Head Office in Gimcheon 269 Hyeoksin-ro, Gimcheon-si, Gyeongsangbuk-do, 39660, Republic of Korea Tel +82-54-421-3114

NSSS Division in Daejeon 989-113 Daedukdaero, Yuseong-gu, Daejeon Metropolitan City, 34057, Republic of Korea Tel +82-42-868-4000

www.kepco-enc.com pr@kepco-enc.com



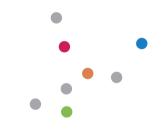












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**Sales** "KRW 2.5 Trillion" **Operating Profit Margin "10%")** 

**Sales of future** growth engines "25%"

Enhancing the Advancement of competitiveness energy solution of core business

technologies

## Harmonizing Humanity, the Environment and Technology

### **Global Leading Energy Solution Partner**

**Challenge Expertise Communication Reliability Safety** 

**Management goals** 

Securing 12 core technologies

**Global sales "65%"** 

Strengthening of capability in global **businesses** 

Securing the growth engines of the future energy solution

**Management strategies** 

Strengthening of sustainable management system



Our Challenge is to become a global power EPC contractor realizing customer value through the world-leading technology expertise.

CHALLENGE

Since our foundation, we have committed to engineering technology innovation aimed at achieving safer and more economical power plant design in Korea which barely had engineering infrastructure. We have played a significant role in Korean power industry, leading technology innovation and opening doors to a brighter future. Now we are taking on a new challenge to become "The world's best EPC contractor by 2020."

# PROFESSIONALISM

With our cutting-edge technology and extensive engineering experience, we have gained worldwide recognition in nuclear & thermal power plant industry.

2104(9)01710

"Work diligently, study enthusiastically" is the our motto, implying our unwavering will to become one of the world's best engineering companies. We are confident that our professionalism and enthusiasm serves as a quiet but strong force that changes the world.

POWER of KEPCO E&C

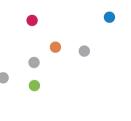
We stress not only the norm and principles of professionals but also communication with clients and communities aimed at achieving development of the mankind.

Our ultimate goal is to "contribute to happiness of mankind with technology." We are more dedicated to achieving co-prosperity with clients, employees, stockholders, partners, and communities than simply pursuing short-term profits. We aim to be the most respected company by embracing the highest level of business ethics and fulfilling social responsibilities.





We are creating a better world with a cutting-edge technology by harmonizing humanity, the environment and technology.



Dear Esteemed Readers,

I am Koo-Woun Park, the President and CEO of KEPCO E&C.

KEPCO E&C was founded in 1975 with the objective of achieving self-reliance in power plant design technology.

We have since then grown to become an independent power plant design company, attaining remarkable achievements in developing the Korean-model nuclear reactor and unique technology in both thermal and nuclear power plants, thanks to the committed efforts and enthusiasm of all executives and employees.

Based on world-class technical expertise, the plants we design have contributed to the enhancement of national competitiveness in the energy sector.

We are currently constructing UAE's first nuclear power plants, using the nuclear steam supply system design and the architect engineering of APR1400(Korean Advanced Power Reactor), highly evaluated for its remarkably improved safety and economic feasibility.

To achieve the goal of becoming one of the top five global players in the power plant field by 2020, we are expanding the horizon of our business to total solution business, entering new overseas markets and conducting research and development for competitive technology.

We endeavor to penetrate global EPC business markets by providing turnkey services encompassing design, purchase, construction and financing. We are also developing future-oriented and eco-friendly technologies for overseas market.

We make our utmost effort not only to improve the effectiveness of internal management with innovative policies but also to assume corporate responsibility. Based on transparent work procedures and ethical attitudes, we are committed to become a company trusted by all peoples.

We will continue to build on our achievements and expertise to further enhance technological competitiveness and rewrite the history of innovation.

Your interest and unwavering support for us will be a great source of encouragement in achieving sustainable growth and development.

Thank you.

Koo-Woun Park President and CEO

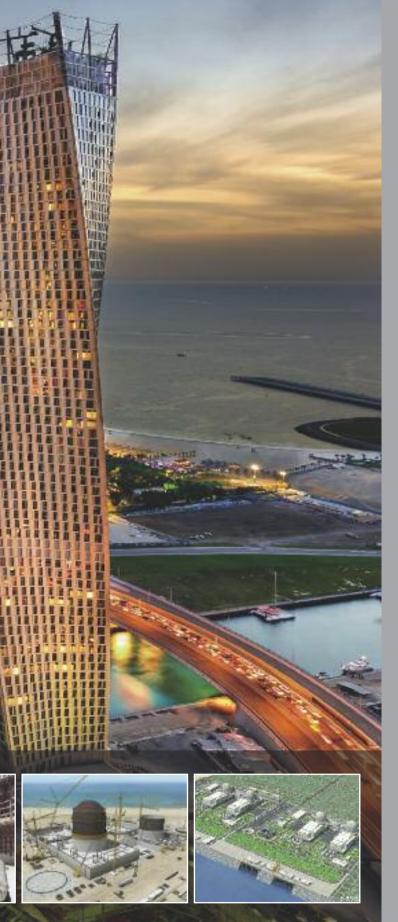
Koollow Jark

# UAE's first-ever nuclear power plant is to be built with Our technology for APR1400

KEPCO's consortium with us, signed an agreement worth \$40billion on December 27, 2009 with the UAE's Nuclear Energy Corporation to construct nuclear power plants. This will be the first nuclear power plant for the UAE and the largest-ever overseas contract amount for Korea history. We provide the architect engineering and nuclear steam supply system design of the Korean-model APR1400 reactors, which feature significant improvements in safety and economic feasibility over many currently operating reactors. The construction of 4 units(1,400MW reactor-based nuclear power plants with a total capacity of 5,600MW) will be started in 2012 in the Persian Gulf region (Al Braka), some 270km west of Abu Dhabi, the capital of the UAE. Beginning in 2017, one unit per year will go into operation enabling us to promote our reputation for technological expertise and our brand image to the world.







### **KEPCO E&C ACTIVITIES**

- NUCLEAR POWER
- THERMAL POWER
- ENVIRONMENT
- CONSTRUCTION
- OTHER BUSINESS AREAS





### **NUCLEAR POWER**

By virtue of technological expertise and outstanding human resources, we provide better nuclear power plant engineering services encompassing both of the design of Nuclear Steam Supply System and Architect Engineering for local and overseas clients. We independently designed the Korean standard nuclear reactor, OPR 1000, applied Hanul Units 3-4-5&6, Hanbit Units 5&6. Improved OPR 1000 in terms of safety and economic viability, we have incorporated it into the construction of 4 units (Shin-Kori Unit 1&2, Shin-Wolsong Units 1 in service, Shin-Wolsong Unit 2 under construction). Our APR1400, exported to the UAE(KEPCO E&C's first overseas nuclear power plant project) known as an internationally competitive next-generation nuclear power plant model, is also to be installed in Shin-Kori Units 3 & 4 and Shin-Hanul Units 1 & 2 currently under construction.



#### **Optimized Power Reactor 1000 (OPR1000)**

The OPR1000 made Korea both achieve nuclear power technology self-reliance and own independently designed nuclear plant model. The OPR1000 incorporated new and verified technology features in enhanced safety and operability, simplified design and narrower operational margins, and remarkably increased convenience in construction, operation and maintenance resulted from the applying the human engineering.

The probabilistic safety assessments, which are used to assess a plant's capacity to respond to accidents, indicated that the OPR1000 decreased its core damage frequency to below onetenth compared with other reactors, suggesting a marked increase in safety.

The improved OPR1000 upgraded in the areas of safety, economy, operability and remedial features through the advanced technologies such as the design of an Integrated Head Assembly, a permanent pool seal, the installation of reverse-osmosis liquid waste treatment facilities, passive catalytic hydrogen recombiners and sharing type of placement technique raised international competitiveness outstandingly.

#### Advanced Power Reactor 1400 (APR1400)

The APR1400, the Korean indigenous model, 1400MW reactor, featuring remarkably improved safety, high profile technology, operational convenience and economy has many kinds of design characteristics including simplified design, increased design margin, and human engineering, all of which are geared towards enhancing accident mitigation. The multiple safety injection and safe shutdown systems and four-train arrangement technology reduced the possibility of core damage. The reactor is equipped with the facility to prevent and mitigate severe accidents. Along with this advanced model, KEPCO E&C is trying to better develop its design technology to apply the design concept of shortened construction period, reinforced seismic design criteria (SSE: 0.3g) and a 60-year design life to the design.

#### **CANDU-PHWR Nuclear Power Plant**

KEPCO E&C has carried out design and engineering and related services for Wolsong Units 2,3&4 and exported Abnormal Operating Manual design technology for the Qinshan Nuclear Power Plant Units 1 and 2 in China.

#### **Other Nuclear Services**

#### **Development of the HANARO Research Reactor**

From 1985 to 1992, KEPCO E&C executed the architect engineering services for the High-flux Advanced Neutron Application Reactor (HANARO), thereby accumulating experience in the design of research reactors.

#### Development of SMART (System-integrated Modular Advanced ReacTor)

KEPCO E&C carries out comprehensive design and reactor design support as an investor as well as a reactor developer for the SMART reactor development project, which is a state research task, under the supervision of KAERI.(Korea A Tomic Energy Research Institute)

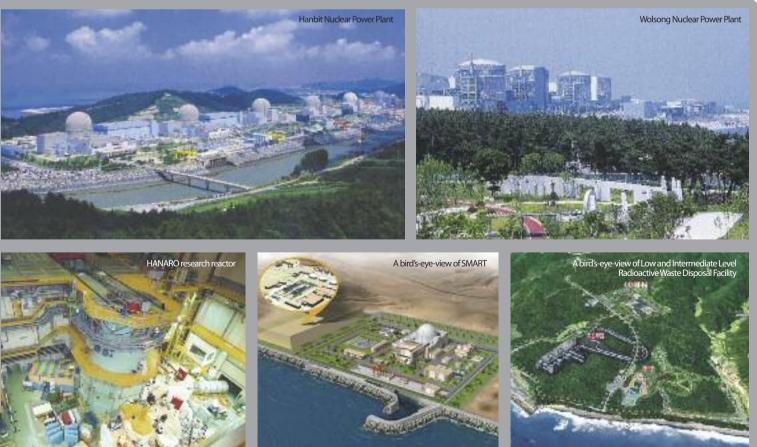
#### **Operations and Maintenance Services**

With regard to 23 nuclear power plants currently operating in Korea, KEPCO E&C, as a safeguard of nuclear power, is conducting technical examination for design improvement and providing timely technical support to ensure the safety of equipment, prevent the failure and suspension of operation, and improve operational availability.

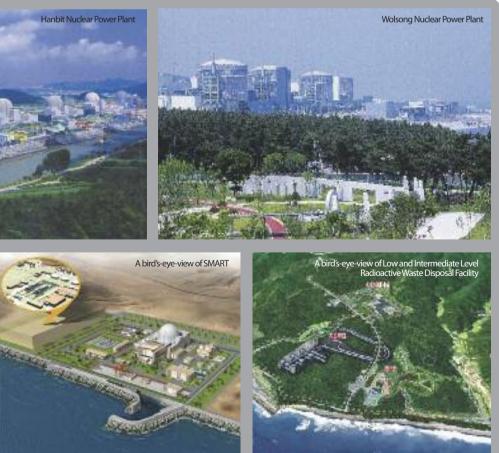
Regarding the life extention, KEPCO E&C has successfully improved the design for various facilities to secure the safety of Kori Unit 1, and supports the comprehensive design for the continuous operation of Wolsong Unit 1. KEPCO E&C, as an architect engineering company, is also undertaking its role and responsibility for maintaining required as the plants are growing old, which includes the activities, such as design, processing, construction supervision, and regulatory compliance support, to improve the operational capacity and replace the major equipment.

#### **Radioactive Waste Management**

KEPCO E&C participates in projects related to high-medium-low level radioactive waste management, water desalinization and the decommissioning of nuclear power facilities. KEPCO E&C carries out total engineering services for the 1st phase (underground silo of 100,000 drums) and the 2nd phase construction project (surface disposal of 125,000 drums) containing low and intermediate level radioactive waste treatment facilities.









### **THERMAL POWER**

KEPCO E&C has developed diverse thermal power plant engineering technologies to satisfy the various needs of the electric power market. Thirty-four 500MW Standard SC (USC) Coal Fired Power Plants and four 800MW Standard USC Coal Fired Power Plants are currently in-service. Six units applying our 1,000MW USC Coal Fired Power Plant engineering technology are under construction. Five more power plants adopting our Circulating Fluidized Bed (CFB) combustion boiler coal fired power plant engineering technology are in operation or under construction. We have designed 39 combined cycle and cogeneration power plants, beginning with the Seoincheon Combined Cycle Power Plant. til da da





#### **1000MW USC Coal Fired Power Plants**

By undertaking the architect engineering of 1000MW USC coal fired power plant like Dangjin Units 9&10, Shin-Boryeong Units 1&2, Taean Units 9&10, KEPCO E&C has been continuously able to enhance the design technology of a world class eco-friendly coal fired power plant which can reduce greenhouse gas emission as well as quantity of fuel import through achieved high efficiency plant operation, and further help to facilitate the trading of CO<sub>2</sub> gas right.

To achieve eco-friendly and highly efficient generation, USC steam temperature was raised up to 600°C for Dangjin units 9&10, Korea's first 1000MW USC coal fired power plants, based on the experience and technology accumulated from the previous design activities on various 500MW and 800MW coal fired power plants.

As a way of coping with the fluctuating supply and demand of coal, this model is designed to employ multi-coal-fired boiler which allows up to 50 % mixing ratio of sub-bituminous coal. To achieve economical and technical operability of turbine generator, 50-inch LSBs, first-ever in 1,000MW power plant, which enable a series four-flow TC4F (60Hz) arrangement, were employed.

#### **500MW Standard SC Coal Fired Power Plants**

KEPCO E&C has developed independently its capability to manage project as well as design technology through successfully performing the activities of the entire construction cycle of 500MW Standard SC (USC) Coal Fired Power Plants from feasibility study to completion of construction. In the architect engineering project for the construction of Boryeong Thermal Power Plant Units 3&4, KEPCO E&C first standardized the basic design, detailed design, procurement, construction, test operation, and supervision processes and procedures. Since then, KEPCO E&C has constructed 34 Standard SC (USC) Coal Fired Power Plants, of which Boryeong Units 3&4 and Taean Units 1~4 were selected as World's Best power plants by "Electric Power International", while Dangjin Units 1~4 were also recognized as World's Best Projects by "Power Engineering"

These achievements enabled KEPCO E&C to export its basic engineering data and services to Israel's Rutenberg Thermal Power Plant and Canada's Brooks Thermal Power Plant. The 500MW Standard SC (USC) Coal Fired Power Plant was designed to ensure high efficiency under Daily Start/Stop (DSS), Weekeend Start/Stop (WSS), Sharp Load Change, and Partial Load conditions. Dangjin Units 5~8, Taean Units 7&8, Boryeong Units 7&8, and Hadong Units 7&8 adopted greenhouse gas reduction and other eco-friendly technologies, as well as high-efficiency operations and Ultra-Super-Critical (USC) characteristics and steam conditions (246kg/cm<sup>2</sup>g, 566°C/ 593°C), increasing their efficiency by 2.36% compared with existing models, thereby responding to the UN Framework Convention on Climate Change.

#### **800MW Standard USC Coal Fired Power Plants**

Taean Thermal Power Plant

KEPCO E&C set up design technology for 800MW Standard USC Coal Fired Power Plants while performing the Yeongheung Thermal Power Plant Project, thereby securing its technical leadership and boosting its global profile. This standardization aiming at reducing design and construction cost and schedule, as well as increasing the safety, efficiency, operability and technical sophistication of the plants, was developed to be served as a model for next plants tobe-constructed in the future. Yeongheung Plant Units 1&2, Korea's first 800MW standard USC Coal Fired power plant applied a leveled-up steam temperature of 566°C, which is one level higher up criteria than 538°C of 500MW, so the thermal efficiency of the plants was increased by about 2%.

As for units 3&4, more leveled-up reheated steam criteria of 593°C and state-of-the-art facilities such as high-efficiency denitrification, desulfurization, non-leaking gas re-heater and low-temperature dry electric precipitator were applied and equipped with to preserve pleasant air quality.

By having completed the base-load power plants with high-tech, large-capacity environmental impact reduction facilities exceeding international environmental regulatory standards, KEPCO E&C, domestically, has been able to proactively cope with Korea's increasing electricity demand and public concern regarding the environmental impact of power plants, and internationally had engaged in technical support for construction of TATA group's 4,000MW Ultra Mega Power Plant (UMPP, 800MW x 5) in India.

#### Large Scale USC CFB Coal Fired Power Plants

KEPCO E&C boasts major achievements and expertise in the design of power plants adopting Circulating Fluidized Bed (CFB) combustion boilers that can burn low-class fuels, including local anthracite coal, imported anthracite coal, and sub-bituminous coal, in a cost efficient manner. KEPCO E&C designed Donghae 200MW Thermal Power Plant Units 1&2, each with a capacity of 200MW, the largest units of their kind in the world, back in 1999, as well as the CFB boilers for the Ulsan Petrochemical Industrial Complex.

With these engineering experience, KEPCO E&C carried out the engineering services for Kumho's cogeneration CFB boilers expansion project as well as a feasibility study on diverse CFB-fired power plants in Bayanteeg (Mongolia), Panay and Cebu (the Philippines), and Banko Barat (Indonesia), among others.

KEPCO E&C has recently completed the engineering project for Yeosue Thermal Plant 340 MW Unit 2 (begun in 2005 and completed in 2012) featuring another application of a CFB boiler. Since 2009, KEPCO E&C has been performing the design work for Samchok Green Power Thermal Power Plant Units 1&2, marking the world's first attempt to combine two world-class 500MW USC CFB boilers, and a 1,000MW 48-inch LSB-applied single turbine under USC steam conditions.

#### **Combined Cycle & Cogeneration Power Plants**

Starting with Seoincheon Combined Cycle Power Plant, KEPCO E&C has thus far executed the design for 39 combined cycle and cogeneration plants, particularly for 19 of those plants, as the prime contractor for architect engineering performing everything from basic planning to test operation. After completing the architect engineering for Seoincheon Combined Cycle Power Plant (238MW x 8), KEPCO E&C improved engineering technology for increasing functionality and efficiency and successfully completed the architect engineering for the subsequent combined cycle power plants.

As for the overseas market, KEPCO E&C has performed the architect engineering for various combined cycle power plants such as in Nigeria, Libya, and the UAE, as well as owner's engineering services for the construction of the combined cycle power plants (600MW class x 2) located in Ilijan, the Philippines. As such, KEPCO E&C continuously make efforts to design power plants more advanced, reliable and economical. Furthermore, KEPCO E&C has accumulated know-how from years of experience on cogeneration and district heating, enabling it to conduct thermal demand analysis, feasibility studies, and the basic planning and design for cogeneratoion power plants constructed in newly developing residential areas. KEPCO E&C also performed the architect engineering, construction and test operation of the Ilsan Cogeneration Power Plant (300MW class x 1).

### **ENVIRONMENT**

We are making every possible effort to conserve and protect environment. Armed with the worldclass technologies for anti-pollution and environmental impact reduction facilities, we conduct environmental impact assessments. We rank No.1 in the performance record of this sector in Korea. As of 2014, we performed engineering services for fuel gas desulfurization system of 55 thermal units totalling to 28,255MW in terms of capacity. And also as a participant in G-7 Environmental Technology Development Project, we performed turnkey projects for 9 units of the KEPAR (Korea Electric Power Absorption Reactor) project successfully.

We performed Korea's first turnkey flue gas denitrification project for the Namjeju Thermal Power Plant as well as the feasibility study, design, and test operation for flue gas denitrification system in nearly all domestic thermal power plants.

We also independently developed the low-temperature DeNOx system named as KoNOx<sup>®</sup>. KoNOx<sup>®</sup> can remove nitrogen oxides with great efficiency at a wide range of exhaust gas temperatures (170°C~450°C) as opposed to the catalytic reaction temperature of 300°C or higher of existing commercial SCRs.

We have also accumulated diverse CDM(Clean Development Mechanism) project achievements, and abundant engineering and construction experience in the overall environmental market, including water pollution control and waste management systems, enabling us to play a leading role of developing a broad range of clean technologies.









Sudokwon Landfill Gas(LFG) Power Plant(CDM)

**KEPCO E&C ACTIVITIES** 

# CONSTRUCTION

We, as Korea's number one architect engineering company, have successfully performed a broad range of engineering projects, including feasibility study on the construction of nuclear, thermal and hydroelectric power plants; basic and detailed design; construction and project management, test operation; and procurement.

Since the early 1990s, we have expanded into various business areas, including general construction (civil engineering, construction, industrial facilities, etc.), electrical work, anti-pollution facilities (air, water, noise, and vibration), and new and renewable energy sources.

Over the years, we have performed construction management, procurement management and supervision for such projects as the construction of Incheon International Airport and the KTX (Korea Train Express) rail line among others.

With the capabilities to perform the Design-Build projects, acquired from various experiences on construction project, PM/CM project, construction supervision project, we as a world-recognized general engineering contractor, are trying to enhance global competitiveness.

Top | Construction site of Shin-Wolsong Nuclear Power Plant Units 1&2 Bottom | Korea Train Express (KTX)



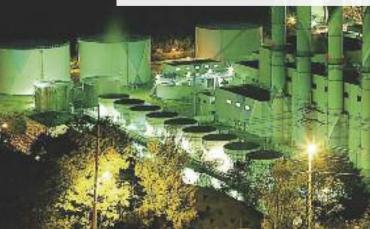


# OTHER BUSINE

We, as a world-class engineering contractor, boast superior technologies and achievements, ranging from power transmission and distribution to the diagnosis of power systems. Beginning with the design of the Shinjecheon substation, which has a capacity of 345kV, in 1979, We have performed such projects as upgrading local voltage to 765kV, conducting a feasibility study on the undersea transmission of large-capacity direct current, designing a 230kV switchyard, and supplying materials and equipment. Our long list of achievements also includes the design of protection and control facilities at substations, the supply of materials and equipment, the provision of technical support for testing/test operation, the execution of turnkey-based 500kV substation projects, and the provision of technical services for the construction of low-voltage spot network systems. Together these projects have provided us with ample experience in power transmission and distribution facility projects, encouraging us to develop new technologies to supply the electric power generated at power plants to end users, namely, industrial business and homes, in a stable and effective manner. Furthermore, we, as an Energy Service Company (ESCO), diagnose industrial facilities, invests in energy saving facilities, and analyze power systems to ensure the safe operation of industrial facilities. As such, we, as a national power leader, have secured leadership of the country's power facility sector.

Top | Power Transmission and Distribution Facility Bottom | Bundang Combined Cycle Power Plant (ESCO)





# **BUSINESS AREAS**

### **KEPCO E&C's PROMISE**

- OVERSEAS BUSINESS
- NEW & RENEWABLE ENERGY
- EPC(Engineering, Procurement and Construction)
- BUSINESS ETHICS
- SOCIAL CONTRIBUTION







We,00 based on the years of experience which has been accumulated in local power plant and other projects, boast unparalleled technologies and perform overseas projects. Among our completed or ongoing overseas projects are the combined licensing of the NuStart AP1000 for US Westinghouse, the construction of numerous nuclear power plants, and the maintenance of nuclear power plants currently in operation in the USA, China, Taiwan, Canada, among others. We together with KEPCO and other group companies, successfully performed feasibility studies on the construction of nuclear power plants in Romania, Vietnam, and Indonesia, among others. For the UAE's first nuclear power plant construction project, we are undertaking the architect engineering and nuclear steam supply system design, and will supply Korea's domestically designed APR1400 reactor, which features markedly advanced safety and economy.

In the thermal power plant sector, our completed overseas projects include the turnkey-based construction of a 500kV substation at the Ilijan Combined Cycle Power Plant and the construction of a fuel handling wharf in the Philippines; The architect engineering for the AFAM VI Combined Cycle Power Plant in Nigeria; The architect engineering for the Misurata and Benghazi Combined Cycle Power Plants in Libya; the Shuweihat S2 Combined Cycle Power Plant in the UAE; and the provision of engineering support for the owner of the Cirebon Thermal Power Plant in Indonesia. As such, We execute architect engineering and provide technical and manpower support and other consultancy services in various fields- including nuclear power plants and thermal power plants, environmental protection and construction- all around the world. We have also succeeded in enhancing our global profile in power plant markets by executing such projects as the Takoradi T2 Expansion EPC in Ghana and the CIPREL IV Volet B EPC in Cote d'Ivorie. Top | A bird's-eye-view of the UAE's first nuclear power plant. Middle | Benghazi Combined Cycle Power Plant in Libya Bottom (left) | A bird's-eye-view of the Ciprel IV Volet B in Cote d'Ivorie

### OVERSEAS BUSINESS



NEW & RENEWABLE ENERGY We specialize the development of new and renewable energy sources, including photovoltaics, solar heat, wind power, biomass, waste, hydroelectric, coal gasification and liquefaction, and marine/tidal energy. We also strategically execute energy-efficiency projects such as smart grids in conjunction with research, devising future alternatives to energy sources in a bid to address future paradigm shifts in the international energy industry. Our achievements in this sector include the architect engineering for the Jeju Hankyung Wind Farm; the design and engineering for various TDF and RDF-fired cogeneration power plants; the architect engineering for a 300MW Integrated Gasification Combined Cycle Power Plant; and for Synthetic Natural Gas (SNG) facilities; and feasibility study. While accumulating the experience through these projects, We have secured a reputation as a friend of the environment and are fostering our future energy competitiveness.



### **EPC**

Engineering, **Procurement and** Construction

11.10

We are aiming to become a global power EPC company. We have consolidated our EPC base through successfully conducting large-scale projects ranging from designing to test running nuclear and thermal power plants. We have also participated in superlarge scale infrastructure construction projects such as the Korea Train Express (KTX Seoul-Busan) project and the Incheon International Airport project. These projects enabled us to develop 12 types of construction management procedural manuals, as well as construction management execution plans and guidelines on construction management, and to build a Web-based total project management system. As such, we have secured standardized project management systems, enabling us to operate a perfect project management support system for any project. Based on the systematic project management capability and abundant human resources. We have been opening a new chapter as a Global Power EPC Leader by successfully acquiring the Takoradi T2 Expansion EPC Project in Ghana, the CIPREL IV Volet B EPC Project in Cote d'Ivoire and Osan Cogeneration EPC Project in Korea. Top | Ilijan Combined Cycle Power Plant in the Philippines Bottom | Incheon International Airport



INN

#### **KEPCO E&C's PROMISE**

We fulfill our corporate and social responsibilities for achieving sustainable growth, based on ethical management principles. Since we established our Code of Ethics in April, 2003, we have been hosting Ethical Management Conventions frequently. In this manner, we have laid the foundation for establishing our company-wide ethical management system. We also implement the Code of Conduct for Ethics management across the company, as well as a self-assessment system for employees on a weekly basis, in an effort to encourage staff members to continue practicing ethical management. We have also established the Best Ethics Management system, which reflects the requirements of ISO26000, the UN Global Compact, and sustainable management, thereby boosting our global competitiveness. In this regard, the CEO sets a firm example by continuing to participate in ethics forums for CEOs and by encouraging the CEOs of our partner firms to sign integrity pledges. The CEO continues to lead internal efforts to pursue integrity at all levels and conduct anti-corruption campaigns, by implementing the ethics management process and continuing to participate in corporate social and community activities. We also operate a Customer Technical Support Center in order to actively and efficiently respond to our customer's ever increasing and varied technical queries and requests. We are committed to becoming a global company creating superb values by complying with international standards, and transparently sharing all our activities and achievements together with stakeholders to realize sustainable growth management ethically, regarding ethics as the highest principles to which all of our employees must adhere.

 $\label{eq:constraint} \begin{array}{l} \mbox{Top} (\mbox{left}) \mid \mbox{Code of ethic for engineer's proclamation celemony} \\ \mbox{Top} (\mbox{right}) \mid \mbox{Convention for Integrity Practice Resolution} \\ \mbox{Bottom} (\mbox{right}) \mid \mbox{Win-Win partnership with subcontractor} \end{array}$ 



Ethical Management-Clean Company

Colospecies

100

### BUSINESS ETHICS

**KEPCO E&C's PROMISE** 

We are committed to fulfilling our Social Responsibility. Our True Love Service Corps, which was launched in August 2005 under the slogan of "Supplying Technology to Our Customers, Sharing Friendship with Our Neighbors" practices the values of love, sharing by participating in volunteer services. All employees raise a certain amount of money through fund-raising activities on a monthly basis, for which the company provides 200% matching funds to provide funds for its charity efforts. All employees thus actively participate in the True Love Service Corps.



We were awarded the Corporate Social Service Prize by the Korea Economic Newspaper for three consecutive years (2006~2008) in recognition of its volunteer service efforts, and the Respected Company Award hosted by the KMAC for three consecutive years (2009~2011) as well. Embracing a corporate philosophy founded on "the synergistic and harmonious convergence of humanity, the environment and technology," we have endeavored to create a more healthy living environment, manage sustainable growth and economic development, while at the same time serving people and the community in a spirit of sharing, "Love, Happiness, Hope and Life."

Top (left) | Overseas volunteer service in a India Top (right) | Activity for the institutes for the disabled Bottom (left) | Overseas volunteer service in a India Bottom (right) | Restoring the damaged farm village by strong storm

한국전력기술 인도지역 참사랑봉사단

Supplying Technology to Our Customers, Sharing Friendship with Our Neighbors



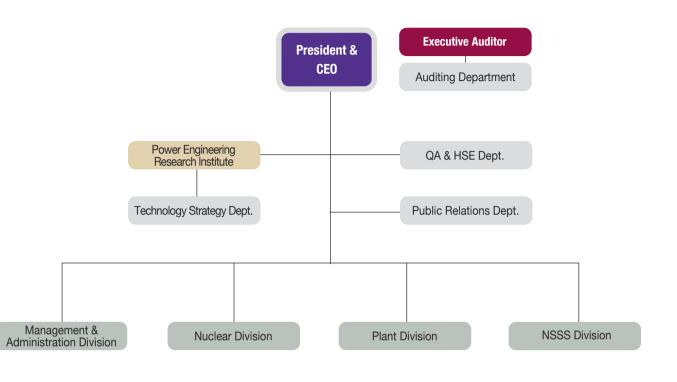
### SOCIAL CONTRIBUTION

#### **COMPANY STATUS**

#### **Statement of Financial Position**

Statement of Financial Position			(Unit:US Dollar
	2015	2014	2013
Assets			
Current Assets	291,432,947	323,227,951	453,758,294
Cash and cash equivalents	13,044,015	69,393,995	92,868,935
Current financial assets	6,385,612	1,358,959	136,833,572
Trade and other receivables	120,971,647	79,931,752	63,129,711
Due from customers for contranct work	111,089,998	149,347,546	109,281,89
Current tax assets	-	-	14,363,857
Current non-financial assets	20,084,342	23,194,244	35,118,269
Inventories	-	1,455	2,162,053
Current Assets held for sale	19,857,333	-	
Non-current assets	438,222,105	384,206,956	266,893,33
Non-current financial assets	32,182,474	11,592,376	10,667,93
Long-term trade and other receivables	14,013,007	4,659,671	10,343,17
Property, plant and equipment	288,260,118	264,040,631	142,184,20
Intangible assets	39,411,969	38,824,388	37,753,96
Investments in associate	6,877,132	11,591,799	14,213,96
Deferred income tax assets	53,272,076	49,655,237	48,253,14
Non-current non-financial assets	4,205,329	3,842,854	3,476,94
Total Assets	729,655,052	707,434,907	720,651,624
Liabilities			
Current liabilities	292,077,375	287,269,117	318,437,75
Non-current liabilities	81,959,027	49,777,774	40,184,16
Total liabilities	374,036,402	337,046,891	358,621,92
Equity			
Capital shares	6,522,184	6,954,148	7,243,43
Other equity components	(8,657,097)	(9,237,438)	(5,159,280
Retained earnings	357,753,563	372,671,306	359,945,54
Total Equity	355,618,650	370,388,016	362,029,70
Total liabilities and equity	729,655,052	707,434,907	720,651,624

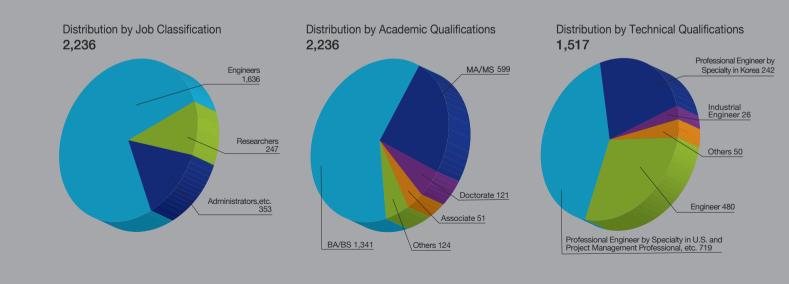
Organization



#### Income Statement

ncome Statement			(Unit:US Dollars
	2015	2014	2013
Sales	561,094,953	765,936,402	715,894,866
Cost of sales	(423,217,470)	(609,296,983)	(573,278,863)
Gross profit	137,877,483	156,639,419	142,616,002
Selling and administrative expenses	(108,281,163)	(96,093,452)	(110,564,793)
Operating profit	29,596,320	60,545,967	32,051,209
Other income	6,094,146	7,952,527	9,721,734
Other expenses	(3,406,831)	(1,108,867)	(1,915,109)
Other loss, net	1,326,964	(4,889,484)	(4,335,716)
Finance costs	(866,447)	(1,134,091)	(675,357)
Finance income	2,394,163	4,970,861	10,042,319
Share of loss of associate	(3,985,599)	(2,054,489)	-
Profit before income tax	31,152,716	64,282,424	44,889,081
Income tax expenses	(4,661,892)	(14,465,285)	(12,284,879)
Profit for the year	26,490,824	49,817,139	32,604,202
Other comprehensive income (loss)	411,536	(8,628,555)	1,044,589
Total comprehensive income for the year	26,902,360	41,188,584	33,648,791

Manpower



Translated into USD at the rate of ₩1,172.00(2015), ₩1099.20(2014), ₩1,055.30(2013) to US\$1

Mar.31, 2016

#### **NUCLEAR POWER**

#### APR1400 Project

Power Plant	Location	Capacity (MW)	Design (NSSS/AE)	Construction Period (First Concrete-Commercial Operation)	Status
Shin-Kori Unit 3	Ulju, Korea	1,400	KEPC0 E&C	Oct.2008~Jul.2015	Under Construction
Shin-Kori Unit 4	Ulju, Korea	1,400	KEPC0 E&C	Oct.2009~May 2016	Under Construction
Shin-Hanul Unit 1	Ulchin, Korea	1,400	KEPC0 E&C	Aug.2012~Apr.2017	Under Construction
Shin-Hanul Unit 2	Ulchin, Korea	1,400	KEPC0 E&C	Aug.2013~Feb.2018	Under Construction
BNPP Unit 1	Al Braka, the UAE	1,400	KEPC0 E&C	Nov.2012~May 2017	Under Construction
BNPP Unit 2	Al Braka, the UAE	1,400	KEPC0 E&C	Nov.2013~May 2018	Under Construction
BNPP Unit 3	Al Braka, the UAE	1,400	KEPC0 E&C	Nov.2014~May 2019	Under Construction
BNPP Unit 4	Al Braka, the UAE	1,400	KEPC0 E&C	Nov.2015~May 2020	Under Construction
Shin-Kori Unit 5	Ulju, Korea	1,400	KEPC0 E&C	Sep.2016~Mar.2021	Under Construction
Shin-Kori Unit 6	Ulju, Korea	1,400	KEPC0 E&C	Sep.2017~Mar.2022	Under Construction
Shin-Hanul Unit 3,4	Ulchin, Korea	1,400	KEPC0 E&C	Mar.2017~Dec.2023	Under Construction

#### **OPR1000 Project**

Power Plant	Location	Capacity (MW)	Design (NSSS/AE)	Construction Period (First Concrete-Commercial Operation)	Status
Hanbit Unit 3	Yonggwang, Korea	1,000	KEPC0 E&C/WEC	Dec.1989~Mar.1995	In Operation
Hanbit Unit 4	Yonggwang, Korea	1,000	KEPC0 E&C/WEC	Jun.1990~Jan.1996	In Operation
Hanul Unit 3	Ulchin-gun, Korea	1,000	KEPC0 E&C	Jul.1993~Aug.1998	In Operation
Hanul Unit 4	Ulchin-gun, Korea	1,000	KEPC0 E&C	Nov.1993~Dec.1999	In Operation
Hanbit Unit 5	Yonggwang, Korea	1,000	KEPC0 E&C	Jun.1997~May 2002	In Operation
Hanbit Unit 6	Yonggwang, Korea	1,000	KEPC0 E&C	Nov.1997~Dec.2002	In Operation
Hanul Unit 5	Ulchin, Korea	1,000	KEPC0 E&C	Oct.1999~Jul.2004	In Operation
Hanul Unit 6	Ulchin, Korea	1,000	KEPC0 E&C	Oct.2000~Apr.2005	In Operation
Shin-Kori Unit 1	Gijang, Korea	1,000	KEPC0 E&C	Jun.2006~Feb.2011	In Operation
Shin-Kori Unit 2	Gijang, Korea	1,000	KEPC0 E&C	Jun.2007~Dec.2011	In Operation
Shin-Wolsong Unit 1	Gyeongju, Korea	1,000	KEPC0 E&C	Dec.2007~Mar.2012	In Operation
Shin-Wolsong Unit 2	Gyeongju, Korea	1,000	KEPC0 E&C	Dec.2008~Aug.2013	In Operation

#### CANDU-PHWR Project

Power Plant	Location	Capacity (MW)	Design (NSSS/AE)	Construction Period (First Concrete-Commercial Operation)	Status
Wolsong Unit 1	Gyeongju, Korea	679	AECL/CANATOM	Oct.1977~Apr.1983	In Operation
Wolsong Unit 2	Gyeongju, Korea	713	KEPC0 E&C/AECL	Sep.1992~Jul.1997	In Operation
Wolsong Unit 3	Gyeongju, Korea	715	KEPC0 E&C/AECL	Apr.1994~Jul.1998	In Operation
Wolsong Unit 4	Gyeongju, Korea	715	KEPC0 E&C/AECL	Aug.1994~Oct.1999	In Operation

#### **THERMAL POWER**

#### 500MW Coal Fired Power Plant Project

Power Plant	Location	Capacity (MW)	Design	Construction Period	Status
Boryeong Units 3~6	Boryeong, Korea	500×4	KEPC0 E&C	Jun.1985~Jun.1994	In Operation (SC)
Taean Units 1~6	Taean, Korea	500×6	KEPC0 E&C	Dec.1987~Sep.2002	In Operation (SC)
Samcheonpo Units 3&4	Goseong, Korea	560×2	KEPC0 E&C	Mar.1989~Sep.1994	In Operation (Sub. Critical)
Dangjin Units 1~4	Dangjin, Korea	500×4	KEPC0 E&C	Nov.1989~Jun.2001	In Operation (SC)
Hadong Units 1~6	Hadong, Korea	500×6	KEPC0 E&C	Nov.1989~Sep.2001	In Operation (SC)
Samcheonpo Units 5&6	Goseong, Korea	500×2	KEPC0 E&C	Jan.1993~May 1998	In Operation (SC)
Dangjin Units 5&6	Dangjin, Korea	500×2	KEPC0 E&C	Sep.2002~Jun.2006	In Operation (USC)
Dangjin Units 7&8	Dangjin, Korea	500×2	KEPC0 E&C	Nov.2003~Nov.2007	In Operation (USC)
Taean Units 7&8	Taean, Korea	500×2	KEPC0 E&C	Mar.2004~Aug.2007	In Operation (USC)
Boryeong Units 7&8	Boryeong, Korea	500×2	KEPC0 E&C	Mar.2005~Dec.2008	In Operation (USC)
Hadong Units 7&8	Hadong, Korea	500×2	KEPC0 E&C	Oct.2005~Jun.2009	In Operation (USC)
Dongbu Green Units 1&2	Dangjin, Korea	500×2	KEPC0 E&C	Jul.2011~Sep.2015	Under Construction(USC)
Bukpyeong Units 1&2	Donghae, Korea	595×2	KEPC0 E&C	Dec.2011~Jul.2016	Under Construction(USC)

#### 800MW Coal Fired Power Plant Project

Power Plant	Location	Capacity (MW)	Design	Construction Period	Status
Yeongheung Units 1&2	Ongjin, Korea	800×2	KEPC0 E&C	Sep.1994~Dec.2004	In Operation(SC)
Yeongheung Units 3&4	Ongjin, Korea	870×2	KEPC0 E&C	Mar.2004~Dec.2008	In Operation(USC)

#### 1000MW Coal Fired Power Plant Project

Power Plant	Location	Capacity (MW)	Design	Construction Period	Status
Dangjin Units 9&10	Dangjin, Korea	1,000×2	KEPC0 E&C	Oct.2007~Dec.2015	Under Construction(USC)
Shin-Boryeong Units 1&2	Boryeong, Korea	1,000×2	KEPC0 E&C	Jan.2011~Sep.2017	Under Construction(USC)
Taean Units 9&10	Taean, Korea	1,000×2	KEPC0 E&C	Jun.2011~Mar.2017	Under Construction(USC)

#### Large Scale CFB Coal Fired Power Plant Project

Power Plant	Location	Capacity (MW)	Design	Construction Period	Status
Tonghae Units 1&2	Donghae, Korea	200×2	KEPC0 E&C	Feb.1993~Sep.1999	In Operation
Yeosu Unit 2	Yeosu, Korea	340×1	KEPC0 E&C	Dec.2005~Mar.2012	In Operation
Samchok Green Power 1&2	Samchok, Korea	1,000×2	KEPC0 E&C	Oct.2009~Jun.2016	Under Construction

#### Combined Cycle & Cogeneration Power Plant Project

Power Plant	Location	Capacity (MW)	Design	Construction Period	Plant Components	Status
Seoincheon CCPP	Incheon, Korea	1,900	KEPC0 E&C	Mar.1989~Mar.1993	(1GT+1HRSG+1ST)×8units	In Operation

Pyongtaek CCPP	Pyongtaek, Korea	520	KEPC0 E&C	Apr.1991~Sep.1994	(4GT+4HRSG+1ST)×1unit	In Operation
Ilsan CCPP	Goyang, Korea	300	KEPC0 E&C	Sep.1993~Jun.1996	(2GT+2HRSG+1ST)×1unit	In Operation
Sinincheon CCPP	Incheon, Korea	2,000	KEPC0 E&C	Nov.1993~Sep.1997	(2GT+2HRSG+1ST)×4units	In Operation
Jeju Hallim Gas Turvine	Hallim, Korea	35	KEPC0 E&C	May 1994~Sep.1995	1GT	In Operation
Ulsan CCPP Unit 2	Ulsan, Korea	1,000	KEPC0 E&C	Feb.1995~Sep.1997	(2GT+2HRSG+1ST) $\times$ 2units	In Operation
Busan CCPP	Busan, Korea	2,160	KEPC0 E&C	May 1996~Mar.2004	(2GT+2HRSG+1ST)×4units	In Operation
GS-Bugok CCPP Unit 1	Dangjin , Korea	500	KEPC0 E&C	May 1997~Apr.2001	(2GT+2HRSG+1ST)×1unit	In Operation
Incheon CCPP Unit 1	Incheon, Korea	500	KEPC0 E&C	Dec.2001~Sep.2005	$(2GT+2HRSG+1ST) \times 1$ unit	In Operation
Kumho TDF Cogeneration	Yeosu, Korea	120	KEPC0 E&C	Sep.2004~May 2009	1ST	In Operation
GS-Bugok CCPP Unit 2	Dangjin, Korea	500	KEPC0 E&C	Nov.2005~Feb.2008	(2GT+2HRSG+1ST)×1unit	In Operation
AFAM-VI CCPP	Afam, Nigeria	650	KEPC0 E&C	Nov.2005~Jun.2010	$(3GT+3HRSG+1ST) \times 1$ unit	In Operation
Incheon CCPP Unit 2	Incheon, Korea	500	KEPC0 E&C	Apr.2006~Sep.2009	(2GT+2HRSG+1ST)×1unit	In Operation
Misurata CCPP	Misurata, Lybia	750	KEPC0 E&C	Aug.2007~Jun.2011	(2GT+2HRSG+1ST)×1unit	In Operation
Benghazi CCPP	Benghazi, Lybia	750	KEPC0 E&C	Aug.2007~Jun.2011	$(2GT+2HRSG+1ST) \times 1$ unit	In Operation
POSCO CCPP Units 5&6	Incheon, Korea	1,000	KEPC0 E&C	Apr.2008~Sep.2011	(2GT+2HRSG+1ST) $\times$ 2units	In Operation
Shuweihat S2 CCPP	Abu Dhabi, the UAE	1,500	KEPC0 E&C	Oct.2008~Sep.2011	(2GT+2HRSG+1ST)×2units	In Operation
Happy City Cogeneration	Yeongi, Korea	500	KEPC0 E&C	Sep.2010~Feb. 2014	(2GT+2HRSG+1ST)×1unit	Under Construction
S3 Combine Cycle	UAE	1,600	KEPC0 E&C	Mar.2011~Jun. 2014	(2GT+2HRSG+1ST) $\times$ 2units	Under Construction
Mokdong Cogeneration	Seoul, Korea	20	KEPC0 E&C	Jun.1984~Jun.1986	1ST	In Operation
Banwol Cogeneration	Ansan, Korea	51	KEPC0 E&C	Feb.1985~Mar.1989	1ST	<ul> <li>In Operation</li> </ul>
Shinpoong Paper MFG Cogeneration	Pyongtaek, Korea	12	KEPC0 E&C	May 1985~Dec.1986	1ST	In Operation
Lotte Jamsil Cogeneration	Seoul, Korea	30	KEPC0 E&C	Mar.1986~Apr.1988	5DG	<ul> <li>In Operation</li> </ul>
Ulsan Petrochemical Cogeneration	Ulsan, Korea	40	KEPC0 E&C	Nov.1987~Jun.1990	1ST	In Operation
Gumi Cogeneration	Gumi, Korea	85	KEPC0 E&C	Mar.1988~Nov.1991	1ST	<ul> <li>In Operation</li> </ul>
Kumho Cogeneration	Yeosu, Korea	25	KEPC0 E&C	Apr.1988~Jun.1990	1ST	In Operation
Bundang Cogeneration	Seongnam, Korea	590	KEPC0 E&C	Feb.1990~Sep.1993	(5GT+5HRSG+1ST) $\times$ 1unit	<ul> <li>In Operation</li> </ul>
Anyang Cogeneration	Anyang, Korea	470	KEPC0 E&C	Feb.1990~Sep.1993	(4GT+4HRSG+1ST) $\times$ 1unit	In Operation
Bucheon Cogeneration	Bucheon, Korea	470	KEPC0 E&C	Feb.1990~Dec.1993	(3GT+3HRSG+1ST) $\times$ 1unit	<ul> <li>In Operation</li> </ul>
Ilsan Cogeneration	Goyang, Korea	630	KEPC0 E&C	Feb.1990~Dec.1993	(4GT+4HRSG+1ST) $\times$ 1unit	In Operation
Ilijan CCPP	Ilijan, the Philippines	1,200	KEPC0 E&C	Jun.1999~Sep.2002	(2GT+2HRSG+1ST) $\times$ 2units	In Operation
Yulchon CCPP	Suncheon, korea	550	KEPC0 E&C	Oct.2002~Jun.2005	(2GT+2HRSG+1ST) $\times$ 1unit	In Operation
GS Bugok Combined Cycle Unit 3	Dangjin, Korea	410	KEPC0 E&C	Jan. 2011~Dec. 2013	(1GT+1HRSG+1ST)×1unit	In Operation
Seoul CCPP Units 1&2	Seoul, Korea	400X2	KEPC0 E&C	Aug.2007~Mar.2015	(1GT+1HRSG+1STR)X2units	Under Construction
Dongducheon CCPP Units 1&2	Dongducheon, Korea	858X2	KEPC0 E&C	Sep.2011~Mar.2015	(2GT+2HRSG+1STR)X2units	Under Construction
Ulsan CCPP Unit 4	Ulsan, Korea	800	KEPC0 E&C	Oct.2011~Oct.2014	(2GT+2HRSG+1STR)X1unit	Under Construction
Pyeongtaek CCPP Unit 2	Pyeongtaek, Korea	868	KEPC0 E&C	Nov.2011~Feb.2015	(2GT+2HRSG+1STR)X1unit	Under Construction
Ghana Takoradi T2	Ghana in Africa	220	KEPC0 E&C	Dec.2011~Dec.2014	(2GT+2HRSG+1STR)X1unit	Under Construction
Osan Cogeneration	Osan, Korea	408	KEPC0 E&C	Dec.2012~Mar.2016	(1GT+1HRSG+1STR)X1unit	<ul> <li>Under Construction</li> </ul>
Cote d'Ivoire Ciprel	Cote d'Ivoire	340	KEPC0 E&C	Sep.2013~Mar.2016	(2GT+2HRSG+1STR)X1unit	Under Construction

General Design
 Planning & Basic Design
 Technical Management & Support
 EPC

#### **ENVIRONMENT**

#### Flue Gas Desulfurization System Project

Project	Client	Capacity	Project period	Style
Boryeong Units 3~6(*S)	KEPCO	500MW×4	Jun.1985~Jul.1999	Packed Tower
Taean Units 1~6(S)	KEPCO	500MW×6	Dec.1987~Sep.2002	Open Spray/Tray
Hadong Units 1~6(S)	KEPCO	500MW×6	Nov.1989~Sep.2001	Open Spray/Tray
Dangjin Units 1~4(S)	KEPC0	500MW×4	Nov.1989~Jun.2001	Open Spray
Tonghae Units 1&2(S)	KEPCO	200MW×2	Feb.1993~Sep.1998	Dry Injection
Yeongheung Units 1&2(S)	KEPCO	800MW×2	Sep.1994~Dec.2004	Open Spray
Yeoungdong Units 1&2(*T)	KEPCO	(125+200)MW	Nov.1994~Dec.1998	KEPAR
Seocheon Units 1&2(T)	KEPCO	200MW×2	Nov.1996~Dec.1998	KEPAR
Dangjin Units 5~8(S)	Korea East-West Power	500MW×4	Nov.2000~Mar.2008	DCFS
Samcheonpo Units 1~4(S)	Korea South-East Power	560MW×4	May 2001~Mar.2007	Open Spray
Taean Units 7&8(S)	Korea Western Power	500MW×2	Aug.2002~Jun.2008	Open Spray
Boryeong Units 7&8(S)	Korea Midland Power	500MW×2	Sep.2002~Mar.2009	Open Spray
Pyongtaek Unit 1(T)	Korea Western Power	350MW	Dec.2002~Nov.2005	KEPAR
Yeongheung Units 3&4(S)	Korea South-East Power	870MW×2	Feb.2003~Jun.2009	Open Spray
Hadong Units 7&8(S)	Korea Southern Power	500MW×2	Sep.2003~Jun.2009	Open Spray
Namjeju Units 3&4(T)	Korea Southern Power	100MW×2	Jan.2005~Mar.2007	KEPAR
Boryeong Units 1&2(T)	Korea Midland Power	500MW×2	Dec.2005~Aug.2010	KEPAR
Dangjin Units 9&10(S)	Korea East-West Power	1,000MW×2	Oct.2007~Present	Open Spray
Shin-Boryeong Units 1&2(S)	Korea Midland Power	1,000MW×2	Jan.2011~Present	Open Spray
Taean Units 9&10	Korea Western Power	1,000MWX2	May.2011~Present	DCFS

#### Flue Gas Denitrification System Project

Project
DeNOx System Design for Yeongheung Units 1&2
DeNOx System for Namjeju Units 1~4 (Turnkey Project)
DeNOx System Design for Seoul Units 4&5
DeNOx System Design for Incheon Units 1&2
DeNOx System Design for Dangjin Units 5~8
DeNOx System Design for Ulsan Units 4~6
DeNOx System Design for Samcheonpo Units 3&4
DeNOx System Design for Taean Units 7&8
DeNOx System Design for Boryeong Units 7&8
DeNOx System Design for Yeongheung Units 3&4
DeNOx System Design for Hadong Units 7&8
DeNOx System Design for Dangjin Units 1~4
DeNOx System Design for Hadong Units 1~6
DeNOx System Design for Incheon Units 3&4

\* S : System Design Project T : Turnkey Project

Client	Project Period
Korea South-East Power	Sep.1994~Dec.2004
KEPCO	Feb.1999~May 2000
Korea Midland Power	Feb.2000~May 2002
Korea Midland Power	Mar.2000~Jun.2002
Korea East-West Power	Nov.2000~Mar.2008
Korea East-West Power	Jan.2001~Mar.2003
Korea South-East Power	May 2001~Mar.2007
Korea Western Power	Aug.2002~Jun.2008
Korea Midland Power	Sep.2002~Mar.2009
Korea South-East Power	Feb.2003~Jun.2009
 Korea Southern Power	Sep.2003~Jun.2009
Korea East-West Power	Oct.2003~Jul.2007
Korea Southern Power	Dec.2003~Sep.2007
Korea Midland Power	Mar.2004~Mar.2006

DeNOx System Design for Boryeong Units 1&2	Korea Midland Power	Jul.2006~Jul .2009
DeNOx System Design for Honam Units 1&2	Korea East-West Power	Aug.2008~Mar.2011
DeNOx System Design for Samcheonpo Units 1&2	Korea South-East Power	Sep.2008~Mar.2009
DeNOx System Design for Shin-Boryeong Units 1&2	Korea Midland Power	Jan. 2011~Present
DeNOx System Design for Dangjin Units 9&10	Korea East-West Power	Oct.2007~Present
DeNOx System Design for Samchok Green Power Units 1&2	Korea Southern Power	Oct.2009~Present
DeNOx System Design for Taean Units 9&10	Korea Western Power	May.2011~Present

#### KoNOx® (KEPCO E&C DeNOx System) Project

Project	Client	Completed
Turnkey Project, Low-Temp DeNOx System for Bundang CCPP Unit 6	Korea South-East Power	Nov.2003
Low-Temp Catalyst for Gwacheon Resource Recovery Facility	Gwacheon Resource Recovery Facility	Nov.2003
Low-Temp Catalyst for Samsung Corning Gumi Factory	Samsung Corning Precision Glass	Dec.2003
Low-Temp Catalyst for Samsung Corning Suwon Factory	Samsung Corning Precision Glass	Dec.2003
Low-Temp Catalyst for HU-CHEMS	HU-CHEMS	Apr.2004
Low-Temp Catalyst for Kumho P&B Chem	Kumho P&B Chem	Nov.2004
Low-Temp Catalyst for Bucheon(Daejang) Resource Recovery Facility	City of Bucheon	Sep.2005
Low-Temp Catalyst for Bucheon(Samjeong) Resource Recovery Facility	City of Bucheon	Sep.2005
Low-Temp Catalyst for Daesung Corp, KoGen Div	Daesung Corp	Dec.2005
US, KEAHOLE ST-7 SCR & Urea Conversion System	HELCO	Jul. 2007
Low-Temp Catalyst for Dongsuh Food Corp.	Dongsuh Food Corp	Oct.2007
Dongwoo Fine-Chem SCR Catalyst Supply Project	Dongwoo Fine-Chem	Mar. 2009
SCR Facility Construction for Sithe Thermal Power Plant	Hynix Semiconductor	Apr.2009
Catalyst Supply for Unit 1 of Yeongheung Thermal Power Plant	Korea South-East Power	Apr.2009
SCR Catalyst Supply for Pangyo Cogeneration Power Plant	Korea District Heating Corp.	Aug.2009
Catalyst Production and Delivery for SCR Facility	TS Coropration	Sep. 2009
Catalyst Production and Delivery for SCR Facility	Heungwon Paper Manufacturing	Sep.2009
U.S. Co-op City Power Plant SCR System	U.S. Co-op City Power Plant	Feb.2010
SCR Reactor Catalyst(KoNOx® DRC 30) Supply	Kumho P&B Chem	May 2010
SCR Catalyst Supply	Korea District Heating Corp. (Daegu Branch)	Aug.2010
SCR Catalyst Supply for Pyeongtaek Thermal Power Plant Unit 2	Korea Western Power	Aug.2010
Basic Design Services for Coal-Fired Thermal Power Plant Fusion System with More than 2 million CMH in Capacity	Hanmo Corporation	Sep.2010
Catalyst Powder Supply for Ulsan Thermal Power Plant Untis 4 and 6	Korea East-Western Power	Nov.2010
Suwon SCR Catalyst Performance Analysis Services	Korea District Heating Corp.	Dec.2010
Catalyst Powder Supply for Samcheonpo Thermal Power Plant Unit 4	Korea South-East Power	Feb.2011
Urea Handling System Supply for Saudi Arabia's Rabigh VI SCR	Doosan Heavy Industries & Construction	Jul.2012
Geoje Municipal Waste Incineration Facility SCR Catalyst Supply Project	Geoje	May 2012
SCR Catalyst Supply for Saudi Yanbu2 BLR Project	Doosan Heavy Industries & Construction	Jun.2014
De-Nox SCR System Supply for Pohang LNG CCPP	Posco ICT	Jun.2012
lybrid SCR De-NOx System Supply for Ulsan Units 4&5	Korea East-West Power	Aug.2012

#### Waste Management System Project

Project	Client	Project Period
Installation of Oil Ash Incinerator in Ulsan TPP	KEPCO	Jul.1993~Jan.1996
Design of Ash Recycling Facility in Samcheonpo TPP	KEPCO	May 1994~Jul.1997
Design of Coal Ash Landfill in Yeongheung TPP	KEPCO	Jan.1995~Jan.1999
Design of Coal Ash Landfill in Dangjin TPP	KEPCO	Jul.1995~Jan.1998
Feasibility Study and Basic Plans of Sudokwon Landfill Gas(LFG) Power Plant Project	KPPS	Dec.1999~Jun.2000
Construction of Geumsan-gun Solid Waste Landfill Site	Environmental Management Corp.	Aug.2000~Feb.2002
Design of Sudokwon Landfill Gas(LFG) Power Plant Project	Hyundai Mobis	Aug.2001~Oct.2002
Construction of Milyang Food Waste/Sewage Treatment Plant	City of Milyang	Jan.2002~Jan.2003
Maintenance & Repair of Suyeong Food Waste/Sewage Treatment Facility	Busan Environmental Facility	Oct.2003~Apr.2004
Construction of Sudokwon Landfill Gas(LFG) Power Plant Project	ECO Energy	Mar.2004~Dec.2006
Construction of Suncheon Food Waste Recycling Plant	City of Suncheon	Dec.2004~Dec.2005
Construction of Mokpo Food Waste Recycling Plant	City of Mokpo	Dec.2004~Jan.2006
Design of Extension of 2nd & 3rd Ash Pond for Samcheonpo TPP	Korea South-East Power	Mar.2006~Oct.2006
Expansion Design Services for Ash Pond 1 of Hadong TPP	Korea Southern Power	Jun.2006~Sep.2009

#### Water Pollution Control System Project

#### Project Yeongheung TPP Units 1~4 (Water Treatment/Wastewater Treatment/Re Hanul NPP Units 5 & 6 (Water Treatment/Wastewater Treatment/Recycle Eonyang Sewage Treatment Plant Engineering Guri Sewage Treatment Plant, 3rd Advanced Treatment Anseong Public Livestock Wastewater Treatment Plant Construction Shin-Kori NPP Units 1~4 (Water Treatment/Wastewater Treatment/Recyc Construction of Sewage Treatment Plants in Gwangju, Docheok, and Namh Construction of Wastewater Treatment Plant Suwon Industrial Complex Construction of Daesan Sewage Treatment Plant Construction of Boryeong Advanced Sewage Treatment Plant Construction of Nuclear Power Plant CPP Wastewater Treatment Plant Hwaseong Public Treatment Facility for Livestock Excretions BNPP Units 1 & 2 (Water Treatment/Sewage, Waste Water Treatment/Gra Shin-Hanul NPP Units 1,2(Water Treatment/Wastewater treatment/Recyc Shin-Boryeong Units 1&2(Wastewater treatment/Recycled Water System Ghana Takoradi T2(Wastewater Treatment System) Tufanbeyli TPP Units 1~3(Wastewater Treatment System) Taean TPP Unit 9&10(Wastewater treatment System) CIPREL IV Volet B EPC Project(Wastewater treatment/Recycled Water Sys Osan Cogeneration(Wastewater treatment/Recycled Water System)

Boryeong TPP(Recycled Water System)

#### New Power, New Standard

	Client	Project Period
ecycled Water Systems)	Korea South-East Power	Sep.1994~Dec.2004
ed Water Systems)	KHNP	Jun.1998~May 2003
	City of Ulsan	Mar.2001~Oct.2004
	City of Guri	Nov.2001~Feb.2003
	City of Anseong	Apr.2002~Dec.2003
/cled Water Systems)	KHNP	Aug.2002~Present
nhan Sanseong	KPPS	Dec.2004~Sep.2006
	City of Suwon	Feb.2005~Dec.2005
	Jeollabuk-do Public Procurement Service	Nov.2005~Dec.2008
	Environmental Management Corp.	Mar.2007~May 2009
	KHNP	Apr.2009~Jan.2013
	City of Hwaseong	Oct. 2009~Aug.2012
raywater Facilities)	KEPCO	Mar. 2010~Present
/cled Water System)	KHNP	May.2009~Present
n)	Korea Midland Power	Jan.2011~Present
	Takoradi Int'l Co.	Jan.2011~Present
	SK Construction	Jan.2011~Present
	Korea Western Power	May.22011~Pres
/stem)	COMPAGNIE IVOIRIENNE DE PRODUCTION D'ELECTRICITE	Jan.2013~Present
	DS POWER	Jan.2013~Present
	Korea Midland Power	Oct.2013~Present

#### **Clean Development Mechanism Business Project**

Project	Client	Registration	Emission reduction (tCO <sub>2</sub> /year)
Sudokwon Landfill Gas(LFG) CDM project	Sudokwon Landfill Site Management Corp.	Apr. 2007	1,210,342
KHNP New Renewable Energy CDM Project (3MW Yonggwang Photovoltaic Power and 0.75MW Kori Wind Power)	KHNP	Apr. 2009	2,680
KHNP Cheongpyeong HPP Unit 4 CDM project	KHNP	Jun. 2011	20,891

#### Major Environmental Impact Assessment Projects(2000~Present)

Project	Client	Project Period
Long-Term Environmental Impact Monitoring of Yeosu and Seosan Oil Storage Cavern Construction	Korea National Oil Corp.	Mar.2000~Mar.2005
Environmental Impact Assessment of Urban Landfill Gas Recycling Project	ECO Energy	Aug.2001~Dec.2003
Environmental Impact Assessment for Wolsong Dry Storage Facility	KHNP	Dec.2003~May 2004
Post-Environmental Impact Study of 345kV Yangyang – Tonghae Power Transmission Line	KEPC0	Jan. 2005~Feb.2014
Environmental and Traffic Impact Assessment of Gunsan CCPP Construction	Korea Western Power	Oct.2005~Jul.2007
Long-Term Environmental Impact Monitoring of Pyongtaek Above Ground Oil Tank Construction	Korea National Oil Corp.	Jan.2006~May 2009
Long-Term Environmental Impact Monitoring of Secondary Ulasn Oil Storage Cavern Construction	Korea National Oil Corp.	Jan.2006~Dec.2012
Environmental Impact Assessment of Samcheonpo TPP Units 2 & 3 Ash Pond Expansion	Korea South-East Power	Feb.2006~Aug.2007
Post-Environmental Impact Study of 345kV Boryeong – Cheongyang Power Transmission Line	Boryeong TPP HQ	Mar.2006~Dec.2009
Environmental/Traffic Impact Assessment of Construction for Dangjin TPP Units 9 & 10	Korea East-West Power	Aug.2006~Aug.2009
Boryeong Thermal Power Plant Course Dredging Environmental Impact Assessment	Korea Middleland Power	Jan.2008~Feb.2011
Dongbu Green Power Plant Environmental Impact Assessment	Dongbu Corporation	Dec.2008~Present
Environmental Impact Assessment of 345kV Kunsan-Saemangeum T/L Construction	KEPC0	Apr.2008~Dec.2012
Environmental Impact Assessment of Construction for Pocheon CCPP	Pocheon Power	Sep.2008~Aug.2011
Environmental Impact Assessment of Dongducheon CCPP Construction	Korea Western Power	Oct.2009~Mar.2012
Enviornmental Impact Assessment of Construction for Bukpyeong TPP	GS Donghae Electric Power	Mar.2010~Nov.2012
Shin-Kori Units 3~4 Radiation Environmental Impact Assessment	KHNP	May 2010~Present
Munsan Combined Cycle Thermal Power Plant Environmental Impact Assessment	SK Construction	Sep.2010~Present
Environmental Impact Assessment of Construction for G-Project TPP	SAMSUNG C&T	Apr.2012~Present
Environmental Impact Assessment of Construction for Pyeongtaek 3rd CCPP	Korea Western Power	Aug.2012~Present

#### Major Geographic Information System Projects(2000~Present)

Project	Client	Project Period
Overhead Transmission Line Routing and Design for Myanmar 500kV Transmission Line Voltage Upgrading Project	KEPCO	Aug.2004~Dec.2004
345kV Seonsan-Shin Pohang Connecting Power Transmission Line Passing Area Design Services	KEPCO	Jan.2005~Dec.2009
Selection of Passing Area using T/L Satellite Images for 154kV Bonghwa-Ulchin	Hawshin Powertech	Jun.2005~Jul.2009
Power Impact Assessment System Development for Power Transmission and Transform Facilities	KEPCO	Feb.2006~Jul.2007
The Prior Review System on Visual Impact Assessment for the Shin-Hanul NPP Units 1&2	KHNP	Nov.2007~Dec.2008
Siting Project for New Nuclear Power Plant on Preliminary Site Selection Stage	KHNP	Nov.2008~Nov.2009
154kv Hanlim Substation Power Impact Assessment	KEPCO	Jun. 2009~Feb.2011
Siting for 154kV 2nd Kanghwa S/S	KEPCO	Sep.2009~Jun.2011
154kV Sangbuk-Yangjeong Power Transmission Line Power Impact Assessment	KEPC0	Nov.2009~Dec.2012

Overhead Transmission Line Routing for 345kV Saemangum T/L  $\,$ 

Location Selection for 765kV Shin-Joongboo Substation and Overhead Transmission Line Routing for Relative T/L

#### **OTHER BUSINESS AREAS**

#### Major Experience for Project Management

#### Project

Program Management Advisory Services for Korea Train Express (KT Construction Project Program Management Advisory Services for Incheon Int'l Airport Con Construction Management Services for Yongju Tabacco Plant Program Management Support Services for Incheon Int'l Airport Railr Owner's Engineering & Project Management Services for Yulchon CCI Program Management Support Services for Busan-Geoje Fixed Link Desulfurization/DeNOx Engineering & Construction Management Servic Banwol Cogeneration Power Plant Construction Management Services for Mungyeong Leisure Town Consulting on Building of Total Project Information System Development of Master Plan and Procedures of Design Management Establishment of Design Management System (Phase 2) Development Services of Project Numbering System and Engineering for Korea Rail Network Authority Construction Management Services for Jeju High-tech Science and Te Project Management Services for New Town Project in Phnom Penh, Lender's Technical Advisory Services for Yongin Light Rapid Transit Test and Commissioning Support Services for Incheon Int'l Airport Co Client Technological Support Services for Dangjin Steel Gas Power Pla Program Management Advisory Services for Multi-functional Adminis Establishment of Integrated Project Management System for Four Ma (First stage) and Integrated Project Management Technological Suppo

Client Technological Support Services for Hyundai Green Power Stee Owner's Engineering of Dong Hae Biomass TPP

Owner's Engineering of Tongyang Power TPP Units 1&2

#### **OVERSEAS BUSINESS**

#### Major Overseas Projects (Nuclear Power)

#### Project

Preparation of Qinshan Units 1&2 AOM

#### New Power, New Standard

I/EB00	A
KEPCO	Apr.2008~Dec.2012
KEPCO	Jan.2012~Present

	Client	Project Period
TX, Seoul-Busan)	Korea Rail Network Authority	Feb.1993~Apr.1995
nstruction Project	IIAC	Dec.1994~Apr.2001
	KT&G	Nov.1999~May 2003
Iroad Project	KORAIL Airport Railroad	Dec.2002~Dec.2010
CPP	Meiya Yulchon Generation	Jan.2003~Jun.2005
	DAEW00 E&C	May 2003~Dec.2004
ices for	STX Engine	Apr.2004~Jun.2007
	Mungyeong Leisure Town	Jun.2004~Nov.2006
	Korea Rail Network Authority	Aug.2004~Dec.2004
t System (Phase 1),	K-Water	Aug.2004~May 2005 Nov.2005~Jan.2007
g Management System	LG CNS	Mar.2005~Dec.2005
echnology Complex	JDC	Jun.2005~Mar.2008
, Cambodia	World City	Nov.2005~Jun.2011
	Yongin Rapid Transit	Dec.2005~Aug.2010
onstruction Project(Phase 2)	IIAC	May 2006~Dec.2007
lant Units 1~4	Hyundai Green Power	Nov.2006~Mar.2011
istrative City Construction Project	MACC	Jun.2007~Oct.2008
lajor Rivers Restoration Project port Services (Phase 2)	MLTM	Aug.2009~Dec.2009 Feb.2010~Dec.2010
el Thermal Power Plant Units 5~8	Hyundai Green Power	Dec.2010~Sep.2014
	Korea East-West Power	Jun.2010~Oct.2013
	TONGYANG POWER	Jun.2013~Oct.2021

Clien	Project Period
AECL	Sep.1998~May 2000

sibility Study and Training Services for Application of Germany's nens' Measuring Control Technology to Korean Nuclear Power PlantsSiemeineer Support for Lungmen NPP, TaiwanS&Wineer Support for Qinshan NPP, ChinaAECLL Professional Engineering ServiceAECLunical Support for S&LS&LIDU 9 NSSS Feasibility AnalysisAECLIDU 9 Work to Conduct an Independent Safety and Design Evaluation and t Preliminary Engineering to Enhance LocalizationAECLInnical Support for BechtelBechteineer Support for GolderOECD/Innical Support for China Lindgong Nuclear Power PlantGuangineer Support for Stone & WebsterS&Wicipation in Westinghouse 0&M ProgramsWECronmental Design for the U.S. NuStart AP1000 COLWECronmental Dupport for PaR Nuclear, the USAPaR Nnological Support Services for the U.S. BechtelBechtelnological Support Services for the U.S. BechtelBechtelnological Support Services for the U.S. BechtelBechtelnological Support Services for the U.S. Acc-1000 Reactor PhysicsAECL	Jul.1 Jul.1 Sep. Oct. Jan. Jan. Jan. VIEA Dec. dong NPP Mar. Jun. Dec. May	.1999~May 2001 1999~Jul.2004 1999~Oct.2003 .1999~Apr.2000 1999~Dec.2001 .2000~Jul.2004 .2000~Feb.2001 .2000~Jul.2004 .2001~Aug.2002 .2002~Feb.2005 .2003~Mar.2008 .2003~Jun.2005 .2003~Dec.2010 .2004~May 2005
ineer Support for Qinshan NPP, China AECL L Professional Engineering Service AECL nnical Support for S&L S&L IDU 9 NSSS Feasibility Analysis AECL IDU 9 Work to Conduct an Independent Safety and Design Evaluation and AECL t Preliminary Engineering to Enhance Localization Bechtel ineering Support for Bechtel Bechtel Bechte ineering Support Service for the APS PVNGS CPCS WEC nnical Consultation for the OECD/NEA IRPE Project OECD/ nnological Advisory for China Lindgong Nuclear Power Plant Guang ineer Support for Golder GA nnical Service for Stone & Webster S&W icipation in Westinghouse 0&M Programs WEC ing Services for the U.S. NuStart AP1000 COL WEC ronmental Design for Ling Ao Phase II NPP Main Control Room LDNPO nnolcal Support for PaR Nuclear, the USA PaR N nnological Support Services for the U.S. Bechtel Bechtel	Jul.1 Sep. Oct. Jan. Jan. Jan. (NEA Dec. (NEA Dec. dong NPP Mar. Jun. Dec. May	1999~Oct.2003 .1999~Apr.2000 1999~Dec.2001 .2000~Jun.2000 .2000~Feb.2001 .2000~Jul.2004 .2001~Aug.2002 .2002~Feb.2005 .2003~Mar.2008 .2003~Jun.2005 .2003~Dec.2010
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nnical Support for PaR Nuclear, the USA PaR Nuclear, the USA Par Nuclear Support Services for the U.S. Bechtel Bechte	Oct.2	2005~Dec.2007
nnological Support Services for the U.S. Bechtel Bechte	C Jun.	.2006~Dec.2008
	uclear Jul.2	2006~Jul.2013
nnological Support Services for ACR-1000 Reactor Physics AECL	Jun.	.2007~Sep.2014
	Jun.	.2007~Nov.2007
000 COL Demonstration & Design Finalization WEC	Mar	.2008~Dec.2010
R Electrical Installation Support ITER	Oct.2	2008~Oct.2010
Primary Cooling System Replacement Consulting Demol	kritos Jun.	.2009~May 2011
iminary Feasibility Study of Nuclear Power Program in Peninsular Malysia TNB	Jun.	.2009~Jun.2010
Brakha Nuclear Power Plant Architect Engineering Project ENEC	Mar	.2010~May 2020
Brakha Nuclear Power Plant NSSS System Design Project ENEC	Jun.	.2010~May 2020
sulting Services for Site Selection and Evaluation for New NPPs in Peninsular Malaysia TNB R	esearch Jul.2	2010~Jan.2011
R Cable Engineering Support Service ITER IC	) Apr.	.2012~Apr.2017
R Detailed Design of CODAC, CIS and CSS Network Infrastructure ITER I	0 Nov.	.2012~Nov.2017
-Feasibility Study for Nuclear Power Project in Vietnam EVN	Jun.	.2013~Jun.2016
R CIS Final Design, Procurement, Commissioning and Maintenance ITER IC		.2013~Sep.2018

#### Major Overseas Projects(Fossil & Others)

Project	Client	Project Period	Service Type
Electric Power Distribution Improvement, Myanmar	Myanmar Electric Power Enterprise(MEPE)	Jun.1996~Dec.2000	Technical Consulting
Khulna Transmission & Distribution Grid Expansion, Bangladesh	Bangladesh Power Development Board (BPDB)	Jun.1996~Aug.2003	Technical Consulting
Hirgigo Diesel Power Plant (22MW $ imes$ 4), Eritrea	Eritrea Electricity Authority (HSD Engine)	Apr.1997~Jan.2004	Design Engineering
Manpower Support Services	Burns & McDonnell	May 1999~Jun.2002	-
Ilijan CCPP, the Philippines	KEPCO Ilijan Corporation	Jun.1999~Jul.2002	Technical Consulting
Diesel Fuel Oil Unloadin Terminal for Ilijan CCPP, the Philippines	KEPCO Ilijan Corporation	Oct.1999~Oct.2000	EPC
500kV Substation for Ilijan CCPP, the Philippines	Washington Group International	Feb.2000~Sep.2001	EPC

Fujairah CCPP, the UAE	UAE Offset Group (Doosan Heavy Industries & Construction)	Sep.2001~Dec.2003	Design Engineering (Electric)
500MW Brooks TPP(1st Phase), Canada	Joint Venture (Parsons, Acres, Colt)	Oct.2001~Feb.2002	Design Engineering
Sawamlah & Al-Leith Substation Protection and Control Systems, Saudi Arabia	SEC (BEMCO)	Sep.2002~Jul.2003	Design and Supply
Safa Substation Protection and Control Systems, Saudi Arabia	SEC (BEMCO)	Sep.2003~Nov.2004	Design and Supply
Switchyard for ARAMCO Cogeneration Power Plant, Saudi Arabia	Mitsui (Hyundai Heavy Industries)	Feb.2004~Nov.2006	Design and Supply
AFAM VI CCPP, Nigeria	DAEW00 E&C	Nov.2005~Dec.2009	Design Engineering
New Town Project, Phnom Penh , Cambodia	World City	Nov.2005~Jun.2011	Construction Management
Manpower Support Services	Burns & McDonnell	Dec.2006~Dec.2007	-
Misurata & Benghazi CCPP, Libya	DAEW00 E&C	Aug.2007~Jun.2011	Design Engineering
Ultra Mega Power Plant(UMPP) MUNDRA, India	Coastal Gujarat Power	Oct.2007~Dec.2013	Technical Consulting
Cirebon TPP, Indonesia	PT Cirebon Electric Power	Apr.2008~Aug.2011	Technical Consulting
Shuweihat S2 CCPP, the UAE	SAMSUNG C&T	Oct.2008~Sep.2011	Design Engineering
Nghi SON #2 TPP, Vietnam	KEPCO	Feb.2009~Jun.2011	Technical Consulting
Power Project Engineering Consulting Services in Iraq	Korea National Oil Corp	Jul.2009~May 2013	Technical Support
Design Engineering Services of Morocco's Jorf Lasfar Coal-Fired Thermal Power Plant	DAEWOO E&C	Jun.2010~Apr.2014	Design Engineering
Design Engineering Services of Chile's Santa Maria Coal- Fired Thermal Power Plant	POSCO E&C	Jul.2010~Feb.2014	Design Engineering
Design Engineering Services of Libya's Zwitina Add-on Plant	DAEW00 E&C	Aug. 2010~Aug. 2013	Design Engineering
Design Engineering Services of UAE's S3 Combined Cycle Themal Power Plant	DAEWOO E&C	Mar. 2011~Jun. 2014	Design Engineering
Engineering Services for Tufanbeyli TPP	SK E&C	Nov.2010~Feb.2015	Design Engineering
Engineering Services for UAE Shuweihat S3 IPP Project	DAEW00 E&C000	Mar.2011~Jun.20140	Design Engineering
Ghana Takoradi T2 Power Plant Expansion EPC Project	Takoradi Int'l Co.	Dec.2011~Dec.2014	EPC
Installation of a Once-Through Sea Water Cooling System for the Takoradi T1 Power Plant EPC Project	Volta River Authority	Jan.2013~Oct.2014	EPC
CIPREL IV Volet B EPC Project	CIPREL POWER	Feb.2013~Dec.2015	EPC

#### **NEW & RENEWABLE ENERGY**

Project	Client	Project period
Review Service of the Feasibility of Automation of Hydro Power Plants on the Hangang River	KEPCO	Apr.1981~Sep.1981
Design Service for the 2nd Phase Gangneung Hydro Power Plant (41MW $ imes$ 2)	KEPCO	Jun.1984~Jul.1991
Design Service for the Marsangdi Hydro Power Plant (dam), Nepal	Lahmeyer	Oct.1986~Dec.1988
Design Service for the Extension and Replacement of Equipment at Boseonggang River Hydro Power Plant	KEPCO	Dec.1987~Sep.1990
Integrated Design Service for Muju Pumped Storage Power Plant Units 1 & 2 (300MW $ imes$ 2)	KEPCO	Apr.1989~Sep.1995
Feasibility Study and Related Service for the Cheongpyeong Hydro Power Plant Unit 4	KHNP	Oct.2005~Apr.2006
Basic Planning Service for the Modernization of the Aged Hydro Power Plant	KHNP	Sep.2006~Dec.200

#### New Power, New Standard

Feasibility Study and Basic Planning for the Modernization of the Namgang River Hydro Power Plant	K-water	Nov.2007~Jun.2008
Planning Service for the Modernization of the Pumped-storage Power Plant	Korea Western Power	Feb.2009~Jan.2010

#### Wind Energy Project

Project	Client	Project period
Design and Engineering Service for the Construction of Jeju Hankyung Wind Farm, 2nd Phase	Korea Southern Power	Sep.2004~Sep.2008
Design and Engineering Service for the 1st Stage Construction of Jeju Seongsan Wind Farm	Korea Southern Power	Oct.2006~Mar.2009
Preliminary Feasibility Study for Milyang Wind Power Project	Korea South-East Power	Apr.2007~May 2007
Owner Support and Supervision Service for the Construction of Jeju Samdal Wind Farm	Hanshin Energy	Dec.2007~Dec.2009
Design and Engineering Service for the Construction of Pyeongchang Wind Farm	Korea Southern Power	Jul. 2008 ~present
Design and Engineering Service for the Construction of Jeongseon Wind Farm	Korea East-West Power	Nov.2008~present
Feasibility Study for Quang-Binh Wind Power Project, Vietnam	KEMCO	Apr.2009~Nov.2009
Basic Design Services for the Medium-sized Sea Wind Power Complex Located in the Southwestern Coastal Area of the Korean Peninsula	KEPCO Power Research Institute	Nov.2009~Aug.2010

#### Waste, Biomass Project

Project	Client	Project period
Feasibility Study and Basic Plans of Sudokwon Landfill Gas(LFG) Power Plant Project	KPPS	Dec.1999~Jun.2000
Design of Sudokwon Landfill Gas(LFG) Power Plant Project	Hyundai Movis	Aug.2001~Oct.2002
Construction of Sudokwon Landfill Gas(LFG) Power Plant Project	ECO Energy	Mar.2004~Dec.2006
Design, Engineering and Supervision Service for the Construction of the Kumho TDF Cogeneration Power Plant	Kumho Petrochemical	Sep.2004~May 2009
Vietnam Rice Husk Power Plant Construction Feasibility Study Project	KEPC0	Jul.2008~Jan.2009
Wonju RDF Cogeneration Power Plant Design Technology Services	Korea Midland Power	Sep.2009~present
Technological Support for Tonghae Wood System Biomass Power Plant Construction	Korea East-West Power	Jun.2010~Present
Client Support Services for Iksan Industrial Complex 2 RDF-Fired Power Plant	Sanggong Energy	Jun.2010~Present
Feasibility & Study on Biomass Mixed Fuel for Taean TPP Units 1&2	Korea Western Power	Nov.2012~Jul.2013
Project of Organic Solid Fuel Mixied Firing Facility for Dangjin TPP Units 3&4	Korea East-West Power	Aug.2012~Present

#### Other New Renewable Energy Project

Project	Client	Project period
Technology Development for Process Design/Pilot Plant for the Capture and Storage of $\text{CO}_2$	KEPC0 Power Research Institute	Nov.2008~present
Feasibility Study on Alternatives Sources of Power for the Yeongnam TPP IGCC	Korea Southern Power	Oct.2009~present
Taean IGCC Power Plant	Korea Western Power	Apr.2011~Jul.2016
Feasibility & Study on IGCC Project(Indonesia)	KEPCO	Oct.2012~Apr.2013

#### Marine Energy Project

Project	Client	Project period
Design Service for the 2nd Phase Flow System to Connect the Systems of the Wuldolmok Model Tidal Power Plant	KORDI	Apr.2006~Mar.2007
Feasibility Study for the Construction of the Wuldolmok Tidal Power Plant	KORDI	Sep.2008~May 2010

#### **EPC (Engineering, Procurement and Construction)**

#### EPC Project

Project	Client	Project period
Yeoungdong Units 1&2 KEPAR Turnkey Project	KEPCO	Nov.1994~Dec.1998
Seocheon Units 1&2 KEPAR Turnkey Project	KEPCO	Nov.1996~Dec.1998
Diesel Fuel Oil Unloadin Terminal Construction for Ilijan CCPP, the Philippines	KEPCO Ilijan Corporation	Oct.1999~Oct.2000
500kV Substation for Ilijan CCPP, the Philippines	Washington Group International	Feb.2000~Jun.2001
ESCO Project for Heat Exchanger's Cooler and NG Heater Installation of Bundang Combined Cycle Thermal Power Plant	Korea South-East Power	May 2001~Apr.2006
Sequential Load Circuit Breaker Installation for Hwangsan Plant of Namhae Chemical	Namhae Chemical	Jun. 2001~Dec.2001
Control and Protection Facility Design and Supply for Saudi Arabia's Sawamlah/ Al-Leith Substation	Arabian BEMCO	Sep.2002~Apr.2008
Pyongtaek Unit 1 KEPAR Turnkey Project	Korea Western Power	Dec.2002~Nov.2005
Control Facility Design and Materials and Equipment Supply Project for Saudi Arabia's Safa Substation	Arabian BEMCO	Sep. 2003~Apr.2008
Food-Leftover Sewage Cogeneration Treatment Facility Repair for Suyoung Center	Busan Metropolitan City Environmental Installations Corporation	Oct.2003~Apr.2004
Switch Yard Design and Materials and Equipment Supply within Saudi Arabia's Aramco Cogeneration Power Plant	Arabian BEMCO	Feb.2004~Jan.2009
Construction of Sudokwon Landfill Gas(LFG) Power Plant Project	EC0 Energy	Mar.2004~Dec.2006
Namjeju Units 3&4 KEPAR Turnkey Project	Korea Southern Power	May 2005~Sep.2006
Boryeong Units 1&2 KEPAR Turnkey Project	Korea Midland Power	Dec.2005~Feb.2010
ESCO Project for Performance Improvement of POSCO Combined Cycle Units 3~4	POSCO Power	Sep.2006~Jun.2009
ESCO Project for HRSG Waste Heat Collection of Bucheon Power Plant	GS Power	May 2007~Aug.2008
ESCO Project to Install Heat Exchanger for Energy Collection of Ulsan Cogeneration 2	Korea East-West Power	Mar.2008~Apr. 2009
ESCO Project to Improve the Fuel Supply Facilities of Yeongdong Unit 1	Korea South-East Power	Apr.2009~Nov.2009
2nd Step ESCO Project on the Chimney Heat Recovery at the Bundang CCPP	Korea South-East Power	Apr.2009~Dec.2009
ESCO Project Involving the Installation of Heat Exchangers for Use in Exhaust Heat Recovery from HRSGs1~6 at the Ilsan Cogeneration Power Plant	Korea East-West Power	May 2009~Dec.2010
ESCO Project for Boiler Coal Cutter Tube Expansion of Yeongdong Units 1&2	Korea South-East Power	Sep.2010~Present
Emergency Restoration EPC Project for Shin-Incheon Steam Turbine Unit 9	Korea Southern Power	Dec.2010~Mar.2011
ESCO Project for Absorption Type Heat Pump Installation of Ilsan Cogeneration Power 1	Korea East-West Power	Mar.2011~Present
Ghana Takoradi T2 Power Plant Expansion EPC Project	Takoradi Int'l Co.	Dec.2011~Dec.2014
Osan Combined Heat Power Plnat EPC Project	DS POWER	Dec.2012~Mar.2016
Installation of a Once-Through Sea Water Cooling System for the Takoradi T1 Power Plant EPC Project	Volta River Authority	Jan.2013~Oct.2014
CIPREL IV Volet B EPC Project	CIPREL POWER	Feb.2013~Dec.2015
Posco Energy Incheon CCPP #5,6 RAC upgrade ESCO Project	POSCO ENERGY	Feb.2013~Sep.2016

