

The logo for DOHWA, featuring the word "DOHWA" in a bold, blue, sans-serif font. The letter "O" is stylized with a green-to-blue gradient and a circular motion effect. The logo is centered within a white circle, which is itself set against a light green, rounded square background with a subtle gradient.

**DOHWA**

*“Korea’s First to the World’s Best,  
The 2020 ENR Top Rank”*

**Investor Relations 2019**

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# 1. Introduction of DOHWA

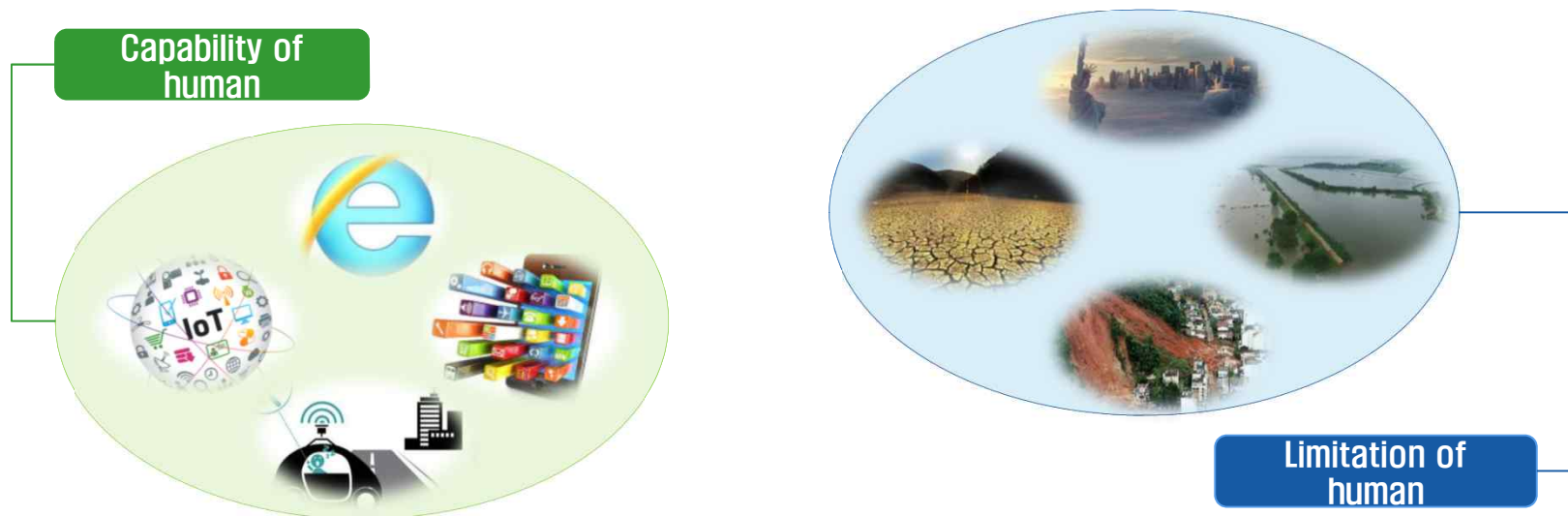
- ◆ **Mission : We value people and nature**
- ◆ **Vision : We design the world for the future of humanity**  
*Korea's first to the world's best. The 2020 ENR Top Rank*
- ◆ **Core Value : People, Collaboration, Creativity**

Outline
<ul style="list-style-type: none"> <li>◆ <b>DOHWA Engineering Co.,Ltd.</b> <ul style="list-style-type: none"> <li>• CEO : Kim Young Yoon, Park Seung Woo Ro Jin Myung, Kwak Jun Sang</li> <li>• Established Date : 1957. 08. 15</li> <li>• IPO Date : 2010. 08. 12</li> <li>• Address : 438, Samseong-ro, Gangnam-gu, Seoul, Republic of Korea</li> <li>• Capital : 16.86 billion won</li> <li>• Financial outcome : Revenue → 402.5 billion won Operating Profit : 17.3 billion won (2018.12.31, Consolidated)</li> <li>• Number of Employee : 2,049 (2018.12.31) (524 PE among 1,773 Engineer)</li> </ul> </li> <li>◆ <b>Main Business</b> <ul style="list-style-type: none"> <li>• Planning / Feasibility Study / Design / Supervision / CM / EPC / O&amp;M</li> </ul> </li> <li>◆ <b>Global Network</b> <ul style="list-style-type: none"> <li>• Operate 21 branch offices &amp; corporation world wide</li> <li>• Performed multiple engineering projects mainly financed by Multilateral Development Bank (EDCF WB, ADB, IDB, AFDB)</li> </ul> </li> </ul>

Business Sector	
<ul style="list-style-type: none"> <li>• <b>Water &amp; Wastewater</b></li> </ul> 	<ul style="list-style-type: none"> <li>• <b>Plant</b> (Photovoltaics /Renewable Energy)</li> </ul> 
<ul style="list-style-type: none"> <li>• <b>Urban planning / Design</b></li> </ul> 	<ul style="list-style-type: none"> <li>• <b>Infrastructure</b> (Water Resources/Road/Harbor/Transportation)</li> </ul> 
<ul style="list-style-type: none"> <li>• <b>Railway</b></li> </ul> 	<ul style="list-style-type: none"> <li>• <b>Supervision/CM, EPC, O&amp;M</b></li> </ul> 

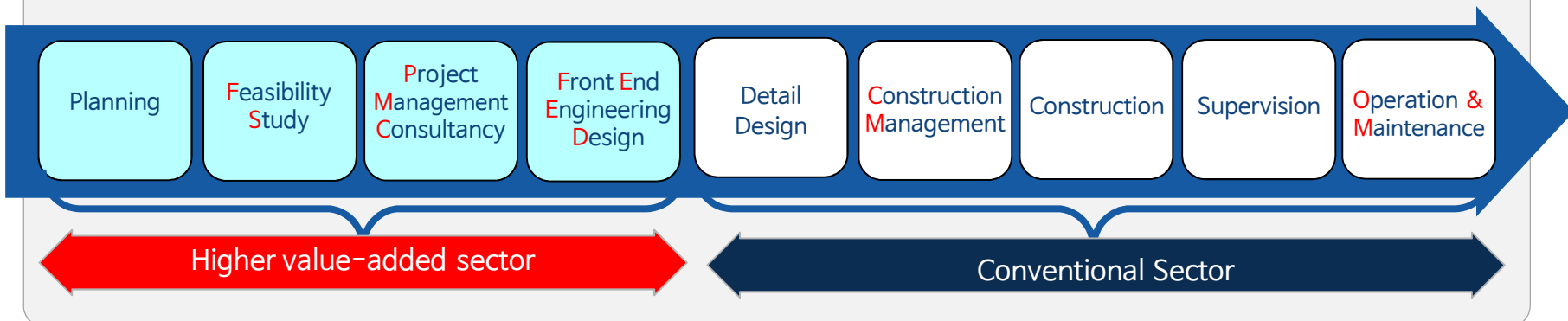
## 2. Business Process of Engineering

Total Solution Provider **DOHWA**



The area 'Dohwa Engineering' Challenge to ← Weather anomaly , Typhoon , Drought , Landslide , Earthquake

□ 'SOC Infrastructure Engineering' - All Facilities necessary to human life...



The number one leading company in Korea / **ENR Global Ranking 80th**

#### Global Engineering Market *[growth market]*



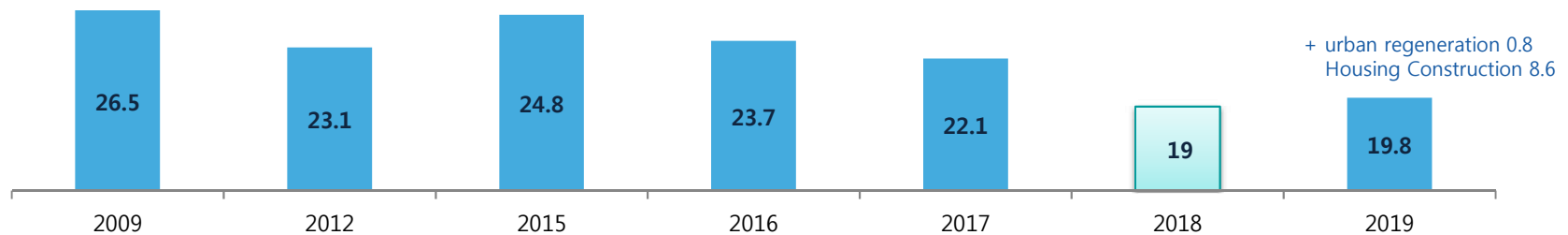
- Size of Market : Maximum 350 billion dollar (estimated size)  
(10% growth per year for last 10 years, 4~8%/yr growth expected)  
Growth Factor : Demand of Infrastructure is 4.1% of GDP,  
Real Investment is 3.8% → **-0.3% Gap** occurs continuously
- Latin American, European, Australian Company occupy over 70% of entire global engineering market (occupy 100% of higher value-added business)

*(Ref. by : IHS Global Insight2018, , Korean Engineering Institute)*

#### Domestic Engineering Market *[Basic cash cow market]*

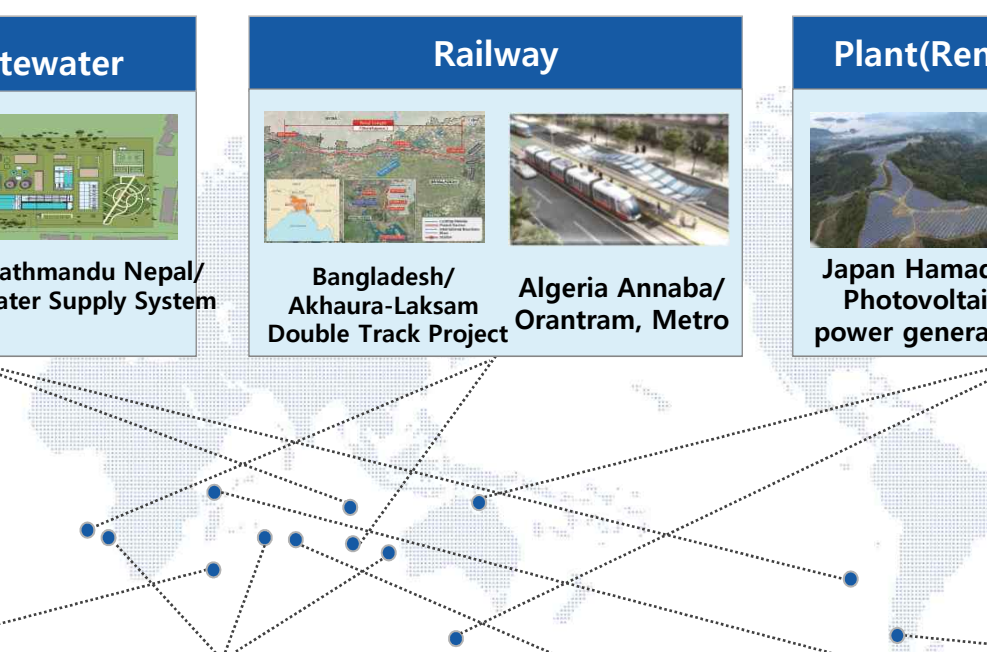
- Budget of SOC : 2018 → 19 trillion won (14% decreased YOY), 2019 → 19.8 trillion won (4.2% increased YOY)

*Ref.by : Ministry of Economy and Finance (unit : trillion won)*





- Domestic[Public] Engineering Market (self-estimated figure) : 2018 → 2.9 trillion / 2019 → expect 6.9% increase
- Pre - Feasibility Study Exemption / Early-Ordering of Private-Sector Business

High Growth in global engineering market  Actively performed overseas projects  
 Remarkable results by each department





**Water & Wastewater**



Nicaragua Juigalpa/  
Water supply system      Kathmandu Nepal/  
Water Supply System

**Railway**

Bangladesh/  
Akhaura-Laksam  
Double Track Project      Algeria Annaba/  
Orantram, Metro


**Plant(Renewable Energy)**

Japan Hamada/  
Photovoltaic  
power generation      Indonesia Biomass  
Fired Power


ENR RANK	
2018	80th
2017	105th
2016	135th

**Urban**




Ethiopia /  
Kilinto Industrial Parks  
Design/Supervision

**Water Resources**




Algeria Constantine/  
River Improvement  
of Urban Zones

**Road**




Pakistan/  
E-35  
Expressway (57Km)

**Harbor**



Georgia Anaklia  
Costal Development

**Supervision / CM**



Peru Lima/  
Metro Line2

## 5. Major Project by Business sector

Have Know-how by Performing 10000 cases of Infra Engineering Project  
 Performed Domestic/Oversea Mega project based on Global network

Division	Project	Project Type	Outline	Status	Sum of Order (Unit: Won)
Water & Wastewater	Managing publically owned treatment works	O&M	<ul style="list-style-type: none"> <li>Managing publically owned treatment works from Private enterprise</li> <li>Market Size : 1.3 trillion won per year</li> </ul>	300 billion won Per year (seongnam sewerage - 7billion/y)	<b>Total 21 project, About 700billion</b> (2014~2018)
Railway	GTX-A Line	Private Business Lead by FI	<ul style="list-style-type: none"> <li>GTX-A Line PPP</li> <li>Key role in first FI Business</li> </ul>	<b>Working Design Basic Design</b> (F/S, PM, SE and etc.)	7.55billion 3.16billion
Plant	Renewable Energy, Biomass	EPC O&M	<ul style="list-style-type: none"> <li>Photovoltaics in Japan (EPC: 7 projects, O&amp;M: 8 projects)</li> <li>QNY 40MW Solar Power Plant in Vietnam</li> <li>Wando Wind Plant EPC</li> <li>Gangneung Biomass EPC</li> </ul>	Actively promote Renewable Energy Business	<b>EPC 31.78 billion</b> <b>O&amp;M 13.08billion</b> <b>EPC 6.2billion</b> <b>EPC 4.73billion</b> <b>EPC 4.07billion</b>
Infra	Indonesia Hydroelectric Power Generation	Strategic Investment on EPC, O&M	<ul style="list-style-type: none"> <li>Construction/Operation of Siborpa / Tripa 100MW Hydroelectric Power Generation</li> <li>Equity Participation in SPC with KOMIPO</li> </ul>	<b>Contract Upcoming</b>	30 billion for Each EPC

### Diversion of Target Market

- Maintain Domestic Market share/ Switch-over Basic cash flow

### Strategic Approach toward oversea market

- Strategically Focus on Countries like Vietnam, Bangladesh, Indonesia, Tanzania, Peru and etc.

### Portfolio Diversification

- Secure New growth engines in renewable energy ; Solar, Wind, Biomass
- Expand to EPC, O&M Business based on Design, Supervision

### Advance to Private Market

- Strategic Approach to Investment Project lead by Financial Investor ; GTX-A line → Pioneer PMC, FEED

### Develop New Business

- Projects for North Korea, Urban Regeneration and etc.

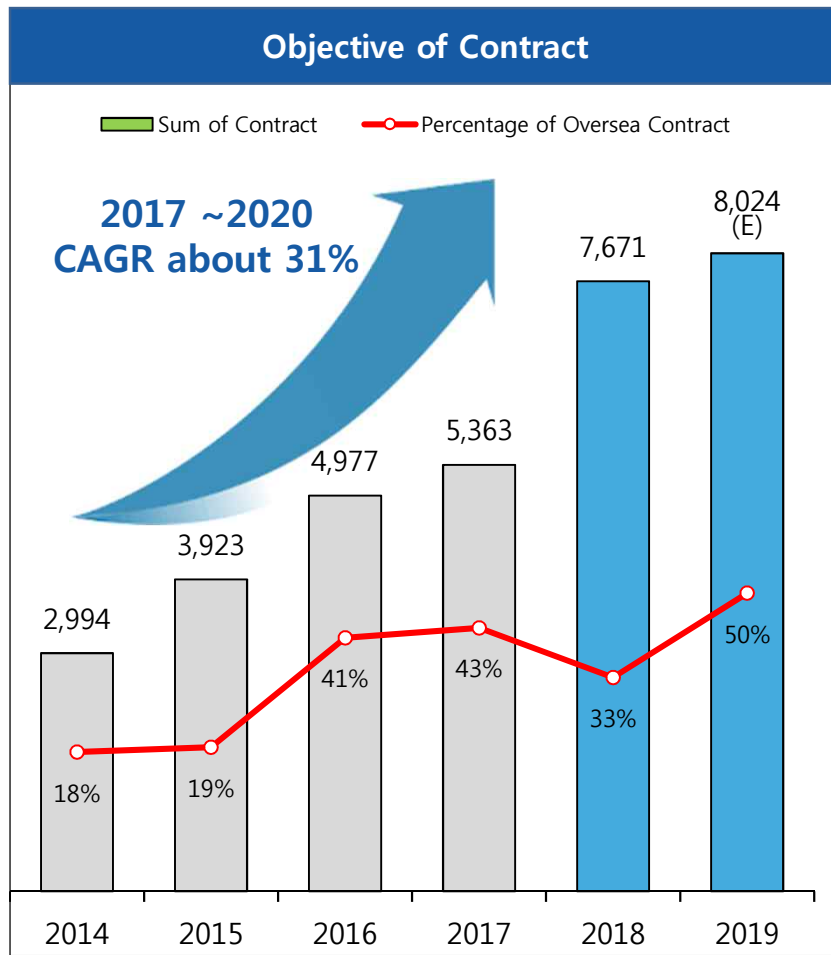
*“Based on **mission, vision, core value** we will pioneer a global market which gives convenience for humanity”*



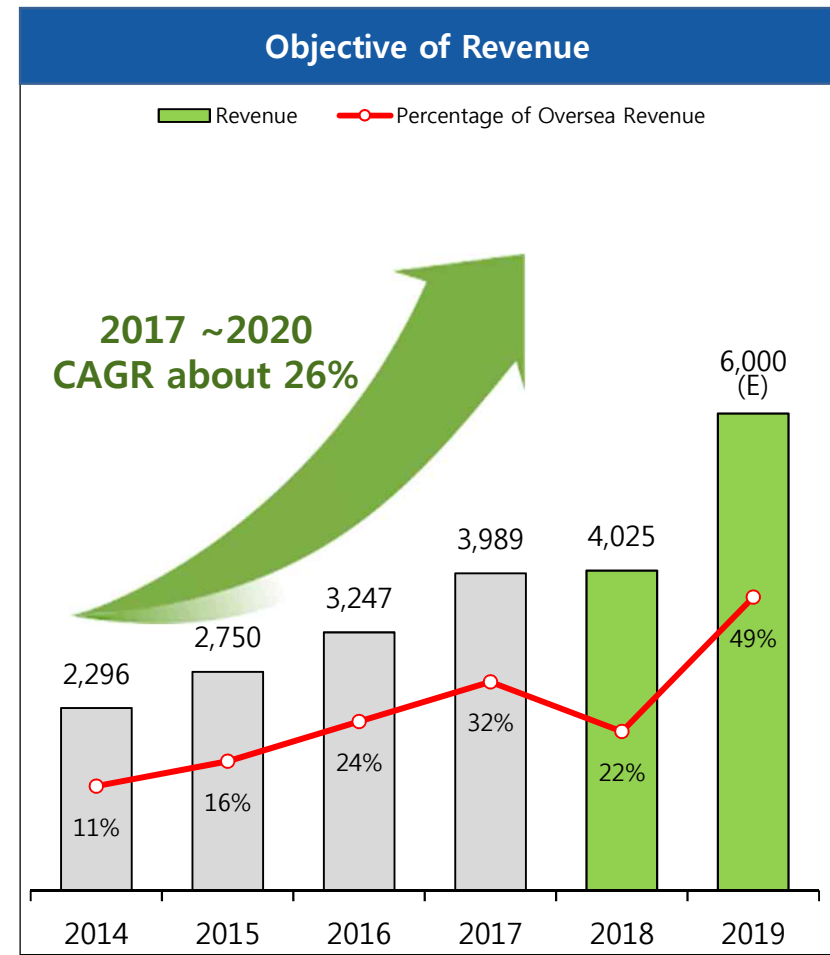
## 7. Goal toward Sustainable growth

Total Solution Provider **DOHWA**

New Market(Global), New Business(Investment b), New Area(renewable energy, PMC)



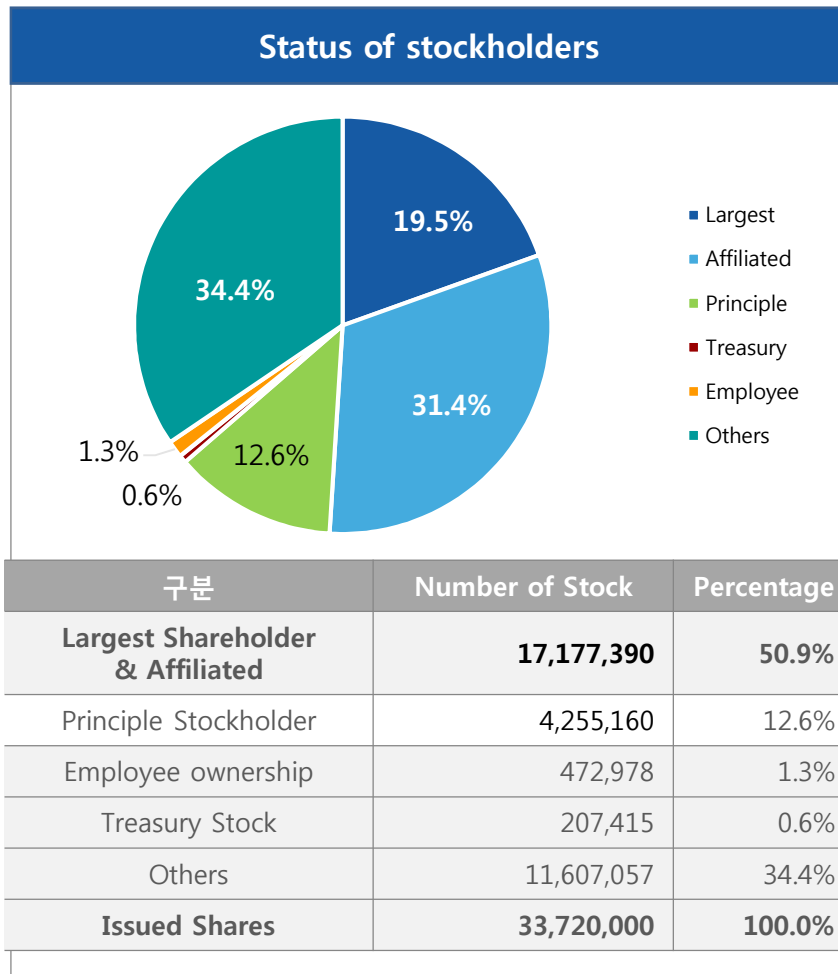
(unit: one hundred billion)



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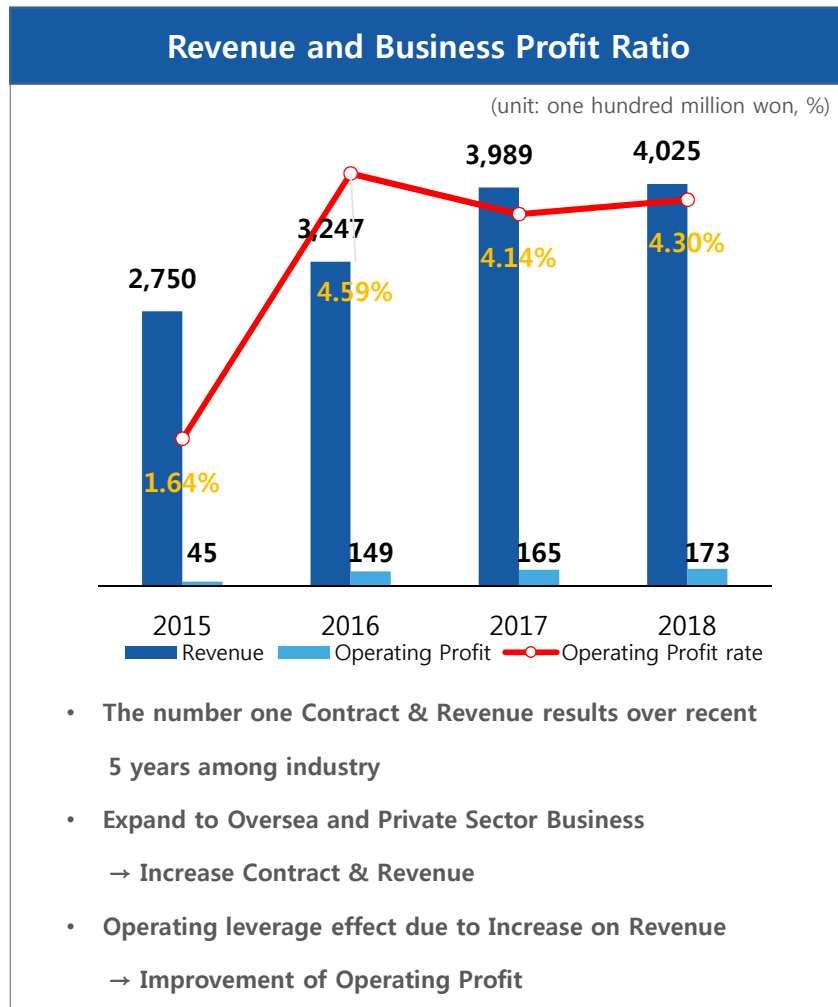
## Stable Management control

Maintain High Dividend  maximization of shareholder



## Largest market share among engineering industry

### Continuous revenue growth, Stable business profit



### Credit Rating over 3 years

Year	2016	2017	2018	2019
CREDIT RATE	AA+	AA+	AA+	AA+

\*Credit-rating agency : NiceDND co.,Ltd. (For Public)

### Business outcome

(unit: million won)

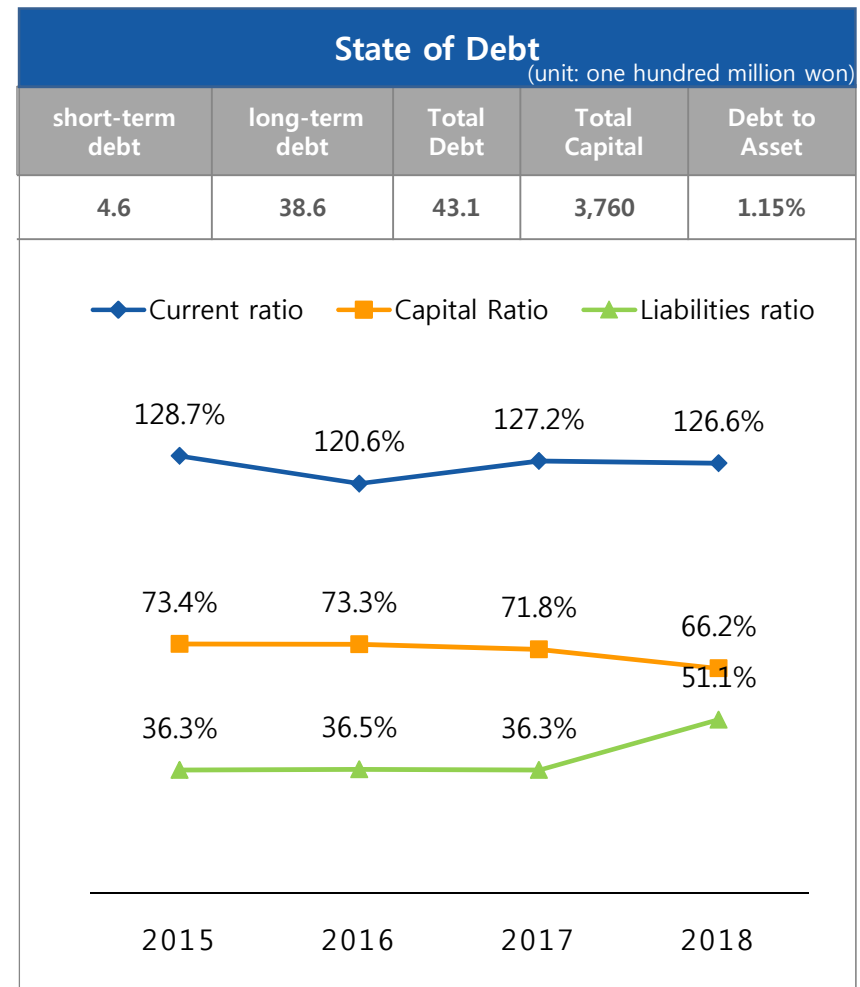
	18.4Q	QoQ	19.1Q	YoY	18.1Q
<b>Revenue</b>	117,286	-12.9%	102,053	6.2%	<b>96,137</b>
Domestic	108,255	-32.1%	73,479	17.6%	62,489
Oversea	9,031	216.4%	28,574	-15.1%	33,648
<b>Operating Profit</b>	9,358	-75.3%	2,308	-30.0%	3,293
Margin(%)	8.0%	-71.3%	2.3%	-32.4%	3.4%
<b>Net profit</b>	7,343	-70.2%	2,186	-13.7%	2,534
Margin(%)	6.3%	-66.0%	2.14%	-17.7%	2.6%

\*Statement of Income (DOHWA only)

## 10. Financial Statement

**Current ratio 126.6%, Liabilities ratio 51.1%, Debt to Asset 1.15%**  
**Maintain Industry-Leading Financial Reliability**

Financial Position <small>(unit: million won)</small>			
	2016.12	2017.12	2018.12
<b>Asset</b>	<b>308,514</b>	<b>328,595</b>	<b>375,922</b>
Current Asset	99,393	112,724	156,080
Non-Current Asset	209,121	215,871	219,842
<b>Liabilities</b>	<b>82,450</b>	<b>92,816</b>	<b>127,182</b>
Current Liabilities	82,450	88,634	123,278
Non-Current Liabilities	-	4,182	3,904
<b>Equity</b>	<b>226,064</b>	<b>235,778</b>	<b>248,740</b>
Capital	16,860	16,860	16,860
Capital Surplus	33,779	33,771	33,771
Earned Surplus	178,522	185,191	202,753



(Base Date : 2018.12.31, consolidated financial statement)