

E&C DONGAH

# E&C DONGAH



# HISTORY

## Foundation - 1960's

- 1945. 08 Established Chungnam Construction Company in Daejeon city (Capital 50,000 KRW)
- 1957. 12 Moved the head office to Seoul

## 1970's

- 1971. 10 Commenced Gori Nuclear Power Plant (No.1 & 2) work
- 1972. 01 Renamed to Dong Ah Construction Industrial Co., Ltd.
- 1972. 10 Established Dong Ah America Company in Guam (1<sup>st</sup> Overseas Entry)
- 1971. 11 Commenced POSCO Steel Processing Plant work
- 1973. 11 Initial Public Offering to the Korea Stock Exchange
- 1977. 11 Commenced Wolsong Nuclear Power Plant (No.1) work
- 1978. 04 Commenced Telephone Expansion Project(TEP) in Saudi Arabia
- 1979. 05 Commenced Al Juwah-Tihama Descent Road work in Saudi Arabia

## 1980's

- 1980. 06 Commenced Incheon land reclamation work
- 1981. 01 Commenced Hanul(Uljin) Nuclear Power Plant (No.1&2) work
- 1981. 11 Awarded Golden Industrial Merit Prize of Korea
- 1981. 12 Awarded Seoul Cultural Merit Prize
- 1983. 11 Signed Contract of the Man-made River Project Phase-I in Libya (US\$ 3.8 billion)
- 1984. 01 Awarded the commemoration of US\$ 7 billion export merit
- 1984. 04 Commenced Hapcheon multipurpose dam work
- 1985. 12 Commenced KBS international broadcasting center work
- 1986. 08 Awarded the President's Prize for being a fair trading company

## 1990's

- 1990. 02 Signed Contract of the Man-made River Project Phase-II (US\$ 6.1 billion)
- 1991. 01 Obtained ASME NA & NPT Qualification Certificates
- 1991. 05 Awarded 26<sup>th</sup> 5.16 Korean People's Prize (Headquarter in Libya)
- 1991. 09 Commenced Hanul(Uljin) Nuclear Power Plant (No. 3&4) work
- 1994. 06 First acquisition of ISO 9001 (Applicable to both domestic and international)



## 2000's

- 1995. 01 Ranked as the 2<sup>nd</sup> Construction Capability in Domestic Market
- 1995. 12 Obtained ISO14001 Environmental Certificate
- 1996. 09 Awarded the First Prize in the Architectural Division from the IFAWPCA(International Federation of Asia and Western Pacific Contractors Associations), for POSCO Center
- 1998. 09 Ranked as the 36<sup>th</sup> largest Company among World's 225 Construction Companies in terms of overseas turnover by ENR
- 1998. 12 First Korean company to enter Japanese public construction market

- 2001. 08 First Korean company to complete high-rise steel frame apartment ("Dong Ah Solecity" in Yongin city)
- 2001. 09 Commenced KEDO Nuclear Power Plant
- 2002. 05 Completed Gayang bridge work
- 2004. 12 Completed 4-lane expansion work of Donghae Highway
- 2005. 05 Completed Hanul(Uljin) Nuclear Power Plant (No. 5&6) work
- 2006. 12 Completed 4-lane expansion work of National Highway No. 5
- 2007. 11 Completed Cheongsong Hydraulic Power Plant (No. 1&2) work
- 2008. 12 Commenced Naengjeong-Busan highway expansion work
- 2009. 02 Commenced Jungang sewage treatment plant work
- 2010. 02 Launched new apartment brand 'The PRIME'
- 2010. 06 Commenced Samcheok Imwon Port Rehabilitation work
- 2010. 07 Commenced Sangju-Youngdeok Highway No.3 work (Sect. 11)
- 2010. 07 Commenced Bohyunsan Multi-purpose Dam construction work
- 2011. 06 Completed Changnyeong Namji The PRIME apartment work
- 2011. 12 Completed Sinrimdong Officetel work
- 2012. 05 Commenced Yeosu Thermal Power Plant (No. 1) work
- 2012. 12 Completed Mokpo-Haenam gas pipeline work
- 2013. 03 Completed Donghae Hyogadong The PRIME apartment work
- 2013. 03 Commenced Taeon Thermal Power Plant (No. 9&10) work
- 2013. 10 Completed Yongsan The PRIME Mixed-use High-rise work





## *COLLABORATION*

E&C Dong Ah concurs with each other and challenges together to achieve all tasks successfully by taking the initiative.



## *CHALLENGE*

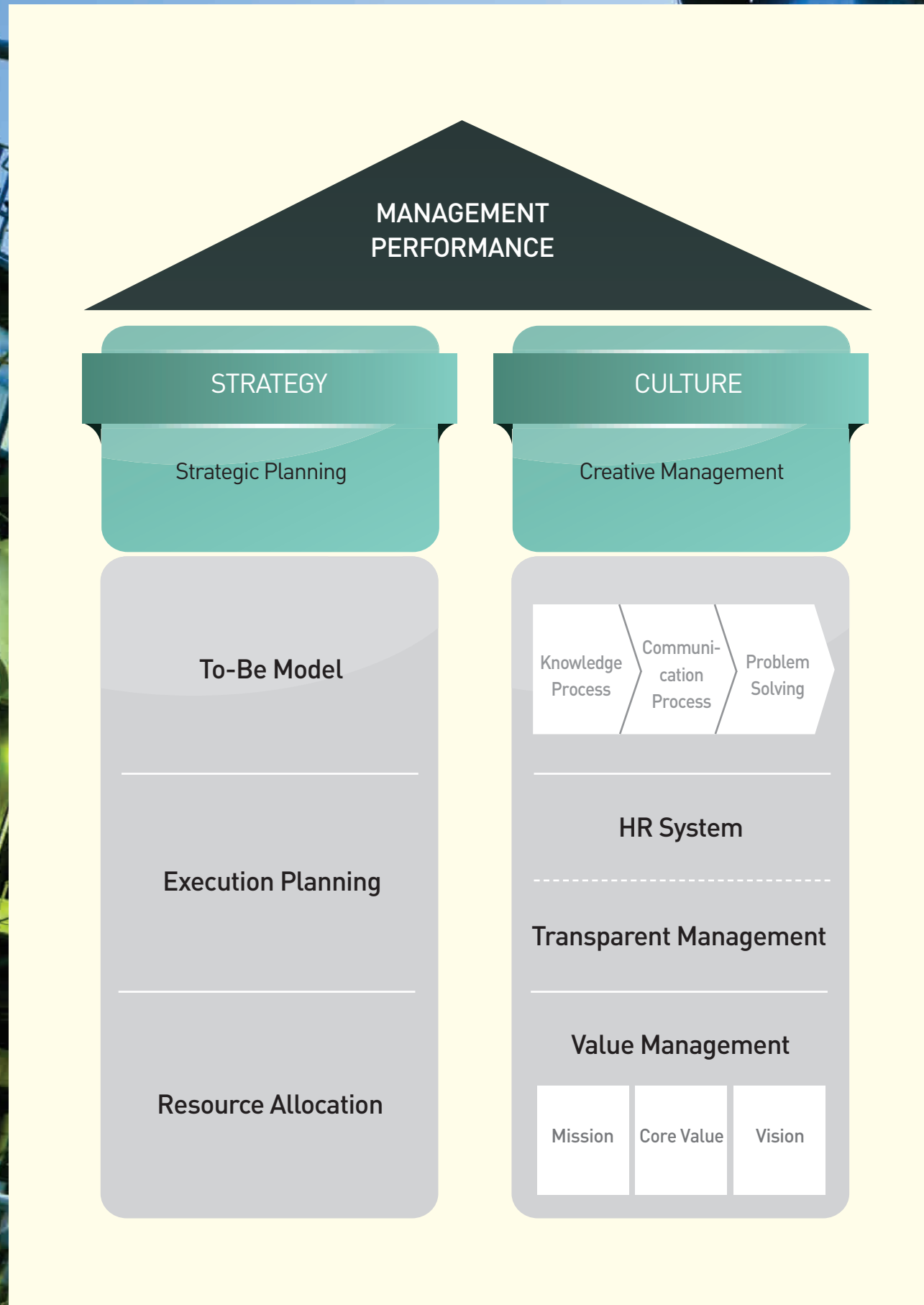
E&C Dong Ah does the best by intense passion for all challenging tasks. Even in cases of failure, it is regarded as a failure without regrets for new opportunities.



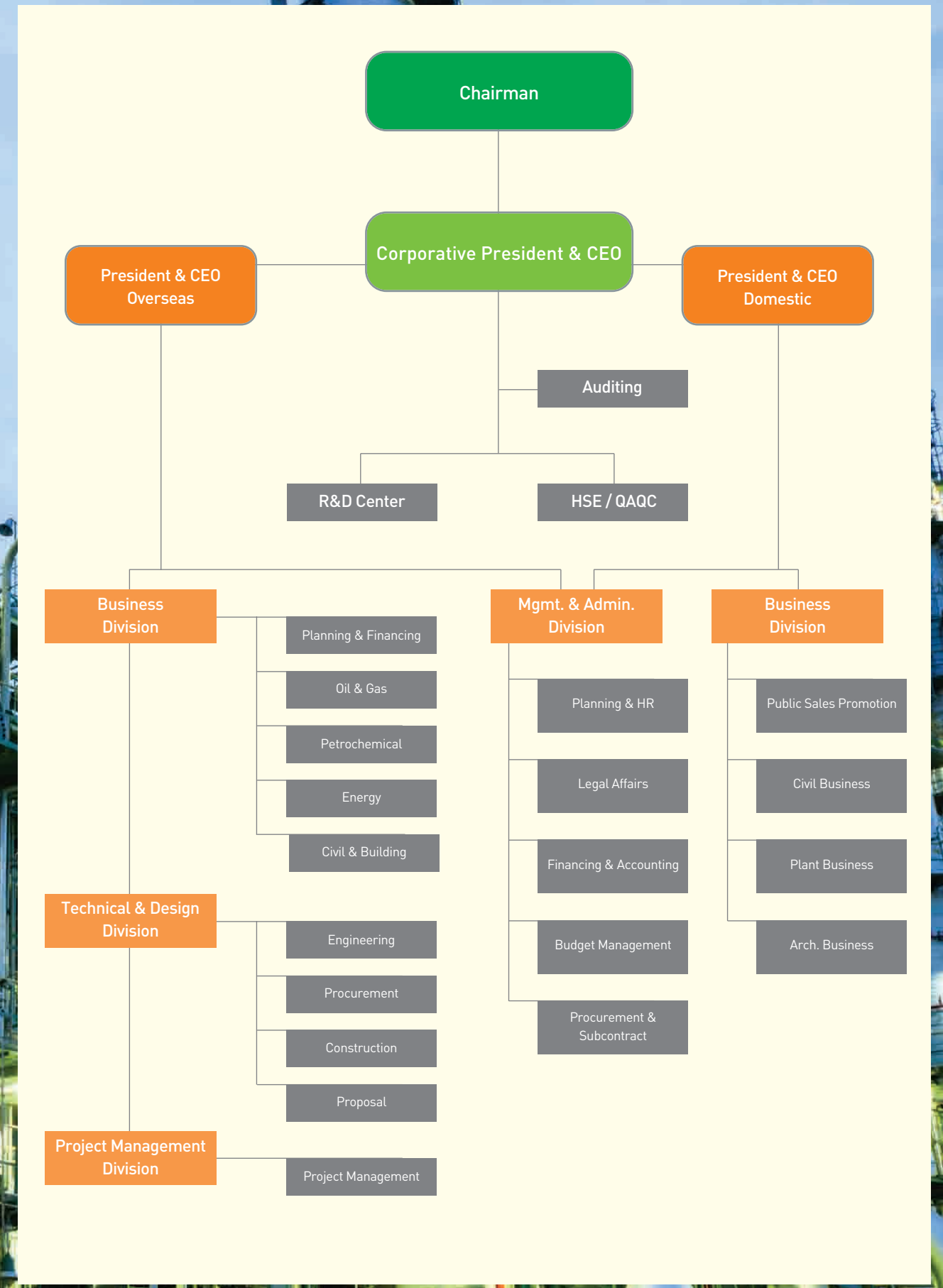
## *CREATION*

E&C Dong Ah must succeed all tasks to the end by new trials and extraordinary idea beyond the stereotype.

# MANAGEMENT PRINCIPLE



# ORGANIZATION



# R&D CENTER

R&D Center of E&C Dong Ah was established after being authorized by the Ministry of Education, Science & Technology on the 14<sup>th</sup> of May in 1985 for conducting of construction technology development.

It has carried out to develop new technologies and to support the site technology in civil engineering, architecture, plant work and electric generation fields. The R&D at the Center has achieved 7 cases of new technology developments, 39 patents including one overseas patent and 18 utility models, while many research tasks as to national policies were also conducted as requested by government organizations.

## 1. Present State of the Rights of Industrial Assets

### 1) Utility Model

Name of Patent	Application No. (Application Data)	Registration No. /Registered Year
Impinger of Waste Incinerator	94-13672 (Jun.13.94)	No.110570/96
Food Waste Recycling Device	95-16289 (Jul.04.95)	No.126651/98
Device to prevent the leakage of mortar from Twin-shaft Mixer for Batch Plant use	94-5260 (Mar.15.94)	No.106836/97
Automatic Tire Washer	96-14509 (May.31.96)	No.132059/98
Median Strip for Road use	97-18370 (Jul.11.97)	No.152994/99
Bolt-Hole Protective Cover for I-type Supporting Beam	97-31161 (Nov.06.97)	No.162187/99
Concrete Pipe and connecting means to construct inner wall	98-22157 (Nov.14.98)	No.152995/99
Boom Stacker	99-3169 (Mar.02.99)	No.183080/00
Fabricated Safety Guard-rail Support	94- 4330 (Mar.07.94)	No.104261/97
H-Beam Type Guard Instrument	96-66215 (Dec.31.96)	No.144755/99
P.C Panel on the Road for Container-Conveying Crane	97- 954 (Jan.24.97)	No.143911/99
Wet Dust Remover	95-16884 (Jul.10.95)	No.121317/98
Vertical Binding Device of Fabricated Walls	95-33492 (Nov.14.95)	No.134912/98
Vertical Binding Device of Fabricated Walls	95-33491 (Nov.14.95)	No.142624/99
Liner Pad Height Controller	97-36581 (Dec.11.97)	No.165399/99

Name of Patent	Application No. (Application Data)	Registration No. /Registered Year
Improvement of earthquake-resistance of Multi-Span Integral Abutment Bridge using PC Beam & Reinforced Concrete Shear Block Structure to confine horizontal displacement	98-27564 (Feb.12.98)	No.228389/99
Sealant	96-36441 (Feb.10.96)	No.162178/96
High-strength Concrete Structure for PSC Beam Bridge use	99-26678 (Sep.22.99)	No.215238/00

### 2) Patent

Name of Patent	Application No. (Application Data)	Registration No. /Registered Year
Rock Bolt Constructional Method	92- 5381 (Mar.31.92)	No.088744/95
PCCP PIPE LINE Water-Pressure Testing Method and Equipment	93- 9156 (May.26.93)	No.103583/96
Manufacturing form of Wave Offset Block	93-10669 (Jun.11.93)	No.109614/96
Form Support for Sludge Digester use	95-41298 (Nov.14.95)	No.163653/98
Manufacturing Method of High-tension Nut by Hot Forging Process	96-1520 (Jan.24.96)	No.232722/99
Nitrogen-Eliminating Method from waste water	96-56853 (Nov.23.96)	No.0242715/99
Sewage Disposal Recycling Method of Concrete Manufacturing Factory	97-20755 (May.26.97)	No.120621/97
Waste Heating Treatment Equipment	96-000459 (Feb.26.96)	No.0165173/98
Water-purifying System	97-31269 (Jul.07.97)	No.0242666/99
Soft Ground Improvement Method	92-23366 (Dec.04.92)	No.099211/96
Vehicle for Excavation of Slope Tunnel use	93- 6729 (Apr.21.93)	No.105627/96
Concrete Lining Method of Rounded Vertical Tunnel Part & Concrete Lining Form	93- 9155 (May.25.93)	No.105632/96
Composition of High-strength Concrete Pile for normal-pressure steam generation use	93-17429 (Sep.01.93)	No.109226/96
Manufacturing method of hardening agent to improve soft ground	94- 9145 (Apr.28.94)	No.145637/98
Crack-Prevention Mortar of Plastering Finishing Material on Ondol	94-21221 (Aug.26.94)	No.118630/97
Manufacturing Method of High-strength concrete	94-26948 (Oct.21.94)	No.120942/97

Name of Patent	Application No. (Application Data)	Registration No. /Registered Year
Manufacturing Method of Self-Compacting Concrete	95-54482 (Dec.22.95)	No.145101/98
Manufacturing Method of High-Durability Concrete	95-54481 (Dec.11.95)	No.147002/98
Manufacturing Method of High-Durability Concrete for high-quality construction	95-51981 (Dec.19.95)	No.196702/99
Manufacturing Method of the concrete with Fly Ash	96-53391 (Nov.12.96)	No.220901/99
Manufacturing and constructing method of Non-crack water-proofing mortar	96-68010 (Dec.19.96)	No.201864/99
Defected Torque Shear Bolt Detector	97-14440 (Apr.18.97)	No.0242714/99
PCCP Design by using UDP	97-25886 (Jun.19.97)	No.0239912/99
PCCP related Design Operational Method using GUI	97-25867 (Jun.19.97)	No.227408/99
Automatical Form Lifting Equipment	97-48596 (Sep.24.97)	No.0239913/99
Blasting Vibration Estimating Method	97- 3903 (Feb.10.97)	No.191920/99
Piling Vibration Estimating Method	97- 3904 (Feb.10.97)	No.191921/99
Construction Noise Estimating Method	97- 3905 (Feb.10.97)	No.191922/99
Traffic Noise Estimating Method	97- 5995 (Feb.26.97)	No.206586/99
Grouting Material to fill Tunnel Lining Back	00-0018101 (Apr.00.07)	No.0377829/03
Light-weight filler for Tunnel and Large Cavern	00-0018019 (Apr.04.00)	No.0381744/03
Operator's Safety Gear on Tower Crane	00-2261 (Apr.27.00)	No.0335355/02
Dancing Hall Bolt	94- 3210 (Feb.23.94)	No.124656/96
Method to inject Grout into Craven of Tunnel Back & relevant equipment	00-001802 (Apr.06.00)	No.0399404/03
Constructional Method of Integral-Abutment Bridge	98-61198 (Dec.30.98)	No.321066/01
Construction Method of Filling Joint to tolerate the displacement of Integral-Abutment Bridge	98-61199 (Dec.12.98)	No.0279124/00
Bedrock Blasting Method	97-67403 (Dec.10.97)	No.0249346/99
Dual Loop Tunnel Structure	99-51721 (Nov.20.99)	No.0477323/05
Operation of the PPCP related design system by using GUI	No.09/099.962 (Jun.19.98)	American Patent 6151680/00

## 2. Achievements of New Technology Development

No	Name of New Technology	Notification No.
1	No-oxygen or Anaerobic Leachate Treatment Stage 2 Method	New Excellent Technology No.164
2	Extremely Soft Surface Layer Solidifying Treatment Method	New Excellent Technology No.16
3	Crack Prevention Method on the plastered Ondol (Korean Floor Heating System)	New Excellent Technology No.29
4	Manufacturing and Constructional Technology of the Cement Mortar for Ceiling Rock Bolt use	New Excellent Technology No.60
5	Awwa C-304 Applied PPC Pipe Design and Fitting Design Computation Program	New Excellent Technology No.170
6	Special Injecting Method using the Material (DAST-2000) for Tunnel Lining Back Filler use	New Excellent Technology No.259
7	Food Waste Drying Treatment Device for Recycling	New Technology Certification No.96-103

\* No. 1~6 Authorized by Ministry of Land, Transport and Maritime Affairs

\* No. 7 Authorized by Small and Medium Business Administration

## 3. Results of National Policy Researches

Name of Task	Period
LFG of over 10 Million m3/year Verification Test	Jan.98 -Dec.99
Development and Constructional Method of Bentonite Composite Lining Material to prevent Leachate leakage on Landfill	Jan.98 -Dec.99
Development of Under Floor air-conditioning (UFAC) system	Jun.96 -Aug.98
Development of High Volume Fly Ash Concrete	Jan.98 -Dec.99
Development of Housing Environment System by using VR	Dec.95 - Oct.96 & Nov.97 - Oct.98
Development of VR Integrated Housing Environment Design/Estimate System	Dec.98 - Nov.2000
Using Landfill Ground for constructional site	Dec.98 - Dec.2000

# CITATIONS

- 1969. 12 Decorated with the Industrial Medal on the 6<sup>th</sup> Export Day
- 1973. 07 Awarded the Bronze Tower Order of Industrial Service Merit
- 1975. 05 Awarded the Silver Tower Order of Industrial Service Merit
- 1977. 12 Awarded the Gold Tower Order of Industrial Service Merit
- 1979. 05 Awarded the Korean Management Grand Prix by the Efficiency Association
- 1981. 11 Awarded the Gold Tower Order of Industrial Service Merit
- 1984. 01 Awarded the Export Tower \$ 7 billion worth in Overseas Construction
- 1988. 01 Designated as a model construction company by the Ministry of Construction
- 1992. 06 Won the President's Award for Promoting Construction Work
- 1993. 11 Received the Presidential Award for Value Evaluation
- 1994. 10 Received the Korean Architectural Culture Award for War Memorial Museum
- 1995. 10 Won the Grand Prix at the Korean Architecture Culture Award for POSCO Center
- 1996. 02 Awarded a medal for excellent industry from KEPICO
- 1996. 03 Awarded a Gold Medal for POSCO Center from Seoul Metropolitan Government
- 1996. 06 Designated as a resident-friendly apartment complex (for Chunden maul in Bundang, Kyeonggi-do)
- 1996. 06 Awarded the Gold Medal for '96 Construction Promotion Association
- 1996. 09 Awarded the Gold Medal from the Asian West Pacific Region Architecture Association (IFAWPCA) for POSCO Center
- 1996. 11 Awarded the top management medal in the building innovation fair (Korea Efficiency Association)
- 1996. 12 Awarded the Bronze Medal for Korea Industrial Development
- 1997. 01 Awarded the Building Innovation Fair by the Korean Efficiency Association (Dong Ah Apt. of Hugok Village, Ilsan)
- 1997. 04 Awarded as a Company of Technology in 1997 by Korea Engineering and Construction Association
- 1997. 06 Nominated as a resident-friendly apartment complex (for Dong Ah Apartment in Chang-dong, Seoul)
- 1997. 09 Awarded the Gold Medal (Presidential Award) for Nation-Wide Q.C (V.E Sector)
- 1997. 12 Won the Grand Prix for 1997 Construction Management and five other areas
- 1998. 01 Selected as the '97 Excellent Construction Building Company by KEPICO
- 1998. 05 Designated as a resident-friendly apartment complex (for Dong Ah Apartment in Changam-dong, Uijeongbu)
- 1998. 06 Awarded for safety management (Ministry of Labor)
- 1998. 07 Awarded the Grand Prix for improvement of the residential environment
- 1999. 06 Awarded the medal for excellent industry by the Ministry of oceanic & fisheries Bureau and the Korea Highway Corporation
- 2000. 01 Awarded the medal for excellent industry by KEPICO
- 2000. 02 Awarded the medal for excellent quality industry by the Korea Highway Construction
- 2000. 04 Awarded the medal for excellent industry by the Ministry of oceanic & fisheries Bureau
- 2000. 07 Awarded the medal from Korean Housing Culture

# CERTIFICATES



ASME(American Society of Mechanical Engineers) NA Certificate by ASME  
 ASME(American Society of Mechanical Engineers) NPT Certificate by ASME  
 ASME(American Society of Mechanical Engineers) NS Certificate by ASME



KEPIC(Korea Electric Power Industrial Code)-EN Certificate by Korea Electric Association  
 KEPIC(Korea Electric Power Industrial Code)-HN Certificate by Korea Electric Association  
 KEPIC(Korea Electric Power Industrial Code)-MN Certificate by Korea Electric Association  
 KEPIC(Korea Electric Power Industrial Code)-SN Certificate by Korea Electric Association



OHSAS 18001:2007(Health & Safety Management) Certificate by TÜV SÜD Asia Pacific Ltd.  
 ISO 9001:2008 (Quality Management) Certificate by TÜV SÜD Asia Pacific Ltd.  
 ISO 14001:2004 (Environmental Management) Certificate by TÜV SÜD Asia Pacific Ltd.

# BUSINESS LINE

20\_Plant | 26\_Environment | 28\_Alternative Energy  
30\_Civil Engineering | 36\_Architecture



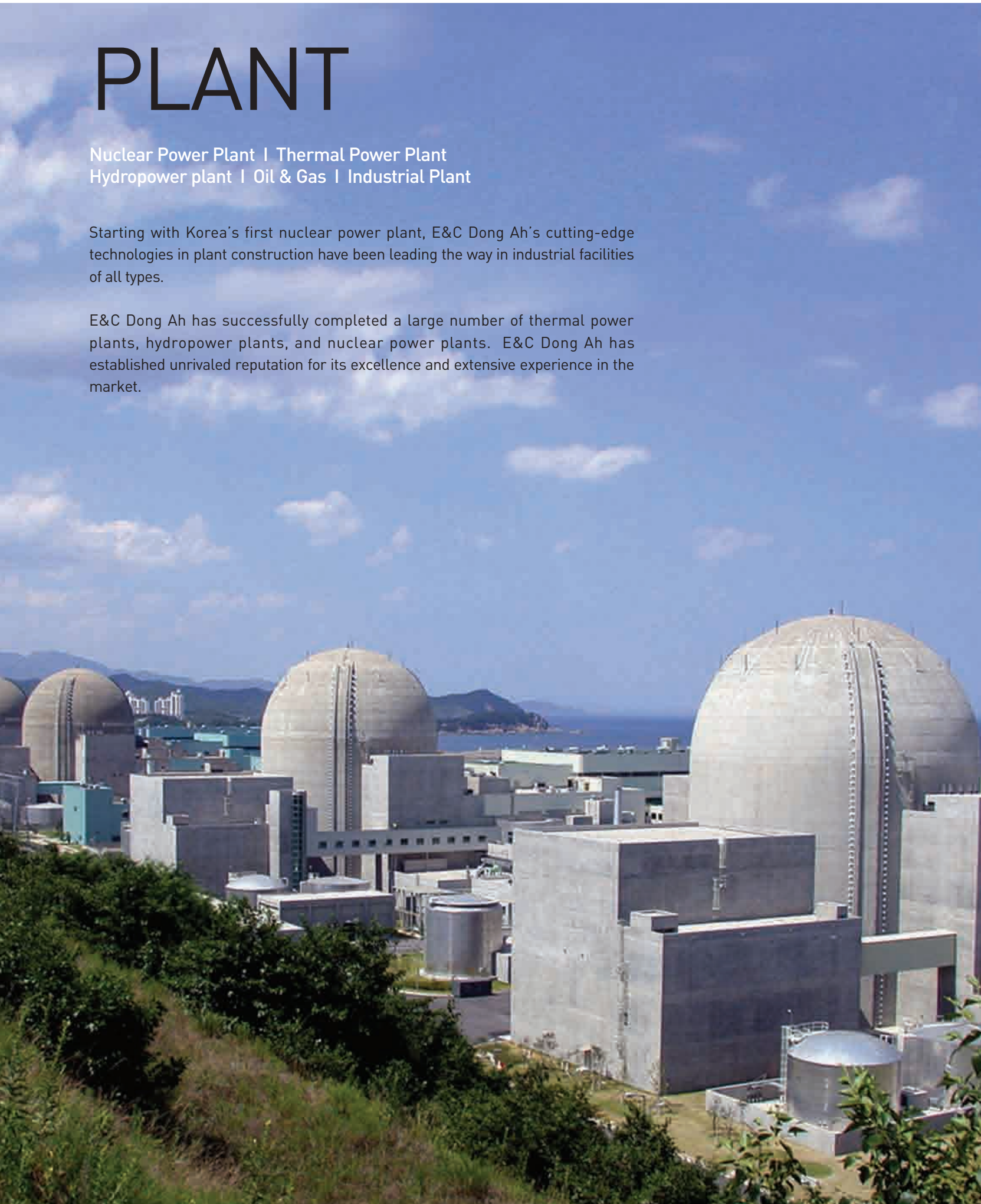


# PLANT

Nuclear Power Plant | Thermal Power Plant  
Hydropower plant | Oil & Gas | Industrial Plant

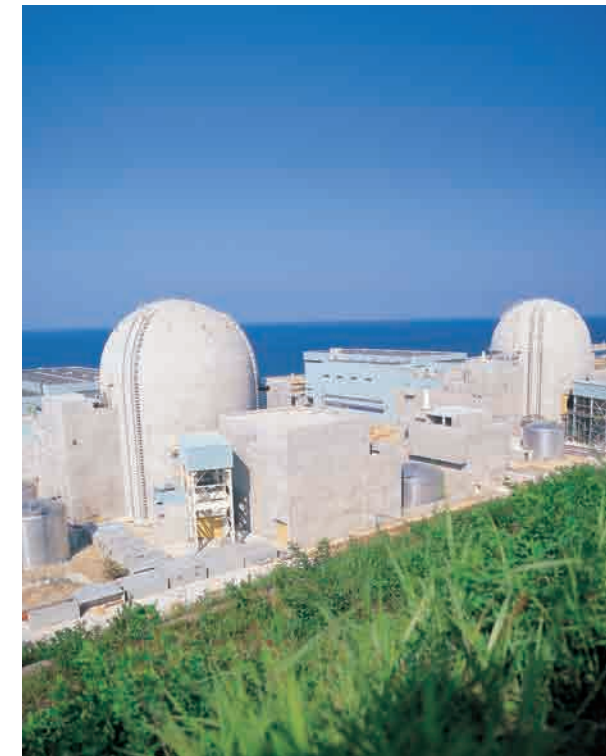
Starting with Korea's first nuclear power plant, E&C Dong Ah's cutting-edge technologies in plant construction have been leading the way in industrial facilities of all types.

E&C Dong Ah has successfully completed a large number of thermal power plants, hydropower plants, and nuclear power plants. E&C Dong Ah has established unrivaled reputation for its excellence and extensive experience in the market.

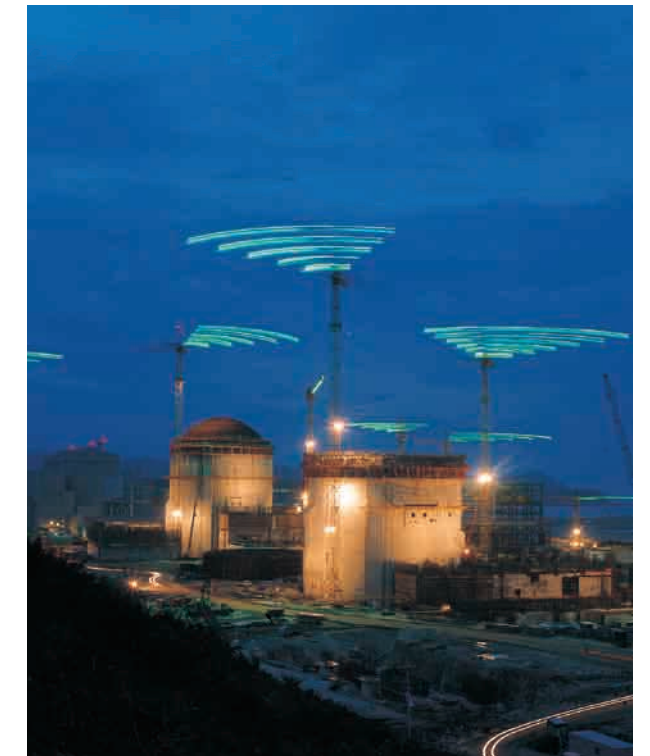


## NUCLEAR POWER PLANT

E&C Dong Ah originally opened the era of Nuclear Power Plant in Korea in 1971. Starting with Kori Nuclear Power Plant No. 1 and 2(Pressurized Water Reactor), E&C Dong Ah has successfully constructed Wolsong Nuclear Power Plant(Pressurized Heavy Water Reactor) and Hanul(Uljin) Nuclear Power Plant(Pressurized Water Reactor) No. 1,2 and Korean Standard Nuclear Power Plant No. 3,4,5, and 6(Optimized Power Reactor 1000). E&C Dong Ah is known for its advanced construction technology in Nuclear Power Plant by participating in KEDO (Pressurized Water Reactor) Project in North Korea.



**Hanul(Uljin) Nuclear Power Plant No. 1&2**  
• Location : Uljin-gun, Gyeongbuk  
• Client : Korea Electric Power Corp.  
• Project Overview : 2 PWR Type Nuclear Power Plants with Capacity 950MW



**Hanul(Uljin) Nuclear Power Plant No. 3&4**  
• Project Overview : 2 Korean Standard Power Reactor(OPR 1000) Type Nuclear Power Plants with Capacity 1,000MW

**Hanul(Uljin) Nuclear Power Plant No. 5&6**  
• Project Overview : 2 Korean Standard Power Reactor(OPR 1000) Type Nuclear Power Plants with Capacity 1,000MW



**Kori Nuclear Power Plant No 1&2**  
• Location : Gijang-gun, Busan  
• Client : Korea Electric Power Corp.  
• Project Overview : 2 PWR Type Nuclear Power Plants with Capacity 600MW



**Wolsong Nuclear Power Plant No. 1**  
• Location : Gyeongju-si, Gyeongbuk  
• Client : Korea Electric Power Corp.  
• Project Overview : 1 PHWR Type Nuclear Power Plant with Capacity 650MW

# THERMAL POWER PLANT

E&C Dong Ah showed its advanced technical ability and technical competence and has been recognized as the leader in this sector. E&C Dong Ah's representative track records include Yeosu, Wangsimni, Yeongdong, Seocheon, and Dangjin Thermal Power Plants No.1, 2, 3, and 4 and the Yonghung Thermal Power Plant No. 1&2. Eco-friendly clean power plants such as the Cheongpyeong, Muju, Cheongsong Hydraulic Power Plant, and the Ilsan Combined Cycle Power Plant complex have all displayed E&C Dong Ah's outstanding technology and performance level.



**Seocheon Thermal Power Plant No. 1&2**

- Location : Seocheon-gun, Chungcheongnam-do
- Client : Korea Electric Power Corp.
- Project Overview : 2 Power Plants with Capacity 200MW



**Dangjin Thermal Power Plant No.1&2**

- Location : Dangjin-gun, Chungcheongnam-do
- Client : East-west Power Co., Ltd.
- Project Overview : 2 Power Plants with Capacity 500MW

**Dangjin Thermal Power Plant No. 3&4**

- Project Overview : 2 Power Plants with Capacity 500MW



**Yonghung Thermal Power Plant No. 1&2**

- Location : Ongjin-gun, Incheon
- Client : Korea South-East Power Co., Ltd.
- Project Overview : 2 Power Plants with Capacity 800MW



**765KV Sintaebaeg Transmission Line**

- Location : Yangpyeong-gun, Gyeonggi-do
- Client : Korea Electric Power Corp.

# HYDROPOWER PLANT

E&C Dong Ah has been involved in the development of numerous hydroelectric power plants in Korea, and has accumulated technical experiences in various types of water resource development techniques. Based on our accumulated unique expertise and experience, we have satisfied various demands of domestic customers and are ready to take on the overseas market. Our representative track records include Eco-friendly clean power plants such as the Cheongpyeong, Muju, and Cheongsong Hydraulic Power Plant,



**Hapcheon Multi-Purpose Dam**

- Location : Hapcheon, Gyeongsangnam-do
- Client : Korea Water Resources Corp.
- Project Overview : - Dam type: Concrete Gravity Type, Total Reservoir Capacity : 790,000,000m<sup>3</sup> - Dam Structure : Bottom W 85m X Top W 8m X H 96m X L 472m - Spillway : 13m X 13.5m X 5



**Juam Multi-Purpose Dam**

- Location : Suncheon-si, Jeollanam-do
- Client : Korea Water Resources Corp.
- Project Overview : - Dam Type : ROCK FILL Gravity Type (Pebble Dam), Total Reservoir Capacity: 457,000,000m<sup>3</sup> - Dam Structure : Bottom W 271m X Top W 10m X H 58m X L 330m - Spillway : 13m X 12.522m X 5



**Jangseong Dam & Ancillaries**

- Location : Jangseong-gun, Jeollanam-do
- Client : Agricultural Development Corp.
- Project Overview : - H = 36m, L = 603m - Total Reservoir Capacity = 1,666,000m<sup>3</sup> - Access Road : 32km



**Cheongsong Hydraulic Power Plant(Pumped Storage)**

- Location : Cheongsong-gun, Gyeongbuk
- Client : Korea Western Power Co., Ltd.
- Project Overview : 2 Power Plants with Capacity 300MW

# OIL & GAS

E&C Dong Ah has played a remarkable role in oil and gas project construction in Korea since 1945. Starting with "Country Network Oil Pipeline Project" in southwestern Korea, E&C Dong Ah has successfully constructed "Samcheok LNG Plant No.1 - 4" in eastern coast of Korea and "Seochon Flue Gas Desulfuring Plant" for KEPCO, the state-run power company. Our international project management, engineering and construction expertise brings innovation to traditional method and using outstanding management systems, our projects are delivered to plan. Our strength is our ability to apply the most appropriate resources and to manage the project execution across all aspects of the project lifecycle.



**Samcheok LNG Plant No. 1 - 4**  
 • Location : Samcheok, Gangwon-do  
 • Client : Korea Gas Corp.  
 • Project Overview : LNG Storage Tank 200,000 kl x 4units



**Mokpo-Haenam Gas Pipe Work**  
 • Location : Mokpo - Haenam, Jeollanam-do  
 • Client : Korea Gas Corp.  
 • Project Overview : Gas Pipeline 20" x 47km, 5 Control Plants



**Pocheon Gas Pipe Work**  
 • Location : Pocheon, Gyeonggi-do  
 • Client : Korea Gas Corp.  
 • Project Overview : Gas Pipeline 30" x 46km

# INDUSTRIAL PLANT

E&C Dong Ah successfully completed industrial plants including Pohang and Gwangyang Complex Steel Plants which are those of the largest industrial plants in the world. Based on our outstanding technology, heavy industry plants as well as chemical plants such as Ulsan Petrochemical Complex, Korea Fertilizer Plant, Namhae Chemical Plant have been successfully constructed. E&C Dong Ah's overall participation in industrial plant construction has provided foundation for the boost of Korea's economy.



**Ulsan Petrochemical Complex**  
 • Location : Ulsan  
 • Client : Ministry of Construction



**Pohang Steel Mill Plants Construction**  
 • Location : Pohang-si, Gyeongbuk  
 • Client : POSCO • Project Overview : Steel Industrial Equipment Installation



**Gwangyang Steel Mill Plants Construction**  
 • Location : Gwangyang-si, Jeollanam-do  
 • Client : POSCO • Project Overview : Steel Industrial Equipment Installation



**Telephone Expansion Project in Saudi Arabia**  
 • Location : Saudi Arabia  
 • Client : Ministry of Posts, Telegraphs and Telecommunications (MOPTT)  
 • Project Overview : 1,260,000 Circuit Automatic Telephone Installation Project - Installed Cable : 17,964m - Installed Manholes : 16,000 EA - Newly Constructed 105 telephone office buildings - Air Pump : 113 EA

# ENVIRONMENT

## Environment

E&C Dong Ah has a strong corporate commitment to preserve the environment through participation in "green" solutions for plant and facilities. E&C Dong Ah's environmental personnel are continuously trained for current techniques to provide the most efficient and environmental-friendly performance. Among various types of environment projects, E&C Dong Ah has actively pursued sewage and water pollution purification plants. E&C Dong Ah has constructed water supply and sewage treatment facilities in large and small urban centers, and industrial complexes.



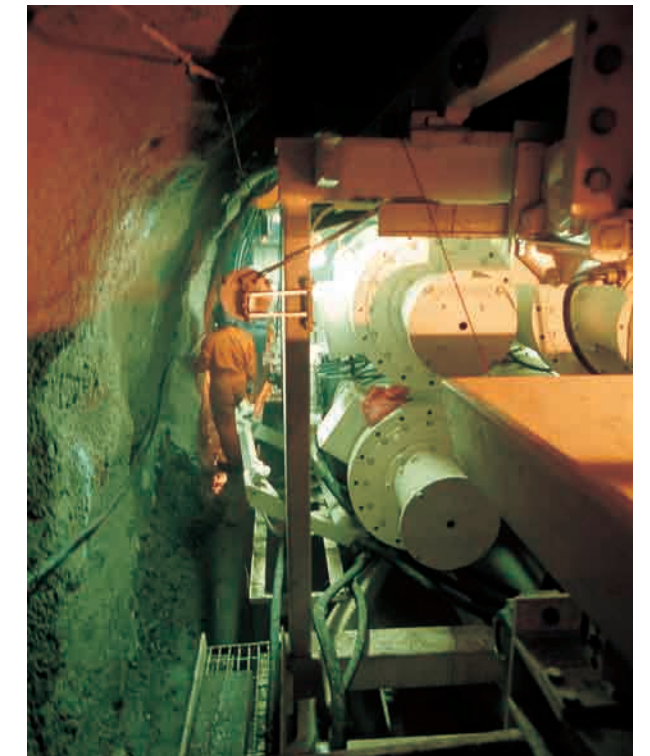
# ENVIRONMENT

E&C Dong Ah creates pleasant and environmental-friendly structures that can harmonize with nature. Representative projects including Juam Dam Systemic Large-unit Water Supply Project, Kayang Sewage Treatment Plant, Cheongwon Sewage Treatment Plant, Masan Sewage Control Facility, Ilsan Waste Disposal Site, and Incheon Night-Soil Disposal Site have been constructed with E&C Dong Ah's advanced environmental technology.



**Kayang Sewage Water Treatment Plant Expansion**

- **Location** : Around Gayang-dong, Seoul
- **Client** : Seoul Metropolitan Government
- **Project Overview** : - Treatment Capacity : 1 Million Ton/Day - Treatment Method : Standard Activated Sludge Treatment Type consisting of Initial Precipitation (Primary Facility), Aeration Tank and final Precipitation (Secondary Facility), Sludge Treatment, Auxiliary Facility, etc.



**Juam Dam Wide Range Water Supply Project**

- **Location** : Suncheon-si, Jeollanam-do
- **Client** : Iksan Land Development Authority
- **Project Overview** : - Pressurized Pumping Station : 1 unit (520,000 ton/day) - Piping : 65.6km (Dia. 800-2800mm) - Water Treatment : 1 unit (60,000 ton/day) - Tunnel : 14.6km



**Anyang River Sewage Treatment Plant**

- **Location** : Anyang-si, Gyeonggi-do
- **Client** : Seoul Metropolitan Government
- **Project Overview** : - Capacity : 1,500,000 ton/day - Pipe : 6km (Dia.1500mm)



**Deckdong Sewage Treatment Plant (Masan - Changwon Sewage Treatment Plant)**

- **Location** : Changwon-si, Gyeongsangnam-do
- **Client** : Masan Municipality
- **Project Overview** : - Capacity : 500,000 ton/day - Pipe : 3.9km

# ALTERNATIVE ENERGY

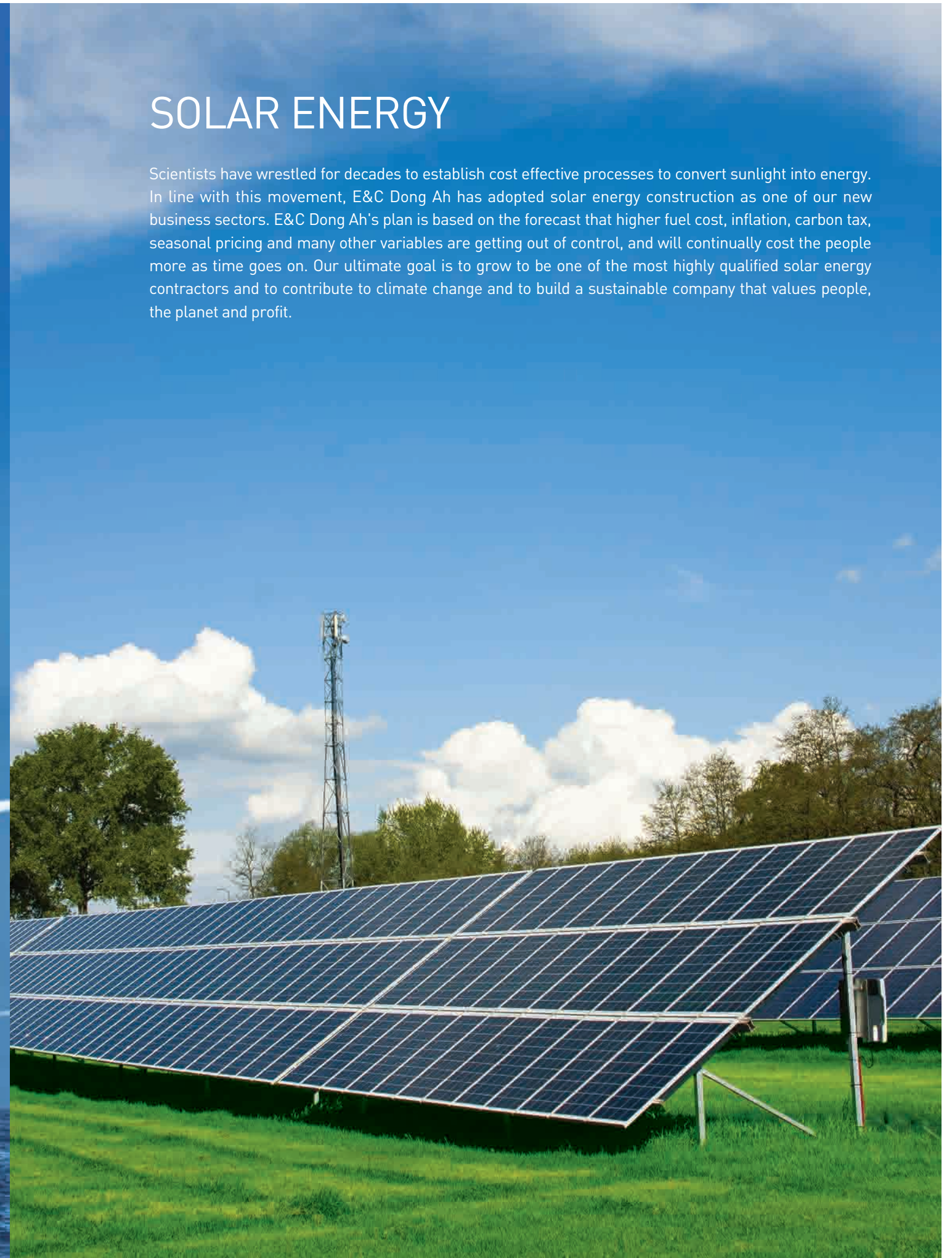
## WIND POWER

With wind turbine technologies and construction methods, wind energy is quickly becoming an affordable alternative to oil, coal, nuclear, and gas-fired energy. In a breakthrough attempt in the construction field, E&C Dong Ah is planning to drive an advancement into the alternative energy construction. E&C Dong Ah's attempt is aimed at helping our clients meet both short- and long-term power demands. Currently, we are exploring or participating in the delivery of renewable energy infrastructure projects around Korea in the areas of wind, solar and wave. Our solutions will cover conceptual design, detailed engineering, procurement and construction, as well as operations and maintenance services.



## SOLAR ENERGY

Scientists have wrestled for decades to establish cost effective processes to convert sunlight into energy. In line with this movement, E&C Dong Ah has adopted solar energy construction as one of our new business sectors. E&C Dong Ah's plan is based on the forecast that higher fuel cost, inflation, carbon tax, seasonal pricing and many other variables are getting out of control, and will continually cost the people more as time goes on. Our ultimate goal is to grow to be one of the most highly qualified solar energy contractors and to contribute to climate change and to build a sustainable company that values people, the planet and profit.

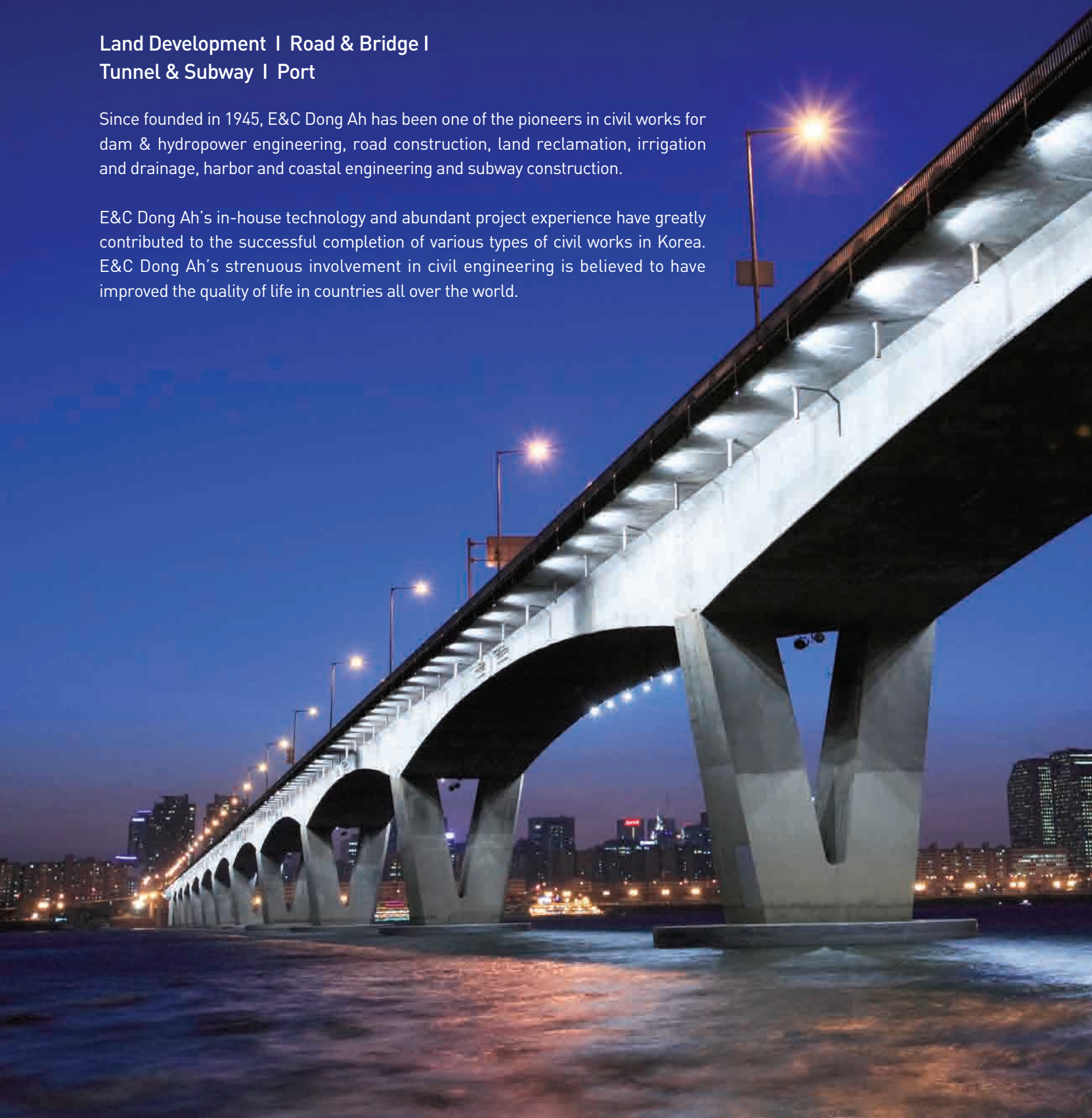


# CIVIL ENGINEERING

Land Development | Road & Bridge | Tunnel & Subway | Port

Since founded in 1945, E&C Dong Ah has been one of the pioneers in civil works for dam & hydropower engineering, road construction, land reclamation, irrigation and drainage, harbor and coastal engineering and subway construction.

E&C Dong Ah's in-house technology and abundant project experience have greatly contributed to the successful completion of various types of civil works in Korea. E&C Dong Ah's strenuous involvement in civil engineering is believed to have improved the quality of life in countries all over the world.



## LAND DEVELOPMENT

E&C Dong Ah played a major role in the national economic development. For better living environment, E&C Dong Ah took part in the development of residential and industrial complex to complete so many and creative projects of proper application of technologies. E&C Dong Ah has outstanding track records in the successful development of reclamation projects, tide embankment construction, multipurpose dams, and landfill projects. These have brought effective land utilization in the agricultural and manufacturing industries. E&C Dong Ah also has executed many housing complex development projects for land realignment projects, and industrial complexes.



### Daeho Embankment & Reclamation

- Location : Dangjin-gun, Chungchungnam-do
- Client : Agricultural Development Corp.
- Project Overview : - Tide Embankment Length : 7,807m  
- Tide Embankment Structure : 255m \* 4m \* 30.5m \* 7,807m - 2 Draining Floodgates



### New Ansan City (Phase 2) Development

- Location : Ansan-si, Gyeonggi-do
- Client : Korea Water Resources Cop.
- Project Overview : - Land Development Area : 4,066,000m<sup>2</sup> - Earth work : 4,219,797m<sup>3</sup>  
- Road : L=50,931m, 7 Bridges, 1 Underpass (576.5m)

# ROAD & BRIDGE

E&C Dong Ah constructed most of Korea's expressway and provincial public road networks which are the backbone of the infrastructure. Beginning with the construction of Kyongbu Highway that is well known as the cornerstone of the nation's economic development, E&C Dong Ah has been a major player in the development of the national highway network. E&C Dong Ah also took part in the construction of Honam, Jungang, Dongbu, Yeongdong, Namhae, Donghae, Gumi, 88, and Pangyo-Guri Highway which still constitute Korea's arterial road network.

Large scaled bridges are visual landmarks that should be harmonized with the soul of the community. E&C Dong Ah applies its creative construction expertise and skills to blend scenic beauty with structural function, and economic efficiency. This capability and knowhow have made E&C Dong Ah one of the finest bridge construction companies in the world. Wonhyo Bridge was designed first as the longest continuous P.C BOX bridge with DYWIDAG Prestressing method in Korea. Youngjong Bridge and Gwangan Bridge are double-deck suspension bridges. The ability to blend innovative technology with aesthetic appearance made E&C Dong Ah a leader in the bridge market sector. E&C Dong Ah aims to meet the requirements of the clients to provide safe and efficient traffic facilities through advanced construction practice.



**Jungang Expressway (wonju - Hongcheon) sec.17**  
 • Client : Korea Highway Corp  
 • Project Overview : - Road : L = 12.38km B = 23.4m - Bridge : 5EA



**Kuryong - Buyeo Road Expansion**  
 • Client : Daejeon Regional Construction & Management Administration  
 • Project Overview : - L=8.40km, B=20m - Bridge : 1 EA (L=1,595m)



**Donghae-Jumunjin Highway Expansion**  
 • Location : Gangneung-si, Gangwon-do  
 • Client : Korea Highway Corp.  
 • Project Overview : - Road : L=5,109m, B=23.4m (4 lanes)  
 - Bridge : Long-spanned Bridge (4 spots/2,797m) - Namdaejeon Grand Bridge : L=1,041M (FCM+LLM) - Construction : Gangneung Branch and Gujeong Resting Place



**Hyungdong-Naeseo Road (4 lanes)**  
 • Location : Masan-si, Gyeongsangnam-do  
 • Client : Busan Regional Construction and Management Administration  
 • Project Overview : - Road : L=6,360m B=18.5m (4 lanes) - Bridge : 8 bridges/1,080m  
 - Tunnel : Ssalijae Tunnel (L=1,465m)



**Incheon Int'l New Airport Road & Bridge**  
 • Location : Incheon - Unbok-dong, Jung-gu, Incheon  
 • Client : New Airport Highway Co., Ltd  
 • Project Overview : - Express : L=3,830m B=36.3m (6 lanes) - Bridge : Truss Bridge L=250m / Steel-concrete Composite Bridge L=450m - Railroad : L=250m (double-track)



**Yeongdong Expressway (Singal - Wonju) Expansion**  
 • Client : Korea Highway Corp  
 • Project Overview : - Road : L = 5,056m B = 23.4m (4 lanes) - Bridge : 780m (1.L.M Method)



**Youngjong Bridge**  
 • Location : Incheon  
 • Client : The New Airport Hiway Co., Ltd.  
 • Project Overview : - Total Length : 2,800m, Width : 36.3m - Type : Self-anchored Suspension Bridge / Warren Truss Bridge



**Gwangan Bridge**  
 • Location : Busan  
 • Client : Busan City  
 • Project Overview : - Total Length : 900m, Width : 25m - Type : Earthanchored Suspension Bridge



**Al-Juwah Tihama Descent Road in Saudi Arabia**  
 • Location : Saudi Arabia  
 • Client : Ministry of Posts, Telegraphs and Telecommunications (MOPTT)  
 • Project Overview : - Length : 90km  
 - Width : 11.6km - Tunnel : 30 EA (1,735m) - Bridge : 52 EA (3,764m)



**Gayang Bridge**  
 • Location : Seoul  
 • Client : Seoul Metropolitan Government  
 • Project Overview : - Total Length : 1,603m, Width : 16-29m, Span Length : 180m  
 - Type : S.T BOX Girder

# TUNNEL & SUBWAY

E&C Dong Ah has abundant and substantial experience in tunnel construction for highway and railway projects. It has successfully completed tunnel projects such as the 2nd Seoul Namsan Tunnel (1,680m), the first tunnel to be financed by private sector, Busan Kudeok Tunnel (1,870m) which E&C Dong Ah participated as an equity investor. We also have abundant subway construction experience in Bundang Subway, Gwangju Subway, and Busan Subway Projects. Technical competence of E&C Dong Ah has been proven in construction of the Seoul Subway Line No. 5, which runs along under many densely populated areas.



**Kudeok Tunnel**  
 • Location : Seo-gu - Hakjang-dong, Buk-gu, Busan  
 • Client : Busan Municipality  
 • Project Overview : - Total Length : 1,870m (NATM) - Radius: 4.7m, Section Area 62.3m<sup>2</sup>



**Relocation of Dongdaegu-Cheongchon Railroad**  
 • Location : The whole area of Hyomok-dong, Dong-gu - Gacheon-dong, Suseong-gu, Daegu  
 • Client : Korea National Railroad  
 • Project Overview : - Total Length : 7,800m - 5 Bridge : 56m (Palhyeon Bridge : Pront Jacking Method) - 2 Tunnel : 2 EA/540m - 3 Station : Gomo Station, Freight Station, Geumgang Station



**Seoul Subway No. 5**  
 • Location : Sinmunno 2-ga - 18, Cheongjin-dong, Jongno-gu, Seoul  
 • Client : Seoul Metropolitan Government  
 • Project Overview : - Total Length : 1,200m - Open Cut : 70.5m - NATM : 1,129.5m - Connecting Pathway : 68.33m



**Namsan Tunnel Line No. 2**  
 • Client : Seoul Metropolitan Government  
 • Project Overview : - Length = 1,680m



**Kyungwonseon (Eujeongbu-Dongducheon) 2-track Line**  
 • Client : Korail  
 • Project Overview : - L=7,948m, Earthwork: 266,379m<sup>3</sup> - Bridge: 3 EA (L=5,177m) - Station: 5 EA

# PORT

Port construction has long been an integral part of E&C Dong Ah's civil work experiences. From the successful accomplishment in domestic projects, E&C Dong Ah began to undertake international port and harbor projects. At present, E&C Dong Ah has exceptional track records in port / harbor construction, modernization, and expansion in both domestic and international construction market. A noteworthy project was Incheon Port Integrated Facility Construction Project which consisted of floodgate and wharf construction that connect the inner and outer harbor, overcoming the tide difference of 10 meters in height. E&C Dong Ah also constructed the 7<sup>th</sup> and 8<sup>th</sup> Wharf of the Korea's largest international port, Busan Port. Advanced technical competence of E&C Dong Ah in Harbor construction gained much recognition through Container Terminal Construction Project of Industrial Gwangyang Harbor, Gyeongin Energy Incheon Wharf Construction, Busan Gaduk New Harbor Development Project, etc.



**Gate Expansion for Incheon Port**  
 • Location : The whole area of Incheon Inner Harbor 80-9, Bukseong-dong 1-ga, Jung-gu, Incheon • Client : Incheon Regional Maritime Affairs & Port Office  
 • Project Overview : - Floodgate Facility 10,000 ton - Caisson Manufacture 24,166 ton - Door Manufacturing and Installing : 488.58m<sup>2</sup> - Shore Protection : 29.32m - Mooring Facility : Wharf for Samll Ship 136.5m - Dredging : 138,761m<sup>3</sup>



**Busan Port No. 3, 4, 7, 8**  
 • Location : The Sea around Doi-dong and Hwanggil-dong, Gwangyang-si, Jeollanam-do  
 • Client : Korea Marine & Port Administration  
 • Project Overview : - Capacity : 1,000 - 15,000 DWT (10 Berths) - Reclamation : 2,107,400m<sup>2</sup> - Dredging : 1,070,000m<sup>3</sup> - Paving : 166,600m<sup>2</sup>



**Gwangyang Port Container Terminal**  
 • Location : The Sea around Doi-dong and Hwanggil-dong, Gwangyang-si, Jeollanam-do  
 • Client : Korea Container Terminal Authority  
 • Project Overview : - Container Terminal 50,000 DWT - Caisson Manufacture and Installation : 108 Cases(L=1,144.8m) - Crane Rail Laying : 2,760m - Pavement Work : 8,478a - Construction Work : 43 buildings(except operation building) - Electric Pipelining Work : 10,450m



**Quadeema Port Facilities in Saudi Arabia**  
 • Location : Saudi Arabia  
 • Client : Ministry of Public Works & Housing [MOPWH]  
 • Project Overview : - Dredging : 8,000,000m<sup>3</sup> - Power Generation : 10,000KW



# ARCHITECTURE

## Housing | Building

Based on accumulated state-of-art technology and experience in architectural works, E&C Dong Ah has acquired considerable in-house capabilities in a broad range of architectural works and services. Such technology and experience have been applied in the construction of residential buildings, commercial buildings, broadcasting stations and cultural properties. Outstanding E&C Dong Ah's performance has resulted in awards such as 1995 Korea Architecture Culture Award, 1996 Seoul Architecture Award, and 1996 IFWPCA Architecture Culture Award second-class prize of Korea.



## HOUSING

E&C Dong Ah pursues to build "More affectionate apartment while you live in" and has devoted all of its energies to provide better housing. E&C Dong Ah successfully completed the first steel-framed apartment, E&C Dong Ah Solecity. Our recent experiences in housing projects include Sangweolkok-dong and Bongchon-dong high quality housings.



**Yongsan The PRIME Mixed-Use High-rise Building**

- Location : Yongsan, Seoul
- Client : Anmode Co., Ltd.
- Project Overview : - Mixed-Use High-rise Building for 559 Households, Office and Retails  
- Land Area : 13,527m<sup>2</sup> - Gross Floor Area : 160,759m<sup>2</sup>



**Changnyeong Namji The PRIME Apartment**

- Location : Changnyeong-gun, Gyeongsangnam-do
- Client : KB Real Estate Trust Co.
- Project Overview : - 7 apartments (20 stories) for 421 households - Lot Area : 16,698m<sup>2</sup>  
- Gross Floor Area : 55,200m<sup>2</sup>



**Donghae Hyogadong The PRIME Apartment**

- Location : Hyoga-dong, Gangwon-do
- Client : Bieecoms Co., Ltd.
- Project Overview : - 7 apartments (18 stories) - Lot Area : 23,227m<sup>2</sup>  
- Gross Floor Area : 53,919m<sup>2</sup>

# HOUSING

E&C Dong Ah always tries to do more than satisfying home buyers' expectation, and we enjoy E&C Dong Ah's brand confidence from home buyers across the country. Starting from 1990, E&C Dong Ah has supplied more than 71,000 residential housing units to the market.



**Seosan Dongmundong The PRIME Apartment**

- Location : Seosan-si, Chungcheongnam-do
- Client : Okseung E&C Co., Ltd.
- Project Overview : - 7 apartments (15 stories) for 458 households - Lot Area : 23,906m<sup>2</sup> - Gross Floor Area : 71,885m<sup>2</sup>



**Yongin Guseong Solecity Apartment Complex**

- Location : Yongin-si, Gyeonggi-do
- Client : Dong Ah Const. Ind. Co., Ltd.
- Project Overview : - Scale : 36 apartments (20 stories) for 1,701 households and 29 auxiliary buildings - Lot Area : 144,041m<sup>2</sup> - Building Area : 21,874m<sup>2</sup> - Gross Floor Area : 433,284m<sup>2</sup>



**Sindang 4<sup>th</sup> Section Apartment Complex**

- Location : Sindang-dong, Jung-gu, Seoul
- Client : Sindang 4<sup>th</sup> Section Reconstruction Housing Association
- Project Overview : - Scale : 19 apartment blocks (8-20 stories) for 2,282 households and 11 auxiliary buildings - Lot Area : 85,637m<sup>2</sup> - Building Area : 14,752m<sup>2</sup> - Gross Floor Area : 250,973m<sup>2</sup>

# BUILDING

E&C Dong Ah has advanced technical competence in commercial building construction. In particular, our exceptional technology became recognized after completion of KBS, MBC Broadcasting centers and international broadcasting center where 88 Olympics was broadcasted all over the world.



**Sinrimdong Ecorium Office**

- Location : Sinrim-dong, Seoul
- Client : Sammo Industrial Co., Ltd.
- Project Overview : - 1 office building for 414 units (26 stories) - Gross Floor Area : 48,949m<sup>2</sup>



**Juffali Headquarter Office Building in Saudi Arabia**

- Location : Saudi Arabia
- Client : E.A. Juffali Brothers
- Project Overview : - Floor Area: 20,000m<sup>2</sup> - 7 Storied 1 building (1 BF)



**Yongsan PRIME Palace Apartment & Office**

- Location : Yongsan-gu, Seoul
- Client : Beaucell Co., Ltd.
- Project Overview : - 1 residential & office building for 183 units (20 stories) - Gross Floor Area : 2,288m<sup>2</sup>

# BUILDING

With the completion of POSCO Center in 1995, E&C Dong Ah received Korean Architecture Award, a gold prize in Seoul Cultural Award, and a gold prize from international Federation of Asian and Western Pacific Contractors' Association (IFAWPCA). E&C Dong Ah also won Korean Architecture Award in 1995 for the construction of the War Memorial Museum. Other representative track records include Olympic Youth Hostel, Yuseong Dongah Studio APT, World Tower Building, KEC and Teaseok Buildings, Korea Cancer Center Hospital, Seoul Station, and Dongdaegu Station Office Buildings.



**Olympic Youth Hostel**  
 • Location : Songpa-gu, Seoul  
 • Client : Seoul Olympic Promotion Foundation  
 • Project Overview : - Hotel (266 Rooms) with 19 floor above - Gross Floor Area : 22,299m<sup>2</sup>



**International Broadcasting Center**  
 • Location : Yeongdeungpo-gu, Seoul  
 • Client : Korea Broadcasting System  
 • Project Overview : - IBC Building and KBS Hall (1,824 Seats) New Construction  
 - Lot Area : 40,000m<sup>2</sup> - Building Area : 25,465m<sup>2</sup> - Gross Floor Area : 73,163m<sup>2</sup>



**POSCO Center**  
 • Location : Gangnam-gu, Seoul  
 • Client : POSCO  
 • Project Overview : - High-tech Information-orientated Building (20-30 floors above and 6 underground) available for 4,500 people - Lot Area : 17,454m<sup>2</sup> - Building Area : 7,305m<sup>2</sup>  
 - Total Floor Area : 181,587m<sup>2</sup>



**Junglimdong Office Buildin**  
 • Location : Jung-gu, Seoul  
 • Client : Mapo 5 Section 12-2 Housing Union  
 • Project Overview : - Office with 17 floor above - Lot Area : 2,793m<sup>2</sup>  
 - Gross Floor Area : 34,094m<sup>2</sup>



**Korea Cancer Center Hospital**  
 • Location : Nowon-gu, Seoul  
 • Client : Office of Supply  
 • Project Overview : - 500-bed Hospital Facility - Gross Floor Area : 31,596m<sup>2</sup>



**Daejeon Worldcup Stadium**  
 • Location : Yuseong-gu, Daejeon  
 • Client : Daejeon Municipality  
 • Project Overview : - 5 floors above and 1 underground, 42,176 Seats  
 - Lot Area : 172,378,18m<sup>2</sup> - Building Area : 33,383,22m<sup>2</sup> - Gross Floor Area : 99,364.95m<sup>2</sup>



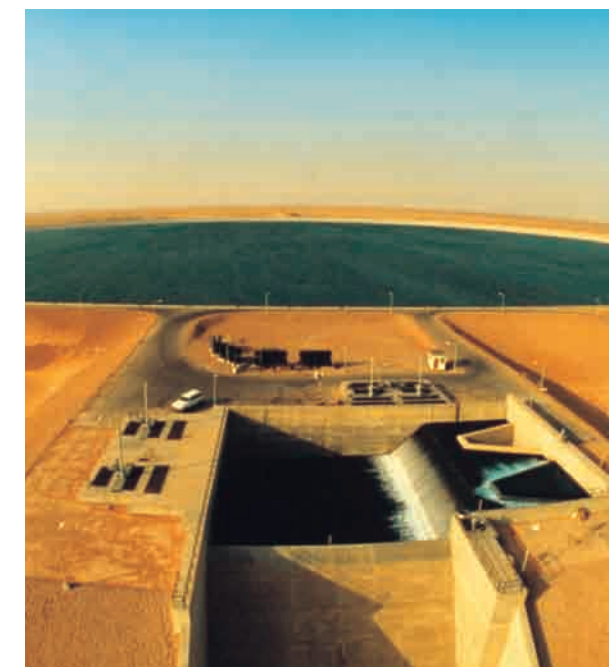
**War Memorial Museum**  
 • Location : Yongsan-gu, Seoul  
 • Client : Ministry of National Defense  
 • Project Overview : - Scale : This project was to newly construct War Memorial Museum Center in civil engineering, architectural engineering, and machinery and equipment area. This construction included one Memorial center (with 4 stories above and 2 under the ground), on convenient facility - Lot Area : 113,265m<sup>2</sup> - Building Area : 18,835m<sup>2</sup> - Gross Floor Area : 84,131m<sup>2</sup>

# THE MAN-MADE RIVER PROJECT

The Man-made River Project, the Eighth Wonder of the World, is supplying clean water for living water, agriculture use, and industrial use in Libya by conveying the deep underground water in the desert to the coastal area where cities and farms are located and developed. The water coming from the Man-made River is construed to be the major resources to support national development of Libya.



The Man-Made River Project (Phase I & II)



Ajdabiya Holding Reservoir



PCCP Laying & Transportation

E&C Dong Ah performed the Man-made River Project which was a miraculous scale of large project and the wordly greatest ever, completed for supplying 4 million m<sup>3</sup> of water per day for Benghazi, Sirte and Tripoli areas. The project renewed several international records for World Civil Engineering Construction in terms of massive human resources, materials and equipment since 1983. The project has been also recorded in the "Britannica World Year Book" as the greatest civil engineering project in the world.



Well Development



Pipe Production Plant



Pump Station



Water Treatment Plant



Operation & Maintenance Facilities



Header Tank for Main Colleting Pipeline

## The Man-Made River Project (Phase II)

- Project Period: 1990. June ~ 2004. December (EPC Project)
- Contract Amount: US\$ 6,638,286,741
- Scope of Works:

<b>Modification of Pipe Manufacturing Plant</b>	Molds & Tooling Double Gasket System
<b>PCC Pipe Production</b>	165,353 ea
<b>Aggregate Production</b>	6,223,404 ton
<b>PCC Pipe Installation</b>	- L=1,448km (D1,600 ~ 4,000mm) - Earth Work: 58,055,000m <sup>3</sup> - Structure Work: 2,456 ea - De-watering Excavation: PCC Pipeline 45km
<b>Well Field Construction</b>	- Production Well Development: 484ea (D=500mm, Depth=600m) - Feeder Pipe (Well Head) Installation (D.I Pipe): 250 km (D200~300mm) - Well Pump & Motor Installation: 484 ea - Collector Pipe Line (D.I Pipe): 382.6 km (D600~1,200mm)
<b>Haul Road Construction</b>	L=1,813km, W=7.2-11.2m
<b>Pump Station</b>	- Steel Structure Bldg: 3 units - Capacity: 3 lots (300,000m <sup>3</sup> /day 2 lots, 1.4 Mil m <sup>3</sup> /day 1 lot) - Pump & Motors: 19 sets - Forebay (Intake) Tank: 3 ea: 166,600 m <sup>3</sup>
<b>Surge Vessel</b>	Air Vessel: 10 sets (3.6m <sup>3</sup> /min)
<b>Flow Control Station</b>	2 ea (2,000,000m <sup>3</sup> /day)
<b>Water Treatment Facilities</b>	- Capacity: 3 lots (300,000m <sup>3</sup> /day 2 lots, 1.4 Million m <sup>3</sup> /day 1 lot) - Steel Structure Buildings: 4,800m <sup>2</sup> , etc. - Degassing Tower - Chlorination Injection Plant
<b>Concrete Reservoir</b>	- Fezzan Regulating Tank (140,000m <sup>3</sup> ) - Ash Shwayrif Regulating Tank (140,000m <sup>3</sup> ) - Tarhunah End Reservoir (120,000m <sup>3</sup> ) - Garabulli End Reservoir(140,000m <sup>3</sup> )
<b>Permanent Communication Control System</b>	- Telephone System - Fiber Optic Cable Laying: 1,200km - SCADA System (SCADA, Process Control, Management Control System)
<b>Operation &amp; Maintenance Facilities (3 areas)</b>	- 80 Buildings (376,769m <sup>2</sup> ) - Runway

# BACKLOG

48 Projects in Progress



# PROJECTS IN PROGRESS

(US\$1=1,119.6 ₩, Aug 1, 2013)

## 1. PLANT

Name of Project	The Client	Construction Period	Project Amount (US\$)
Samcheok LNG Plant No. 1 ~ 4 [ 200,000 kl x 4 units ] -Storage Tank & Facilities	Korea Gas Corp.	2010 ~ 2015	535,687,031
Taeon Thermal Power Plant No. 9 & 10 [ 1,000MW x 2 units ] -M&E Work	Korea Western Power Co. Ltd.	2013 ~ 2016	182,401,929
Yeosu Thermal Power Plant No. 1 [ 350MW x 1 unit ]	Korea South-East Power Co., Ltd.	2012 ~ 2016	129,698,106
Yeongheung Thermal Power Plant No. 5 & 6 [ 870MW x 2 units ] -Land Preparation Work	Korea South-East Power Co., Ltd.	2009 ~ 2014	106,939,750
Sejong City Combined Cycle Power Plant	Korea Midland Power Co., Ltd.	2011 ~ 2013	102,296,336
Pocheon Combined Cycle Power Plant -Pipeline Work	Korea Gas Corp.	2012 ~ 2014	63,813,938
Andong LNG Plant -Yard Work	Korea Southern Power Co., Ltd.	2012 ~ 2014	36,584,655
345KV Seonsan-Shinpohang Transmission Line	Korean Electric Power Corporation	2011 ~ 2015	23,357,538
154KV Bonghwabungi Transmission Line	Korean Electric Power Corporation	2010 ~ 2014	11,456,770

## 2. CIVIL

Name of Project	The Client	Construction Period	Project Amount (US\$)
Honam Ultra Speed Railway Vehicle Base	Korea Rail Network Authority	2010 ~ 2013	269,583,333
Jungrang Sewage Treatment Plant	Seoul Metropolitan Government	2009 ~ 2014	248,071,633
Kohyun-Hadong IC2 National Road Work	Busan Regional Const. Mgmt. Admin.	2009 ~ 2017	186,958,735
Wonju-Gangreung Railway	Korea Rail Network Authority	2012 ~ 2016	171,391,560
Bohunsan Multi-purpose Dam Construction	Korea Water Resources Corp.	2010 ~ 2015	140,094,677
Sangju - Youngdeok Highway No. 3	Korea Expressway Corp.	2010 ~ 2015	107,225,795
Naengjeong-Busan Highway Expansion Work (No. 104)	Korea Expressway Corp.	2008 ~ 2013	107,214,184
Metropolitan Ultra Speed Railway (Suseo-Pyeongtaek)	Korea Rail Network Authority	2012 ~ 2015	101,542,515
Saemanguem Seawall Work	Korea Rural Community Corp.	2010 ~ 2015	99,113,916
Jungangseon Wonju-Jecheon Double Track Railway	Korea Rail Network Authority	2011 ~ 2016	97,251,697
Northern Seawall Construction of Ulsan New Port	Ulsan Regional Maritime Affairs and Port Office	2011 ~ 2014	89,324,759

Name of Project	The Client	Construction Period	Project Amount (US\$)
Naengjeong-Busan Highway Expansion Work (No. 551)	Korea Expressway Corp.	2009 ~ 2013	87,651,840
Connection Line between Gyeongbu Ultra Speed Railway - Donghae Nambuseon Connection Railway	Korea Rail Network Authority	2010 ~ 2014	83,024,652
Gogunsan-island Liking Road Work	Iksan Regional Const. Mgmt. Admin.	2009 ~ 2014	70,765,018
Busan Ring Road of National Expressway No. 600	Korea Expressway Corp.	2011 ~ 2015	63,768,757
Dongdaegu-Youngcheon Double Track Subway	Korea Rail Network Authority	2011 ~ 2016	57,719,238
Kohyun-Hadong IC1 National Road Work	Busan Regional Const. Mgmt. Admin.	2009 ~ 2013	41,392,462
Osan-Segyo Road for Traffic Improvement	Korea Land Housing Corp.	2009 ~ 2014	41,036,977
Osu-Galma Road Expansion Work	Iksan Regional Const. Mgmt. Admin.	2009 ~ 2017	36,874,777
Dongdo-Seodo Bridge Work	Jeollanamdo	2010 ~ 2015	34,421,222
General Industrial Complex of Busan New Port Global Industrial City	Busan City Corp.	2011 ~ 2015	32,189,927
Kampo Port Improvement Work	Ministry for Food, Agriculture, Forestry and Fisheries	2010 ~ 2015	24,541,554
Nampo-Jangjae Road Expansion & Pavement Work	Jeollanamdo	2011 ~ 2016	20,581,797
Andong Agriculture Water Development Project	Korea Rural Community Corp.	2013 ~ 2017	20,430,957
Anjong Songdam Land Readjustment Project	Incheon Public Procurement Service	2009 ~ 2014	20,219,721
Access Road of West Warft in Pyeongtaek, Dangjin Port	Pyeongtaek Regional Maritime Affairs and Port Office	2012 ~ 2015	18,628,081
Imwon Port Rehabilitation Work	Ministry for Food, Agriculture, Forestry and Fisheries	2010 ~ 2015	12,724,634

## 3. ARCHITECTURE

Name of Project	The Client	Construction Period	Project Amount (US\$)
Yongsan The PRIME Mixed-Use High-rise Building	Anmode co., Ltd.	2010 ~ 2013	182,929,618
Headquarter of Korea Expressway Corp.	Korea Expressway Corp.	2011 ~ 2014	113,224,000
Hanam Misa A28-Block Apartment Complex	Korea Land Housing Corp.	2012 ~ 2015	104,669,436
Dongducheon Jihaengdong The PRIME Apartment Complex	HD Development Company	2011 ~ 2014	61,016,345
Gwangju Jeonnam Hyuksin Town	Korea Land Housing Corp.	2011 ~ 2014	37,242,765
Seoul Seocho A3-Block Apartment Complex	Korea Land Housing Corp.	2011 ~ 2013	28,060,584
Hongseongdong Apartment & Officetel Construction	Korea Asset Management Corp.	2012 ~ 2014	12,357,985



### Taean Thermal Power Plant No. 9 & 10

- Client : Korea Western Power Co. Ltd.
- Description of Project : 1,000MW x 2 units
- Construction Period : 2013 ~ 2016
- Contract Amount : US\$ 182,401,929



### Yeongheung Thermal Power Plant No. 5 & 6

- Client : Korea South-East Power Co., Ltd.
- Description of Project : 870MW x 2 units
- Construction Period : 2009 ~ 2014
- Contract Amount : US\$ 106,939,750



### Yeosu Thermal Power Plant No. 1

- Client : Korea South-East Power Co., Ltd.
- Description of Project : 350MW x 1 unit
- Construction Period : 2012 ~ 2016
- Contract Amount : US\$ 129,698,106



### Yongsan The PRIME Mixed-Use High-rise Building

- Client : Anmode co., ltd.
- Description of Project : Mixed-Use High-rise Building for 559 Households, Office and Retails  
Land Area : 13,527m<sup>2</sup>  
Gross Floor Area : 160,759m<sup>2</sup>
- Construction Period : 2010 ~ 2013
- Contract Amount : US\$ 182,929,618

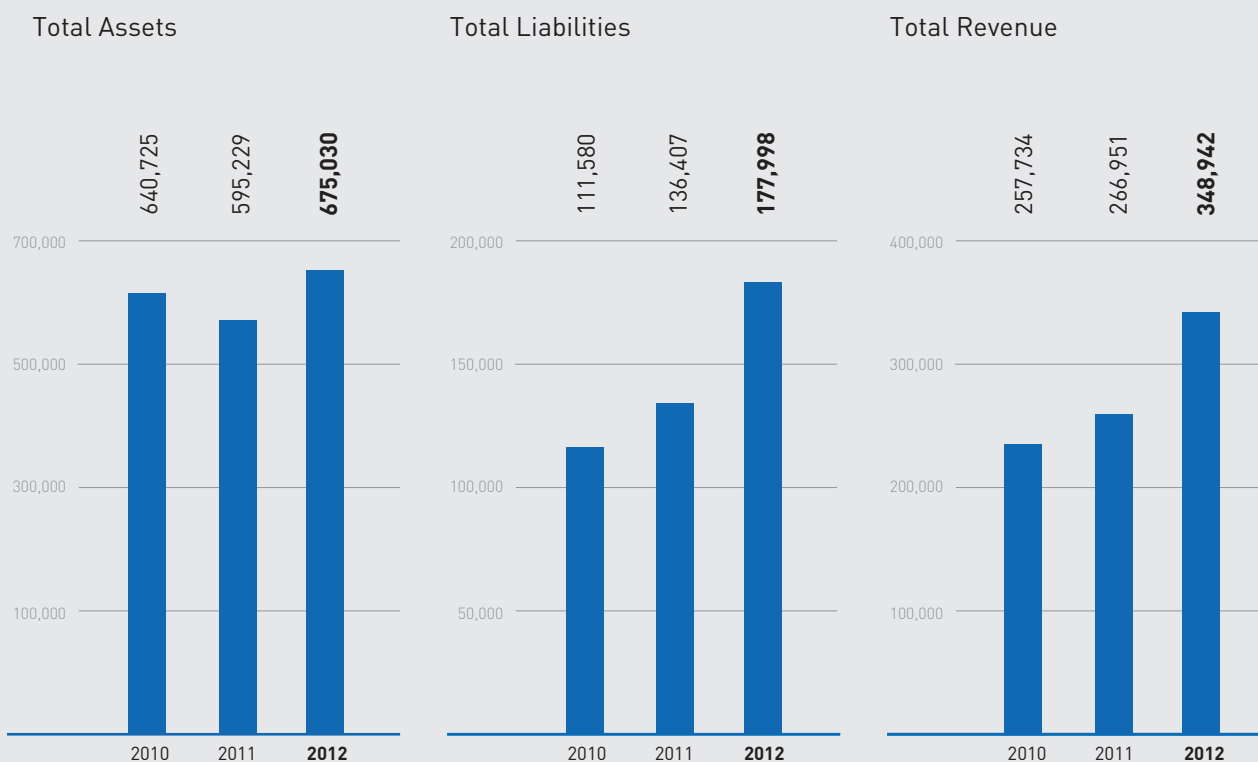


# FINANCIAL SUMMARY

# NETWORK

(unit: US\$ equivalent in, 000s)

	2012	2011	2010
<b>Information from Balance Sheet</b>			
Total Assets (TA)	675,030	595,229	640,725
Total Liabilities (TL)	177,998	136,407	111,580
Net Worth (NW)	497,032	458,822	529,145
Current Assets (CA)	531,674	461,450	423,312
Current Liabilities (CL)	154,555	120,122	94,769
<b>Information from Income Statement</b>			
Total Revenue (TR)	348,942	266,951	257,734
Profits Before Taxes (PBT)	13,227	10,417	40,255



## GLOBAL NETWORK

### USA

DongAh-Prime Development, Inc.  
: 600 Palisade Ave., Union City, New Jersey, USA

### Canada

DongAh Canada Development Corp.  
: Burnaby, BC, Canada

### Bangladesh

ENA-DongAh Construction Firm  
: House # 30, Road # 9/A, Dhanmondi, Dhaka-1209, Bangladesh  
Tel. +880-17-6601-3652

### ENA-DDJ Construction Firm

: 57/3, Lakecircuit Kalabagan (2nd Floor), Dhaka, Bangladesh  
Tel. +880-17-6601-3652

### KUWAIT

P.O. Box 24938 Safat, 13155 Kuwait  
Tel. +965-2241-0861 Fax. +965-2240-4731

### UAE

P.O. Box 46363 Abu Dhabi, UAE  
Tel. +971-2674-4111 Fax. +971-2674-0777

### QATAR

P.O. Box 24131 Doha, Qatar  
Tel. +974-4437-8888 Fax. +974-4437-8899

### OMAN

P.O. Box 261 Hamriya, 131 Sultanate of Oman  
Tel. +968-2447-8655 Fax. +968-2448-2086

### SAUDI ARABIA

P.O. Box 10009, Jubail Industrial City 31961, Kingdom of Saudi Arabia  
Tel. +966-3361-2222 Fax. +966-3361-2112

## DOMESTIC NETWORK

### CONSTRUCTION & DEVELOPMENT

#### Prime Development Co., Ltd.

38FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-0100 www.primenet.co.kr

#### Saman Corporation

Head Office: 1-20, Byeolyangdong, Gwacheonsi, Gyeonggi-do, Korea  
Tel. +82-2-509-4600 www.samaneng.com

Seoul Office : 23, 25, 28, 32-34FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea

#### Prime Industrial Co., Ltd.

13FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-3000 www.tm21.com

#### Korea Infra Development Co., Ltd.

18FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-1800 www.kidco.co.kr

#### Seoulchinateown Development Co., Ltd.

15FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-0805

#### Fuzzle Development Co., Ltd.

26FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-4130

#### Fuzzle Asset Management Co., Ltd.

26FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-4130

#### Gyeonggi Integrated Freight Terminal Co., Ltd.

18FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-1800 www.kidco.co.kr

#### Prime Asset Management Co., Ltd.

3-25 Guro-dong, Guro-gu, Seoul, Korea  
Tel. +82-2-2111-8200

#### Prime Homes Co., Ltd.

906-5 Nohyeong-dong, Jeju-si, Korea  
Tel. +82-64-741-5000

## INFORMATION TECHNOLOGY

#### Prime Information & Technology Co., Ltd.

7FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-0600 www.primeit.com

## FINANCE & INVESTMENT

#### Prime Capital Co., Ltd.

19FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-4226

## CULTURE & ENTERTAINMENT

#### YoungComm Co., Ltd.

29FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-2030 www.youngcomm.co.kr

#### Croance Co., Ltd.

150-19 Gwangmyeong-dong, Gwangmyeong, Gyeonggi-do  
Tel. +82-2-2067-8114 www.croance.co.kr

#### Prime Broadcasting Co., Ltd.

10FL Prime Center, 85 Gwangnaruro-ro 56-gil, Gwangjin-gu, Seoul, Korea  
Tel. +82-2-3424-3175 www.rtn.co.kr

#### Universal Entertainment Co., Ltd.

Bunsu-ri, Gwangtan-myeon, Paju-si, Gyeonggi-do, Korea  
Tel. +82-31-947-5300