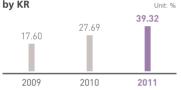
Economic Responsibility

Enhancement of Profitability

Fee for Use of High Speed Railways



Ratio of Conventional Railway Improvement Projects Completed by KR



Think-Tank Research Meeting



Creation of Profit through Active Facility Management and Asset Development

KR has been creating profits and improving the financial structure through systematic management of facilities. In addition, it has been creating new profit models through advanced management methods, such as turning conventional cost management into strategic cost management and turning strategic direction from income from rent to asset management.

Efforts to Recover Investment through Collection of Appropriate Use Fees

KR constructs and offers high speed railways for railway operators, and the fee for use of the railways, which are collected from the operators annually based on contracts, are utilized as an important resource for recovery of investment in construction. However, KR has faced difficulties in recovery because of unrealistic assessment standards of the fees. Thus, KR launched a project to draw out a reasonable method of assessment of fees in November, 2011. Based on the result of the project, KR will reasonably recover the investment in railway construction and use the resource for achievement of financial soundness.

Results of Improvement in Collection of Railway Use Fee

Signing Contract for Use of Railways

- ·Signing contract for use of the Gyeongbu high speed railways
- -The conclusion of the contract had been postponed because of KORAIL's demand for reduction of the fees for use of the second phase railway segment (31% ▶ 24%) but, KR's demand (31%) was accepted.

Collection of Fees for Use of Railways

- ·Collecting 300.2 billion won of fees for use of the Gyeongbu high speed railways
- -43% increase compared to the amount of 2010

Setting Standards of Assessment of Fee for Use of Railways

- ·Launch of new assessment method for the fee
- -Goal : Recovery of Investment (construction debt + maintenance cost + interest)
- -Way for improvement : Business income 31% ▶ Fee per unit ¹
- ¹ Fee for which the operator should pay to the facility manager per 1km of operation of one formation of trains.

Achievement of Budget Reduction through Expansion of Tasks for Railway Facilities

KR has further enhanced safety of railway through systematic improvement and maintenance, which reflect the age of facilities and urgency for improvement. In particular, KR's capacity has been expanded through expansion of areas of KR's own improvement and management. Plus, as for areas commissioned to KORAIL, KR succeeded in budget reduction through thorough verification.

Expansion of Profits through Active Asset Development and Management

KR has increased profit from use fees compared to the previous year, through various ideas and active asset development and management. In detail, profits were created and budget was saved through rent from unused land and trains, compensations for illegal occupation, rates of ads in KR's facility assets, fees for use of utility poles, sales of unused goods, export of discarded railway ties, and recycling of discarded pebbles. In particular, for resolution of inveterate arrears and intentional default on bonds, KR launched a system for recovery of outstanding bonds, which includes electronic seizure of deposit and preliminary testing. KR has also been nurturing the expertise of personnel in charge of this sector, through various on-line and off-line education programs on issues such as asset management and bond recovery. Good examples are spread at result briefings held twice every quarter and know-how about asset management is shared at the think-tank research group.

Project of Development of the Gyeongchun Line



Signing MOU for the Gyeongchun Line



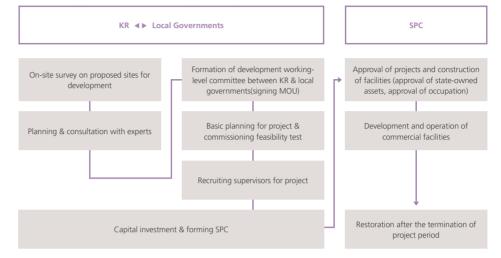
Inaugural Meeting of **Mutual Investment Company**



Creation of New Profits through Diversification of Development Projects

KR established a realistic mid-and-long-term development plan for diversification of asset development projects. For implementation of the projects, an MOU is signed with local governments for the establishment of the working-level committee. Then, supervisors are recruited to form SPC (Special Purpose Company) to collect occupation fees.

Process of Implementation of Development Projects



Status of the Main Development Projects

KR began a project to develop a theme park with trains, rail bikes, wine tunnel, and performance hall, on discarded railways sites of the Gyeongchun line. For the project, KR established a mutual investment company with a private business and Chuncheon-si(city) in 2011. When the project is completed in 2013, 28.3 billion won of new profit will be created for the next three years and the local economy is expected to be revitalized. KR is also considering a launch of development projects for discarded railways of the Jungang, Donghae-Nambu, and Yeonadona lines.

Project for the development of the Gwangmyeong Station had been sluggish since its start in 2007 because of difficulties in funding but, KR pushed forward with the project after coming up with ways for normalization, through consultation with experts in May, 2011. In addition, despite economic slowdown, KR succeeded in the selection of supervisors of projects to develop areas near Seogang Station and Gongdeok Station. If these projects succeed, KR is expected to secure 163.1 billion won of profit for the next 30 years.

Efforts for Financial Efficiency

KR secures financial soundness along with expansion of profit, through budget reduction. Budget reduction consists of the planning phase, design phase, and construction phase. It also creates various financial effects through activities such as optimization of the size of facilities, design VE, improvement of construction methods, 6-sigma innovation, and CoP (Community of Practice) for each phase.

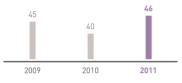
Optimization of Size without Excessive Facilities

KR reviewed railway construction projects under planning or construction, to go beyond conventional planning and establish passenger-oriented railways. As to the Seohae line, the basic plan was reviewed and as a result, the size of stations and width of bridges and cross-sectional area inside tunnels were reduced according to the demand and number of passing trains. For the Suin-line, wiring at stations was reduced based on the analysis of freight train operation in the future and the size of facilities of stations and car depots were adjusted, reflecting the station operation plan and train introduction plan. Through the reasonable adjustment of excessive facilities, 514.2 billion won of business cost was reduced and the reduced amount will be invested in the expansion of railway facilities.

Awarded for Excellent Design VE



Number of Implementation of Innovation Tasks Unit: number



CoP (Community of Practice)



Competition for the Share Management Results



Carrying Out Economical Design through Advancement of Design VE

KR has been raising its status as an institution specializing in design, based on design VE (Value Engineering). For continuous enhancement of competitiveness in design, detailed design VE operational pans were set and capacity was strengthened through internal design VE contest, workshop, survey, and professional education. As a result, KR received the excellence award at the design VE contest held by the Ministry of Land, Transport, and Maritime Affairs and could reduce 199.1 billion won of the budget.

Example of Application of Design VE





Improvement of the Construction Method

KR has been continuously implementing efforts for the improvement of construction methods, to actively participate in one of the major government policies, 10% of the budget reduction, and to enhance efficiency of investment in railways. A special team for achievement of budget reduction target through improvement of construction methods was established and regular monitoring has been conducted with meeting for reviewing budget execution and deliberation committee for design change. As a result, 330.8 billion won of business cost was saved through improvement of construction methods and good cases were shared company-wide through briefing about good examples at management result sharing meetings and publication of a casebook.

Creation of Financial Achievements through 6-Sigma Innovation Activities

KR has been carrying out innovation activities in connection with management strategies and internal evaluation of departments. Strategic tasks are drawn out from the management strategy and they are led to be resolved through 6-sigma innovation tasks for each department and the result is reflected on the internal evaluation of departments. In addition, actual achievements are produced based on monitoring of the implementation of the improvement of tasks for actual working from the next year of introduction of the 6-sigma tasks.

In 2011, KR implemented 46 of 6-sigma tasks and created 35.3 billion won of expected financial benefits. Plus, according to a thorough monitoring of 1,360 tasks that have been carried out since 2004, 60.7 billion won of the budget was actually saved thanks to the application of improvement tasks. At KR, 6-sigam innovation tasks are implemented based mainly on CoP. All employees post their knowledge, suggestions, and 6-sigma tasks on 397 CoPs operated under the theme of management strategy. The suggested issues are resolved through the collective intelligence of KR employees and the result for a year is shared and spread at an end-of-the-year competition for the sharing of management results.

Economic Responsibility

Pursuit of Growth

Meeting for Review of Opening



Business Management System

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Special Lecture on Railway **Evaluation Handbook**



Efforts for the Establishment of an Efficient Green Rail Network

Opening Five New Railway on Time

In 2011, KR opened five railways on time, including the dual-track electric-powered railways on the Jeolla line, to provide convenient transport to the public and to contribute to the local economy. For systematic management of railway opening projects for the next five years, KR established a mid-term plan for railway construction in January, 2011. Construction processes have been systematically managed through the management strategy meeting and meeting for review of railway opening projects, led by the CEO, on-site inspection of the CEO, and a project management system. Safety has also been secured through enough test-driving before opening of the railways. KR will continue its efforts to reduce CO2 emissions and enhance social benefits by continuously expanding the green railway network.

Effect of Opening of Railway

Opening of the Dual-track Electric-**Powered Railway** from Jecheon to Dodam Apr. 2011



Increase in transportation demand for the Jechion-Dodam segment of the Jungang line, caused by the expansion of production facilities of a cement factory

Reduction of logistics cost, through mass transportation and promotion of development of in-land area of Gangwon Province

·7 minutes less travel time

Opening of the Dual-track Rail on the Jeolla Line Oct. 2011



Reduction of 8.2km of railway, through improvement of the shape of the railway ·Support for successful hosting of the 2012 Yeosu Expo

Offering high speed rail service to areas near the Jeolla line (Jeonju, Namwon, Suncheon, Yeosu)

Responding to transportation demand caused by the development of Gwangyang Port

·1hrs and 43 min shorter travel time

·Further reduction of 35 min of travel time through turning more segments into high speed railways before the opening of the Yeosu Expo

Opening of the Dual-track Electric-Powered Rail on the Sinbundang Line Oct. 2011

Effects ·Gangnam-Jeongja 18.5km

·Traffic without congestion in southeastern Metropolitan region

·30 min shorter travel time

·The first unmanned heavy train in Korea

Opening of the **Dual-track Railway** from Dongsuncheon-Gwangyang Nov. 2011



Reduction of 8.2km of railway, through improvement of the shape of the railway Expansion of the transportation network supporting industrial complexes around the south coast region and promotion of local development

Increase in railway capacity(21 ▶ 112) - 2 min. shorter travel time

Opening of the Dual-track Electric-**Powered Rail from** Jukjeon to Giheung Dec. 2011

Effects

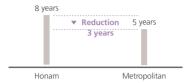
Jukieon-Giheung 5.1km

Establishment of the connected transportation system with transfer with Yong-in light-weight subway ·Promotion of the local development and provision of convenient transportation to local residents (when transferring at Jeongja Station on the Sinbundang line, passengers can travel from Giheung to Gangnam Station within 30 min.)

Identification of New Potential Railway Projects

KR has been actively identifying new railway projects for the expansion of the green rail network. To promote such activities, the railway evaluation handbook, which overestimates costs and underestimates benefits, needs to be revised. As a result of the logical explanation about KR's opinion and consistent persuasion to stakeholders including the Strategy and Finance Ministry and Korea Development Institute, in October 2011, the guidelines on the preliminary feasibility test were revised to raise the ratio of economic benefits by 25-40%. Based on the result, KR has succeeded in identifying four new potential construction projects including the dual-track electricpowered railway from Indeogwon to Suwon.

Reduction of the Construction Period for the Metropolitan High Speed Railways



Overview of New High Speed Railways

Line	Section	Date of Opening	Reduc- tion	
Gyeong- chun	Yongsan- Chuncheon	Feb. 2012	45 min	
Jungang	Cheongryangri- Wonju	Under con- struction	40 min	
Jeolla	Iksan-Yeosu	Apr. 2012	79 min	
Gyeo- ngjeon	Samryangjin- Jinju	Under con- struction	80 min	
Dong- hae	•		59 min	
Jang- Cheonan- hang Singunsan		On the drawing board	79 min	

Cycle of Inspection of Vulnerable Sites

Category	Position	Cycle		
Subcon- tractor	Construction Manager	Regular		
Construc-	Quality Manager	Daily		
tor	Safety Manager	Regular		
	Field Representa- tive	Frequent		
Supervi-	Check Supervisor	Regular		
sors	Supervising Con- struction Section Manager	Frequent		
	Head Supervisor	Frequent		
	Supervisor for Technical Sup- port	More than once a month		
KR	Construction Manager	Weekly – monthly		
	PM Director	Twice a month- once a quarter		
	Construction Director	Monthly-quarterly		
	Head of Local Headquarters	More than once a quarter		

Timely Beginning of the Metropolitan High Speed Railway Construction and Support for the Pyeognchang Winter Olympics

KR has been making efforts for the reduction of the construction period of the metropolitan high speed railways, for opening of the metropolitan line and Honam line of high speed railways at the same time, in 2014. For the reduction of the construction period, KR placed the order for bedding and track at the same time, carried out consultation for the approval and preliminary processes of purchase of land at once, and drastically improved design processes. As a result, construction of the metropolitan line could be able to break ground within 13 months of beginning of design, in June 2011. In addition, in 2011, KR mapped out a plan for the operation of a high speed railway from Incheon International Airport to Pyeongchang and has been supporting the successful hosting of the Pyeongchang Winter Olympics.

Achievement of Competitive Speed through Turning Main Railway into High Speed Rail

In 2011, KR formed a special team to fully implement tasks for turning six major main railways including the Gyeongchun line and Jungang line into high speed rail (180-230km/h). KR will continuously work hard to enhance speed competitiveness through turning more main railways into high speed rail and to promote the balanced growth of regions in Korea.

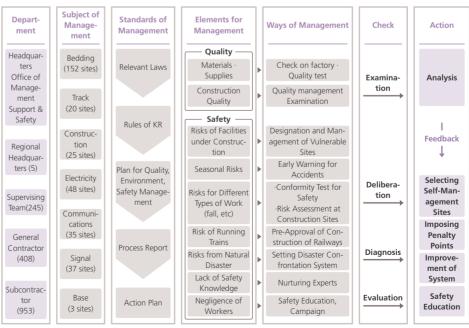
Efforts for the Establishment of Systematic Quality · Safety Management System

KR has been doing its best for accident-free safe construction and high-quality construction. In 2011, it overhauled the quality \cdot safety management system and applied the new system to actual construction. It also promptly resolved problems with track changer \cdot turnout on the second phase railways on the Gyeongbu line and established a strict management system to control accidents. As a result, the number of accidents at railway construction sites recorded 20, 43% decrease year on year.

Dramatic Improvement of Quality · Safety Management System

After a series of accidents at construction sites in 2011, KR reformed its quality · safety management system for prevention of accidents. Plans to practice the new system were established based on the PDCA perspective, according to different organizations in charge and management standards. As parts of the application of the plan to actual construction, once scattered responsibilities for construction, quality, and safety management were concentrated to the construction department and inspection systems for different classes of local headquarters were firmly established. In addition, for swift identification of the cause of problems and prevention of the reoccurrence of accidents, the main headquarters formed a department in charge of accident inspection. Based on those efforts, KR has been carrying out efficient management and inspection with streamlined processes of management of vulnerable construction sites.

Quality · Safety Management System



Site Inspection



Quality · Safety Management System Education



Quality · Safety Campaign



Efforts for the Implementation of Quality \cdot Safety Management System for the Prevention of Accidents

KR has systematically strengthened the cycle of inspection on construction sites vulnerable to accidents and applied new quality · safety system established through risk assessment of construction sites, pre-approval of construction near running trains, operation of disaster confrontation office, and CCTV monitoring system. The results have been shared with construction sites through education, campaign, and publication of a handbook. In addition, the quality · safety inspection system has been strictly implemented not only in the construction stage but also after completion of construction and safety-related laws were thoroughly abided by, resulting in no single violation. KR also recorded 0.142% of accident rate, only one fifth of the number of domestic construction companies and received the presidential award as an "institution with excellent accident prevention records" and a prime minister's award as an "institution with excellent disaster confrontation performance".

- *accident rate: (converted number of casualties/number of regular workers)*100
- *converted accident index: casualty(1), death toll(business owner's fault 10, no fault 1)
- *number of regular workers: (corporation's annual amounts from railway construction*ratio of labor expenses)/(12*average monthly pay in the construction sector)

Safety Management Inspection System

Subject of Management	Groundbreaking	Completion	Opening	
Safety Management at Construction Sites Traffic Safety Act	Safety Inspection			
Safety Management of Regional Headquarters Safety Management Rules	Comprehensive			
Facilities Slated for Opening Railway Safety Act		Comprehensive Test-driving		
Facilities After completion Special Act of Facility Safety Management		: Safety Diagnosis on Facilities :		

Efforts to Secure the Safety of Railway Facilities

To secure safety from disasters such as earthquakes, anti-earthquake performance tests and supplementary plans for railway facilities were carried out and established. Video monitoring devices and fences were installed at vulnerable sites in preparation for the Nuclear Security Summit. In addition, the number of accidents at crosswalks was reduced through making nine crosswalks into three-dimensional. KR has also made its best efforts to protect the public from accidents, including PR of its activities to prevent accidents within railway protection zones.

Track Changer on the Second Phase Segment of the Gyeongbu Line Resolution of Problem of Turnout

Foreign track changers that were introduced to the second phase segment of the Gyeongbu high speed railway had repeatedly caused problems. So, the CEO of KR formed a task force that consists of experts in various fields in September 2011 and took action on 81 categories based on close examination by experts in and out of the company. After a two-month-long joint examination, KR confirmed that track changers were working properly after November 2011.

In order to prevent any recurrence of such a problem, KR has been carrying out special management for turnouts at Singyeongju and Ulsan Stations and formed a maintenance and management manual for high speed turnouts. In addition, KR filed criminal accusations and damage suits against companies which supplied troubled turnouts based on fabricated documents. For the Honam and Metropolitan high speed railways which are under construction currently, track changers and turnouts will be purchased in lump-sum, to clearly define the responsibility for problems and to eliminate interface problems.



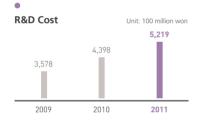
CEO Commanding the Problems of the Gyeongbu High Speed Railways

Unit: %

Comparison of Level of Railway Technology Unit: % 100 99.8 99.6 73.7 Germany Japan France Korea

Specialized Education on Light-Weight Electric-Powered Train





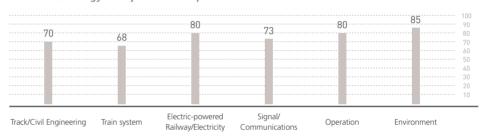
Efforts to Secure a World-Class Level of Railway Technology

KR will enhance the level of its railway technology, which is currently 73.7% compared to that of advanced countries, to the same level with advanced counties by 2020, based on the 3 High (Speed, Stability, Localization) and 2Low (CO₂, production cost) Strategy.

Direction of Technology Development Strategy



Level of Technology in Major Fields Compared to Advanced Countries



Participation in National R&D Projects

In 2011, KR participated in a total of 14 national R&D projects including seven continuing projects and seven new projects. Two of them were completed and 12 are ongoing. In particular, KR participated in a commercialization project for a magnetic levitation train with a total business cost of 423 billion won. 68.8% of the project is now completed and KR registered three related patents as well.

Implementation of KR's Research Tasks

KR has been conducting a total of 21 research projects on technologies to resolve problems at construction sites and related policy tasks, including ten continuing projects and 11 new projects. Among them, five have been completed. In particular, KR succeeded in the development of a made-in-Korea interlocker and when the newly-developed interlocker is used for the construction of the Honam and Metropolitan high speed railways, more than 9 billion won of import is expected to be saved. Based on the results of the research projects, KR registered four patents and nine intellectual property rights and currently holds 49 intellectual property rights including 26 patents.

Efforts for the Localization of Core Railway Technology

KR has continuously pursued localization of core railway materials such as materials for the track of electric-powered rail and pre-produced concrete track. As a result, KR has secured world-class railway technology and reduced imports. In addition, KR has done its best for the development of new technology, which led to a reduction of 2.4 billion won of the budget. In particular, KR has demonstrated a good example of shared growth in the field of technology, with establishment of a industry-academia-research cooperation system for localization of core train technology.



Plan for Entry into the Global Railway Market

KR is not complacent with its current status as a public corporation specializing in railway, which leads the domestic railway market, but plans to further raise Korea's national prestige through entering into the global railway market and creating new profits. Currently, the global railway market is growing at 4-5% every year on average and at the center of the growth, there are new high speed railway construction projects in China, Africa, and South American countries and projects for turning general railways into high speed railways. Since KR first entered the Chinese market with supervision service in 2005 for the first time, it has posted average 50% of sales increase annually. However, still, more

than 90% of KR's foreign sales are concentrated on the Chinese market. For diversification of overseas business, when establishing the 2011 overseas railway business strategy, KR decided to expand its business areas from current areas of design, supervision, and technical support to project management, EPC, and share investment in mid and long term. In addition, KR has set clear growth strategies that include detailed plans for different regions and business models.

Strategy for Overseas Business in Stages

Category	2011~2014	2015~2017	2018~2020
Business	·Supervision service, project feasibility, and master plan establishment service	·Supervision/consultation service, project feasibility, project management service, etc.	·Carrying out full range business including EPC
Personnel	Nurturing overseas business experts Recruiting outside experts	·Utilizing experts in domestic business ·Utilizing experts in overseas business	·Recruiting global talents
Finance	·Utilizing ODA ·Entering PPP	-Utilizing ODA & PPP -Laying foundation for direct investment	·Independent investment resources ·Facilitating direct investment

Achievements from Penetration into the Global Railway Market

Diversification of Penetration into Global Railway Market

KR made company-wide efforts for increase in orders from foreign countries in 2011, based on the overseas business facilitation strategy called "Selection and Concentration". As a result, the countries where KR carries out business, which were limited to China and Cameroon, were dramatically expanded to include Nepal, Indonesia, Paraguay, and Cambodia. In addition, KR succeeded

in expanding its overseas business area which was confined to supervision to design, feasibility test, and project management. In particular, four out of seven projects for which KR won the bid in 2011 were ODA projects, which not only support economic growth in developing countries but also lay the foundation for additional contracts for following-up projects.

Current Status of Penetration into Foreign Railway Market

- Projects ongoing or under planning
- Projects under efforts for winning contract
- Projects under identification

Records of Overseas Contracts

Individual Project

·Actual-image design of electric-powered railway in Nepal ·Feasibility study on inter-city railway in Kathmandu, Nepal ·Feasibility study on construction of railway in Cameroon

ODA Project

·Establishment of master plan and project management for loop railway line in Jabotabek, Indonesia

·Feasibility study on construction of railway in Paraguay

·Establishment of master plan, feasibility study, project management and consultation for railway in Cambodia

Research of case of private-public



Business Agreement

with California

Business Agreement





Exhibition Booth at the World Congress on Railway Research



Efforts for Diversification of Penetration into the Global Railway Market

KR has made efforts to win more contracts in China, Oman, Qatar, India, Bangladesh, Brazil and the USA, as well as Nepal and Paraguay.

Efforts to Win Contracts

Country Efforts		
China	Establishing a Korea-China limited partnership, signing a letter of Intent for participation in development of subway and station influence areas	
Oman	Passing the preliminary examination of the bidding price for design and supervision service contract	
Qatar	Submitting a Letter of Intent for the first phase construction of subway	
India	Submitting offer suggestion for two railway construction projects including the Hyderabad-Chennai section	
Bangladesh	Selected as final candidate consortiums for service contract (with Chinese consortium)	
Brazil	Review for financial support by the Brazilian government, pushing agreement with local designer (Progen)	
USA	Submitting a Letter of Intent for participation in California high speed railway construction project	

KR-Partner Companies Joint Workshop



Establishment of the Railway Cooperation Network in and out of the Country

KR learned the trend of railway technology through participating in the general assembly of International Union of Railways, held in Poland 2011 and ran an exhibition booth at the World Congress on Railway held in France, to actively promote KR's brand value. In addition, for strengthened technology capacity, KR held a technology exchange meeting with the Japan Railway Construction, Transport, and Technology Agency. KR has been carrying out overseas business, complying with international conventions on the protection of human rights.

KR agreed on active entry into railway markets in developing countries, with signing MOU with KOICA and Korea Export and Import Bank. It also promoted the excellence of Korea's railways, with trial-rides and visits to KTX, provided to Chinese high-ranking officials. In particular, KR participated in 11 projects including a railway construction project in Cameroon, as a member of a consortium with 23 SMEs. It has also taken the lead in the realization of shared growth through holding joint workshops and quarterly meetings on shared growth for overseas business.





Environmental Responsibility

Coloring with Green and Becoming New Hope with Green

KR has been making a variety of efforts based on a mid-and-long-term master plan for actively responding to climate change and been preventing environmental conflicts in close cooperation with environmental organizations.

KR will continue to enhance environmental value through environmental policies tailored for each stage from design, construction, and operation of railways to the finish of operation of railways.

Our Approach

KR is doing its best to fulfill its environmental responsibility. In particular, KR established a mid-and-long-term master plan which takes the features of railway projects into account and has been carrying out practical tasks of the plan systematically.

Our Strategy

Response to Climate Change: KR has set and implemented a mid-and-long-term master plan for responding to climate change, which focuses on the calculation of carbon footprints at rail-way construction sites, operation of the green house gas-energy target management system in the office-work field, implementation of CDM (Clean Development Mechanism) for high speed rail-way construction, and application of new and renewable energy. In addition, it preemptively heads off environmental conflicts based on quantifying the results of environmental protection activities through environmental impact assessments and the establishment of communication channels with environmental organizations for smooth exchange of information.

Construction of Eco-Friendly Railways : KR turned the whole process of railway construction including design, construction, operation, and discard into an eco-friendly value creation system. In particular, KR obtained a preliminary certification of eco-friendly building and BF (Barrier Free) environment, through its eco-friendly design of stations.

Systemization of Environment Management : KR systematically collects and manages environment-related data of not only the office-work area but also at construction sites. Based on this, KR works hard to reduce the production of waste and facilitate reuse and recycling of construction materials

Our Performance Progress

Core Indicator	Unit	2009	2010	2011	2012(goal)
Environmental Influence Index	Point	100	105	113	118
Rate of Green House Gas Emission Reduction	%	-	-	5.8	10.0
Number of Violation of Environment- Related Rules	Number	0	0	0	0
Rate of Construction Waste Recycling	%	85.2	92.57	95.60	96.47
Rate of Application of New & Renewable Energy Facilities	%	-	-	13.76	15.14
Supply Rate of LED Lighting	%	-	-	19.8	30.0

^{*}The rate of greenhouse gas emissions reduction in the sector of KR's office work, compared to the standard amount of emission

Our Future Plan

KR will continue to enhance the reflux system of environmental management, through improving the environmental management system at railway construction sites in compliance with environmental information release obligation, establishing self-examination process for guarantee of compliance with environmental rules and implementation of demands of stakeholders. In addition, KR will further raise the status of railway as the leader of green growth, based on enhancement of cooperation channels with environmental organizations and continuous implementation of ecosystem restoration projects.

Environmental Responsibility

Response to Climate Change and Environmental Management

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Response to Climate Change SWOT

Strengths

Low greenhouse gas emissions Enhancing railway's status as low-carbon transportation

Weaknesses

·Lack of basis for responding to greenhouse gas reduction regulations

·Lack of funds for mid-and-long-term investment

Planning

·Plan for expansion of government investment in railway

Enforcement of the Framework Act on Low Carbon Green Growth

Risks

·Lack of awareness of green growth in the construction sector

·Lack of secured data because of the structure of the construction industry

•

History of Implementation of the Greenhouse Gas · Energy Target Management System

Feb. 2011	Survey on past emissions
Mar. 2011	·Assessment of standard amount of emissions ·Establishment of reduction target for each year ·Establishment of implementation plan for 2011
Every month	Saving of energy at each depart- ment and monitoring results
Mar. 2012	Reporting result of reduction to the Environment Ministry

^{*}The subject of greenhouse gas · energy target management system is the amount of green house gas emissions from office buildings and trains. KR set 20% of reduction compared to standard amount by 2015 and has been implementing the plan

System of Response to Climate Change

Construction of Eco-Friendly Railways

Importance of responding to climate change has been emerging in and out of the country. With this trend, a national vision of low carbon green growth was declared in Korea and consensus on the need for reduction of green house gas emissions has been spreading throughout the world. With the establishment of a mid-and-long-term master plan for the management of climate risks in the railway sector, KR has been leading environment management in the low carbon green growth era.

Organization in Charge of the Response to Climate Change

KR's environmental management is under control of the environment division of the Quality and Safety Management Team under the Management Support and Safety Office and the department in charge carries out eco-friendly design, construction, and management in stages, under the implementation plan. KR conducted research on its management environment and according to the research, expansion of construction projects based on increased government investment in railway is an opportunity factor and lack of secured environment data is a risk factor. Based on the result of the research, KR established a mid-and-long-term master plan for the response to climate change and realization of environmental management.

Establishment of the Mid-and-Long-Term Master Plan for the Response to Climate Change

KR has been seeking various measures for responding to climate change, including establishment of measures for management of the amount of greenhouse gas emissions and enhancement of eco-friendly railway construction technology. To this end, KR launched research of the assessment of carbon footprints of the whole process of railway construction. In addition, the reduction of greenhouse gas emissions has been carried out in the officework sector based on implementation of the green house gas and energy target management system. KR has also been preparing for participation in the emission trading market with the implementation of the Honam high speed railway construction as a CDM project. KR will suggest a new profit model through active use of new and renewable energy and reduction of greenhouse gas emissions at the design and construction phase.

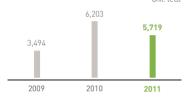
The Mid-and-Long-Term Master Plan for the Response to Climate Change

	2009-2010 Developing ► Methods	2011-2 Developing		•	2013-2020 Responding to Government Policy and Reducing Greenhouse Gas Emissions	Major Achievements	
Assessment of Greenhouse Gas Construction Equipment	Researching response measures for greenhouse emission reduction regula in the railway constructio projects	ation				Establishing green- house gas inventory and verification by a third party	
Assessment of Greenhouse Gas	of	esearching a carbon foc e whole pro	tprints in	t	Applying Guidelines on the Amount of Greenhouse Gas Emissions at Railway Construction Sites	Standardizing unit of greenhouse gas emissions and managing	
Construction Materials	rai	ilway construction			Trial-run Expanding areas for application	construction sites	
Response to	Establishing KR's Greenhouse Gas-energy Target Management System				Responding to target management system		
Policy		Imple		_	esponse system for target management ation of reduction target and action plans	and carrying out reduction	
		ширк	errierrung a	alloc	ation of reduction target and action plans		
Reduction of Greenhouse			Partici	pat	ing in the Emissions Trading Market	Participating in the	
Gas Emissions and Creation		Establishing foundation for response to emission trading scheme				carbon market and creating additional	
of Profit		Obtaining emission rights and participating in the carbon market				profit	
Researching ways to improve railway con-					k Renewable Energy and Expanding v Evaluation and Application	Expanding tech-	
	_	Survey o	n characte		cs and setting strategies for introduction	nologies eligible for application of new & renewable energy	
growth		Achieving more than 40% in the supply of new & renewable energy to stations			.c.iewabie energy		

Greenhouse Gas Emissions Reduction Target

Standard	6,071tCO ₂
Amount of	KR's average emissions for
Reduction	2007-2009 period
2010	6,203tCO ₂
2011	6,010tCO ₂
2012	5,463tCO ₂
2013	5,282tCO ₂
2014	5,039tCO ₂
	4,857tCO ₂
2015	Reducing 20% of standard
	emissions

Amount of Greenhouse Gas Emission



*KR reassessed the standard amount of emissions and amount of past emissions with reflection of three buildings which opened in 2010 (Mangsang Rest Area, Pohang Office, and Haeundae Recreation Center). Thus, the chart above is different from a chart in the 2011 KR Sustainability

Major Activities for the Response to Climate Change

KR has been carrying out a variety of activities including assessment of unit of the greenhouse gas emissions (carbon footprint), response to government policies (greenhouse gas \cdot energy target management system), reduction of greenhouse gas emissions, and creation of profit (CDM project and use of new & renewable energy), based on a mid-and-long-term master plan for the response to climate change. As a result, the amount of greenhouse gas emissions in 2011 recorded 5,719CO₂, 7.8% decrease year on year.

Assessment of Carbon Footprints

KR set out the assessment of carbon footprints, the measurement of the amount of greenhouse gas emissions at railway construction sites, in May, 2011. Elements that cause greenhouse gas emissions at different phases of construction, civil engineering, construction, track, electricity, signal, and communications, were assessed and based on the result, KR will efficiently reduce greenhouse gas emissions. To this end, KR will develop guidelines on greenhouse gas emission management system for railway construction sites and reduce the amount of greenhouse gas emissions.

Operation of the Greenhouse Gas · Energy Target Management System

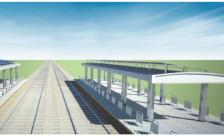
In response to the government's greenhouse gas emissions policy, KR surveyed the amount of greenhouse gas emissions from its office-work sector including buildings and automobiles, and set 6,071tCO₂ as the standard amount of emission. To reduce 20% of greenhouse gas emission compared to the standard amount by 2015, KR established detailed action plans such as efficiency of use of spaces in buildings and equipments, saving of energy including compliance with the indoor temperature for each season, driving cars eco-friendly, and the results have been strictly managed through monthly monitoring. As a result, in 2011, KR succeeded in reducing 5.8% of greenhouse gas emissions, six-times higher than 1%, the originally planned target.

Implementation of CDM

To preemptively secure carbon emission rights in the transportation sector, KR has been implementing the Honam high speed railway construction project as a CDM project. In 2010, KR submitted a letter of intent to the UN and in August 2011, a CDM method to apply to the high speed railway construction project was developed and approved by the UN. Currently, a business plan for the project is being prepared. KR will do its best to secure CER (Certified Emission Reductions) through the successful CDM project of the Honam high speed railway.

Application of New and Renewable Energy

KR conducted research on expansion of application of new \cdot renewable energy in the railway sector, such as sunlight and wind power, from 2010 to 2011. It also set plans for installment of photovoltaic equipment on the roof of 65 stations. When the installation is completed, 3.42 million L of oil will be saved and emissions of 10,000tCO₂ will be reduced. Plus, 17.58 million kWh of electricity will be generated.







Wind Power Energy

Green Railway Consultation Commission



Purchase of Eco-Friendly Projects (Purchase Rate) Unit: 1 million won, (%)



Receiving Appreciation Plaque



Continuous Efforts for the Realization of Green Management

KR introduced the assessment system on environmental achievements in 2010, for the realization of green management. KR also established a channel for close communication with stakeholders in the environmental sector, such as NGOs, to head off environmental conflicts.

Advancement of the Assessment System on Environmental Achievements

For qualitative assessment, disclosure and continuous development of the results of environmental management, in 2010, KR launched an assessment system of environmental achievements that consists of 10 indicators including the rate of recycling of construction waste and the rate of purchase of eco-friendly products. In addition, to raise credibility of the assessment system and to reflect emerging issues to the system, KR added two more indicators to the system in 2011 and has been monitoring quarterly results, to pursue improvement of failing indicators. As a result, the environmental management index, the integration of the environmental achievement assessment system, recorded 113 points, 8 points increase compared to the previous year.

Indicator of Environmental Results

Construction of Eco-Friendly Railways

Environmental Management Indicator

Completion of Environmental Education	Recycling Rate of Railway Ties
Improvement Rate of Suggestions in and out of the Company	Production of Construction Waste
Amount of Fines Imposed	Recycling Rate of Construction Waste
Recognition of Environmental Results	Installment Rate of Soundproof Facilities
Green Railway Consultation Commission	Purchase Rate of Eco-friendly Products
Number of Agreements Unimplemented	Achievement Rate of Greenhouse Gas Emission

Resolution of Environmental Conflicts through Co-Existence and Cooperation

Since 2005, KR has been operating a cooperative network with environmental organizations including NGOs, to prevent unnecessary environmental conflicts and maximize environmental protection effects, based on continuous communication with stakeholders. Until 2006, the cooperation activities were at an initial stage but since 2008, KR has been holding regular events and reflecting environmental organizations' opinions to KR's environmental policy, through the Green Railway Consultation Commission.

In 2011, the forth Green Railway Consultation Commission was established and two meetings were held. KR carried out environmental protection activities with NGOs, including the creation of green playgrounds and green tourism and environment campaign. As a result, KR's image as an eco-friendly company was raised and Korean Foundation for Environmental Movement awarded an appreciation plaque to KR.



Creation of Green Playground



Environmental Operation Indicator

Green Tourism & Environment Campaign

Environmental Responsibility

Construction of Eco-Friendly Railways

Process of Eco-Friendly Design

- Planning for Design of Bedding
- 2 Analyzing Environmental Impact of Track/Structure
- 3 Launching Eco-friendly Design
- 4 Carrying out Environmental Impact Assessment
- 5 Agreeing on Environmental Impact Assessment
- Sharing Casebook of Eco-friendly Design

Establishment of the Virtuous Cycle of Creation of Eco-Friendly Value

KR has been implementing eco-friendly railway construction which takes the whole life cycle of railways into account. In other words, KR constructs green railways based on understanding of environmental elements as an important factor from the stage of design to stage of discard.

Virtuous Cycle of the Construction of Eco-Friendly Railways

Design

- Implementing eco-friendly design from the design phase, based on environmental impact assessment
- Expanding application of use of new & renewable energy for response to climate change

Discard

Returning to society through ecosystem restoration projects that utilize shut-down railways and facilities

Construction

- •Strengthening management of environment at construction sites through post-environmental impact survey and feedback
- ·Saving resources through recycling and reducing greenhouse gas emissions

Operation

Improving living environment through management of noise and shaking cause by running trains

Efforts of the Implementation of Eco-Friendly Design

KR conducts research of the influence of railway construction projects on the environment in advance, through environmental impact assessment carried out at the design phase and minimizes the environmental impact of its projects through reflection of the result of the assessment on design.

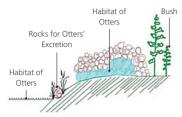
Implementation of the Environmental Impact Assessment

KR conducts an environmental impact assessment at the stage of design and draws out ways to prevent or reduce harmful impact on the environment, through preliminary survey, prediction, and assessment of the influence of construction projects on the environment. In 2011, KR completed environmental impact assessments on seven projects including moving of railways in the Yeongju dam's submerged districts and project of construction of Gwangju car depot for the Honam high speed railway. KR conducted surveys on water reserve area, wildlife sanctuaries, and endangered species of wild animals and pursued protection of them in the design phase.

Sanctuaries and Endangered Species of Wild Animals

Surveyed Construction Project	Water Reserve Area	Sanctuary for Wildlife	1-degree Endangered Wild Animal	2-degree Endangered Wild Animal
Incoming Railway to Gunjang National Industrial Complex	-	2 places	-	Wildcat, Bean Goose, Korean Buzzard, Korean Golden Frog, Narrow-mouthed Toad
Dual-track Electric-powered Railway from Iksan to Daeya	1 places	7 places	Korean Ratsnake	Wildcat, Bean Goose, Korean Buzzard, Korean Terrapin, Narrow-mouthed Toad
Gwangju Car Depot of the Honam High Speed Railway	3 places	4 places	-	Bean Goose
Moving of Railways in Yeongju dam's Submerged Districts	8 places	7 places	Otter	Wildcat, Long-Billed Plover, Bean Goose
Dual-track Electric-powered Railway from Wonju to Jechoen on the Jungang Line	4 places	5 places	Otter	Marten, Wildcat, Flying Squirrel, Narrow- mouthed Toad, Eremias Argus, Long-Billed Plover, Bean Goose
Dual-track Electric-powered Railway from Geumgang to Yeongcheon on the Daegu Line	9 places	10 places	Otter, Korea Ratsnake	Wildcat, Bean Goose, Spectated Teal, Long-Billed Plover, Swan, Korean Golden Frog, Korean buzzard
The Metropolitan High Speed Railway (Suseo – Pyeongtaek)	10 places	15 places	-	Bean Goose, Korean Buzzard, Korean Golden Frog

Habit of Otters at Yeongju Dam Railway



Wildlife Passage for Small Creatures



Mid-and-Long-Term Plan for Installment of Soundproof Walls

2012	31 places
2013	15 places
2014	11 places
2015	8 places
2016	6 places

Implementation of Eco-Friendly Design

KR has expanded eco-friendly design for the convenience of local residents and protection of the ecosystem. During an environmental impact assessment on the moving of railways in Yeongju dam's submerged districts, otter, an endangered wild animal, was discovered so, habitat for otter was added to the design of railways, with planting of bush and installation of rocks for otters' excretion.

KR has also expanded application of new and renewable energy such as sunlight and wind power, LED lighting, and eco-friendly and highly efficient energy equipment to design. In addition, products that include mercury, cadmium, and sulphur hexafluoride, were replaced with eco-friendly projects and the new projects were included in the design.

Efforts for Eco-Friendly Construction and Operation

KR has been strengthening eco-friendliness of railways through application of eco-friendly elements included in design and thorough inspection on them even after completion of construction.

Eco-Friendly Construction

KR built 10 wildlife passages and planted 32,910 trees in 2011. To prevent water pollution, air pollution, and noise, 3,484 pollution control facilities were installed and environmental damage is minimized through recycling of railway construction materials such as rail, ties, and recycled aggregates.

Eco-Friendly Operation

In 2011, KR reduced harm from noise through installment of soundproof walls in 16 places and will continuously reduce noise through establishment of a mid-and-long-term strategy for expansion of soundproof walls. In addition, KR has been expanding recycling of railway wastes, with revision of unreasonable regulations on the recycling of bedding and pebbles (Wastes Control Act and enforcement ordinance and regulations on recycling promotion of construction wastes).

Efforts for Implementation of the Ecosystem Restoration Project

Since 2009, KR has been carrying out ecosystem restoration projects to return land with shut-down railways to the ecosystem and local communities. In 2011, ecosystem observation trail, eco forest, and garden of wild flowers were built on 9,500m² of land with closed-down the Gyeongchun line railways, to restore damaged ecosystems and provide green areas to local residents. In addition, bicycle lanes built on land with shut-down Jungang line railways, made this region into a popular tourist attraction. KR will continue to implement ecosystem restoration projects every year to offer spaces for leisure and life with beautiful natural environment.

Case of Restoration of Ecosystem for the Gyeongchun line



Environmental Responsibility BEST PRACTICE

Achieving Green Railways through the Design of **Eco-Friendly Stations**

Direction of the Eco-Friendly Design of Stations

KR has been constructing eco-friendly railways in a way of saving energy used for stations and eliminating barriers for passengers. In 2009, KR installed minimum convenient facilities but, from 2010, KR established a master plan for eco-friendly railway structure and implemented construction of barrier-free stations, through expanded application of new and renewable energy facilities. KR will continue to realize eco railway through expansion of BF (Barrier Free) certification.







Achievements of Design of the Eco-Friendly Stations

Design of the Eco-Friendly Stations

In 2011, KR expanded eco-friendly design, which had been applied only to stations on the ground, to cover underground stations and actively applied eco-friendly elements such as ground heat, natural lighting, and utilization of groundwater produced during construction for air-conditioning.

Through these efforts, KR was able to save energy and materialize a comfortable environment in stations and in December 2011, the Gwangju car depot for the Honam line obtained preliminary certification as an eco-friendly building. As such, KR has been taking the lead in the government's low carbon green growth policy

- *Using ground heat for heating and air-conditioning (11 stations including Sosa Station, saving 108 million won annually)
- *Replacing 28W fluorescent bulbs into LED bulbs (saving 769,000 won annually)
- *Using groundwater for cleaning of tunnels (four stations including Seongsu Station, saving 394.000 won annually)

Example of Improvement of Underground Station on the Sinansan Line



BF Design of Stations

KR had focused on installation of minimum convenient facilities mandated by the Act on Transportation Handicapped. However, since 2011, KR has improved access and connection to station and implemented BF design for convenient use of station for everyone.

In detail, KR applied BF design to Jinju Station on the Gyeongjeon line and Mukhyeon Station on the Gyeongchun line with high demand of use, for convenient use of stations by both the disabled and non-disabled people. After the BF certification deliberation, KR obtained a preliminary certification with the best degree and it contributed to enhancement of KR's brand image.

Content

BF Design Handicapped Act Incline of Slope 1/18 - 1/24 Finish of Floor Prevention of slip Changing color Width of Handi-1.5 - 1.8m cap Parking or wide Width of Main 1.0 - 1.2m wider Entry **Stair Landing** Installing within 3m Installing within 1.8m Installing within the Mandatory instal-Elevators visible range of the

main entry

Transportation

Certification Process of Buildings

Environmental Responsibility

Systemization of Environment

KR has systemically managed the total amount of substances input, including energy use and use of materials and the amount of substances emitted, including greenhouse gas emissions and waste discharge. Data was collected from 208 construction sites in 2009, from 267 sites in 2010, and 264 sites in 2011. The reason why the number of sites for data collection in 2011 decreased compared to the previous year was that the number of construction sites itself decreased because of completion of some railway construction projects.

Input

Railway Construction Sites (affiliate companies)

Amount of Energy Use			Unit: TJ
Classification	2009	2010	2011
Buildings	485.53	527.32	430.51
Automobiles	166.31	258.15	879.31
Construction Machines	2,281.11	3,108.42	3,263.93

^{*}Amount of indirect use of energy is 497.48TJ and the rest in Amount of direct use of energy

Amount of Use of Materials

Unit: ton

Classification	2009	2010	2011
Steel bar	572,681	1,163,417	485,283
Rail (new material)	49,259	61,272	29,595
Rail (recycled)	4,348	3,940	559
Pc Bedding (new material)	142,469	111,178	108,934
Pc Bedding (recycled)	11,472	7,127	3,495
Wood Bedding (new material)	797	232	342
Wood Bedding (recycled)	1,717	60	866
Aggregate (new material)	1,789,679	2,228,104	2,606,046
Aggregate (recycled)	71,407	191,365	72,381

Amount of Use of Water

Unit: ton

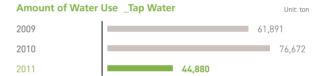
Classification	2009	2010	2011
Total	1,589,682	3,525,171	2,782,504
Recycled Water	164,400	279,338	158,117

^{*}Major source of water in 2011 : Heukcheon(stream), Yudeungcheon(stream), Wansacheon(stream), Jungangcheon(stream), Nakdong River, Geumho River, Bukhan River

KR (headquarters and local headquarters)



*Amount of indirect energy use is 81.07TJ and the rest is the amount of direct energy use











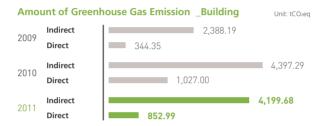




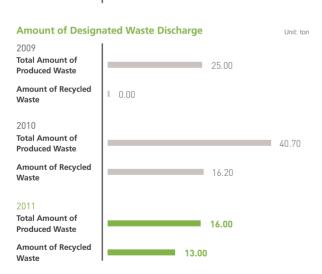




KR (headquarters and local headquarters)







Output

Railway Construction Sites (affiliate companies)

Amount of Greenhouse Gas Emissions

Unit: tCO2eq

Clas	sification	2009	2010	2011
Buildings	Indirect	19,583.90	22,218.40	18,710.91
	Direct	4,696.99	6,700.64	4,693.27
Automobiles	Direct	11,189.45	17,944.90	61,191.69
Construction Machines	Indirect	3,167.13	7,943.41	7,061.07
	Direct	151,973.59	208,090.79	220,084.09

Amount of Waste Discharge

Unit: ton

Cla	ssification	2009	2010	2011
Construction Waste	Amount of Produced Waste	980,643.04	798,501.07	718,088.00
	Amount of Recycled Waste	835,406.95	739,643.82	686,594.00
Waste From Places Of Business	Amount of Produced Waste	55,159.92	62,145.89	71,677.95
	Amount of Recycled Waste	30,659.79	44,683.73	39,659.63
Designated Waste	Amount of Produced Waste	1,360.93	831.07	7,235.08
	Amount of Recycled Waste	322.97	19.97	8.96

Amount of Air Pollutants

Classification	2009	2010	2011
Amount of Annual Dirt Output _kg	1,305	14,742	3,141
Number of Air Pollutant Control Facilities in Operation	6	17	17

^{*}Ozone-layer destructing substances, No NOx, Sox, emissions

Amount of Water Pollutants Emission

Classification	2009	2010	2011
Annual Waste Water Output _ton	3,207,309	4,821,362	4,868,269
BOD _mg/l	4.1	3.9	4.4
COD _mg/l	9.7	6.4	6.8
SS _mg/l	11.2	9.7	8.9
Number of Waste Water Control Facilities in Operation	33	101	107

^{*}Major waters for release of waste water in 2011 : Han River, Jungrangcheon(stream), Suyeong River, Heukryong River, Geum River

^{*}No release of critical toxic substances and shipment of those substances to overseas

Social Responsibility

Connecting Hearts and Spreading Love and Sharing

For realization of a fair society, KR guarantees equal opportunities and fair competition through improving unfair practices and institutions. In addition, KR is realizing socially responsible management through a management of sharing based on the railway infrastructure and management of sharing.

Our Approach

KR is implementing the best socially responsible management among all public institutions, based on realization of a fair society through job creation, shared growth with stakeholders, and strategic sharing activities.

Our Strategy

KR is improving its organizational efficiency through fair recruitment, efficient management of personnel, reasonable reward, and systematic capacity building. In addition, KR has been establishing an open organizational culture by promoting work-life balance and communication between the labor and management.

Through establishment and effective implementation of a systematic CS strategy, KR is practicing service that can move the hearts of customers, going beyond customer satisfaction. KR raised a variety of satisfaction levels including satisfaction level of the government customer, through active resolution of customer complaints and customer-oriented disclosure of information.

In the face of the Capitalism 4.0 era, KR is realizing a fair society through elimination of unfair practices in the railway industry and job creation in the private sector. KR set an action plan for realization of a fair society based on the acceptance of new environments and is also waging a variety of efforts including establishment of a fair trade system, priority on purchase of products of SMEs, and joint penetration into foreign railway markets.

KR is fulfilling a role as a public institution that contributes to local societies, based on continuous activities for contribution to society. In particular, with strengthened feedback, KR has been carrying out strategic activities for contribution to society which can satisfy both participants and subjects of the campaign.

Our Performance Progress

Core Indicators	Unit	2009	2010	2011	2012(goal)
Kobex Index	Grade	-	-	AAA	AAA
Shared Growth Index	Points	51.88	93.93	90.08	91.07
Customer Satisfaction	Points	89.30	93.20	95.40	95.86
National Transparency	Points	8.55	8.35	8.81	9.20
Employee Satisfaction	Points	68.55	74.75	73.70	77.78
Rate of Core Human Resources	%	26.6	30.8	31.5	33.0
Social Contribution Mileage	Mileage	240	238	227	200
Disabled Employment Rate	%	89	106	109	100
Participation Rate of Local Companies	%	73.54	82.47	97.80	98.02

^{*}KoBEX (Korean Business Ethics Index): Evaluation index for sustainable management, developed by the Ministry of Knowledge Economy and The Institute for Industrial Policy Studies, for evaluation of results of sustainable management.

Our Future Plan

KR will carry out shared growth and activities for social contribution for creation of customer value, based on strengthened internal capacity through recruiting and nurturing talented human resources. Through these efforts, KR will maintain the highest grade (AAA) in the KoBEX and realize the best socially responsible management among public institutions.

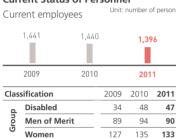




Social Responsibility

Employees

Current Status of Personnel



New Recruitments 98 93 2009 2010 2011 Classification 2009 2010 2011 Women Disabled **Local Talents** 15 Natural Science Regular & Engineering 3 26 Majors Total 6 36 Short-term Contract 3 Intern 87 70 90



77 93

92

Fair Recruitment and Reasonable Personnel Management

KR not only complies with employment policies recommended by the government but also employs a certain ratio of socially disadvantaged people including the disabled, men and women of merit, and women, to fulfill the social responsibility of public institution. In addition, KR has a meritocratic organizational culture based on fair personnel evaluation and reasonable rewards. As of December 31, 2011, the number of employees of KR is 1,396, 44 decrease compared to the previous year. KR will continue to reasonably manage its organization through optimized personnel management plans.

Efforts to Secure Talents

KR has implemented fair recruitment by employing young interns and the disabled more than the governmentrecommended quota, to fulfill its social responsibility as a public institution. In addition, KR eliminated all the unreasonable elements in every stage of recruitment evaluation based on 6-sigma innovation tasks and established fair and advanced recruitment standards and procedures.

Improvements for Each Stage of Recruitment Problems	Improvements
Troubles with relevant comparison of official foreign lan- guage test scores and GPA at the highest level of school	Setting minimum requirement for foreign language tests and GPA for document screening
Relatively low share of scores of major courses for those who pass written test	Expanding weight of major course scores among subjects of written tests
Overlapping reflection of official foreign language scores at every level of recruitment	Reflecting foreign language test scores only on document screening, not the total score of written tests
Concerns over losing talents because of the management and frontline officials	Dividing interviews into 1-phase interview by frontline of- ficials and 2-phase interview by the management
Need for balanced sense of history and enhanced social responsibility as a public corporation	Adding Korean history to the subjects of written test

Efforts to Respect Human Rights and Diversity

KR gives advantage to socially marginalized people and local residents in recruitment of young interns, to fulfill public institutions' social responsibility and to comply with the employment policy of the government. In addition, high school-graduates were added to the employment category in 2012 and local talents were defined as people from non-metropolitan areas. KR pays 260% of the legal minimum wage to employees, both men and women, and actively prevents sex discrimination through education against sexual harassment, which is conducted on all employees and security workers.

Establishment of Personnel Management Plan

The average age of KR employees is 43.6, which is higher than 40.5 of other public institutions. Under this circumstance, KR established the human resources supply plan based on the forecast of retirees for every year. It is expected that the vitality of the organization will be raised and the average age of KR employees will go down from 2013, through a human resources virtuous cycle including designated tenure for executives and wage peak

Improvement of Open Recruitment for Executive Position

2010

Implementing Open Recruitment for Tenured High-ranking Posts (10)

2011

Expanding the System to All High-ranking Posts Above General Manager level (221)

•

Incentive for Employees with Good Performance

Class- ifica- tion	Area
	Bonus for Budget Reduction: 9,35 million won
Danua	Achievements of Projects: 8,3 million won
Bonus	Facility/Asset Achievements: 6,2.4 million won
	Sharing of Results of Innovation and Creativity: 5,2.8 million won
	Promotion: 130
Etc.	Outstanding Employees: 28
	Educational Benefits: 1,909

Program for Capacity Building of Employees with Low Performance

Subject of Applica- tion	Below Director Level 10% Below General Manager Level 5%
Establish- ment of System	Establishment of Operation Guide Lines (Dec. 2009)
2011 Results	Personnel Measures After Comprehensive Assessment on 14 Employees (3 ex-officio dismissals, 3 demotions)

Fair Personnel Management Based on Capacity and Performance

KR set performance, integrity, and personality as basic principles of personnel management and established detailed implementation policies. In addition, an open recruitment for all the high-ranking posts was implemented to secure fairness and transparency of personnel management. Based on this, KR has been continuously producing successful management results.

Process of Personnel Appointment



Reasonable Reward According to Performance

KR is connecting implementation tasks for achievement of its management strategies to goals of each team and individual MBO of all employees and 6-sigma innovation has been utilized for fulfillment of the goals. In addition, a virtuous cycle system of strategy, innovation, evaluation, and reward, which evaluates and reflects the achievement level of the goals is established and operated. Through fairly evaluating the performance of each team and individual and reasonably rewarding them, KR has been creating a meritocratic organizational culture based on sound competitions.

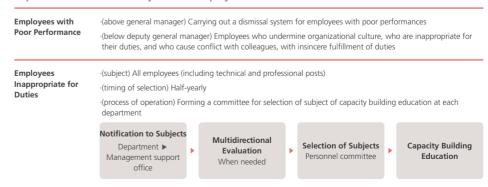
Process of Determining Remuneration



Improvement of Dismissal System for Employees with Low Performance

KR introduced a system to dismiss employees with low performances in 2010 and in 2011, objectivity of evaluation was improved in 2011. Subject of the system was also expanded from high-ranking employees (Director, General Manager), to include all employees with posts below Deputy General Manager. Through this improvement, unfair examples of free-riders on our organization were prevented and rewards for achievements were clearly implemented.

Improvements of Dismissal System for Employees with Low Performance



Flexible Working Hour System for Alleviation of Childcare Burden

Short Working Hour System

Working for 15-35 hours a week (longer than 1 month)

Flexible Working Hour System

Operating 2 types for married female employees (daily: 08:00 – 17:00, 10:00 – 19:00)

Concentrated Working Hour System

Performing personal duties after selection of specific hours

Working Hour Selection System

For those who need independent performance of duties because of childcare and household responsibilities

Rate of Employees Covered by National Pension

National Pension

23%

Public Officials Pension

Total

92%

Overlapping Pension Holders

Work-Life Balance

KR is doing its best to create the stable working environment for employees, through operation of a variety of family-friendly programs for work-life balance.

Family-Friendly Management

KR operates the KR daycare center, a workplace child-care center, to establish work-life balanced culture. It also carries out various programs such as family training, cultural events for employees' families, and flexible working hour system. To resolve the housing problem of employees who live away from their home, dormitories were secured and for raised quality of life for employees, items of health checkup were expanded and health consultation service is offered. In addition, KR has been making efforts to protect and enhance health of its employees, with designation of safety and the health categories in collective agreements which are effective until 2013. KR has also been preventing child labor and forced labor, abiding by the Labor Standards Act.



Poculto

cultural event for families of employees

Family-Friendly Program

	Program	Results
Operation of System	Introducing flexible working hour system for work-life balance Operating selective welfare system	-396 employees under flexible working hour system -Selective welfare system: maximum 700,000 won
Alleviation of Childcare Burden	Operating kr daycare center and supporting fees -Allowing time for breastfeeding twice a day, except for during night duty -Allowing three days of maternity leave to fathers	·41 children under care, 17 kindergarten teacher ·Childcare leave 11 (9 will return, 2 will extend the leave)
Legal Consultation	·Operating free legal consultation service	Raising employee satisfaction level Free legal consultation service: 75
Health of Employees	Operating group insurance for employees -Expanding test categories in health checkup -Operating health consultation service	-Categories of health checkup (15 ▶ 20) -Health consultation service, total 66 innings, used by 466 employees
Etc.	-Supporting various clubs and operating a gym -Supporting dormitories and company's leisure facilities -Supporting loans for living	Dormitory for employees: 567 rooms Leisure faciliteis: 61 rooms, 682 employees Fund for stable living: 140 employees, 19 million won

Guaranteeing Life after Retirement

KR recommends employees to join the pension scheme, for stable income and life after retirement. As a result, as of 2011, the actual rate of KR's employees who hold pension policies is 92% and those who do not hold pension policies are only new recruitments and employees waiting for retirement. In addition, KR is operating a variety of education programs including real estate trade, presentation, and programming, for the stable life of employees after retirement.

Workshop for All Employees



Results of Communication Efforts

Classification		Num- ber
	Labor Union	17
CEO's eEfforts for Communication(231)	Employees	35
Communication(231)	Executives	179
Department Heads'	Union	12
Efforts for Communication(168)	Employees	156

Results of Difficulties Treatment Unit: %



36

5

Unit of Results of Satisfaction Level

Treatmentt

Survey			Unit: point
Classification	2009	2010	2011
Performace Evaluation	66.35	71.45	72.20
Remunera- tion & Reward	63.80	68.70	66.30
Welfare	69.45	75.05	71.40

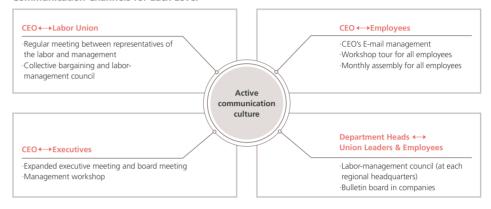
Promotion of Communication Culture

KR is operating a variety of communication channels for formation of consensus between the labor and management. KR has been establishing an open organizational culture that listens to employees' opinions and reflects

Various Communication Channels

KR has been expanding the consensus of communication between employees, based on active communication channels including consultation between the labor and management, and workshops for all employees.

Communication Channels for Each Level



Difficulties Treatment System

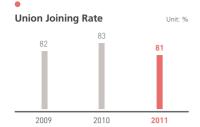
KR has been benchmarking and analyzing other companies' difficulties treatment system and improving its own system, for smooth resolution of employees' difficulties. Based on early understanding and swift resolution of the difficulties, KR is effectively creating management results.

Channel of Difficulties Treatment

Labor-Management Joint Difficulties Treatment Committee (personal difficulties)	·Flow of operation of difficulties treatment committee				
	Using Difficulties Complaint Filing System	Acceptance of Complaints at Labor- Management Joint Difficulties Treatment Committee	Reviewing and Notifying the Result within 10 Days	Resolving Untreated Complaints through Labor-Management Consultation	
Labor-management Council	Collective difficulties treatment, etc. (establishment and improvement of system, enhancement of welfare system, etc.)				
Chat Room with CEO	Operating hot-line between CEO and employees through intranet				
Free Legal Consultation Service	12 free legal consultation service for personal and duty-related affairs (75 consultations)				
Mentoring System	Swift adaptation of new employees to duties and development of potential growth power			th power	

Efforts to Raise Employees' Satisfaction Level

KR conducts a survey on the satisfaction level of employees through a survey system inside the company (Sorisaem) every year and reflects the feedback from the result on management. According to the 2011 survey, the satisfaction level has improved for two consecutive years, through reasonable assessment of indicators, establishment of the basis for evaluation focused on performance, and implementation of customized education programs. KR will further enhance the satisfaction level of its employees based on operation of efficient and diverse welfare systems.



Certified as a Company with **Excellent Labor-management** Relation



Labor Education



Advancement of Labor-Management Relation

KR reorganized strategies for advancement of the labor-management relation, reflecting willingness of the members of its organization for harmony between the labor and management. KR is building a matured labormanagement relation based on law and principle and making efforts to maintain a labor-management relation based on partnership.

Operation of the Labor-Management Consultative Body

KR operates a variety of consultative bodies including labor-management safety and health committee, labormanagement working-level council, and co-existence council with the same number of members from the labor and management, for prevention of labor-management conflicts and formation of consensus between them. In addition, KR guarantees freedom of assembly and right to collective bargaining, abiding by the Labor Union Act and the Labor Relations Adjustment Act. In its group agreement, it is stipulated that when a major change occurs including dissolution, division, merger, transfer, and change in organization, the management must notify the fact to the labor union until 90 days before the occurrence.

Result of Activities of Labor-Management Council

Classification		Major Activities	Number
Labor- Management	Collective Bargaining	Preliminary consultation on collective bargaining & arrangement of result of bargaining	10
Working-Level Council	Labor-management Council	Preliminary adjustment of agenda of labor-management councils	3
Labor-manageme Council	nt Co-existence	Establishment of plan for annual salary system for all employees and creation of company-wide consensus	1
Labor-manageme for Harmony	nt Joint Committee	Identification and operation of labor-management harmony programs	1
Retirement Pensi Labor Welfare Fu	on/Intra-company nd Committee	Appropriate operation of evaluation on operation of retirement pension fund and labor welfare fund	2

Operation of the Labor-Management Harmony

KR holds Hanmaeum track meet for both the labor and management and creates a sense of unity through benchmarking companies with exemplary labor-management relation. KR was certified as a company with excellent labor-management relation by the Ministry of Labor and Employment in June, 2011, being recognized for those efforts. KR will continue to implement various programs for harmony between the labor and management and pursue stabilization of the relation.



Hanmaeum Track Meet

Enhancement of Expertise in the Labor-Management Relation

KR is nurturing experts in labor, with operation of a variety of education programs including mid-and-long-term labor education, education for raising labor capacity, and on-line labor education. Inside the company, a club for research of labor affairs is being operated to help former and incumbent employees in charge of labor affairs to play a role of bridge between the labor and management. In addition, outside the company, KR is establishing a close labor network with other public institutions. Based on the network, KR exchanges information and enhances professional capacity.

Education to Nurture Experts in Labor-Management Relation

External Education

·Mid-and-long-term labor education (labor-managementgovernment course for CEOs. Korea University)

·Education to nurture labor capacity (course for experts in response to multiple unions)

Internal Education

·On-line labor education ·Labor education tour for all employees

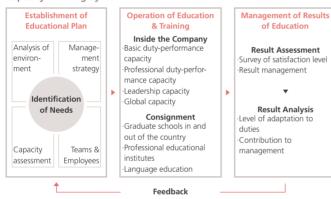
Social Responsibility BEST PRACTICE

Systematic Capacity Building for Production of Outcome

Establishment of the Reasonable Development Process through Capacity Assessment

KR is systematically establishing capacity building plans according to the current level, importance, and necessity of projects and capacity, through internal assessment of capacity. Education is carried out based on balanced reflection of the organization's strategies and individual needs. The results are reflected on frontline tasks and the next year's education plans, as part of the systematic capacity building system.

Capacity Building System



Examples of Capacity Assessment (business capacity for railway construction)

High Current Level	·Knowledge of design-related laws and rules ·Comparative analysis of construction feasibility and economics of design ·Construction management		
▼			
High Importance	·Identification of new business items ·Understanding of balanced national development ·Understanding of railway structure & design ·Actual image design and management		
	▼		
Great Gap	·Analysis of economic feasibility ·Identifying new business items ·Planning and understanding of national backbone network ·Understanding of balanced national development		

Measurement of Capacity Assessment Results

Leve	el of Application to Actual Duties
·Tim	ing: survey within 3 months of
edu	cation
·Sub	ject: respondents themselves,
colle	eagues, superiors
·Cor	ntent: application, change in behavior,
etc.	

Contribution to Management ·Timing: end of the year ·Calculation: profit/education cost ·Content: analysis of financial effects

Operation of Customized Education Programs to Secure Advanced Railway Technology Capacity

KR has nurtured 23 core human resources including four professional engineers, 15 masters, and four doctors, through operating customized educational programs based on mid-and-long-term educational plans. After completion of the education, the level of their education to actual duties and contribution to management is evaluated and a feedback is given, for raised quality of education. In addition, to secure an advanced level of railway technology capacity, KR established the industry-academia cooperation system and under the system, 14 R&D projects and 21 inside research projects are currently conducted.

Enhancement of Capacity through Feedback on Frontline Tasks

Every year, KR operates advanced educational programs of design, construction, and supervision, for frontline employees. Employees who complete the education are assigned to construction sites in Korea or the Chinese branch, to apply what they learned to actual tasks on sites. In particular, employees with increased duty performance capacity are directly performing design or supervision tasks, which had been carried out based on service contract. In detail, direct design was implemented in the fields of electricity, signal, communication, and direct supervision is carried out in the fields of bedding, track, electricity, and communication. As a result, 25.4 billion won of budget for service contracts was saved and the increased capacity of employees has led to improved competitiveness of the organization.



Contruction Site in China

Result of Capacity Enhancement Project

Classification	Unit	2009	2010	2011
Per-person Hours of Education	Hours	128	135	119
Satisfaction Level of Capacity Building Project	Points	69.9	76.9	76.7

Social Responsibility

Management for Customer Satisfaction

Transparent Customer Support



Call Center



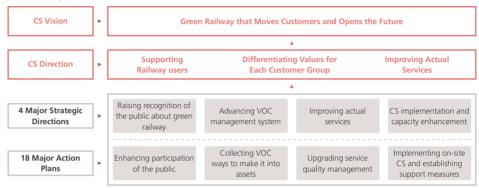
CS (Customer Satisfaction) Management System

KR established the CS vision system for realization of customer value and is operating the company-wide CS organizational system. In addition, KR has been systematically managing customers' VOC through "Sorisaem", the first-ever patented system among public institutions in Korea.

CS Vision System

KR set four strategic directions and 18 action plans for realization of its CS vision, "green railway that moves customers and opens the future". It also offers the optimal customer service through establishment of CS direction for each stakeholder, customized to features of different institutions, and operation of the best sharing channels.

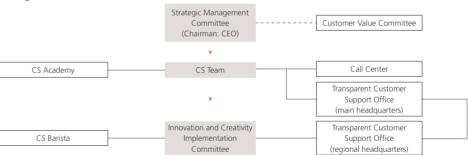
CS Vision System



CS Organization

KR is carrying out voluntary CS management at each division. A quarterly workshop for CS leaders and CS baristas from each division is held, to give an opportunity to improve weaknesses and further advance strengths. In particular, at the workshop, CS activities of different division are cross-evaluated to secure objectivity of the evaluation.

CS Organizational Chart



Self-regulating CS Management

KR also carries out voluntary CS management through implementation of the self-regulating CS management system for each division. The system is an officially documented system under the goal of improvement of satisfaction levels for seven areas including level of friendliness of answering the phone. It is preventing customer complaints such as unkindness and failure to initial response to customer complaints. For division with declining CS indexes, despite efforts for CS activities, KR diagnoses and analyzes problems, and provides customized mentoring service. In particular, internally nurtured CS lecturers conduct the CS mentoring to enhance educational effect.

Sorisaem



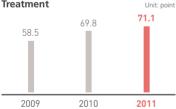
Complaint Management System



Customer Suggestion Center



Satisfaction Level of Complaint Treatment



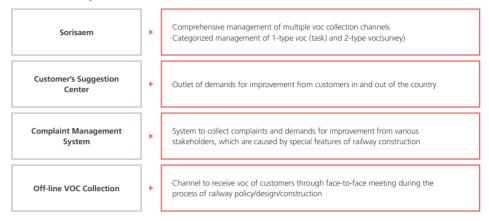
CS Activities to Move Customers

KR will touch the hearts of customers through multidirectional efforts to provide services that meet needs and tastes of customers.

Operation of the VOC Collection System

KR is operating four major VOC collection systems including easily accessible Sorisaem, which is easily accessible, and customer suggestion system, based on consideration of the features of different customer groups. With this system, KR is actively exchanging information with customers.

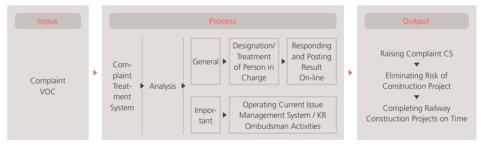
VOC Collection System



Establishment of a Response System for Different VOCs

KR categorizes VOC into general complaints and important complaints and systematically treats them, to raise customer satisfaction and to complete railway construction on time. In particular, by resolving major VOC that can raise issues through 6-sigma innovation tasks, the root cause of civil complaints are eliminated in advance.

Process of Complaint Treatment



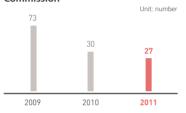
Facilitation of Customer's Suggestion

KR established a customer's suggestion center on its web-site and receives customer's opinions in real time. The customer's opinions are actively reflected through review of relevant division and the results are promptly sent to e-mail and SMS of customers. In particular, helpful suggestions reflected on policies are regularly awarded, to promote voluntary participation of customers.

Satisfactory Service



Recommendations of Anti-Corruption & Civil Rights Commission



e-People Presidential Award



Provision of Satisfactory Service

KR set the waiting time of customers, the biggest complaint of customers, at maximum nine minutes and raised satisfaction level of visiting customers through offering a satisfactory service based on concentration of customer convenience facilities and computing facilities at transparent customer support center.

Meeting within 9 Min. System



Efforts for the Efficient Resolution of Complaints

KR reasonably improved customer's complaint system and reduced the number of recommendations of the Anti-Corruption and Civil Rights Commission and increased the acceptance rate of recommendation of correction. In addition, the ratio of on-line record certificates issued at the request of customers and the time required has been reduced as well. Being recognized for those achievements, KR was awarded the e-People Presidential Award by the Anti-Corruption and Civil Rights Commission and set a good example by donating the prize money for contribution to society.

Results of CS Management

As a result of various CS activities for the year 2011, the satisfaction level of government customers has risen continuously since 2004 and different satisfaction levels surveyed through Sorisaem were raised compared to the previous year as well. KR will continue to do its best to create more customer value based on CS management.

Result of Survey on Different Satisfaction Levels



Satisfaction Level of Management Information Disclosure 75.0 73.9 70.2

2010

Process of Information Release

2009

Reception of Request for Information On-line, Mail, Fax, Visit

Sending Mail

Completion of reception and appointing person in charge

Calling Kindly
Identifying detailed information to the person
requesting information

Notifying Decision to Disclose InformationSending e-mail about result of decision to release information

Surveying Satisfaction Level of the Person Requested Information Introducing the reason of disclosure, Legal ground, and Process of disobedience

Receiving an Award for Institution with Excellent Information Disclosure



Satisfaction of Customers' Right to Know

KR is satisfying customers' right to know through providing a variety of management information in real time to customers and is doing its best to protect customers' private information, which has been emerging as an important social issue.

Customer-Oriented Information Disclosure

KR is making efforts to enhance the quality of information offered to customers, in line with rising demand for quality information. In particular, a management information disclosure system customized to different groups of customers is in place and in 2011, the comprehensive information disclosure system and self-disclosure categories were expanded. As a result, satisfaction level for KR's information disclosure has been raised constantly.

Disclosure System for Different Groups of Customers

	Customer's Needs	Disclosure Items (Provided Information)	Disclosure Tool
Policy Customer	-Features: transparency, reason, agreement -Demand: information on management status -KR's general status -Management activities, financial status	·KR overview, current status of executives, number of employees, financial statements, income and expenses, etc.	·Comprehensive and self disclosure (web-site), railway industry information center newsletter
General Customer	-Features: convenience, safety, explanation -Demand: general information of railway -Routes, opening status -Recruitment information	New recruitments, major projects, average reward for employees, railway statistic annals, railway terminology book	Integrated and self disclosure (website), railway industry information center newsletter
Business Customer	-Features: cooperation, sharing, contract -Demand: railway project information -Plan to place orders for project -Contract information	·Current status of investment implementation, budget status, bidding information, current status of ongoing projects, electronic contracts	Integrated and self disclosure (website), electronic procurement system, contractor management system, text-messaging, SNS service
Complaint Customer	-Features: conversation, understanding, persuasion -Demand: local and individual complaint -Current status of routes and facilities -Incorporation of land, reward	·Current status of employee in charge of information disclosure, other information disclosure, requests for information disclosure	Integrated and self disclosure (web-site), integrated customer management system, text- messaging and SNS service

KR advanced the customer management system by division, information category, and customer's group, based on utilization of information categorizing process oriented for customers. KR has been touching hearts of customers through providing information to customers conveniently. As a result, KR was selected as an "institution with excellent information disclosure" by the Ministry of Land, Transport, and Maritime Affairs, and as an "institution with excellent access on-line" by the Ministry of Public Administration and Security.

Records of Information Disclosure

Classification	Unit	2009	2010	2011
Request for Information Disclosure	Number	311	182	175
Decision of Information Disclosure	Number	244	147	160
Rate of Information Disclosure	%	72.0	80.8	91.4

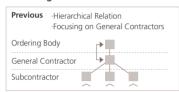
Efforts for the Protection of Customer's Information

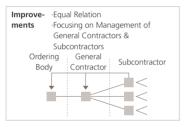
KR established a solution to prevent exposure of customers' private information, network security system, and strengthened user identification system and conducted regular education for personnel in charge of security duties. As a result, there was no case of loss of customer information or data, or related complaints. KR also secured credibility for information protection, through preventing complicated cyber attacks based on a strengthened information security.

Social Responsibility

Model of Co-Existence and Cooperation

Improvements Unreasonable Practices of Railway Construction Projects Eliminating Vertical Producing Method





Implementation Shared Growth

Establishing Fair Growth Working Group (Oct. 25, 2010)
Consisting of Shared Growth Team, Voluntary

Consisting of Shared Growth Team, Voluntary Work Team Management Efficiency Team

Workshop for the Implementation Fair Growth (Nov. 9, 2010)

Shared growth, voluntary work, implementation plan for management efficiency
Presentation and task identification discussion

Establishment of Action Plan to Realize Fair Society (Dec. 3, 2010)

- 15 tasks for realizing a fair society
- -5 implementations of shared growth
- -5 stages of voluntary works
- -5 implementations of management efficiency

President's Liberation Day Remark (Aug. 15, 2011)

Presenting "shared growth" as core national

Establishment of Action Plan for Shared Growth (Nov. 18, 2011)

- 28 strategic tasks for shared growth
- -19 leading shared growth tasks -5 fair business culture tasks
- -4 culture sharing tasks

Implementation Plan for Realizing Fair Society

KR established strategic plans for realizing a fair society to achieve the goal to become "a trusted public institution". The realization of fair business culture is being established under the slogan of "Reducing Unfair Practice and Enhancing Shared Growth".

Implementation Strategy for Realization of a Fair Society

KR established a strategic system for realization of a fair society, for fulfillment of the vision for a fair society, "Realization of a public institution trusted by the public". KR is also making efforts to realize a fair corporate culture, under the slogan of a fair society, "Go! Reduction of Unfair Practices, Go! Shared Growth!".

Strategic System of Realizing of Fair Society



Organization for Realizing Fair Society Realization

KR made the Fair Society Task Force, which was a temporary organization, into an official organization as a shared growth team of the Planning and Budget Division under the Planning and Innovation Office, in November 2011. Through this move, a foundation for the realization of a fair society was built. In addition, KR has put organizational culture that can help affiliate companies in place, based on the operation of a shared growth council by region and field, and subcontract examination committee for prevention of unfair practices.

Organizational System for Realizing of Fair Society

Classification	Ontent Making temporary shared growth task force into the shared growth department of the planning and budget team under the planning and innovation department. -dealing with shared growth tasks, improvement of system, and support for SMEs	
Newly Establishing Regular Organization		
Newly Establishing Subcontract Examination Committee	-Establishing foundation for shared growth between large companies and SMEs based on controlling of prevention of low-price subcontracting and unfair practices of general contractors	
Establishing and Operating Commission on Shared Growth for Large Corporation and SMEs	Consisting of 5 KR executives and 25 representatives of affiliate companies (twice a year) Council by region and field consists of KR and 20 representatives of 20 affiliate companies -5 regional council, 1 electricity council, 1 overseas business council, 2 private investment council (Total 15)	

Shared Growth Web-Site



SME Support Center at Regional Headquarters



Patent and Deposit System

Patent System
·Occurrence of Right: enforcement of effect
after examination of patent agency
·Information Disclosure: anyone
·Protection Period: 20 years

Deposit System		
·Occurrence of right: Occurrence of legal effect		
during use of system		
·Information disclosure: only developing		
companies		
Protection Period: permanent		

Amount of Purchase from Disadvantaged Companies

Unit: 100 million won

SME	1,111,762
Company Headed by Woman	12,830
Social Corporation	207
Company Headed by Disabled Person	100

Operation of the Implementation System for a Fair Society

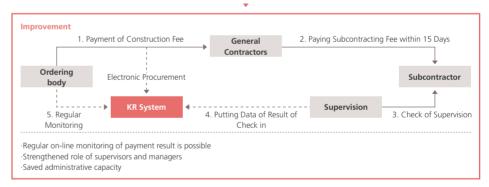
KR is improving unfair subcontracting practices for shared growth between large companies and SMEs in line with government policy, and is contributing to the spread of a fair trade culture, through strengthening support for affiliate companies.

Establishment of the Fair Trade System

KR is notifying subcontractors through SNS, when paying to general contractors, to root out unfair practices. In addition, KR established IT-based "Subcontractor Payment Check System", to monitor if the prices are properly paid to subcontractor, in real time. In addition, for establishment of shared growth culture throughout the railway construction industry that can cover subcontractors, facility rental companies, and materials and workforce supply companies, KR signed a "fair trade agreement' with 139 companies in November 2011. KR also distributed casebooks of difficulties at construction sites and subcontractor management manuals for spread of fair trade culture and is recommending utilization of standard contract for rental of construction machines and standard subcontracting contracts.

Payment System for Subcontract





Operation of the Fair Achievement Distribution System

KR conducted three development of technology with guarantee of purchase, including track transfer system, for fair distribution of achievements with SMEs. In particular, for the first time among public institutions, KR introduced deposit system to make SMEs concentrate only on development of technology, by protecting core technologies of SMEs. KR is also contributing to enhanced competitiveness of SMEs, through actively purchasing products of companies operated by disadvantaged people, including SMEs, social companies, and companies headed by women and disabled people.

Promotion of Communication Channel with SMEs

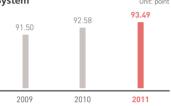
KR is actively utilizing shared growth web site established in January, 2011, for interactive communication and expanded SME support center, which was only at the main headquarter, to regional headquarters. As a result, KR was able to clear all the 40 problems such as overdue wages. KR created 5.2 billion dollars worth economic benefits including 4.3 billion won of unpaid construction fees and 900 million won of overdue wages, through swiftly clearing difficulties of SMEs.

•

e-Procurement System



Satisfaction Level of e-Procurement System Unit: point



Technology Exchange Meeting with SMEs



Efforts to Support SMEs

KR selected and is operating four major tasks to support the practical growth and development of SMEs, including the prioritized purchase of SMEs' products and joint penetration in overseas railway markets. In addition, for the first time among Korean public institutions, KR signed an agreement for support for SMEs with the Commission on Shared Growth, to express its will for a fair society.

Four Major Tasks Jointly Implemented with SMEs

Prioritized Purchase of SMEs' Products

Support of Joint Research for Development of Railway Operation of Support Programs for Enhanced Capacity

Efforts for Joint Penetration into Overseas Railway Markets

Prioritized Purchase of SMEs' Products

As a result of efforts to prevent unfair competition in contracting and prioritize contracts with SMEs, KR succeeded in over-fulfilling the ratio of purchase of services and products from SMEs, recommended by the government KR is also continuously expanding participation of SMEs through utilization of a joint subcontracting system¹ with general contractors, for lowered entry barrier for SMEs, based on resolution of the business environment with a large number of big bedding construction. As a result of through compliance with relevant laws, KR recorded no single violation of unfair transactions or unfair competition. KR also contributed to 552.9 billion won worth contracts for local companies, based on expanded implementation of incentive system for participation of local companies, for revitalization of local economies.

KR is swiftly disclosing contract information through its web-site, e-procurement system, and Alio system (information posting system), to provide equal opportunity for bidding and resolve public mistrust in the bidding process. In particular, the whole process of contract from bidding to payment is operated according to the KR e-procurement system, to raise the transparency of the contract process. As a result, the satisfaction level of contractors has been raised continuously. In addition, KR is leading the formation of fair contract practices, through reducing the amount of arbitrary contract even below the level recommended by law and open calling for estimates before bidding.

¹ A method of construction based on joint contract of general contractor and specialized construction company signed by the ordering body, for resolution of unfair structure of subcontracting

Programs to Support Capacity Building

KR is operating a shared growth academy to form of consensus on the realization of a fair society. In addition, KR is operating a variety of education courses for employees of affiliate companies including experts in quality, environment, safe and healthy management, overseas railway, and light-weight railways.

KR is also operating the "management doctor system" to resolve difficulties of SMEs and build their capacity. In addition, KR provides customized management diagnosis and consultation and pays the fee for consultation instead of SMEs.



Management Doctor System

KR transfers advanced technologies of large compa-

nies to SMEs, supports expensive facilities, and holds technology exchange meeting, for raised capacity of SMEs. In addition, KR supported the fee for certification of PMS (Productivity Management System) to four SMEs, to contribute to the establishment of the systematic management system of SMEs.

Support of Joint R&D



Citation for the Institution with Best Support for SMEs



Citation for Contribution to Shared Achievement System



Expansion of Joint Research and Development

KR established an SME support system including utilization of facilities, through revision of R&D provisions in March 2011, to support SMEs' R&D. In addition, KR is securing viability of SMEs based on joint four research projects including improvement of track structure for reduced maintenance costs, in line with transformation of regular railways into high speed rail.

Joint Penetration into Overseas Railway Markets

KR formed a consortium with affiliate companies and is jointly penetrating into the global railway market, to strengthen global competitiveness and effective penetration. In detail, KR is enhancing cooperation based on sharing of overseas bidding information and human network with affiliate companies.

Achievement of Support for Joint Research Projects

Number of Joint Research Projects	4
Participating SMEs	5 companies
Budget for Joint R&D	12.67 million won

Results of Joint Penetration into Overseas Market

Number of Projects	5
Number of Affiliate Companies	20 companies
Size of Projects	3.075 trillion won

Efforts for Joint Penetration into Overseas Market

2010 Projects

- •Modernization of Railway in Azerbaijan
- •Design and Supervision Service in Oman
- •1st and 2nd Phase Construction in Mongolia 5.2 trillion won
- ·Rio-Campinas High Speed Railway Construction and Operation in Brazil
- 2.2 trillion won

2011 Projects

- (ongoing) Modernization of Railway in Azerbaijan
- (ongoing) Design and Supervision Service in Oman
- ·(ongoing) 1st and 2nd Phase Construction in Mongolia
- ·(ongoing) Rio-Campinas High Speed Railway Construction and Operation in Brazil
- •1st Phase Subway Construction in Qatar 3 trillion won

Affiliate Companies: Daeah TI, Hyewon Katchi Architectural Firm, Gyeongin Technology, Moon Engl, D2Eng, Huedime Architectural Firm, Cheongseok Eng, Baesan Eng, Jeongseol Sytem, Sambo Technology Group, Cheonil Technology Group, AOC Architecture Eng, Seogu Eng, Taejo Eng, Seohyeon Technology Group, Sinsong Eng, Korea Comprehensive Architectural Firm, Dongnam TDS, Gonggwan Protech

Efforts to Spread Consensus for Realizing of a Fair Society

KR is making a variety of efforts in and out of the company, to spread consensus on the realization of a fair society. In February 2011, KR held a company-wide briefing with affiliate companies and shared the importance of realization of a fair society, with publication of difficulties of SMEs. In June, KR distributed a subcontracting management manual. In November, a fair trade agreement with affiliate companies was signed and held an awarding ceremony for announcement of cases of shared growth was held. In particular, in that the CEO himself is engaged in communication with affiliate companies and policy improvement, KR's efforts for realization of a fair society is producing tangible results.

Results of Efforts to Realizing of Fair Society

As a result of efforts for realization of a fair society, KR was designated as the "best institution in support for SMEs" in 2011, and received a Knowledge Economy Minister's Award and a Commission on Shared Growth's Award as an "institution with good achievement sharing". KR will continue to fulfill its social responsibility as a public institution through creating equal opportunity and fair competitive environment.

Social Responsibility

Contribution to Society

Media Coverage of KR's Contribution to Society

Sharing for New Year's Holiday Daejeon Ilbo, Jan. 27, 2011

Scholarship Granting Ceremony for KR Teenager Group YTN, Feb. 22, 2011

KR Teenagers Group, Hope Project Kookmin Ilbo, May, 28, 2011

Railway Love Camp Newsis, Jul. 23, 2011

Sharing for Thanksgiving Holiday Daejeon Ilbo, Sep. 6, 2011

Sharing Briquette of Love Daejeon Ilbo, Nov. 24, 2011

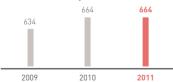
Beautiful Playground Daejeon Ilbo, Nov. 24, 2011

Sharing Kimchi of Love Daejeon Ilbo, Nov. 29th, 2011

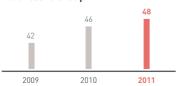
Special Report on Sisterhood between Companies YTN, Dec. 1, 2011

Community Chest Campaign at the End of Year Geumgang Ilbo, Dec. 30, 2011

Number of Participants in KR Volunteer's Group 66/ 664 634



Employee Participation Rate of KR Volunteer's Group Unit: %



Establishment of the System of Contribution to Society

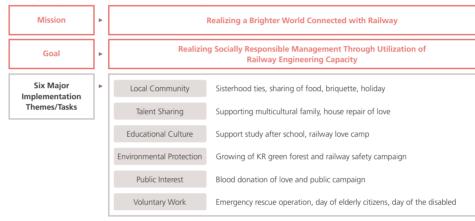
KR selected the best fulfillment of social responsibility among public institutions as a strategic task that requires company-wide implementation, when establishing the 2020 Global Management Strategy. KR established the implementation strategy for fulfillment of the strategic tasks and reorganized organization and infrastructure.

Establishment of the Implementation Strategy for Contribution to Society

As ISO 26000, a global standard of socially responsible management, was enforced, KR's contribution to society was comprehensively reviewed and a conclusion was drawn out that a strategic contribution to society is necessary and an efficient promotion of that is also needed. Thus, KR overhauled its master plan for contribution to

KR set six implementation themes including protection of communities and environment, for fulfillment of socially responsible management based on utilization of railway engineering capacity and selected implementation tasks for that. In addition, KR is setting goals with calculation of employees' social contribution into contribution mileage and the result of the calculation is reflected on internal evaluation of departments.

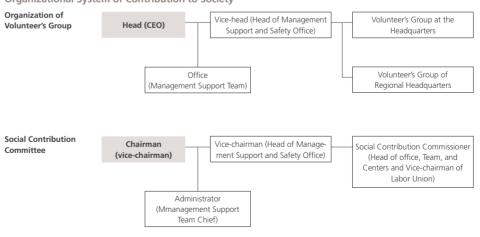
Strategic System of Contribution to Society



Implementation Organization of Contribution to Society

KR is operating KR volunteer's group and social contribution committee for continuous activities of social contribution. The CEO is leading the contribution as the head of KR volunteer's group and the vice-CEO is playing a role as head of the social contribution committee which examines the implementation plan and budget for contribution activities by year.

Organizational System of Contribution to Society



Change

Fund for Social Contribution

	Unit: 1 million won
Budget	208
·Fraction of Wage	8
·Share Fund	85
·Donation	21
·Matching Grant	92
·Onnuri Gift Certificate	2
2010 Roll Over	111
2011 Total Amount	319

Execution	218
·Support for Disadvan- taged People	110
·Support for Local	11
Communities -Education and Culture	97

101

Results of Contribution to Society

Classification	Results
Number of Volunteer Workers	2,446 people
Hours of Volunteer Working	13,884 hours
Fund for Contribution to Society	2.18 million won
Blood Donation	354 people
Amount Used for Purchase of Agricultural Products	16 million won

Feedback System of Contribution to Society

KR conducts a survey on satisfaction level to draw out the effect of its contribution to society and operates a system for contribution to society and gives effective feedback to social contribution activities.

Survey on Satisfaction Level of Contribution to Society

KR conducted a survey of satisfaction level and contribution level to local communities, on beneficiaries, affiliate companies, and personnel in charge, in December 2011 and reflected the result on the establishment of 2012 social contribution plan.

Overview of the Satisfaction Level Survey of Social Contribution Activities

Satisfaction Level Survey of Social Contribution Activities

Subject

Beneficiaries, Affiliate institutions, Personnel in charge

Content

·Satisfaction level of programs ·Contribution level to local communities

Analysis of Results

Response rate: 96%
Rate of responses above satisfaction: 81%

Raised awareness of social contribution activities by employees is needed

Reflection of Result

Reflecting the result of satisfaction level survey on annual plan Institutionalizing satisfaction level survey (Once a year, Survey by class)

Operation of the System of Contribution to Society

KR has established and been operating a system of contribution to society to encourage voluntary participation in social contribution activities. KR employees can connect to the social contribution system on-line and check important information in real time, including their mileage, future plan of social contribution activities, and current status of social contribution fund. Feedback is given to improve lacking aspects.



Social Contributions System

Creation of Consensus of Social Contribution Activities

KR employees are obliged to obtain 200 points of social contribution mileage every year. When an employee fulfills an hour of social contribution activities, he/she is granted 10 mileages. To obtain 200 mileages, employees should invest 20 hours in social contribution activities every year. To encourage effective social contribution activities, KR selects departments and individuals with excellent social contribution records and awards them. In addition, special lectures and workshops for personnel in charge are held to spread consensus on the need for social contribution activities.

Programs for Creation of Consensus of Social Contribution

Classification	Content	
Reflecting internal department evaluation as common indicators Introducing mandatory mileage per individual		
Educational Program	-Special lecture by experts to raise awareness of social contribution activities -Holding workshops for personnel in charge of social contribution	
Awarding System	·Awarding teams and individuals with excellent social contribution records at the end of year	

1 Company- 1 Farming Village Sisterhood



Sharing Briquettes of Love



Making and Sharing Kimchi



Sharing during Holidays



Social Contribution Activities by Six Implementation Themes

KR conducted active social contribution activities by six implementation themes, in 2011. As a result, KR's brand image as a socially responsible public corporation was raised by 4.2 points to 79.2 points. KR committed no single violation of laws related to supply of service, labeling, and marketing and KR will continue to grow as a public institutions for the public, through compliance with relevant laws and active social contribution activities.

Local Community

KR's main headquarters and five regional headquarters formed a sisterhood relationship with local farming communities and carried out a variety of volunteer works there. KR is also contributing to increase in the income of the local communities, through purchasing agricultural products from its sister farming villages. In addition, KR accomplished out various social contribution activities for residents near railways, by sharing briquettes, kimchi, and holiday gifts.

Overview of 1 Company – 1 Farming Village Sisterhood Relationship

Sister Village Gapa village, Cheongyang-gun, South Chungcheong Province	Major Activities Planting posts on red pepper field, arranging matrimony vine field (May)
	3, 1,1, , 3,3
	·Harvesting cabbages, radishes, and salting cabbages (November)
Seoul Metropolitan Yigok , 2-ri village Gapyeong-gun, Covering pears, rearranging pear farm (June) Geadquarter Gyeonggi Province Harvesting ginko nuts, pulling props at red per	
Myeonghak-ri village Yeonggi-gun, South Chungcheong Province	·Harvesting pears, eliminating vinyl at pear farm (October)
Wondang village, Milyang-si (city), South Gyeongsang Province	-Removing seeds from apples, cleaning (June) -Harvesting apples, rearranging apple farm (November)
Gosan-ri village, Wonju-si (city), Gangwon Province	-Piling and trampling earth on collapsed wall of community town (June)
Ssangji village, Suncheon-si (city), South Jeolla Province	·Helping farming village, cleaning (November)
	Gyeonggi Province Myeonghak-ri village Yeonggi-gun, South Chungcheong Province Wondang village, Milyang-si (city), South Gyeongsang Province Gosan-ri village, Wonju-si (city), Gangwon Province Ssangji village, Suncheon-si (city),

Sharing Talent

KR carried out talent sharing activities such as repair of dilapidated houses and papering walls, through utilizing experts in construction, civil engineering, and electricity fields, for local communities. In addition, KR's Chinese branch is operating a Korean language school for Chinese and conducts emergency rescue activities after earthquake, to raise its status as a global company.



Korean Language School at Chinese Branch

Education and Culture

KR is supporting scholarships, school uniforms, and school supplies to 120 teenagers from low-income families nationwide, through the Hope Project for KR teenagers group. KR also laid the foundation for continuous support for the teenagers, through a one-onone mentoring program. In addition, disadvantaged teenagers and elementary school students who live in remote areas were invited to the railways love camp, which includes field trips to railway construction sites and train experience programs.



Hope Project or KR Teenagers Group

Blood Donation



Environmental Protection

KR is making areas under overpasses and near shutdown railways into railway parks, markets, bicycle lanes, and cultural experience parks and returning them to local communities. KR is realizing contribution to society and environmental management at the same time, through these efforts.



Happiness Nuri Park

Sharing Meals



Major Achievements of Environmental Protection

Classification	Major Content	
Railway Park	-Area near railway at the entrance of Gogil village in Hwanggeum-dong, Gwangyang-si (city) -Total 6.3km from Seongbuk Station to Hwarangdae Station -Section within Euijeongbu-si (city) on the Gyeongwon line (Happiness Nuri Park)	
Market ·730m from Onui Intersection to Hoban Bridge in Chuncheon-si, on the Gyeongch		
Cultural Experience Park · Area under bridge at Sangroksu Station in Ansan-si		
Ecosystem Observation Trail	·Area near Cheongpyeong Station in Gapyeong-gun, Gyeonggi Province (9,500m²)	
Bicycle Lane	-3.86km from Yangju city hall to Deokgye Station in Yangju-si, on the Gyeongwon line -26.82km on from Paldang Bridge in Namyangjo-si to Yanggeun Bridge in Yangpyeong-gun	

Free Photos for the Elderly



Public Interest

In cooperation with the Korean Red Cross, KR designated February and August, when blood is especially insufficient, as blood donation months and encourages employees to donate blood. KR is also waging a forest growing campaign. In addition, to prevent accidents, KR is conducting a safety campaign including distribution of fliers at major stations around the country, jointly with relevant institutions and NGOs.

Voluntary Works

KR is contributing to revitalization of local economies, through active support for local festivals including Geumsan World Ginseng EXPO and Cheongwon Life Festival. In addition, KR is operating soup kitchens for the elderly living alone and marginalized classes and offering free service of shooting photos of the elderly.

Major Performance of Voluntary Works

Major Content	
Voluntary works at soup kitchens for the elderly living alone and marginalized class (11 works, 93 participants)	
Voluntary work at festival (63 employees, 644 hours)	
Supporting festival and promotion in and out of the company	
Taking photos for the elderly and offering free frames (66 employees)	

Appendix

APPENDIX

Participation in the UN Global Compact

Ten Major Items of the UN Global Compact

Item	Principle	Major Activities	Page
Human Rights	We must support and respect human rights protection declared internationally.	Work-life balance	50
Tullian Rights	Businesses must make active efforts not to be engaged in human rights violation.	Fair recruitment and reasonable personnel management	48
	Businesses must support actual recognition of freedom of assembly and right to collective bargaining,	Advanced labor-management relation	52
Labor	4. Must exclude all forms of forced labor,	Work-life balance	50
	5. Must effectively eliminate child labor,	Work-life balance	50
	6. Must eliminate discrimination in employment and duties	Fair recruitment and reasonable personnel management	48
	7. Must support preventive approach to environmental issues,	Efforts to implement eco-friendly design	41,42
Environment	8. Must implement measures that promote environmental responsibility,	Major activities to combat climate change	39
	And must facilitate development and spread of eco-friendly technology.	Eco-friendly design of station	43
Anti-corruption	10. Businesses oppose all forms of corruption including extortion and bribery.	Results of implementation of ethical management	16



KR joined UN Global Compact in 2007 and the Korean branch of UN Global Compact in 2010, to fulfill corporate social responsibility. KR will continue to abide by 10 principles of the UN Global Compact to become a corporate leader of sustainable management.

Participation in the UN Global Compact

Statement of Verification by a Third Party

GRI Index

System for Implementation of Sustainable Management and External Participation

APPENDIX

Statement of Verification by a Third Party

Messrs. Stakeholder of Korea Rail Network Authority

Korea Productivity Center (the "Verifier" below here) submits its opinion of verification, at the request of a third-party verification of "2012 Sustainability Report" (the "Report" below), by Korea Rail Network Authority.

Responsibility and Independence

The responsibility of the information and opinion written in the Report wholly lies to Korea Rail Network Authority. The Verifier is responsible for opinion of verification on the Report and as an independent verification agency, the Verifier was not engaged in writing this Report and does not have any interest with Korea Rail Network Authority, which can undermine independence of verification.

Standards of Verification

The verification was conducted with AA100AS(2008) verification standard, based on Type 1 verification type and Moderate verification level and appropriateness to inclusivity, materiality, and responsiveness principles was checked, following AA1000 APS (2008) verification principle.

Limitation

For this verification, results in 2011 were verified according to the verification principle above and verification of credibility of some data including financial results, environmental data such as greenhouse gas emission, and web-site-related information is not included here. In addition, a limited on-site examination at the Daejeon headquarters was conducted and if additional verification is conducted in the future, the result of verification could be different.

Method of Verification

For this verification, a verification process in the following methods was conducted.

- 1. Compliance with content and quality of report was checked based on GRI G3. 1 Guideline.
- 2. Satisfaction of GRI Application level A requirements were checked through examination of reporting rate and writing method on indicators of GRI G3. 1 Guideline.
- 3. Appropriateness of selection of major issues dealt with and the content in the report was examined through media research and benchmarking analysis.
- 4. Appropriateness and errors in expression of the content in the report was examined through methods such as comparison and analysis against other sources of information.
- 5. Ground for major data and information was checked through on-site examination at the Daejeon main headquarters and internal process and system were checked as well.

Result of Verification

The Verifier confirmed that this Report is sincerely and fairly reflecting the activities and results of Korea Rail Authority (KR)'s sustainable management. In addition, through this verification, it was confirmed that KR satisfies the self-declared GRI Application Level A standards.

1. Inclusivity: Participation of Stakeholders

KR categorizes and manages its stakeholders into "value influencing customer", "value creating customer", "value conveying customer", and "value purchasing customer", according to trends of value of railways, and is listening to their opinions through various communication channels customized to different group of stakeholders. KR is strengthening communication with employees based on improvement of the labor-management relation and difficulties treatment system. KR is also immediately responding to difficulties of affiliate companies through its SME support center and shared growth web-site. In addition, KR is smoothly exchanging information with different groups of customers, through the four major VOC collection system including Sorisam, customer suggestion, and customer complaint management system. As such, it was confirmed that KR is continuously communicating with different groups of stakeholders, through off-line channels such as public hearing, discussion, and council, and on-line channels including blog and web-site.

In particular, KR's attempt to prevent and swiftly resolve social conflicts, which frequently occur because of the characteristics of the railway construction project, through formation and operation of the conflict management committee is evaluated to be an active effort for response to and resolution of business-related issues. In addition, KR built a cooperative network with environmental organizations including NGOs, for resolution of environmental conflicts surrounding Mt. Cheonseong in the Gyeongbu high speed railway area, which is one of the major issues of sustainable management written in the Report. KR formed the green railway consultation council and actively reflected opinions of environmental organizations to KR's environmental policies, which is an exemplary case of communication.

It is recommendable for KR to disclose interview of different stakeholders including railway experts, government agencies, KORAIL, and NGO, to supplement content of communication with stakeholders. In that way, an opportunity will be offered to examine the current level and standards of KR's sustainable management from outside perspective. Plus, I recommend you to manage different on-line and off-line communication channels for more systematic management of the opinions of stakeholder in and out of the company, which are collected through various channels.

2. Materiality: Selection and Report of Major Issues

It is confirmed that KR is continuously identifying sustainable management issues relevant to KR, through a variety of methods such as media survey and survey on stakeholders. In particular, KR is making efforts to examine the satisfaction levels of different issues such as economic, environmental, and employee responsibilities, through surveys and to identify issues related to sustainable management, through finding out positive or negative issues covered by the media, through media research. In addition, the issues drawn out by the survey come under a materiality evaluation and given priorities, to draw out core issues. It is confirmed that most of the major issues are reported in this Report in a balanced way.

In particular, KR is reporting the process and plan for eco-friendly construction of railways which takes the whole life cycle of railway into account, as a response to issue of "realization of eco and green railway for green growth". It also reports its social contribution activities based on operation of social contribution system and support for local communities by experts, as a response to the issue of "public interest project for contribution to society and expansion of contribution". Those are good examples of implementation of sustainable management that utilizes the characteristics of business. However, the issue of "spread of eco-friendly awareness" is focusing only on PR of KR's environmental activities such as environmental campaign and education, thus, reporting of this issue needs improvement and the reporting of "realization of eco and green railway" needs more detailed information of results of carbon emission reduction in the whole process. I recommend you to add more detailed and diverse issues related to the railway industry to the issue pool and to more actively respond to major issues through providing more detailed information of actual cases and plans of major issues.

3. Responsiveness: Organization's Response to Issues

KR established 2020 Global Management Strategy in December 2011 and set 18 strategic tasks under four strategic goals. KR also designated implementation tasks and core result indicators for each strategic tasks and the achievement level of the result indicators are examined every year, to be evaluated in connection to internal assessment of department performances. The core result indicators are also connected to major result indicators of sustainable management so, KR's case is a good example of joint implementation of sustainable management and organizational strategies. In particular, ethical management activities can be monitored through the ethical management system, four major sectors -management, disaster, conflict, and PR- can be monitored through the risk management system, mileage of social contribution of each department and individual employee can be checked in real time through the social contribution system. Such system for different fields is an excellent example of company-wide management of results of sustainable management.

KR is an institution with excellent record of sustainable management, where strategies of sustainable management is carried out with actual management strategies, and has clear long term goals such as "0.05% or lower accident rate by 2020" and "3.6 trillion won of profit from new projects". I recommend you to add detailed roadmap and mid-and-long-term goals for result indicators of sustainable management to the Report in the future, to help stakeholder better understand KR's mid-and-long-term strategies for sustainable management.

Recommendation

The Verifier highly evaluates KR's efforts for and achievement of enhancement of sustainability and recommends KR as the following, for publication of Reports in the future and raised standard of its sustainable management.

- 1. I recommend KR to establish a systematic channel of management of stakeholders, for more integrated management of participation channels of stakeholders. That will enable improvement of stakeholders' participation in connection with KR's sustainable management.
- 2. I recommend KR to report plans and results of some issues that are currently under planning, including assessment of railway greenhouse gas emissions, use of new and renewable energy, and systematic resources management in the whole process.
- 3. I recommend KR to establish mid-and-long-term plans and goals for more detailed implementation of sustainable management in the fields of economy, environment, and society, and report this in the future, as core result of KR's sustainable management.
- 4. You can enhance the standard of sustainable management through managing various indicators of result of sustainable management in connection to financial results.





June 2012, Chairman & CEO of KPC, **Hong Jin**

Dong-su Kim, Executive Director D. S. Kim

Jeong-seok Seo, Division Chief M M Ju-mi Park, Expert Member

APPENDIX

GRI Index

GRI 3.1 & ISO 26000 Indicators

● All Reported / ● Partially Reported / ○ Not Reported / − Not Relevant

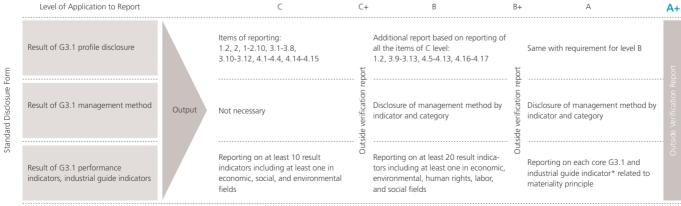
	GRI 3.1	Classification	ISO 26000	Page	Rate o
Vision	and Strategy				
1.1	CEO's declaration of sustainable management		6.2	4~5	•
.2	Statement of major risk factors and opportunities		0.2	10	•
rgar	ization's Profile				
.1	Name of organization			8	•
2.2	Major products and service			9	•
.3	Organizational structure		6.2	8	•
.4	Location of office of headquarters			8	•
.5	Location of overseas branch (number of countries with overseas branch, name of country where major business is going on or has relation with sustainability issues dealt with in this report)			8, 11, 34~35	•
.6	Ownership structure and legal structure			8	
7	Operating markets (regional classification, business area, types of customers/ beneficiaries			8, 11, 34~35	
.8	Size of organization			8	•
.9	Important changes in organization and ownership structure			8	
.10	Awards and prizes			74	•
				: 74	•
•	t Media Variables				ï
1	Period covered by the report			3	•
2	Date of issuance of the latest report			3	•
3	Cycle of issuance of report			3	•
4	Contact point in regard to the report and content of it			3	•
5	Process of definition of the content of report			21	•
6	Area covered by the report			3	•
7	Limiting factors of the report			3	•
8	Criteria of comparison between terms and organizations			3	•
9	Method of assessment of data such as result indicators and calculation standards			3	
10	Effect of restatement of information written in previous reports			3	
11	Major change in the coverage of the report, compared to the previous report			3	
12	Chart that demonstrating the status of standard information disclosure in the report			70~72	
13	Policy and current activities to seek outside verification of the report	1 1	7.7	68~69	•
over	nance, Responsibility, Participation				
1	Organizational governance			13~14	•
2	If head of the board is one of the executives			13	•
3	Number of members of the board who are independent or non-executives			13	•
4	Mechanism of advising or suggesting direction for the board			14	•
5	Reward for members of the board and executives			14	•
6	Process of preventing interest conflict inside the board			14	•
7	Process of determining eligibility and standards of expertise for board members		6.2	13	
8	Mission/core value and principle of behavior		0.2	10	
9	Process of the board's identification and management of economic/environmental/social performance	-		14	
	· · · · · · · · · · · · · · · · · · ·			-	-
1	Process of evaluating the board's performance			14	•
11	Whether principle of prevention and approach are adopted	-		25	•
12	Outside initiative that joints or supports economic/environmental/social charter or principle			74	•
13	Current status of membership of society or national/international policy body			74	•
14	List of groups of participating stakeholders			18	•
15	Standards of identification and selection of stakeholders who will participate			18	•
	Current status of ways of stakeholders' participation, such as type of participation and frequency of		5.3		
16	participation by group of stakeholders			18	•
17	Core subject, interest, and response to issues raised by stakeholders' participation			21	•
	mic Result Indicators				:
1	Creation and distribution of direct economic values	Core	6.8/ 6.8.3/ 6.8.7/ 6.8.9	26	•
2	Financial effects of climate change and risks and opportunities it poses to business areas	Core	6.5.5	38	-
3	Scope of pension support	Core		50	•
4	Records of government subsidy received	Core	607/611/6	8	•
.5	Ratio of wage for new employees to local legal minimum wage in areas with major offices	Secondary	6.3.7/ 6.4.4/ 6.8	48	•
6	Policy, practices, and ratio of local purchase at major offices	Core	6.6.6/ 6.8/ 6.8.5/ 6.8.7	60	•
7	Process of prioritized recruitment for local residents at major offices	Core	6.8/ 6.8.5/ 6.8.7	48	•
8	Investment in infrastructure that prioritizes public interest and effect of service support activities	Core	6.3.9/ 6.8/ 6.8.3/ 6.8.4/ 6.8.5/ 6.8.6/ 6.8.7/ 6.8.9	30~31	•
9	Understanding and explanation of indirect economic effect	Secondary	6.3.9/ 6.6.6/ 6.6.7/ 6.7.8/ 6.8/ 6.8.5/ 6.8.6/ 6.8.7/ 6.8.9	11, 26	•
dica	tors of Environmental Achievements				
<u>инса</u> 1	Amount of fuel used, in weight or volume	Core		44~45	
					•
12	Ratio of recycled materials used	Core	6.5/ 6.5.4	44	-
13	Amount of direct consumption of energy by primary energy source	Core		45	•
14	Amount of direct consumption of energy by secondary energy source	Core		45	•

			● All Reported / ● Partially Reported / ○ N	Not Reported / -	- Not Relevan
	GRI 3.1	Classification	ISO 26000	Page	Rate of Reporting
EN5	Amount of energy use reduced through saving and improvement of efficiency	Secondary		39	•
EN6	Products based on renewable energy/efforts for provision of service and amount of saved energy through those efforts	Secondary		43	•
EN7	Projects to reduce indirect use of energy and results	Secondary	6.5/ 6.5.4	39,42,43	0
EN8	Total amount of water taken from different sources	Core		44	•
EN9	Ratio of water supply source highly affected by taking of the water	Secondary		44	•
EN10	Total amount and ratio of reused or recycled water	Secondary		44	•
EN11	Location and size of land that is owned, rent, or managed in or near wildlife reserve or areas with high biodiversity value	Core	6.5/ 6.5.6	41	0
EN12	Effect on biodiversity of activities, products, or service in wildlife reserve or areas with high biodiversity value	Core	6.5/ 6.5.6	41~42	•
EN13	Protected or restored reserve	Secondary		42	0
EN14	Strategy, current actions, and future plan for biodiversity management	Secondary	6.5/ 6.5.6/ 6.8.3	41~42	•
EN15	Number and level of risk of extinction of IUNC-designated endangered species (Red List) or nationally designated endangered species which live in the project influence area	Secondary	6.5/ 6.5.6	41	•
EN16	Total amount of direct and indirect greenhouse gas emissions	Core		45	•
EN17	Total amount of other indirect greenhouse gas emission	Core	6.5/ 6.5.5	45	0
EN18	Result of greenhouse gas reduction projects	Secondary		39	•
EN19	Amount of emission of ozone-destroying substances	Core		45	•
EN20	Amount of major air pollutants including NOx and SOx	Core		45	•
EN21	Total amount of waste water output and water quality at final release sites	Core	6.5/ 6.5.3	45	•
EN22	Amount of waste output by forma and treatment method	Core	0.5/ 0.5.5	45	•
EN23	Number and amount of major toxic substance release	Core		45	•
EN24	Amount of transport/import/export/treatment of waste stipulated in Basel Convention Annex , , and	Secondary		45	•
EN25	Name of the waters and habitats affected by the reporting organization's release of waste water	Secondary	6.5/ 6.5.3/ 6.5.4/ 6.5.6	45	•
EN26	Achievement of activities to reduce environmental influence of products and service	Core	6.5/ 6.5.4/ 6.6.6/ 6.7.5	41	•
EN27	Ratio of sold products and related packaging materials	Core	6.5/ 6.5.3/ 6.5.4/ 6.7.5	44	•
EN28	Amount of fine imposed because of violation of environmental laws and number of non-monetary punishments	Core	6.5	37	•
EN29	Critical environmental influence of transport of products, materials, and employees	Secondary	6.5/ 6.5.4/ 6.6.6	39, 42	•
EN30	Total amount of expenditures and investment in environmental protection	Secondary	6.5	40	•
	ors of Social Achievements	:			
LA1	Type and contract of employment and current status of local personnel	core	6.4/ 6.4.3	48	0
LA2	Number and ratio of employees' resignation	Core		48	•
LA3	Benefits provided only to regular workers, not to temporary workers	Secondary	6.4/ 6.4.3/ 6.4.4	50	•
LA4	Ratio of employees subject to collective bargaining	core	6.4/ 6.4.3/ 6.4.4/ 6.4.5/ 6.3.10	52	•
LA5	Minimum notification period for changes in major project	Core	6.4/ 6.4.3/ 6.4.4/ 6.4.5	52 52	•
LA6 LA7	Ratio of employees represented by labor-management joint health and safety council Number of injuries, occupational disease, absence, and duty-related accidents	Secondary Core	6.4/ 6.4.6	23	•
LA7	Education, prevention, and risk management programs to support employees, their families, and local	Core	6.4/ 6.4.6/ 6.8/ 6.8.3/ 6.8.4/ 6.8.8	50	•
LA9	residents	Casandani	6.4/ 6.4.6	50	•
LA9 LA10	Health and safety items subject to official negotiation with labor union Hours of education a day per one employee	Secondary Core	6.4/ 6.4.7	53	•
LATO	Duty education and life-long education programs for continuous employment and support for life after	Cole	0.4/ 0.4./		
LA11	retirement	Secondary	6.4/ 6.4.7/ 6.8.5	50	•
LA12	Ratio of employees subject to regular performance evaluation and career development	Secondary	6.4/ 6.4.7	49	•
LA13	Current status of composition of the board and employees (with standards of diversity indicators such as sex, age, and social minority)	Core	6.3.7/ 6.3.10/ 6.4, 6.4.3	13	•
LA14	Ratio of wage for men and women for different employee categories	Core	6.3.7/ 6.3.10/ 6.4/ 6.4.3/ 6.4.4	48	•
LA15	Ratio of return to work and maintenance after maternity leave, by sex	Core	6.4/ 6.4.4	50	•
D (13	inate of retain to work and maintenance area maternay reare, by sex				
Indicat	ors of Human Rights Achievements Number and ratio of major investment agreements that include human rights protection provisions or	Core	63/633/635/666	35.60	•
Indicate	ors of Human Rights Achievements Number and ratio of major investment agreements that include human rights protection provisions or passed human rights examination	Core	6.3/ 6.3.3/ 6.3.5/ 6.6.6	35, 60	0
HR1 HR2	ors of Human Rights Achievements Number and ratio of major investment agreements that include human rights protection provisions or passed human rights examination Ratio of human rights examination at major suppliers or contractors	Core	6.3/ 6.3.3/ 6.3.5/ 6.4.3/ 6.6.6	60	0
HR1 HR2 HR3	ors of Human Rights Achievements Number and ratio of major investment agreements that include human rights protection provisions or passed human rights examination Ratio of human rights examination at major suppliers or contractors Completion of employee education on policy and procedure of human rights related to duties	Core Secondary	6.3/ 6.3.3/ 6.3.5/ 6.4.3/ 6.6.6 6.3/ 6.3.5	60 48	0
Indicat HR1 HR2	ors of Human Rights Achievements Number and ratio of major investment agreements that include human rights protection provisions or passed human rights examination Ratio of human rights examination at major suppliers or contractors	Core	6.3/ 6.3.3/ 6.3.5/ 6.4.3/ 6.6.6 6.3/ 6.3.5 6.3/ 6.3.6/ 6.3.7/ 6.3.10/ 6.4.3 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.8/ 6.3.10/	60	0
HR1 HR2 HR3 HR4 HR5	Number and ratio of major investment agreements that include human rights protection provisions or passed human rights examination Ratio of human rights examination at major suppliers or contractors Completion of employee education on policy and procedure of human rights related to duties Total number of discriminatory actions and related measures Area of work which has a potential of severe violation of freedom of assembly and collective bargaining	Core Secondary Core	6.3/ 6.3.3/ 6.3.5/ 6.4.3/ 6.6.6 6.3/ 6.3.5 6.3/ 6.3.6/ 6.3.7/ 6.3.10/ 6.4.3 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.8/ 6.3.10/ 6.4.3/ 6.4.5	60 48 48 52	0
HR1 HR2 HR3 HR4 HR5	Number and ratio of major investment agreements that include human rights protection provisions or passed human rights examination Ratio of human rights examination at major suppliers or contractors Completion of employee education on policy and procedure of human rights related to duties Total number of discriminatory actions and related measures Area of work which has a potential of severe violation of freedom of assembly and collective bargaining Areas of business which has high potential of child labor and actions against child labor	Core Secondary Core Core	6.3/ 6.3.3/ 6.3.5/ 6.4.3/ 6.6.6 6.3/ 6.3.5 6.3/ 6.3.6/ 6.3.7/ 6.3.10/ 6.4.3 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.8/ 6.3.10/ 6.4.3/ 6.4.5 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.7/ 6.3.10/	60 48 48 52 50	•
HR1 HR2 HR3 HR4 HR5 HR6 HR7	Number and ratio of major investment agreements that include human rights protection provisions or passed human rights examination Ratio of human rights examination at major suppliers or contractors Completion of employee education on policy and procedure of human rights related to duties Total number of discriminatory actions and related measures Area of work which has a potential of severe violation of freedom of assembly and collective bargaining Areas of business which has high potential of child labor and actions against child labor Areas of business which has high potential of forced labor and actions against forced labor Ratio of security personnel who completed education on human rights policy and procedure related to	Core Secondary Core Core core	6.3/ 6.3.3/ 6.3.5/ 6.4.3/ 6.6.6 6.3/ 6.3.5 6.3/ 6.3.6/ 6.3.7/ 6.3.10/ 6.4.3 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.8/ 6.3.10/ 6.4.3/ 6.4.5 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.7/ 6.3.10/ 6.6.6	60 48 48 52 50	•
HR1 HR2 HR3 HR4 HR5 HR6 HR7	Number and ratio of major investment agreements that include human rights protection provisions or passed human rights examination Ratio of human rights examination Ratio of human rights examination at major suppliers or contractors Completion of employee education on policy and procedure of human rights related to duties Total number of discriminatory actions and related measures Area of work which has a potential of severe violation of freedom of assembly and collective bargaining Areas of business which has high potential of child labor and actions against child labor Areas of business which has high potential of forced labor and actions against forced labor Ratio of security personnel who completed education on human rights policy and procedure related to their duties	Core Secondary Core Core core Core Secondary	6.3/ 6.3.3/ 6.3.5/ 6.4.3/ 6.6.6 6.3/ 6.3.5 6.3/ 6.3.6/ 6.3.7/ 6.3.10/ 6.4.3 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.8/ 6.3.10/ 6.4.3/ 6.4.5 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.7/ 6.3.10/ 6.6.6	60 48 48 52 50 50 48	0
HR1 HR2 HR3 HR4 HR5 HR6 HR7 HR8	Number and ratio of major investment agreements that include human rights protection provisions or passed human rights examination Ratio of human rights examination at major suppliers or contractors Completion of employee education on policy and procedure of human rights related to duties Total number of discriminatory actions and related measures Area of work which has a potential of severe violation of freedom of assembly and collective bargaining Areas of business which has high potential of child labor and actions against child labor Areas of business which has high potential of forced labor and actions against forced labor Ratio of security personnel who completed education on human rights policy and procedure related to their duties Number of violation of rights of the natives and related actions	Core Secondary Core Core Core Core Secondary Secondary	6.3/ 6.3.3/ 6.3.5/ 6.4.3/ 6.6.6 6.3/ 6.3.5 6.3/ 6.3.6/ 6.3.7/ 6.3.10/ 6.4.3 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.8/ 6.3.10/ 6.4.3/ 6.4.5 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.7/ 6.3.10/ 6.6.6 6.3/ 6.3.5/ 6.4.3/ 6.6.6	60 48 48 52 50 50 48	0
HR1 HR2 HR3 HR4 HR5 HR6 HR7 HR8	Number and ratio of major investment agreements that include human rights protection provisions or passed human rights examination Ratio of human rights examination Ratio of human rights examination at major suppliers or contractors Completion of employee education on policy and procedure of human rights related to duties Total number of discriminatory actions and related measures Area of work which has a potential of severe violation of freedom of assembly and collective bargaining Areas of business which has high potential of child labor and actions against child labor Areas of business which has high potential of forced labor and actions against forced labor Ratio of security personnel who completed education on human rights policy and procedure related to their duties	Core Secondary Core Core core Core Secondary	6.3/ 6.3.3/ 6.3.5/ 6.4.3/ 6.6.6 6.3/ 6.3.5 6.3/ 6.3.6/ 6.3.7/ 6.3.10/ 6.4.3 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.8/ 6.3.10/ 6.4.3/ 6.4.5 6.3/ 6.3.3/ 6.3.4/ 6.3.5/ 6.3.7/ 6.3.10/ 6.6.6	60 48 48 52 50 50 48	0

			Thirteported Territary reported Te	rivot ricported?	TVOL TICICVALLE
	GRI 3.1	Classification	ISO 26000	Page	Rate of Reporting
Social	Achievement Indicators				
SO1	Features, scope, and effect of programs that assess and manage impact to local communities	Core	6.3.9/ 6.8/ 6.8.3/ 6.8.9	41	•
SO2	Number and ratio of business units with identified risk of corruption	Core		16	•
SO3	Ratio of employees who are educated about anti-corruption policies and procedures	Core	6.6/ 6.6.3	16	•
SO4	Actions taken to corruption cases	Core		16	•
SO5	Stance toward public policy and participation in establishment and lobbying of public policy	Core		18	•
SO6	Total amount of cash/in-kind donation to institutions related to political parties and politicians by country	Secondary	6.6/ 6.6.4/ 6.8.3	16	•
SO7	Number and result of legal actions against unfair competition and monopoly	Secondary	6.6/ 6.6.5/ 6.6.7	60	•
SO8	Amount of fine and number of non-monetary penalties imposed for violation of laws and regulations	Core	6.6/ 6.6.3/ 6.6.7/ 6.8.7	60	•
SO9	Businesses that pose potential and negative impact on local communities	Core		41~42	•
SO10	Activities for prevention and reduction of businesses that pose potential and negative impact on local communities	Core	6.3.9/ 6.5.3/ 6.5.6/ 6.8	41~42, 56, 62~65	•
Produ	ct Responsibility Indicators				
PR1	Level in the life cycle that assess influence of products and services on health and safety for improve- ment and the ratio of major products and services that received the assessment	core	62016661671674675	32	•
PR2	Number of violation of regulations or voluntary rules related to customers health and safety, in a certain phase of the life cycle of products and services	Secondary	6.3.9/ 6.6.6/ 6.7/ 6.7.4/ 6.7.5	32	•
PR3	Type of information of goods and services necessary for procedure and ratio of major products and services that subject to the information	Core	671677167716771677	31, 43, 55, 57	•
PR4	Number of violation of regulations and voluntary rules related to information and labeling of products/ services	Secondary	6.7/ 6.7.3/ 6.7.4/ 6.7.5/ 6.7.6/ 6.7.9	64	•
PR5	Activities related to customer satisfaction such as result of survey on customer satisfaction level	Secondary	6.7/ 6.7.4/ 6.7.5/ 6.7.6/ 6.7.8/ 6.7.9	47	•
PR6	Regulations, standards, and voluntary rule-abiding programs related to marketing, such as ad, promotion, and sponsorship	Core	67167216761670	64	•
PR7	Number of violation of regulations, standards, and rules related to marketing, such as ad, promotion, and sponsorship	Secondary	6.7/ 6.7.3/ 6.7.6/ 6.7.9	64	•
PR8	Number of complaints filed in relation to violation of protection of customers' personal information and loss of customer data	Secondary	6.7/ 6.7.7	57	•
PR9	Amount of fine imposed for violation of laws and regulations on supply of products and services	Core	6.7/ 6.7.6	64	•

Declaration of Level of GRI G3.1 Application

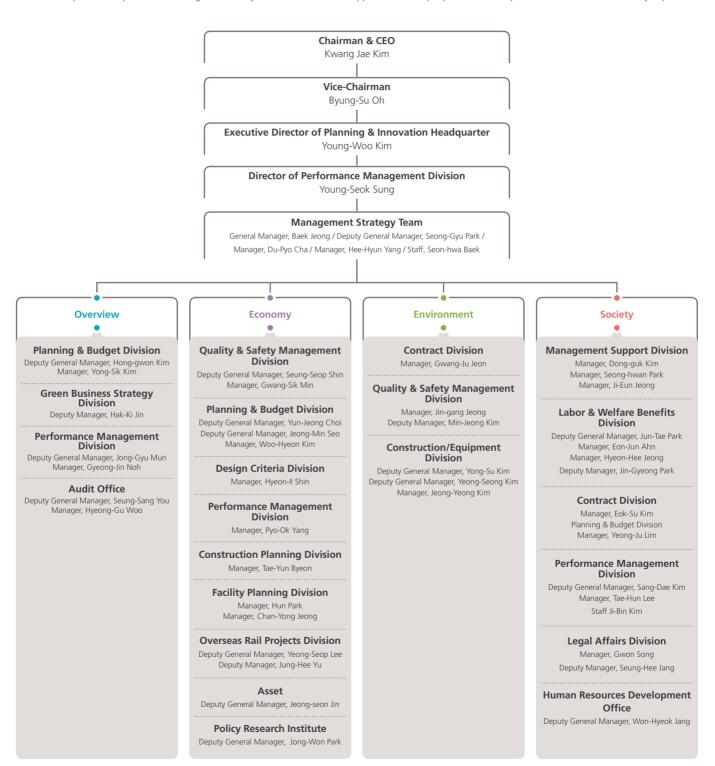
KR wrote this report according to the GRI G3.1 guidelines and declares that the level of application is "A+". Korea Productivity Center, which conducted the verification of this report, confirmed that this report satisfies "A+" level of GRI G3.1 application.



^{*} final version of industrial guide

System for Implementation of Sustainable Management and External Participation

KR's sustainable management is presided over by the Performance Management Division of the Planning and Innovation Headquarter and the report was written based on cooperation of personnel in charge of the duty from 16 divisions. We appreciate all the people for their cooperation for the KR Sustainability Report



APPENDIX

External Participation & Recognition of External Assesments

Membership to External Associations

KR is carrying out activities for sustainable management, with membership to a variety of institutions including the UN Global Compact.

,International Union of Railways, Architectural Institute of Korea, Korean Society of Transportation, Korean Society of Civil Engineering, The Korean Committee for UNICEF, UN Global Compact, UN Global Compact Network Korea, Ethical Management Forum, Korean Society of Hazard Mitigation, Korea Industrial Technology Association, Korea Infrastructure Safety Inspection Association, Korea Suggestion System Association, Korea Railway Construction Engineering Association, The Korean Society for Railway, Korean Tunneling and Underground Space Association, Korea Project Management Association, International Construction Association of Korea, The Council for the Korean Pact on Anti-Corruption and Transparency

External Recognition

In 2011, KR was recognized for its various economic, environmental, social achievements from External institutions, including the E-People Presidential Award.

Achievement	Ву	Meaning
1. The most respected public construction company	Korea Management Association & Consulting	Performance of corporate social responsibility by production of outstanding achievements (Feb, 2011)
2. e-People presidential award	Anti-Corruption and Civil Rights Commission	Recognized as the best pubic institution that protects public interest (Feb, 2011)
3. Presidential citation for excellent disaster confrontation	National Emergency Management Agency	Certified as an institution with exemplary disaster confrontation (May, 2011)
4. Certification for excellent labor-management culture	Ministry of Labor and Employment	Leading reasonable and cooperative labor-management relation (Jun, 2011)
5. Presidential citation for excellent construction accident prevention	Ministry of Labor and Employment	Evaluated as the best institution with accident prevention at railway construction sites (Jul, 2011)
6. Korea sustainability report award	Korea Standards Association	Recognized for management achievement for sustainable development (Sep, 2011)
7. This year's project award (transportation facility sector)	Korea Project Management Association	Certified for scientific business management ability in and out of the country (Oct. 2011)
8. Excellence award at nationwide ordering body VE competition	Ministry of Land, Transport, and Maritime Affairs	Officially recognized for improved quality of railway design and budget reduction (Nov. 2011)
Knowledge economy minister's citation at national productivity award (process innovation sector)	Ministry of Knowledge Economy	Evaluated as an institution with excellent integrated management system (Nov. 2011)
10. Citation for the best public institution for support for SMEs	Ministry of Knowledge Economy	Recognized as a public institution which leads shared growth (Nov. 2011)
Award for a group with excellent contribution for result sharing system for large companies and SMEs	Shared Growth Commission	Contributing to establishment of fair trade order for realization of fair society (Nov. 2011)
12. Citation for contribution to society	Daejeon Metropolitan City	Recognized for efforts to support disadvantaged class (Nov, 2011)
13. Bronze prize at national QCC competition	Ministry of Knowledge Economy	Enhancing quality competitiveness through quality management activities (Dec. 2011)
14. Award for public institution with excellent information disclosure	Ministry of Land, Transport, and Maritime Affairs	Raising public trust through transparent disclosure of information (Dec. 2011)

Customers' Opinion

KR is waiting for precious opinions from our customers, in regard to "KR 2012 Sustainability Report".

If you have any suggestion or opinion on this report, please contact the following number or address.

Your opinions and suggestions sent to KR will be a precious foundation for KR's sustainable management.

1. To which category do you belong? ☐ Central Government ☐ Academia ☐ KR Employee ☐ Partner Company ☐ Media ☐ KORAIL ☐ Ordering Company ☐ General Public Others(2. Through what channel did you come to know of this report? ☐ KR's Website ☐ Seminar, Lecture Other Web-Sites ☐ Newspaper, Magazine ☐ KR Employee Others(3. Which part of this report was the most impressive? ☐ KR & Sustainable Management ☐ Economic Responsibility ☐ Environmental Responsibility ☐ Social Responsibility 4. Which part of this report needs supplement? ☐ KR & Sustainable Management ☐ Economic Responsibility ☐ Environmental Responsibility ☐ Social Responsibility 5. Did this report help you understand KR's sustainable management? ☐ Very Helpful ☐ Somewhat Helpful So-so ☐ Not-Helpful ☐ Not Helpful at All 6. Please freely write your opinions on KR's sustainable management activities shown in this report.

Thank you for your opinion.