Beyond engineering for a better tomorrow

CONTENTS

We

Create the value

Shape the future



Dohwa pursues the happiness of its members based on advanced technology and challenges to be the world's best.

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History of DOHWA

Since its establishment in 1957, DOHWA Engineering Co., LTD. (Dohwa) has grown alongside the history of Korea's National Development Plan. Having accumulated experience and expertise in civil engineering, we are taking every step to become the best comprehensive engineering company that leads the global market, standing shoulder to shoulder with our global peers.

<u> 1957 - 1979</u>

- 1957 Established 'Dohwa Design Office'
- **1962** Company name changed to
 - 'Dohwa Consulting Engineers Co., LTD
- 1965 Received the 'Prime Minister's Commendation' for contribution to the development of construction industry and improvement of technology
 • Established a branch office in Teheran. Iran
- **1975** Appointed by the Ministry of Science
- **1976** and Technology as the
 - 'Promotion Institution for international expansion

 Registered with the IBRD
 - (International Bank for Pecons
 - Registered with the ADB (Asian Development Bank)

1980 - 1999

- 1981 Company name changed to 'Dohwa General Technology Corporation'
- **1985** Registered with AfDB (African Development Bank)
- **1987** Received the 'Presidential Medal of Industrial Merit (Bronze Tower)' for contribution to the development of the construction industry
- 1997 Obtained the ISO 18001 Certification

 SGS YARSLEY INTERNATIONAL CERTIFICATION SERVICES LTD.

 In the sector of water and sewage, construction, electrical machines
 and instruments, environment, water resources, soil quality, and road
- **1998** Received the 'Letter of Appreciation from the President' for contribution to the development of the national industry through the regional water supply system project
 - for contributing to the development of the national industry
 - through the construction of the Daegu subw

2000 - 2009

- 2001 Received the 'Award for excellence in service' by the Minister of Construction and Transport
 2003 Obtained the ISO 9001 certification (CRK-Q1-255)
 Appointed as 'Excellent construction company with low accident rate in 2002' by the Ministry of Labor
 Won CM (Construction Management) contract of 'The Incheon International Airport Project (Phase 2)', a first milestone for Korean Engineering Company
 2004 Obtained the ISO 14001 certification (CRK-E1-067)
 "Gunjang New Port Breakwater Project" won the Silver Medal for 'Civil Engineering Structure of the Year' by the Korean Society of Civil Engineers
 2005 Received the 'Letter of Appreciation from the President' for the contribution to the development of the national industry and the promotion of the construction industry
 Received the 'Letter of Appreciation from the President' for contribution to the development of the national industry through the development of the national industry through the development of the national industry through the development of rom the President' for the contribution to the development of the national industry through the construction technologies (Received the 'Letter of Recognition from the President' for the contribution to the development of the national industry through the construction industry through the construction industry for the contribution to the development of the national industry for the contribution to the development of rom the President' for the contribution to the development of rom the President' for the contribution to the development of rom the President' for the contribution to the development of rom the President' for the contribution to the development of rom the President' for the contribution to the development of the national industry through the construction of multi-regional water sanitation
 - Received the 'Letter of Appreciation from the President' for contribution to the development of the national indust
 - through the invention of new construction technology

since **1957**

2010 - 2023

2010	
	International Architecture Festival: Gadeokdo's work
	 Listed in KOSPI, Korea Composite Stock Price Index
	• Received the 'Presidential Medal' as a leading company in job creation
2011	 Company name changed to 'Dohwa Engineering Co., LTD.'
2013	Received the silver medal for
	'Civil Engineering Structure of the Year' from the Korean Society of
	Civil Engineers: Daedong Hwamyung Bridge
2014	Received the 'MOT Letter of Appreciation' for the detailed design and
	supervision of the GMS Vietnam South Coastal Corridor project
	Received the 'Civil Engineering Grand Prize' from the Korean Society
	of Engineers for contribution to the development
	of construction technology
	Declared 'NEW VISION 2020'
2015	Obtained OHSAS
	(Occupational Health and Safety Assessment System)
2016	Awarded "Presidential Golden Merit of Industry" in recognition of
	contribution to national development through construction technology
2017	Designated as 'World Class 300'
2018	 Won the GTX-A PPP Contract as a JV member of the FI
	(Financial Investor)-led consortium.
	Unprecedented award for a Korean Engineering Firm
	Awarded the "Presidential Gold Tower Order of Industrial Service
	Merit" for Contribution to the development of the national industry
	through the promotion of the engineering industry
2019	First company in Korea to sign a PMO (Project Management Office)
	contract, New Chinchero International Airport construction in Peru
	 'Best Practice of International Construction': Feasibility Study
	of the Sea Bridge between Shanna & Masirah, Oman
2020	Received 'Gold Tower Order' for contribution to the development
	of overseas construction and plant industry
2021	Declared 'VISION 2030'
2022	Renewal of 2022 DOHWA Corporate Identity
	Certification of ISO 37001 on Anti Corruption
2023	Received a "Presidential Citation" for contributing to the
	development of the national industry through the
	promotion of the engineering industry
	 Subscribed to PRI(Political Risk Insurance) Guarantee of
	MIGA (Multilateral Investment Guarantee Agency)

Greetinas.

I am Seung-Woo Park, the Chairman of DOHWA Engineering Co., Ltd.

DOHWA was founded in 1957 as the First Civil Engineering Company in South Korea. For the last 16 years, our company has been ranked first in the civil engineering consultancy sector with 'Humanity', 'Harmony' and 'Creativity' as core values.

DOHWA, through ceaseless innovation and overcoming its diverse challenges, came to play a pivotal role in the development of Korea's Civil & Construction Engineering Industries, and has played a key role in developing the South Korean Economy from a barren land into a global economic leader.

Based on accumulated expertise and proven track records, we have entered the overseas market since the mid-1970's, and are promoting Korea's unique technological prowess to the world ever since. We are now in preparation to take a step ahead of the rapidly-changing future by building systems and infrastructures suitable for the Fourth Industrial Revolution.

Throughout the years, DOHWA has been delivering engineering-based EPC (design, procurement, construction) projects in order to minimize risks, and expand business areas to the entire construction cycle, including FEED (Preliminary and Conceptual design), PMC (Project Management Consultant), and O&M (Operation and Maintenance) services. Thus, our company has been endeavoring to grow into a world's leading engineering company beyond the domestic market.

Lastly, DOHWA is a company that fulfills its social responsibilities to shareholders, stakeholders, and local communities through ethical management, and will continue to pursue safe and proven technologies for the benefit of our nature and people. We will always undertake assignments based on unremitting passion and trust by meeting the expectation of our Clients, and the global society with unparalleled performances.

Thank You.

Park, Seung Woo

Chief Executive Officer, Chairman DOHWA Engineering Co., LTD





WE

Leading the Future of the Global E&C with **Technology for People and Nature**



Management Philosophy

Mission We value people and nature

"Create a future for a safe and happy life"

Dohwa, setting the new standard in engineering. From Korea's first to the world's best, a global company aiming to design the future that humankind dreams of.



Vision 2030

4

WE

Create the Value, Shape the Future 2030 World Top-tier

Dohwa pursues the happiness of its members based on advanced technology and challenges to be the world's best.



'Human-Centered Design', which puts people first, is the driving force behind Dohwa's ethical business management. Our management philosophy, which places people and nature above anything else, is realized through global human resources development and sustainable technology for the environment.

The solidarity built upon trust and consideration has laid the foundation for growth. All of our executives and employees work together to make Dohwa the best in the industry

Meaningful and lasting technologies are born from 'creative thinking' that does not settle for the present but sees it from a new perspective. We will leap forward as the leading comprehensive engineering company and pioneer the future with progressive actions and creative thinking.

WE

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Company Overview as of 2023-12-31

Dohwa is striving to create the best value without settling on previous achievements. We are growing into the world's best engineering company through global human resource development and investments in new technology development, as well as efficient business operation and constant innovation.

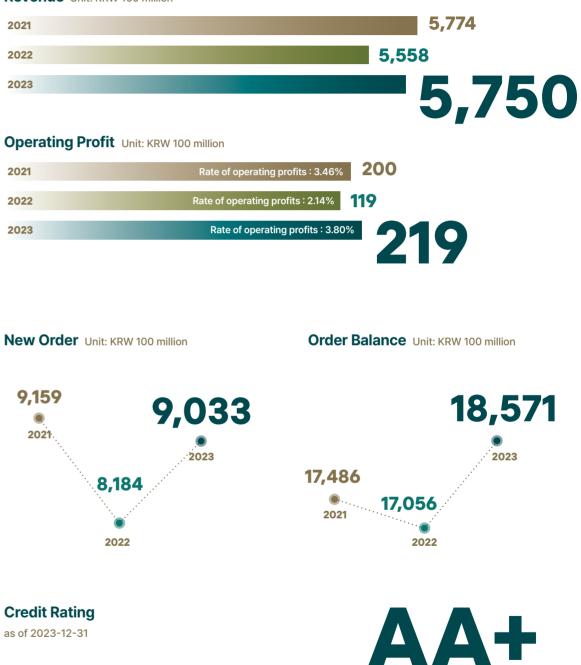


Summary Financial Statements (consolidated)

Revenue Unit: KRW 100 million

2021			
2022			
2023			

Rate of op	2021
Rate of ope	2022
Rate of	2023



Credit Rating as of 2023-12-31





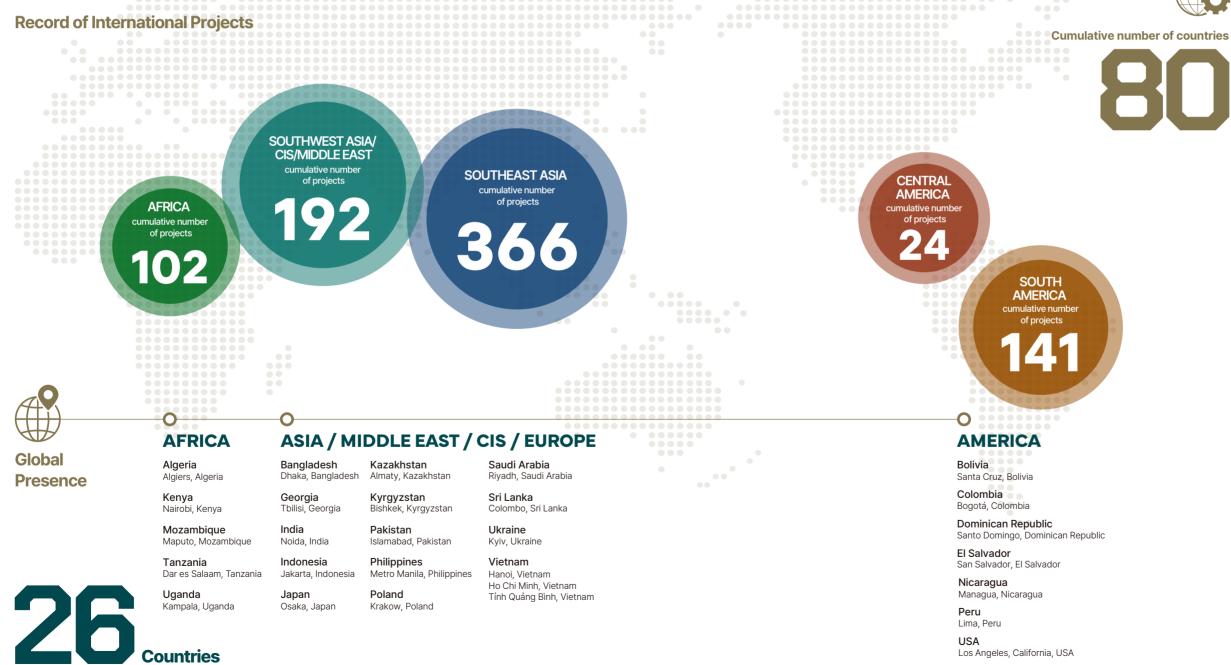
Corporate Credit Rating (NICE D&B)

7

Dohwa operates 36 subsidiaries and branch offices around the world and has successfully completed over 825 global projects. As the No.1 company in terms of the amount of the award from the international projects among Korean companies, it is attributable to the increase in PMC, EPC, CM (Construction Management), O&M business, and the first entry of the PPP (Public-Private-Partnership) and IPP (Independent Power Producer) field in cooperation with leading companies both domestic and overseas countries. We are spurring the expansion of overseas business areas, such as winning the contract for the first intergovernmental project (G2G) PMO business in Korea.



• Ranked 69 out of Top 225 International Design Firms in 2023 (Revenue from the International Projects) Ranked 87 out of Top 150 Global Design Firms in 2023 (Revenue from the Domestic and International Projects)



WE

Record of Projects

(according to the source of funds)

Source of Funds	Accumulated Projects
WB	50
ADB	37
K-Exim	53
KOICA	27
EDCF	18
KIND	9
JICA	4
AFDB	2
AIIB	2
EBRD	4
IDB	1

Key Achievements by Region

AFRICA

- · Central Railway line, Tanzania
- Dar es Salaam wastewater Treatment Plant, Tanzania
- Nairobi BRT-5, Kenya
- Bolemi and Kilinto Industrial Park, Ethiopia

SOUTHWEST ASIA/ **CIS/MIDDLE EAST**

- · Consultancy service for Design review and Construction supervision for Dhaka sanitation improvement
- Preparation of Concept design & Implementation plan for bus route rationalization and company based operation of bus service in Dhaka
- Consultancy service for Detailed design, Tender assistance and Project implementation of construction of Nalua-Baherchar Bridge
- Development of project document for the project entitled construction of a railway line on the section Katowice-state border-Ostrava

India/Pakistan

- AllB Construction Supervision Consultancy for Improvement and Upgradation of Roads in Assam (ASRIP), India
- Consultancy Services for Authority's Engineer for Extradosed Bridge across River Ganga at Phaphamau, India
- Consultancy Services for Authority's Engineer for Extradosed Bridge across River Ganga at Bihar, India
- EDCF Consulting Services for Improvement and Widening of N-45 Road Section III (48km), Pakistan

SOUTHEAST ASIA

- Detailed Engineering Design and Tender Assistance of Panay-Guinaras-Negros Island bridges Project, Philippines
- Hung Ha Bridge Construction Project, Vietnam
- Sewerage System Development in Ta Khmau Town Project, Cambodia
- Asahan Irrigation System Development Project, Indonesia

CENTRAL AMERICA

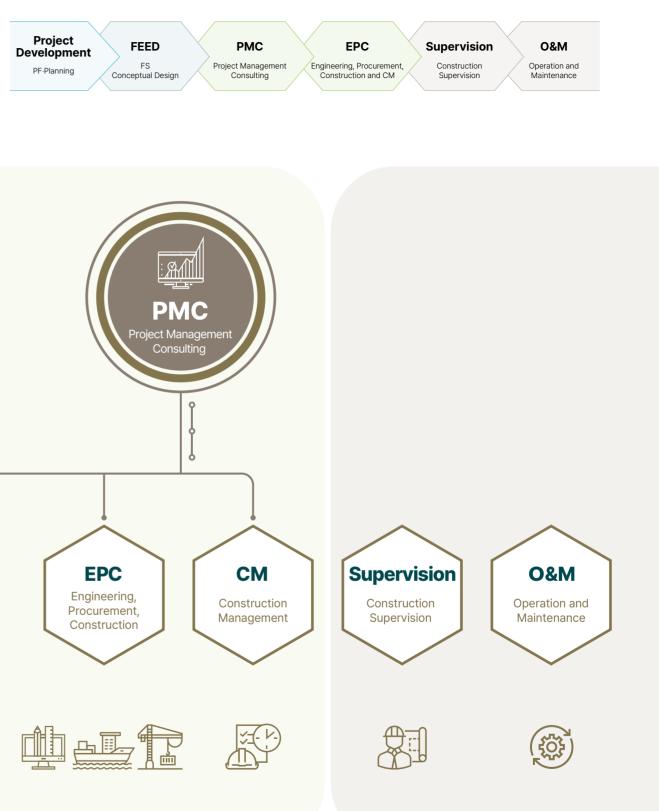
Los Chorros Highway Expansion, El Salvador

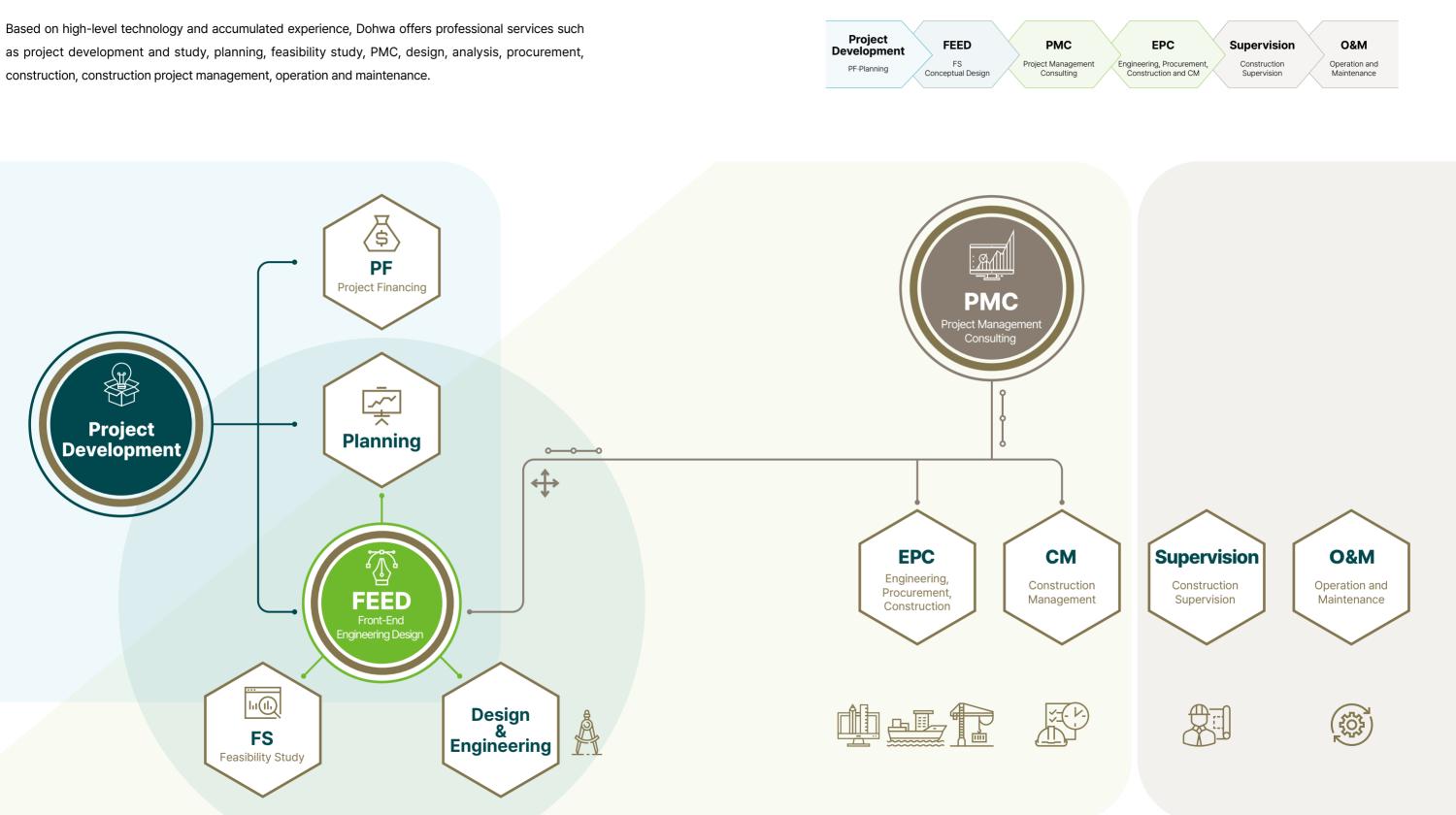
SOUTH AMERICA

- Montalvo Bridge, Peru
- Pucacruz Road, Peru
- Storm Drainage in Tumbes, Peru
- Sacambaya Bridge, Bolivia



Service Area





Business Portfolio

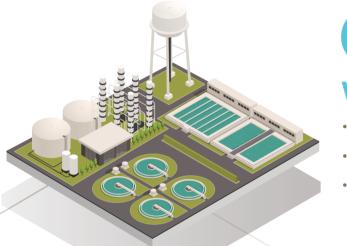
Water: Creating clean and safe water.

Urban: Enhancing the value and dignity of life.

Transportation: Connecting time and space for more convenient travels and movements.

Energy: Developing energy to protect the natural environment.

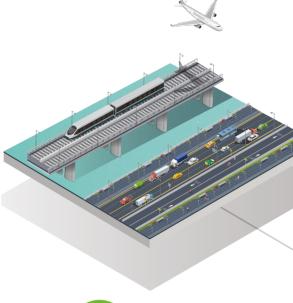
We create value for a better future in all areas of SOC (Social Overhead Capital)





WATER

- Water Supply
- Sewerage
- Architecture





ENERGY

- Solar Power
- Wind Power
- Power Plant/Environment Plant



URBAN

- Urban Planning & development
- Landscaping/Leisure
- Smart City





TRANSPORTATION

- Road/Airport/Traffic Planning
- Railway/High-speed Railway
- Urban Railway/Metro



- Water Resource (Rivers/Disaster Prevention/Dams/Hydropower)
- Harbor&Coastal/Bridge/Tunnel
- Environmental Assessment

Water

- Water Supply
- Sewerage
- Architecture

WATER







Water Supply

We completed the feasibility study and design of regional water supply facilities including Daecheong Dam, Jeonju area, Ulsan area, Gwangyang area, etc., development of alternative water resources such as seawater desalination and riverine filtered water, advanced water purification treatment to supply high quality water, modernization of old water supply facilities, ICT, etc. By establishing a real-time monitoring system incorporating technology, we are contributing to improving the water welfare of the people, such as smart pipe network management for stable water supply and water pipe network maintenance to improve water flow rate. We are also successfully carrying out overseas water supply development projects in Nepal, Indonesia, Vietnam, Kyrgyzstan, Sri Lanka, Uzbekistan, Cambodia, Bangladesh, Peru, and Kenya, and are taking the lead in building advanced water supply facilities required by the new era by responding to climate change and integrated water management.

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Preliminary and Detailed Designs for the Water Supply System Adjustment Project of Han River Downstream Basin (2nd) 2009. 09 ~ 2011. 12

 Stable water supply by utilizing surplus water in Seoul metropolitan area to resolve the imbalance in water supply and demand between regions • Location: Pyeongtaek, Hwaseong, Anseong and Osan, Gyeonggi-do Project Features: Water purification plant (Q=260,000m3/day)

Concentration tank Sedimentation basin 3 Overview of water treatment plant

Key Achievement

PROJECT

- Improvement of Reliability of Metro Chungju Dam Industrial Water Intal Daechung Dam Waterworks Syste Reconstruction of Yeoungdeungpo Construction of Advanced Water
- Construction of Advanced Water Adjustment of Water Supply System
- Installation of Advanced Water Treatment
- Improvement of Credibility of Metro Thien Tan Water Supply Project (F
- Kolonna-Balangoda, Badalkumbur
- Issyk-Kul Water Supply Project
- Namangan Water Supply Project • Kathmandu Valley Water Supply In
- Karian Serpong Raw Water Pipelin Adjustment of Water Supply System
- Construction of Industrial Water Int in Water Industry Cluster in Daegu • Water Supply Project of Gyeongna
- Busan Metropolitan Area (Intake/ • Technical Diagnosis for Modification
- Plan and Water Treatment Plant in Daechung Dam WaterWorks: Check
- Construction of 2050 Hlgh-Tech S • Installation of Advanced Water Trea
- in Wolpyeong Water Treatment Pla Adjustment of Water Supply System
- Construction of Advanced Water
- in Gongchon Water Treatment Pla • Implementation of Reuse Facilities • Establishment of Basic Plan for Sm Establishment of Asset Managem Installation of Water Heat Energy Water Saving Project in Military Base • Feasibility Study and Basic Plan Es River Basin Safe Drinking Water Su

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Dohwa is a leading company in the domestic water supply and sewage industry that plans, designs, and supervises national water supply facilities, including regional water supply systems, which are major social infrastructure that responds to rapidly increasing water demand.



PROJECT	COUNTRY	SERVICE
 Improvement of Reliability of Metropolitan Water Supply (Phase 2) 	Rep. of Korea	Design
Chungju Dam Industrial Water Intake/Treatment Plant (Phase 2)	Rep. of Korea	Design
Daechung Dam Waterworks System Section 3 (Water Intake & Water Conveyance Facility)	Rep. of Korea	Design
Reconstruction of Yeoungdeungpo Water Treatment Plant and	Rep. of Korea	Design
Construction of Advanced Water Treatment Facilities in Seoul		
 Construction of Advanced Water Treatment Facilities in Samyang 3rd District 	Rep. of Korea	Design
Adjustment of Water Supply System of Han River Downstream (Phase 2)	Rep. of Korea	Design
 Installation of Advanced Water Treatment Facilities of Hanam Water Treatment Plant 	Rep. of Korea	Design
 Improvement of Credibility of Metropolitan Water Supply (Lot 1) 	Rep. of Korea	Design
Thien Tan Water Supply Project (Phase 2)	Vietnam	Design
 Kolonna-Balangoda, Badalkumbura Water Supply Project 	Sri Lanka	FS
 Issyk-Kul Water Supply Project 	Kyrgyz Republic	Design/Supervision
Namangan Water Supply Project	Uzbekistan	Design/Supervision
Kathmandu Valley Water Supply Improvement Project	Nepal	Design/Supervision
 Karian Serpong Raw Water Pipeline Main and Water Treatment Plant Project 	Indonesia	Design
 Adjustment of Water Supply System of Yeongsan River Area (Phase 2) 	Rep. of Korea	Design
 Construction of Industrial Water Intake/Treatment Plant 	Rep. of Korea	Design
in Water Industry Cluster in Daegu City		
 Water Supply Project of Gyeongnam Province 	Rep. of Korea	FS
- Busan Metropolitan Area (Intake/Conveyance Facilities)		
 Technical Diagnosis for Modification of Water Supply Maintenance 	Rep. of Korea	MP
Plan and Water Treatment Plant in Busan City		
 Daechung Dam WaterWorks: Cheonan Advanced Water Treatment Facilities Project 	Rep. of Korea	Design
Construction of 2050 High-Tech Smart Myeongjang Water Treatment Plant in Busan City	Rep. of Korea	MP
 Installation of Advanced Water Treatment Facilities 	Rep. of Korea	Design
in Wolpyeong Water Treatment Plant in Daejeon City (Phase 1)		
 Adjustment of Water Supply System of Han River Downstream (Phase 3) 	Rep. of Korea	Design
 Construction of Advanced Water Treatment Facilities 	Rep. of Korea	Design
in Gongchon Water Treatment Plant in Incheon City		
 Implementation of Reuse Facilities for Granular Activated Carbon in Han River Area 	Rep. of Korea	Design
 Establishment of Basic Plan for Smart Water Networks Maintenance 	Rep. of Korea	MP
 Establishment of Asset Management System of Wagter Supply Facilities in Jeju Island 	Rep. of Korea	Design
 Installation of Water Heat Energy Supply Facilities in Jangheung District 	Rep. of Korea	Design
 Water Saving Project in Military Bases (WASCO) 	Rep. of Korea	EPC
 Feasibility Study and Basic Plan Establishment forf the Construction of Nakdong 	Rep. of Korea	FS
River Basin Safe Drinking Water Supply System Project (Downstream)		
Basic and detailed design service for Yeosu City local water supply modernization project	Rep. of Korea	Design



Sewerage

As a leading company representing the domestic sewerage sector, we have established a wide range of plans for maintenance of Korea's sewerage facilities, from special/metropolitan cities and cities/ counties to catchment areas.

We are making efforts to meet the technical and regulatory requirements in the design of sewage treatment facilities and pipelines, including the establishment, expansion, modernization, reuse of treated sewage, maintenance of leased sewage pipes, and precise inspection of aging sewage pipes. We also provide the optimal total solution for the entire sewage system, including sewage facility asset management and urban flood prevention.

We are making efforts to realize a sustainable, resource-circulating society for water quality and environmental conservation both domestically and internationally. We have expanded to countries such as Bangladesh, Nepal, Cambodia, Uzbekistan, Tanzania, Nicaragua, and Peru, Ecuador, Indonesia, Ethiopia, Vietnam, Kyrgyzstan and are contributing to improving the living environment of local residents and preserving the water quality of their water effluent sites.

Ansan Public Sewage Treatment Facility Management 2001.12 ~ 2004.02
 Public sewage treatment facility operation and management.
 Preventing water pollution in public waters caused by urban and industrial sewerage.

Location: Ansan area, Gyeonggi-do
 Project Features: Ansan Wastewater Treatment Plant (Q=534,000m³/day) and Daebu Wastewater Treatment Plant (Q=3,000m³/day)

Key Achievement PROJECT

 Wastewater Treatment Plant Construction Wastewater Treatment Plant Construction • WB Funded Consulting Services for Feasi & Bidding Documents for DBO/DB Contr • EDCF funded Consulting Services for Wa • ADB funded Consultancy Services for Ka Design, Supervision and Management • WB funded Preparation of Detailed Desig Wastewater System in Thai Hoa Town, N • Feasibility Study for Expansion and Impre Sewerage Treatment Facilities on 20 site Canoas Waste Water Treatment Plant Co • Water Treatment Facility Installation (3rd Master Plan (Revision) for Seoul Metropo Master Plan for Unit Watershed Sewerage • Build-Transfer-Lease (BTL) for Sewer Ne • Build-Transfer-Operate (BTO) for Centra Buffer Storage Facility Installation Project EDCF funded Provision of Consultancy S of Wastewater Treatment System in Dar • EDCF funded Consulting Services for De of Sewerage System Development in Ta Water Reclamation Center Expansion Pro Cheonan Wastewater Treatment Plant M Waste Water Reclamation Project in Seo Ganggu Port Flood Protection Project in • EBRD funded PIU Support, Design and C Kashkadarya Wastewater Project • Detailed investigation of Gwangju Metro

 Detailed investigation of Gwangju Metro.
 EDCF Cambodia Takmau Sewerage Fac
 Detailed Design for Namyangju City Hwa Treatment Facility Private Investment Pro19

	COUNTRY	SERVICE
ion Project (1st Phase) in Gunsan 2 National Industrial Complex	Rep. of Korea	Design
ion Project (1st Phase) in Gumi High-tech Valley sibility Studies and Preparations of Conceptual Designs	Rep. of Korea	Design
racts (Pagla STP)	Bangladesh	FS/Design
Vastewater Treatment Project in Juigalpa	Nicaraqua	Design/Supervision
Kathmandu Valley Wastewater Management Project:		
t Consultant (DSC-04)	Nepal	Design/Supervision
ign and Bidding Documents for Drainage and		5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
Nghe An Province	Vietnam	Design
rovement of Water Supply and	Peru	FS
tes in Arequipa		
Construction Project	Colombia	FS
d Phase) in Seoul Jungrang Water Reclamation Center	Rep. of Korea	Design
politan Wastewater Maintenance Project	Rep. of Korea	MP
e Treatment Facility Maintenance on Main Stream of Han River	Rep. of Korea	MP
letwork Maintenance Project in Daejeon Metropolitan City	Rep. of Korea	Design
alized Wastewater Treatment Facilities in Gumi City	Rep. of Korea	Design
ct in Ulsan Petrochemical Industrial Complex	Rep. of Korea	Design
Services for Design and Supervision	Tanzania	Design/Supervision
ir es Salaam		
etailed Design and Supervision	Cambodia	Design/Supervision
a Khmau Town Project		
roject in Pangyo New Town	Rep. of Korea	0
Modernization Project (Private Investment Project)	Rep. of Korea	Design
ongseo Industrial Complex	Rep. of Korea	FS
n Yeongdeok County	Rep. of Korea	Design
Construction Supervision for Implementation of	Uzbekistan	Design/Supervision
opolitan City old sewer pipe (2nd stage)	Rep. of Korea	Design
cility Design (Change) Project	Cambodia	Design
<i>r</i> ado Public Sewage roject (BTO-a)	Rep. of Korea	Design



Architecture

We are successfully carrying out projects not only in Korea involving special buildings such as power generation, steel, shipbuilding, machinery, and non-ferrous metal factories, airport passenger terminals, high-speed rail stations, water and sewage related structures such as water purification plants, sewage treatment plants, and wastewater treatment plants, but we are also successfully carrying out various overseas projects in countries such as the Indonesia, Ecuador, Laos, Mongolia, Philippines and Tanzania with professional technology.

Ulsan Integrated Water Operation System Construction Project 2013. 04 ~ 2014. 12 Facility plan for integrated operation and management of water supply facilities distributed and operated throughout Ulsan Metropolitan City Location: All areas of Ulsan Metropolitan City Project Features: water operation center (6,706m²), landscaping (2,826m²)

Q Namyangju Jingun District Storm Water Pumping Station Investigation Project 2012.04 ~ 2013.07 Facility plan for operation and maintenance of storm water pumping station for flood prevention in Jingeon district, Namyangju Location: Namyangju Jingun District

Location: Sungnam Water Treatment Plant (269,353m²)

Key Achievement

PROJECT

 Sungnam Water Treatment Pla • Ulsan Integrated Water Opera • Establishment of the PV Pane Wonchang-dong Low Temper Danam Flood Risk Manageme Material Performance Testing • Danyang Water Treatment Pla • Operation Village for Xe-Pien • Namyangju Jingun District Sto • Xe Pien - Xe Namnoy Hydroel Songsan Green City Wastewa • Gunnam Flood Control Reserv • Textile Industrial Complex Con • Ecuador Galapagos Solar pho • Yeongdeungpo Water Treatm Muharraq Wastewater Treatm Wastewater Treatment Syster • Ulaanbaatar Urban Services Taehwa and Woojeong Distric World Camping Caravanning

Campsite Construction Project Gochon Water Treatment Plan

Project Features: storm water pumping station (2,903m²)

Sungnam Water Treatment Plant Renewal Project 2020.05 ~ 2023.04

Establishment of a safe tap water production base for representative wide-area water purification plants

- in the metropolitan area and realization of the highest level of cleanliness and green image
- Project Features: administration building and 24 other buildings (24,000m²), exterior space



COUNTRY

SERVICE

	000111111	
Plant Renewal Project	Rep. of Korea	Design
ration System Construction Project	Rep. of Korea	Design
el Manufacturing Infrastructure	Uzbekistan	Design
erature Refrigeration Warehouse Construction Project	Rep. of Korea	Design
nent Project	Rep. of Korea	Design
g Center Installation Project	Rep. of Korea	Design
lant Site Administration Building Construction Project	Rep. of Korea	Design
n Xe-Namnoy Hydroelectric Power Project	Laos	Design
torm Water Pump Station Investigation Project	Rep. of Korea	Design
electric Power PPP Project	Laos	Design
ater Treatment Facility Construction Project	Rep. of Korea	Design
rvoir Construction Project	Rep. of Korea	Design
onstruction Project in Central Java, Indonesia	Indonesia	Design
otovoltaic power Plant Construction Project	Ecuador	Design
nent Plant Membrane Filtration Facility Project	Rep. of Korea	Design
ment Plant and Sewer Construction Project in Bahrain	Bahrain	Design
em in Das Es Salaam	Tanzania	Design
and Ger Areas Development Investment Program	Mongolia	Design
ict Flood Risk Management Project	Rep. of Korea	Design
Contest Hall and Yeonin Mountain Multipurpose	Rep. of Korea	Design
ect		
ant Administration Building Remodeling Project	Rep. of Korea	Design

Urban

- Urban Planning & Development
- Landscaping/Leisure
- Smart City

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15)

DOHWA ENGINEERING

URBAN 9



Urban **Planning &** Development

To improve the quality of life and make the city sustainable, we offer various planning services including general plan, management plan (redevelopment) and regeneration plan. We also conduct feasibility reviews and establish business plans as an endeavor to develop eco-friendly cities. Dohwa has completed complex planning projects involving site planning, earthwork construction, water supply and sewage, rivers, bridges, ground and so on to include housing and multiple complex, industrial and logistics complex, the 3rd Generation New Town and Saemangeum waterfront city. We are expanding our business to cover development and planning of new cities, housing complexes and industrial complexes overseas.

Survey Design service for residential land development project in Gwanggyo district 2012. 09 ~ 2020. 12 Supervision and Overall Responsibility Supervision for Section 3-5 2020 ~ · Creating a new residential complex in order to resolve the housing shortage in the metropolitan area and relocating it

to Gyeonggi-do and contributing to the stability and welfare of the people's residential life.

Location: Iul-dong, Woncheon-dong and Ha-dong of Yeongtong-gu, Suwon-si, Sanghyeon-dong, Suji-gu, Yongin-si, and Yeongdeok-dong district, Giheung-gu, Gyeonggi-do
 Project Features: 11,304,494m²

Key Achievement PROJECT

• Development Project of Semangeu Busan Research and Development Busan Eco Delta City Section 2 Deve Gyeongbuk Provincial Office relocat Yeongjong Sky City Development Pr Pyeongtaek Internationalization Plan Jinju Innovation City Development Seongnam Pangyo Creative Econor New Town Development Project for • Project to Build a Techno Industrial

• Hwaseong-si Songsan Green City I • Pyeongtaek U.S. Forces Korea facilit Housing Site Development Project Jeju Advanced Science and Techno Gimhae Daedong High-Tech Industr • Hanam Gyosan public housing distr Daesan Green Complex general ind • Yeongju High-Tech Bearing Nationa Yongin Semiconductor Cluster Gene

Yongin Platform City Development

DOHWA ENGINEERING

	COUNTRY	SERVICE
um Waterfront City (Seondo Island District)	Rep. of Korea	Design
t Special Zone (High-tech Complex) Development Project	Rep. of Korea	Design
evelopment Project	Rep. of Korea	Design
ation New Town Project (Phase 2)	Rep. of Korea	Design
Project in Incheon Free Economic Zone	Rep. of Korea	Design
anning District Development Project	Rep. of Korea	Design
Project in Gyeongnam	Rep. of Korea	Design
omy Valley Development Project	Rep. of Korea	Design
or relocation of Chungnam Provincial Government	Rep. of Korea	Design
I Complex in Ulsan City	Rep. of Korea	Design
Phase 2 Development Project No. 1	Rep. of Korea	Design
ility project Parcel-2B site development project	Rep. of Korea	Design
t in Gwanggyo District, Suwon-si	Rep. of Korea	Design
nology Complex Complex 2 Construction Project	Rep. of Korea	Design
strial Complex Construction Project	Rep. of Korea	Design
trict development project	Rep. of Korea	Design
dustrial complex development project	Rep. of Korea	Design
nal Industrial Complex Construction Project	Rep. of Korea	Design
neral Industrial Complex Construction Project	Rep. of Korea	Design
t Project	Rep. of Korea	Design

of Korea Design of Korea Design

25



Landscaping/Leisure

Dohwa is playing a leading role in developing creative and sustainable space that allows nature and humans to co-exist in harmony. From large-scale national projects such as the National Arboretum Development Project and Preliminary design for Saemangeum Area Tourism & Leisure project to designing parks, tourist attractions, amusement parks, golf courses, ecological conservation and landscape planning.

Preliminary and Detailed Design for Danyang Mancheonha Skywalk Development Project 2012.06 ~ 2015.06 Creating an Experience-type Tourism Facility which is Integrated with the Natural Landscape Location: 19 A Aegok-ri, Jeokseong-myeon, Danyang-gun, Chungcheongbuk-do
 Project Features: 1 Observation Deck (25m), 2 Zipline Courses (980m), Alpine Coaster (950m), etc.

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Key Achievement

PROJECT

 Sejong-si National Arboretum Pro • Danyang-gun Myeongseung Cult Cheongsong-gun Forest Leisure

- Icheon-si Icheon National Cemete • Hwaseong-si Huayung Hose Parl
- Gwangju-si Central Park District 2 Kumho River Grand Plan
- Daegu Grand Park Construction • Yeongcheon-si Let's Run Park Ye Jangmok Tourist Complex in Geo Danyang-gun Mancheonha Skyw • Palgongsan Forest Leisure Sports • Eco-farmland saddle horse riding Saemangeum Ecological Environr • Namwon-si Dragon Tourist Comp • Pohang-si Park Development Pro • Landscape Development Project • Yeongyang-gun Mountain Village Robot Land Development Project • Development of EXPO 2012 Yeos
- 2023 Suncheon Bay International

2012 Yeosu World Expo Construction Management 2009. 02 ~ 2009. 10 • Utilizing the sea for the second international exhibition held in Korea and creating an exhibition complex connected with exhibition facilities • Location: Sujeong-dong, Yeosu-si, Jeollanam-do • Project Features: 1,737m²

	COUNTRY	SERVICE
roject	Rep. of Korea	Design
ulture Village Development	Rep. of Korea	Design
e Sports Recreation Complex Project	Rep. of Korea	Design
etery Expansion Project	Rep. of Korea	Design
ark Construction Project	Rep. of Korea	Design
t 2 Park Construction Project	Rep. of Korea	Design
	Rep. of Korea	Design
n Project	Rep. of Korea	Design
leongcheon Construction Project	Rep. of Korea	Design
eoje-si	Rep. of Korea	Design
/walk	Rep. of Korea	Design
rts Complex Construction	Rep. of Korea	Design
ng complex and livestock R&D complex in Hwaseong-si	Rep. of Korea	Design
nmental Land Development Project (Phase 1)	Rep. of Korea	Design
nplex Construction Project	Rep. of Korea	Design
roject	Rep. of Korea	FS
ct for Dasan New Town in Namyangju-si	Rep. of Korea	Design
ge Culture Site Development Project	Rep. of Korea	Design
ct in Changwon-si	Rep. of Korea	CM
osu International Exposition Center	Rep. of Korea	СМ
al Garden Expo Construction Project	Rep. of Korea	Design





Smart City

Dohwa contributes to creating a future city that improves the quality of human life by presenting a smart city model that incorporates innovative technologies from the Fourth Industrial Revolution era. Providing consultation for urban and regional planning, new town, residential complex, industrial complex, logistics complex, tourism complex, urban renewal and maintenance and providing optimized solutions for fields such as smart transportation, energy, safety, environment and tourism to meet the different needs that each country or city might have.

Key Achievement PROJECT

 Vietnam Social Housing Development Dung Quat Urban Development Project Chau Giang Smart City and High Tech Anowara II, Saberang Free Economic 2 • Ulaanbaatar Urban Services and Ger Bayangolyn AM Rental Housing Const • Tashkent Urban Development Project Nairobi Central Railway Station and Its • Konza Smart Digital Media City (DMC) Bole-Lemi and Kilinto Industrial Zones Smart City in Astete Airport Hinterland • New Town in El Dorado International A Mongolia Cushing Valley Sinjun Mode Bangladesh Khulna Smart City Develo • Paraguay Bagna do Sur area developr

PORTFOL

Incheon Free Economic Zone Songdo Smart City

A global hub for Northeast Asia high-tech business and a high-tech business city utilizing innovative smart city technology
 Location: All areas of Songdo-dong, Yeonsu-gu, Incheon
 Project Features: 5,340ha





	COUNTRY	SERVICE
nt Project	Vietnam	FS
ect	Vietnam	FS
chnology Industrial Complex Development Project	Vietnam	MP
c Zone Development Project	Bangladesh	FS
r Areas Development Investment Program	Mongolia	FS/Design
struction Project	Mongolia	FS
ct	Uzbekistan	FS
Its Surroundings Redevelopment Project	Kenya	MP
C) Construction Project	Kenya	FS
es Development Project	Ethiopia	Design/Supervision
nd Development Project, Cuzco	Peru	FS
I Airport Hinterland Development Project, Bogota	Colombia	MP
le Smart City Development Project	Mongolia	MP
elopment Project	Bangladesh	MP
pment project	Paraguay	MP

Transportation

- Road/Airport/Traffic Planning
- Railway/High-speed Railway
- Urban Railway/Metro



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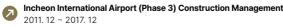


Road/ Airport/ Traffic **Planning**

Dohwa has successfully performed tasks in design, supervision and CM for domestic expressway, national highway and local road projects, including Gyeongbu Expressway and overseas projects that involve feasibility study, design, supervision, PMC and PMO. In total, we have successfully conducted over 60 projects so far. We were responsible for Incheon International Airport's 2nd stage construction project management, 3rd stage comprehensive project management and 4th stage Landside facility design. In Peru, we were in charge of PMO for the Peru Chinchero New Airport Project. With efficiency, we develop, operate and manage air and land traffic, which is critical to national transportation. In transportation planning, we provide services including comprehensive transportation planning, public transportation, transportation system improvement and traffic safety related projects as we pave the way for a human-centered, eco-friendly green transportation system.

Busan Outer Ring Expressway Construction Work Preliminary & Detailed Design (Section 7) 2008. 12 ~ 2010. 06

· Stimulating regional exchanges, eliminating traffic congestion, and maximizing logistics and transportation functions by connecting the coast and inland by securing a smooth connection towards the new port. Location: Nopo-Dong, Geumjeong-Gu ~ Baekgil-Ri, Cheoma-Myeon, Gijang-Gun, Busan
 Project Features: Expressway L=6.3km, 4 Lanes, 100km/hr, Nopo Junction, Geumjeong Intersection, 10 Bridges, 1 Tunnel, Uninterrupted Underpass, Ecological Tunnel



· Overall project management, design supervision, and technical support in specialized fields for the 3rd phase of Incheon International Airport Construction Location: Unseo-dong Area, Jung-gu, Incheon Project Features: Site Creation, 2nd Passenger Terminal, Cargo Terminal, 2nd Passenger Apron, 2nd Cargo Apron, 2nd Passenger Terminal Parking Lot, Access Road (section 1, 2), T1-T2 Connection Road (section 1, section 2)

Key Achievement PROJECT

 Construction of Sejong-Pocheon highway (Sejong-Ansung) • Construction of Saemangeum - Jeonju Highway • Sikman ~ Sasang (Daejeo Grand Bridge) Road Construction Project Construction Project of Coastal Ring in Ulleungdo • Da Nang – Quang Ngai Expressway Development Project • Loichang' Amatak – Lodwar Road (A1) construction Project Iguitos-Saramiza Road Construction Civil Works under Busega – Mpigi Expressway • Padang Bypass Capacity Expansion project the New Chinchero - Cusco international Airport Saemangeum-si Airport Construction Project • Incheon International Airport Phase 4 Landside Facility Construction Project Incheon International Airport Phase 2 and Phase 3 Comprehensive Project Seoul Gangnam Circulation Urban Expressway (Private Investment Zone) • Expressway 30, Sangju-Youngdeok (Sections 16~19) • Ethiopia, Bus Rapid Transit Construction Project • WB Ho Chi Minh Green Transportation Development Project Bus System Improvement Project (CS-9) Gongju and Sejong BRT Construction Project

- Modernization of Tbilisi-Rustavi Section of the Tbilisi-Red Bridge (Azerbaijani border) Road
- Improvement and Expansion of Airport services in the Region of Cusco through
- Ivory Coast, Road development project to improve Road Fluidity and Capacity Building in Abidjan Côte d'Ivoire
- Introduction of the BRT System and Improvement of Bus-only Roads in Seongnam City

COUNTRY

Rep. of Korea Design Rep. of Korea Rep. of Korea Design Rep. of Korea Vietnam Georgia Kenya Peru Uganda Indonesia Peru

Rep. of Korea FS Rep. of Korea Design Rep. of Korea Rep. of Korea Supervision Rep. of Korea Supervision Ethiopia Vietnam Rep. of Korea FS/Planning Rep. of Korea Designz

PMO CM Design FS Planning

SERVICE

Desian

Design

Design/Supervision

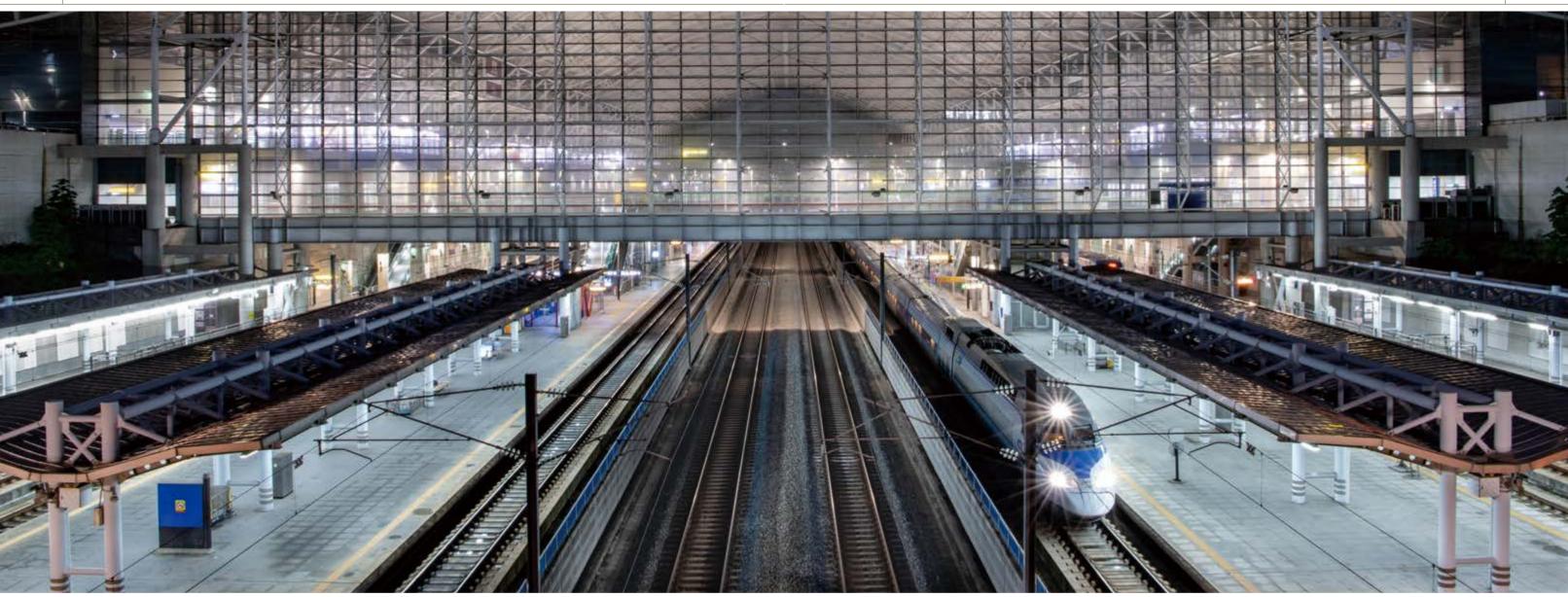
Design/Supervision

Design/Supervision

Design/Supervision

PMC

FS



Railway/ High-speed Railway

Based on outstanding technology and years of extensive experience in Korea, Dohwa has accomplished a number of overseas railroad projects in Poland, Peru, Panama, Bangladesh, Sri Lanka, Vietnam, Philippines, Tanzania, Algeria, etc. We are also expanding our business to include railway construction and private investment projects that combine design-build concept and capital. We offer our expertise to all stages and areas of the railway system, including civil engineering, track, depot, E&M, signaling and communication.

Key Achievement PROJECT

- Seoul-Busan High-speed Rail Constructio
 Honam High-speed Rail Construction (2nd) Wonju-Gangneung High-speed Rail (KTX,
- Double Track Railway (Jungang Line) Cons
 Ulsan-Pohang Double Track Railway Cons
 Trans-Korean Railway (Gyeongwon Line, N
- Poland high-speed rail construction project
 ADB funded Consulting Services Contract
 Double Track Project
 Feasibility Study with Detail Design and Te
- for Construction of Rail Line From Bhanga K-EXIM funded Feasibility Study for Const Karnaphuli River Project
 Trasandino Long Rail Tunnel Construction
- Inasandino Long Raii Tunnei Construction
 Marcona-Andahuaylas Railway Construct
 Supervision of Contracts for Railway Tracl Rehabilitation Works Package A&B
 Preliminary and Detailed Design for Nouad
- High-speed Rail Construction Project

Seoul-Busan Gyeongbu High-Speed Railway Construction Project 1997. 03 ~ 2005. 08 Relieve from the traffic and logistics difficulties of the existing Gyeongbu-axis railway line through the introduction of high-speed railway Location: Routes via Gyeongju (Gyeongju-si, Gyeongsangnam-do-Ulju-gun, Ulsan)
 Project Features: Line length 27km, 1 station, 2.5km bridge, 14.8km tunnel

BUSINESS PORTFOLIO

High-speed Rail Construction Project • ADB funded Transport Project Preparatory for the Feasibility Study and Detailed Desis • Project Consulting Service (Feasibility Stu-the Lao PDR to Vung Ang in Vietnam • Detailed Design of Railway and Earthwork • Feasibility Study to Link Yanbu Industrial C the Railway line between Jeddah and Jub • Detail Central Research Detail Survey and Design of Electrified Ra Master Plan and Feasibility Study for Jab

DOHWA ENGINEERING

	COUNTRY	SERVICE
tion Project 2nd Phase) Project X, Korea Train Express) Construction Project onstruction Project onstruction Project 2, Northern Donghae Line, etc.) Rehabilitation Project ject PR7 act for Construction Supervision of Akhaura-Laksam	Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Poland Bangladesh	Design/Supervision Design/Supervision Design/Supervision Design/Supervision FS/Design Design Supervision
Tender Document Preparation ga to Payra via Barisal istruction of the Rail-and-Road Bridge over	Bangladesh Bangladesh	FS/Design FS
on Project ction Project ack and Structure (Bridges & Culverts)	Peru Peru Tanzania	FS FS Supervision
aceur-Marrakesh (Lot 3)	Morocco	Design
ory Facility, Consulting Service	Sri Lanka	FS/Design
esign at Colombo Suburban Railway Project tudy) for a Railway Link from Vientiane in	Lao PDR, Vietnam	FS
rk for Saudi Sulfur Railcar Loading Facilities of ARAMCO I City and King Abdullah Economic City with ubail	Saudi Arabia Saudi Arabia	Design FS
Railway Line for Mechi-Mahakali Railway botabek Railway in Indonesia	Nepal Indonesia	Design FS/MP

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Urban Railway/Metro

Dohwa has implemented various urban railway projects from Metro rapid railway linking major cities, MRT (Mass Rapid Transit), Monorail, Tram to LRT (Light Rail Transit).

Especially, we have completed the "Private Investment Project of Metropolitan Rapid Transit Railway (GTX) Line A" that can connect major stations in Seoul from satellite cities in capital area within 30 minutes as the first financial investor-led (FI) project in Korea and newly transformed paradigm of engineering industry.

Ø

Construction of Daegu Urban Railway Line 3 Monorail 2007. 10 ~ 2009. 06 (Photo Source: Daegu Metropolitan City / Photography contest (photo by Jung Gi Hwan) Dissolution of burgeoning traffic congestion and network connection establishment with Urban Railway Line 1,2 currently in operation
 Object section: Daegu Metropolitan City Buk-gu Maecheon-dong ~ Paldal-dong,
 Nam-gu Daebong Intersection ~ Suseong-gu Beommul-dong
 Project Scale: Length of route: L=23.9km, Full through Bridge, Stations: 30 Nos

Key Achievement

PROJECT

 Private Investment Proje Private Investment Proje Private Investment Proje Seoul Urban Railway Line Gwangju Urban Railway • Daegu Urban Railway Line • Yeongdong-daero underg • Lima Metro Line 2 Constr • Lima Metro Line 3,4 Cons • Panama Metro Line 3 Cor • Panama Metro Line 5 Cor Algiers Metro Line 1 Ain N • Algiers Metro Line 1 Lot • Extension of Oran Tramw • Annaba Tramway Line 1 Manila Metro Subway Pro Manila Metro Rail Transit • Ho Chi Minh Metro Tan S • Ho Chi Minh Metro 5-2 se Jakarta LRT phase 2 and Bali LRT construction project





ect of Metropolitan Rapid Transit Railway (GTX) Line A	Rep. of Kore
ect of Metropolitan Rapid Transit Railway (GTX) Line B	Rep. of Kore
ect of Shinansan Double-Track Line	Rep. of Kore
e 9 extension project – Phase 4	Rep. of Kore
Line 2 Construction Project - Phase 1	Rep. of Kore
ne 3 Monorail Construction project	Rep. of Kore
rground space complex development project	Rep. of Kore
truction Project	Peru
nstruction Project	Peru
onstruction Project	Panama
onstruction Project	Panama
Naadja–Baraki Section Extension Construction Project	Algeria
1 Extension Construction Project	Algeria
way Line 1 Construction Project	Algeria
Construction Project	Algeria
roject (MMSP) Phase 1	Philippines
t (MRT) Line 7 Construction Project	Philippines
Son Nhat Airport Connection Section Construction Project	Vietnam
section Construction Project	Vietnam
d Bali LRT construction project	Indonesia

COUNTRY

SERVICE

ep. of Korea PPP/Design ep. of Korea PPP/Design ep. of Korea PPP/Design ep. of Korea Design ep. of Korea Design ep. of Korea Design ep. of Korea Design/Supervision Supervision FS DB/Design FS Supervision FS/MP/Design Design/Supervision Design/Supervision Supervision DB/Design FS FS FS

- Solar Power
- Wind Power
- Power Plant/Environment Plant





Solar Power

In order to reduce greenhouse gas emissions and contribute to protecting the global environment, we are currently pursuing photovoltaic projects in domestic and overseas markets such as Japan, Vietnam, Iraq, Ethiopia and Honduras. In particular, we strive for the convenience of mankind by promoting solar power projects in remote areas with poor environments. Furthermore, based on our experience in conducting various tasks such as feasibility, consulting, design, EPC and supervision of domestic and overseas aquatic and onshore photovoltaic power businesses, we are expanding our scope to business development and investment projects as well.

Quang Binh Le Thuy Photovoltaic Plant Project 2020. 06 ~ 2020. 12 Solve the supply and demand of electricity by using solar power generation, an eco-friendly energy, to reduce the lack of electricity in Quang Binh, Vietnam Location: Le Thuy County Quang Binh Province Vietnam

- Location: Le Thuy County, Quang Binh Province, Vietnam
 Project Feature: 49.5MW
- Photovoltaic Plant Construction Project at Ariji Country Club 2009. 01 ~ 2009. 05
 Solve the supply and demand of electricity by using solar power generation, an eco-friendly energy, to operate the Ariji Country Club
 Location: Ariji CC, Ganam-myeon, Ganam-eup, Yeoju-gun, Gyeonggi-do
 Project Feature: 194.04kW

3 Hamada Photovoltaic Plant EPC Project 2016. 11 ~ 2017. 04

- Solve the supply and demand of electricity by using solar power generation, an eco-friendly energy, to reduce the lack of electricity in Hamada, Japan
 Lection Machanese Town Llowerdo (20), Chinaga Deficition, Japan
- Location: Nagahama Town, Hamada City, Shimane Prefecture, Japan
 Project Feature: 12MW

Key Achievement PROJECT

K-Water metropolitan (regional) carbon neutral onshore solar power project
Yeosu Gwangyang Port idle site solar power generation project
Hapcheon Dam floating solar power generation project
K-Water floating solar power development project
Yeongheung solar power complex 5 power generation project
Goheung Bay floating solar power development project
Le Tui solar power generation project in Quang Binh Province
Morioka solar power construction project
Yufu solar power construction project



DOHWA ENGINEERING

• Iseshima solar power generation project construction work

COUNTRY

Rep. of Korea Vietnam Japan Japan Japan

SERVICE

FS FS FS Design Design EPC EPC/0&M EPC/0&M EPC/0&M



Wind Power

In line with the global trend of promoting eco-friendly energy policies and developing new and renewable energy, Dohwa has been conducting feasibility studies and design for numerous on and offshore wind farm construction projects at home and abroad. In recent years, we have successfully completed an EPC project of a domestic wind power plant. We will continue to move forward as a leader in the future wind power industry based on our accumulated experience and technology.

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Sinji Wind Power Complex Development Project EPC 2018. 03 ~ 2019. 12 Contributing to domestic energy supply and demand plans and constructing a pollution-free wind farm that is friendly to nature Location: Wolyang-ri, Sinji-myeon, Wando-gun, Jeollanam-do
 Project Features: Wind Power Generation 17.325MW, Underground Line (22.9kV) 16.87km

Key Achievement

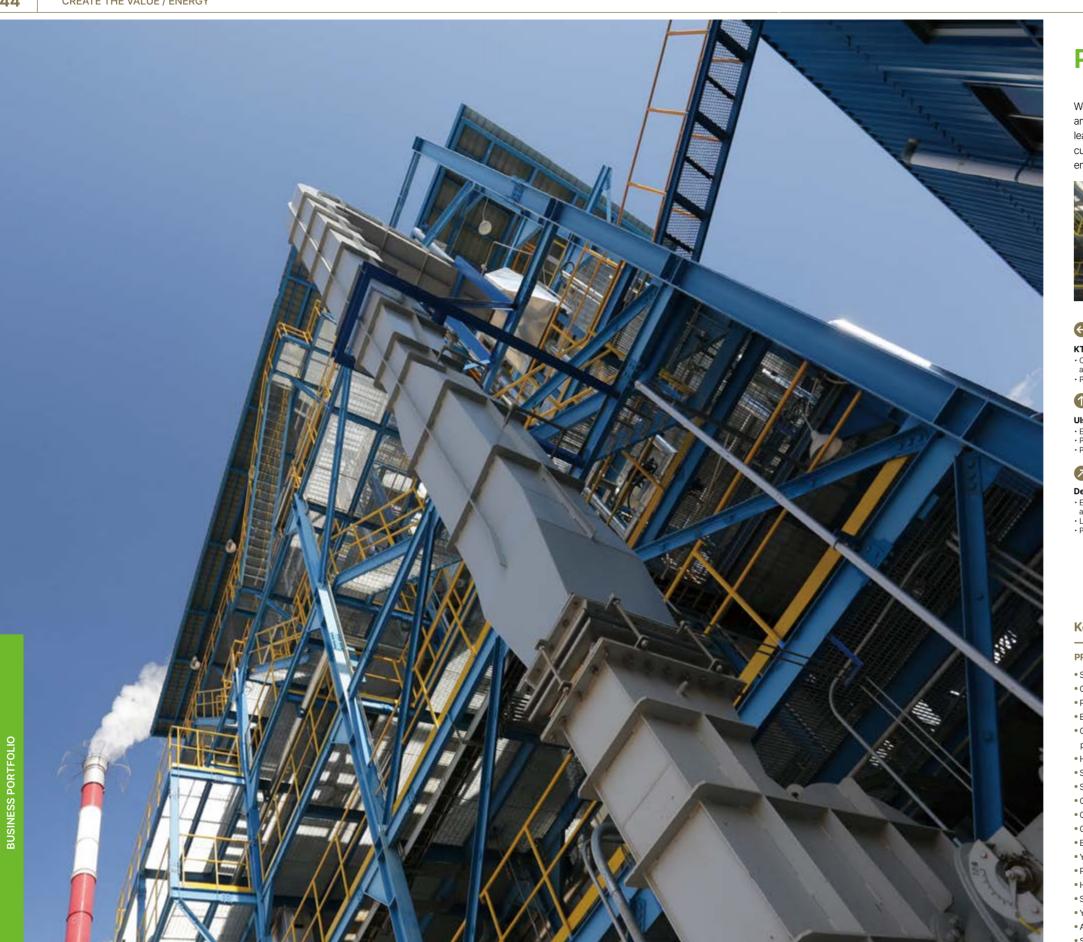
PROJECT

 3rd Wind Power Generation Yangsan City wind power Yeosu Geumodo offshore Laos Buarapha wind power Donghae 1 floating offshore • Wando Geumil Offshore Wir Jeju City bill wind power de Jangheung-gun wind powe

• Jeju Dongbok-ri Phase 1 and • Wando-gun Shinji Wind Pov Floating offshore wind power Shinan Offshore Wind Powe Nakwol offshore wind power Southwest Sea 500MW offs • Jeju Handong-Pyeongdae K-Wind Power offshore wind Boryeong Nokdo Offshore \ Yeonggwang Chilhae offsho Shinan floating offshore win Shinan large-scale offshore Taean offshore wind power Yokji offshore wind power Shinanwui offshore wind po

	COUNTRY	SERVICE
on Comprehensive Management Plan Establishment Project	Rep. of Korea	Plan
generation project	Rep. of Korea	FS/Design
wind power development project	Rep. of Korea	FS/FEED
er generation project	Laos	FS
ore wind power generation project	Rep. of Korea	FS
Vind Power Project	Rep. of Korea	Design
development project	Rep. of Korea	Design
ver generation construction project	Rep. of Korea	Design
and 2 Wind Power Complex Development Project	Rep. of Korea	Design
ower Complex Construction Project EPC Construction	Rep. of Korea	EPC
wer commercialization complex construction project	Rep. of Korea	FS
wer Complex (300MW) Construction Project	Rep. of Korea	FS
wer complex development project in Yeonggwang-gun	Rep. of Korea	FS
offshore wind farm development project	Rep. of Korea	FS
e offshore wind power development project	Rep. of Korea	Design
ind power generation project	Rep. of Korea	FS
e Wind Power Generation Project	Rep. of Korea	FS
shore wind power generation project	Rep. of Korea	FS
vind power generation complex development project	Rep. of Korea	FS
re wind power complex development project	Rep. of Korea	FS
er generation project	Rep. of Korea	Design
r generation project	Rep. of Korea	Design
power generation project	Rep. of Korea	Design





We have differentiated expertise in comprehensive engineering, EPC services and consulting services, and operation and maintenance in the energy, power generation and environmental plant fields. As a leader in the energy field, we provide the best engineering services, EPC, and O&M services by utilizing cutting-edge technologies and patent rights in combined cycle power generation, new and renewable energy, WTE (incineration, biogas), sanitary landfill, and biomass power generation business.



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Project Features: Power generation 7.3 MW

Design service for Pyeongtaek Eco Center Private Investment Project 2013.07 ~ 2015.10 Establishing a resource-circulating city by converting waste into resources Establishing a resource-circulating city by converting wasternitoresources and producing new and renewable energy
 Location: Godeok-myeon, Pyeongtaek-si, Gyeonggi-do
 Project Features: Waste Fueling Facility: 250 Ton/day, Recycling Facility: 50 Ton/day, SRF Cogeneration Facility: 130 Ton/day, Sludge Treatment Facility: 184 Ton/day, Organic Biogasification Facility: 210 Ton/day

Key Achievement

PROJECT

 Samcheonpo natural gas Goseong natural gas pow Pyeongtaek-si Poseung bio Banwol Power Plant Multip • Gyeongju-si Angang busin power generation, and dry

• Hadong Combined Cycle • Sejong (North) Happy Dist Samcheonpo Units 5 and 6 Gwangju City Metropolitan Changwon City food waster Gyeongbuk Northern Area • Bundang combined cycle Yongin combined cycle por Pyeongtaek combined cyc • Hapcheon Clean Energy C Supervising agency for Shi

• Yangju City Ghana resourc • Aspex Steam Turbine Expa Sri Lanka solid waste treat

Power Plant/Environment Plant



KTH Biomass Power Plant Installation Work 2011.08 ~ 2013.03 Contributing to the Utilization of renewable energy in electricity production by using Bark, an abundant resource in Kalimantan, Indonesia, as the raw material

Ulsan Eco Recycling Green Energy Development Project 2020.06 ~ 2022.05 Establishment of waste management facility within Ulsan Industrial Complex

Project Description: Incinerator: 91.2 Ton/day, Waste water management: 300 Ton/day, Sludge drying: 300 Ton/day

	COUNTRY	SERVICE
power generation project	Rep. of Korea	Design
ver generation project	Rep. of Korea	Design
biomass integrated energy project construction work	Rep. of Korea	Design
iple Turbine Generator Installation EPC Construction	Rep. of Korea	EPC
iness waste incineration,	Rep. of Korea	EPC
rying facility construction project		
e Unit 1 construction project	Rep. of Korea	Design
strict Energy Facility Construction Project	Rep. of Korea	Design
d 6 environmental facility improvement project	Rep. of Korea	Design
an Sanitary Landfill Phase 2-2 Construction Project	Rep. of Korea	Design
ste water bio-energy facility installation project	Rep. of Korea	Design
ea Environment and Energy Town Development Project	Rep. of Korea	Design
e power plant blocks 1 and 2 construction project	Rep. of Korea	FS
oower generation construction project	Rep. of Korea	FS
ycle power generation facility relocation project	Rep. of Korea	FS
Complex Construction Project	Rep. of Korea	FS
hinpyeongtaek natural gas power plant construction, etc.	Rep. of Korea	PMC
rce circulation energy supply project construction work	Rep. of Korea	EPC
pansion Project	Indonesia	EPC
atment new landfill construction project	Sri Lanka	CM

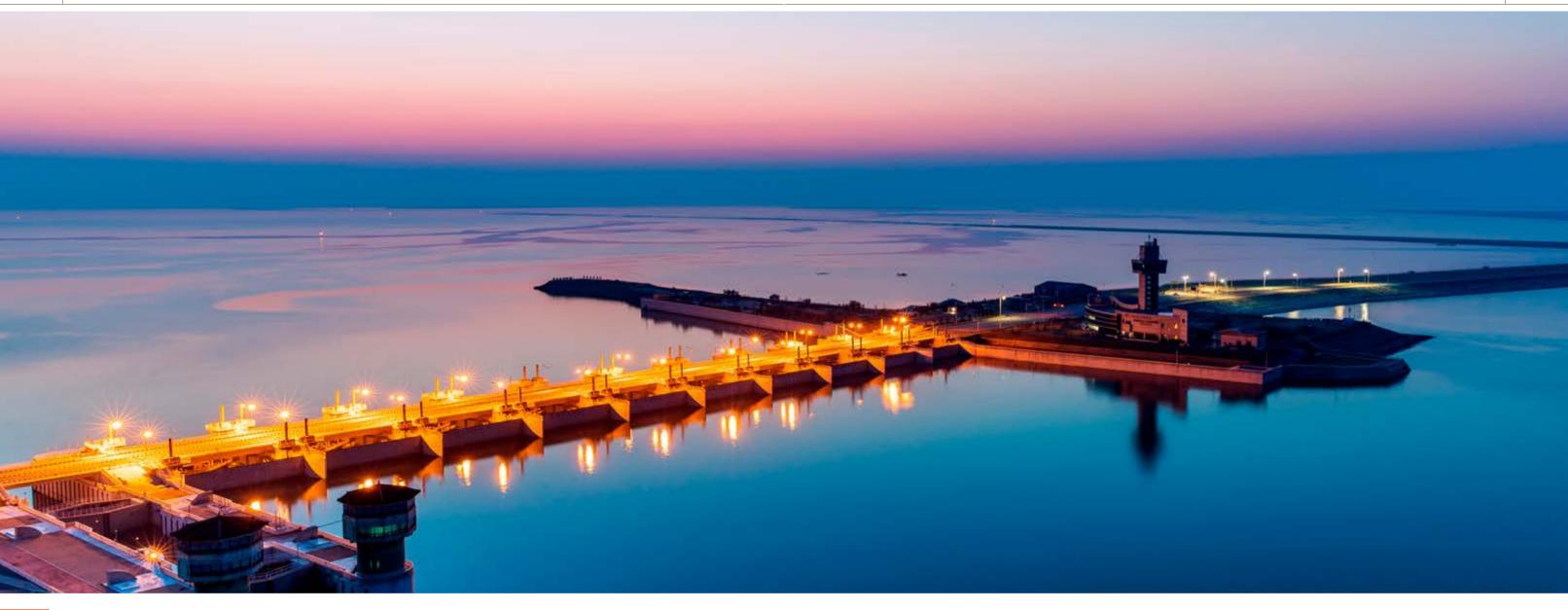


BUSINESS PORTFOLIO

- Water Resources (Rivers/Disaster Prevention/Dams/Hydropower)
- Harbor & Coastal/Bridges/Tunnels
- Environmental Assessment

DOHWA ENGINEERING

INFRA-



Water Resources

Rivers/ Disaster Prevention/ Dams/Hydropower Starting with the 'Water Resource Technology Survey of the Okcheon Branch of the Geumgang Watershed' in 1961, we have been carrying out numerous projects in the domestic water resources and disaster prevention fields, and have been actively participating in overseas river development, hydroelectric power generation, and flood control integrated planning projects since the 2000s.

With the best technology, comprehensive basin plan, river basic plan, comprehensive river development plan, flood risk map production, river disaster prevention and ecological river restoration project, basin survey, dam survey and design, securing water for maintenance, flood control pond, drainage pump station, and hydropower. It is playing a leading role in the fields of power generation projects, tidal power generation, natural disaster reduction comprehensive plans, storm water runoff reduction measures, natural disaster risk improvement district maintenance projects, disaster impact assessment and disaster recovery project analysis and evaluation, and emergency response plans. In particular, based on our experience in carrying out hydroelectric power generation projects, we are expanding into overseas hydroelectric power generation business development and investment projects.

(<u>1</u>)

Feasibility study and basic plan establishment for Saemangeum tidal power generation project 2009. 06 ~ 2010. 04

Establish Saemangeum as a carbon-neutral and green energy hub and

- establish a basic plan for tidal power generation project to achieve sustainable target water quality of Saemangeum Lake.
 Project scale: Facility capacity 140MW (23.3MW × 6 units, Bulb-type Kaplan water turbine),
 - water gates 15.3m (B) × 12.0m (H) × 4 gates

Key Achievement PROJECT

• Measures to strengthen dimensional sta • Establishment of River Master Plan(C • Integrated river-basin development pr • 2021 National River Basin Survey • Integrated Urban River(Daechon river) Comprehensive Storm and Flood Dan • Preliminary and detailed design for con of living area damaged by storm and fl • Preliminary and detailed design for the wind and flood damage living areas in (• Feasibility study and basic planning for Construction for Yeongcheon Dam Sa • Pumped Storage Consturction project • Feasibility study and basic plan establ Gulpur Hydropower Owner's Engineer • Xe Pian – Xe Namnoy Hydropower de • Ethiopia SIBILU Dam and Water Facilit • Indonesia Tripa-1 Hydropower Project Marikina River Flood Defense Project Climate change response project to res Integrated Flood Control Plan for CHI • Feasibility study for Cambodia Battan



	COUNTRY	SERVICE
tability of national rivers for flood safety in response to climate change	Rep. of Korea	Design
Change) for Lower Kumho River Area	Rep. of Korea	Design
project for Sincheon and Kumho River	Rep. of Korea	Design
	Rep. of Korea	Design
er) Dimensioning Plan	Rep. of Korea	Design
amage Reduction Plan in Gyeonggi-do	Rep. of Korea	Design
omprehensive maintenance project	Rep. of Korea	Design
l flood in Jangsan district		
ne comprehensive maintenance project of	Rep. of Korea	Design
n Chimsan and Sangyeok districts		
for deep rainwater drainage facilities in the Dorimcheon area	Rep. of Korea	Design
Safety Enhancement Project	Rep. of Korea	Design
ect (Pocheon)	Rep. of Korea	FS
ablishment for Saemangeum tidal power generation project	Rep. of Korea	FS
ering	Pakistan	Supervision
development project	Laos	Design
ilities project	Ethiopia	Design
ect	Indonesia	FS
t	Philippines	FS/Design
esilience watershed in the eastern dry corridor in El Salvador (PMC)	El Salvador	PMC
HICAMA, ZANA, VIRU, CHANCAY, OLMOS in Peru	Peru	Design
ambang II hydroelectric power generation (BOT) project	Cambodia	FS



Harbor&Coastal/Bridge/Tunnel

Starting with the "Survey and Design Service for the Mokpo Port Samhakdo Quay Wall New Construction" in 1975, we have successfully carried out various projects such as design, supervision, and alternative/turnkey projects in the port and coastal fields for over 50 years. In particular, in 1970, we designed Korea's first IRAN Koramsha Port and Indonesia's 100,000-ton loading pier, laying the foundation for expansion into overseas business.

Recently, based on accumulated design experience and technological know-how, we are actively participating in not only traditional port fields such as port facilities and coastal protection facilities, but also fields such as fuel unloading docks, ash disposal plants, intake and drainage structures, and marine plants. We are expanding our territory. We have designed various types of structures, including road and railway bridges, underground tunnels, and offshore structure foundations, including offshore wind power, at home and abroad. Based on this experience, we are carrying out safer and more engineered structure planning and design. All members are working to design structures optimized for temporary areas around the world based on design standards and various specifications for each country, and are pursuing business expansion into special bridge construction supervision, PMC, and EPC.

Bidding design for Chojeong-Hwamyeong road construction project (Hwamyeong Bridge) • Establishment of wide-area transportation network between major cities in Gyeongnam, such as Gimhae and Changwon, and the eastern mountain area Location: Hwamyeong-dong, Busan and Daedong-myeon, Gimhae-si Project Features: 2-pylon concrete cable-stayed bridge (main bridge: 115+270+11)

Key Achievement

HARBOR & COASTAL PROJE • Design for Busan New Port South • Detailed design for Gyeongin Ara \ Detailed design design service for • Preliminary and detailed design fo and Bukseong Port access road ex Design Technology for Boryeong basic and detailed design for Nam • Design technology service for Yea • Feasibility study for Indonesia's ne

BRIDGES PROJECT

• Feasibility Study for Bangladesh N • Feasibility Study for Indonesia Bata • Detailed design for the construction and 5th residential zone outer ring • Detailed design and construction s for Myanmar Friendship Bridge co • Feasibility study and basic plannin

• Detailed design for Aphae-Amtae construction, lump-sum bidding Detailed design for Amsa Bridge Detailed design for CARLOS bridg

TUNNELS PROJECT

 Construction of Geumbitnoeul Bridgen in the Administrative Center Com • Private Investment Project for Sec • 2020 Groundwater Pollution Con Environmental Pollution Remediat Construction of Juam Dam Stabil

Busan New Port South Container Terminal (Phase 2-4) 2004. 06 ~ 2007. 12 (Photo source : Busan Port Authority) Container terminal construction in Busan New Port, Mega Hub Port in Northeast Asia.

 Location: Seongbuk-dong, Gangeo-gu, Busan
 Project Features: 3 berths (L=1,050m) for 50,000 DWT vessels, hinterland 630,000m², container handling capacity 1.5 million TEU 2006.06 ~ 2007.02

ECT	COUNTRY	SERVICE
th Container Pier Phase 2-4 private proposal project	Rep. of Korea	Design
a Waterway Project Section 6 facility construction	Rep. of Korea	Design
or Ulleung Airport construction work	Rep. of Korea	Design
for Incheon Port waterfront construction	Rep. of Korea	Design
expansion		
g Thermal Power Plant Pier 3 Construction Project	Rep. of Korea	Design
mae 1-ri erosion prevention facility		
eongheung Thermal Power Plant Units 5 and 6 (general field)	Rep. of Korea	Design
new capital relocation and port development	Indonesia	FS
development project in Acahutla Port, El Salvador	El Salvador	FS
	COUNTRY	SERVICE
Meghna Bridge Project	Bangladesh	FS
atam-Bintan Bridge Project	Indonesia	FS
tion of Geumbitnoeul Bridge	Rep. of Korea	Design
ng road in the multifunctional administrative city		-
n supervision	Myanmar	Design/Supervision
construction project		
ing for Shanna ~ Masirah land bridge in Oman	Oman	FS/Mater Plan
e (Section 1) road construction design,	Rep. of Korea	Design
and connecting road construction work	Rep. of Korea	Design
lge in Peru	Peru	Design
	COUNTRY	SERVICE
Bridge and Outer Ring Road	Rep. of Korea	Design
mplex City		0
Seoul Metropolitan Area Rapid Transit Line A	Rep. of Korea	Design
oncern Area Survey and Evaluation Project	Rep. of Korea	*
iation Project for Camp Hovey (Shooting Range)	Rep. of Korea	•
pilization Project (T/K)	Rep. of Korea	Design





Assessment

Environmental We have implemented environmental impact assessment, or sustainable development (strategies environmental impact assessment, small scale environmental impact assessment). We have implemented environmental impact assessment for sustainable development (strategic impact assessment, post-environmental impact assessment, etc.) in urban development, road, railway, water resources, power generation, offshore wind power, port projects, etc. and currently leading the future value by creating the environmental plan based on our accumulated technical insights.

> Environmental Impact Assessment for Tamna offshore wind power expansion project 2022.03 ~ Development of offshore wind power for Jeju Special Self-Governing Province clean energy independent island
> Project Scale: Offshore wind power 102 MW (Existing: 30MW, Expansion: 72MW)

- Environmental Impact Assessment and Post-environmental Impact Assessment for SMG Biomass power plant construction project
 - To satisfy new renewable energy supply & expansion policy and contribute to stable electricity supply in Gunsan industrial complex and Saemanguem region.

Project Scale: power generation 100MW, Area 54,575m²



Key Achievement PROJECT

• Environmental Impact Assessment for • Youngsan River Naju District Environm • Environmental Impact Assessment for Yo • Environmental Impact Assessment for • Environmental Impact Assessment for • Busan New Port - Gimhae Highway Co • Environmental Impact Assessment for

Railway Line A (GTX-A Project) • Environmental Impact Assessment for • Environmental Impact Assessment for S • Environmental Impact Assessment for • Environmental Impact Assessment for • Environmental Impact Assessment for F • Environmental Impact Assessment for Ul • Environmental Impact Assessment for • Environmental impact assessment of S • Environmental impact assessment of t transmission line construction project • Environmental impact assessment of S Impact assessment of multifunctional • Environmental Impact Assessment for • Environmental impact assessment of

	COUNTRY	SERVICE
or Jeju Public Wastewater Treatment Plant Modernization Project	Rep. of Korea	Design
mental Impact Assessment	Rep. of Korea	Design
Yongin Semi-conductor Cluster Business Complex Development Project	Rep. of Korea	Design
or Busan Eco-delta City Waterfront Development Project	Rep. of Korea	Design
or Yeosu Marine Tourism Complex Project	Rep. of Korea	Design
Construction Strategy and Environmental Impact Assessment	Rep. of Korea	Design
or Private Investment Project of Metropolitan Rapid Transit	Rep. of Korea	Design
or KTX Incheon Linkage Project	Rep. of Korea	Design
or Stage 2 Development of Jeju Outer Port	Rep. of Korea	Design
or Yeosu Green Energy LNG Group Energy Project	Rep. of Korea	Design
or SK hynix Inc. (Cheong Ju) Power Plant	Rep. of Korea	Design
or Pohang Biomass Power Generation Project	Rep. of Korea	Design
Ulsan Floating Offshore Power Generation Complex Construction Project	Rep. of Korea	Design
or Sinan Offshore Wind Farm Complex Construction Project	Rep. of Korea	Design
f Seomjingang River Jeokseong district and 1 location	Rep. of Korea	Design
f the 345kV Dangjin Thermal Power Plant-Sinsongsan	Rep. of Korea	Design
t		
f Songdo International City (District 5 and 7) development project	Rep. of Korea	Design
al administrative city (Sejong City) large-scale parks, etc.	Rep. of Korea	Design
or Taean Offshore Wind Power Complex Construction Project	Rep. of Korea	Design
f Jeju Gwangnyeong-Dopyeong bypass construction project	Rep. of Korea	Design

We Practice Sustainable Management

We prepare for the future with state-of-the-art technology in a rapidly changing market environment.

Dohwa's pursuit of technological development and innovation is the force that assures continued growth toward the future. We are creating the future of construction engineering suited for the Fourth Industrial Revolution era. The technologies include collecting and analyzing big data with AI and using nextgeneration technologies, such as BIM and CAE to strengthen design component efficiency, while self-developing the web-based design platform DIDAS that converts and shares all design output into digital forms.

Our corporate growth is not limited to the pursuit of higher profits and revenues, but is also accomplished through fulfilling social responsibilities

Dohwa's employees support the happiness and well-being of people worldwide, including our local communities, by supporting the "Hope Sharing Fund" and actively participating in volunteer activities. To overcome the damage caused by COVID-19 and prevent its spread, we are extending a helping hand to disaster-stricken areas both domestically and internationally. Our contribution to world peace and safety includes providing various subsidies, health products, and corona diagnostic kits to the countries where DOHWA has a presence.

We respect both people and nature, and we practice value management for the next generation

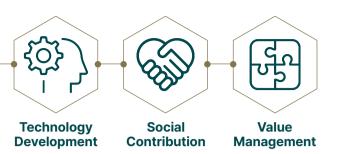
Under the motto of 'Coexistence Between Nature and People', Dohwa practices sustainable engineering for future generations. We will endeavor to become a company that cares about people and nature by continuously investing in the development of and business expansion in the sector of environmental-friendly technologies.



Son, Young II

President DOHWA Engineering Co., LTD.

1 60 0)





R&D

generation leading technologies with high added value, we are conducting research on building platform-based design infrastructure, CAE-based optimal design technology, and smart construction engineering-based technology.

In order to continuously secure new growth engines and secure next-

* CAE: Computer Aided Engineering

R&D Center



The R&D Center was established in 1992 to conduct research and development in the field of construction engineering and to strengthen construction technology innovation and competitiveness. By researching ways to apply next-generation technologies such as BIM, CAE, Big Data, and AI to design, we strengthen technical capabilities through digitalization of the overall design work.

DIDAS is a cloud-based design platform that digitally transforms design work.

* BIM: Building Information System

Design Platform DIDAS



· Cloud-based design Design simulation program optimization platform Provides Design task templates Management of work and design data by standard process DIDAS Dohwa Infrastructure Design Automation Suite Integrated information Provides cloud community environment management, data sharing and big data accumulation Supports external collaboration Project-based and decision departmental collaboration

BIM Design



We are establishing a BIM design process and developing design support tools for BIM overall design, and developing BIM-based smart construction utilization technologies such as VR, MR, and drones.

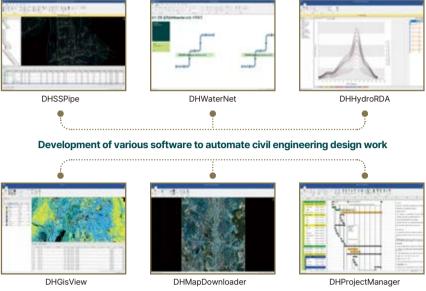


Software Development



We are focusing on developing dedicated software to streamline design work and internalize design technology capabilities through automation of civil engineering design work.





Future technology research





 Classify and standardize design data

- Establishment of data
- processing and management system

CAE (Computer-Aided Engineering) Predict and reproduce

physical phenomena Simulation-based

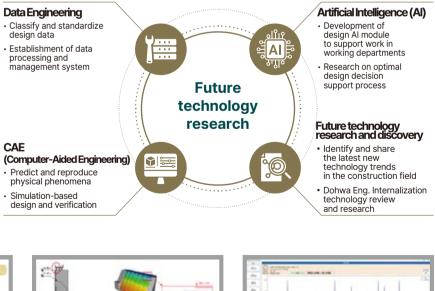
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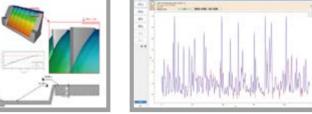
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We are working to secure future technologies such as data engineering, AI, and CAE to establish a foundation for optimal data-based design and design automation.





<CAE simulation>

<Al Program>

Social Contribution



As trusted members of the society, we take a step further beyond pursuing economic profits, and communicate and cooperate with local communities to share and pursue happiness together. It is Dohwa's will to continue to treasure the value of coexistence by supporting the underprivileged and preserving the environment and culture.

Hope Sharing Fund

'Dohwa Hope Sharing Fund', which is made up of voluntary participation of its employees, is raised with a certain amount donated out of one's monthly salary. It is used to carry out various social contribution activities at home and abroad. Currently, more than 1,380 members, which is approximately 51% of all employees, are participating in the fund. The company also sponsors an amount as same as the amount donated by employees, operated in a so-called "matching grant method" which doubles the size of the fund.



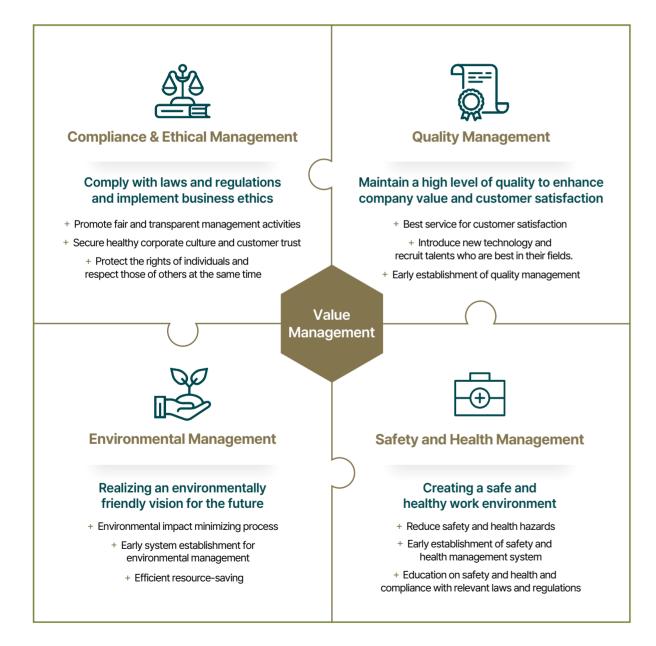
Financial Support Details ~2023

- 2016 · Support for leukemia patient in Vietnam
- 2017 · Support for Peru flood damage
 - · Support for the Korea Paralympic Committee · Support for invitational events for North Korean defectors · Donation for Pohang earthquake damage
- 2018 · Support for Yeongdeok-Gun flood damage · Support for earthquake damage recovery in Indonesia
- 2019 · Support for World Together
- · Support for Gangwon-do forest fire disaster relief
- Support for Mozambigue cyclone damage recovery · Donation for making wells in Tanzania
- · Support for Bangladesh train accident relief aid
- 2020 · Donation for Philippines Taal volcano eruption relief · Support children's books donation for underprivileged children
- in Peru Support for Covid-19 Medical Staff Meal in Daegu
- · Delivery national support fund to support COVID-19 in Peru
- · Support COVID-19 diagnostic kits to Peru
- · Support Covid-19 in Cambodia
- Mask support to dispatch countries due to COVID-19
- 2021 · Support for Gangnam Welfare Foundation (North Korean defectors and underprivileged) since 2016, in each year
 - · Support for the creation of Well No. 2 in Tanzania · Support for quick recovery following an outbreak of fire at Yeongdeok Traditional Market
 - · Support for the economic independence of women living below the poverty line in Peru
- 2022 · Support for the Ukraine Emergency Relief Fund Support for the Flood Damages in Pohang City. Gangnam District and Gwangju City in Gyeonggi Province
- 2023 · 2023 Donation to Korea Senior Citizens' Association Incheon · Support for flood damage recovery in Gyeongsangbuk-do · Support for recovery from earthquake damage in Turkiye



Value Management

Dohwa provides customized design and top-quality construction management services with minimal impact on the environment. We strictly comply with strict government regulations on safety and health and conduct fair and transparent management following corporate ethics.







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Create the Value, Shape the Future

