

Doosan Enerbility Co., Ltd.

# 2022 Earnings Release & Business Plan



February 2023

# Disclaimer

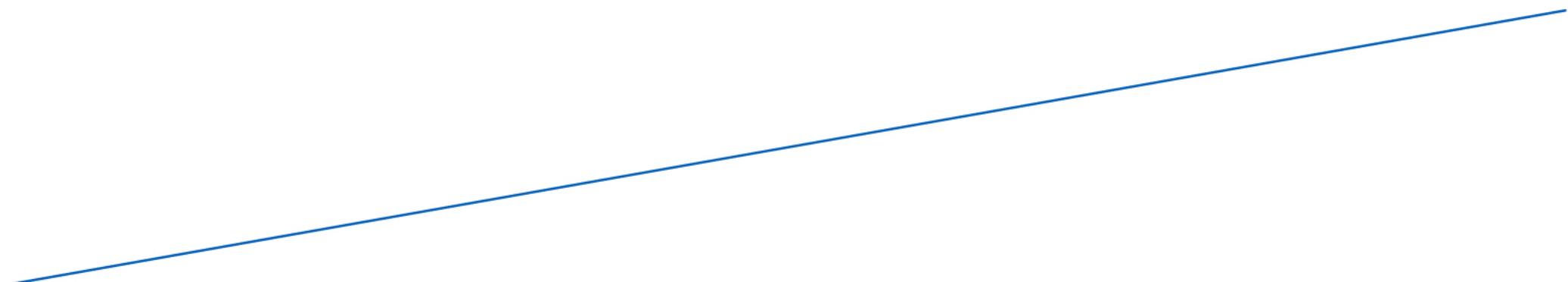
This presentation was prepared for the convenience of investors. The financial figures contained in this presentation are K-IFRS consolidation and Doosan Enerbility managerial consolidation<sup>1)</sup> basis.

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1) Doosan Enerbility managerial consolidation : Doosan Enerbility separate + Overseas Subsidiaries

# Contents



**1. 2022 Results**

2. 2023/Mid-term Business Plan

3. Key Business Outlook

# '22 Doosan Enerbility\_Business Results Summary

- Orders increased by 19.6% YoY incl. Saudi C&F<sup>1)</sup> and Desalination projects, Guam CCPP, Egypt nuclear power plant construction and US SMR projects
- Sales increased by 37.1% YoY driven by strong sales growth in large EPC projects in '22 and new orders in '21
- EBIT decreased due to impact of global raw material price hike
- Net loss recorded mainly from one-off non-cash valuation losses
- Net debt decreased by KRW 1,344Bn, resulted 52.7%p improvement in L/E ratio with financial restructuring effort

## Summary

(Unit : KRW Bn, %)

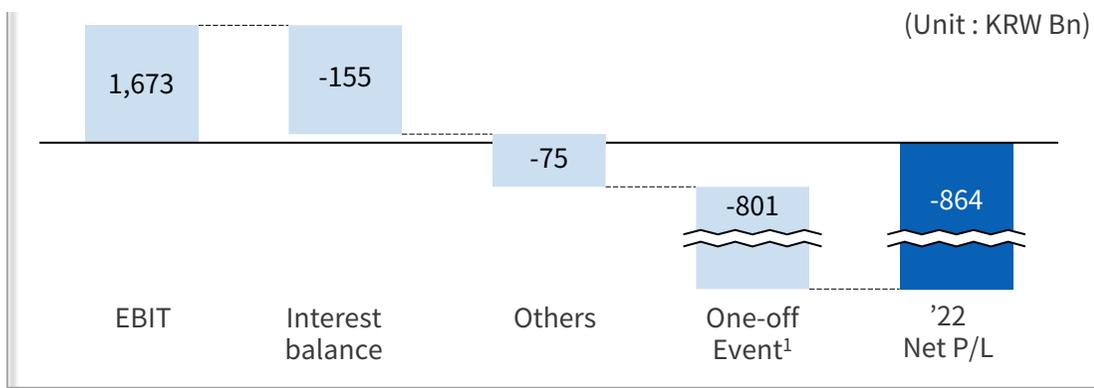
	'21	'22	YoY	'22.3Q	'22.4Q	QoQ
Orders	6,340	7,584	+19.6%	1,528	2,794	+82.8%
Backlog	13,456	14,482	+7.6%	13,779	14,482	+5.1%
Sales	4,783	6,558	+37.1%	1,567	2,091	+33.4%
EBIT	241	167	-30.5%	39	19	-50.6%
%	5.0%	2.6%	-2.4%p	2.5%	0.9%	-1.6%p
EBITDA	423	338	-86	79	60	-20
Non-OP	-125	-983	-858	-56	-759	-703
Interest Balance	-205	-155	+50	-41	-39	2
Others	80	-828	-908	-14	-720	-705
Net Profit	288	-864	-1,152	55	-658	-713
Net Debt	3,914	2,570	-1,344	2,508	2,570	62
Liability/Equity ratio	171.6%	118.9%	-52.7%p	114.6%	118.9%	+4.3%p

<sup>1)</sup> C&F – Casting & Forging

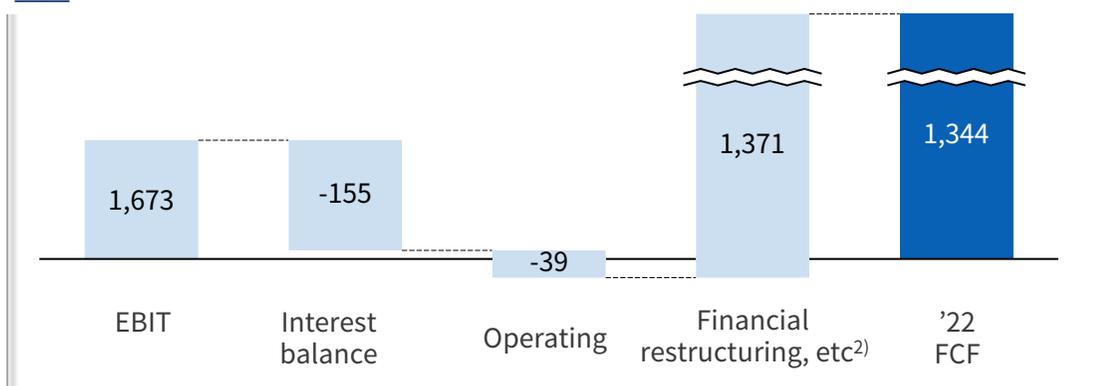
# '22 Key results – Net P/L, FCF

- Despite of large reduction in interest expense, one-off events such as re-valuation of subsidiary share price and PRS position resulted net loss
- One-off events are mostly non-cash charges and the company significantly reduced debt level resulting consecutive improvement on L/E ratio in three years

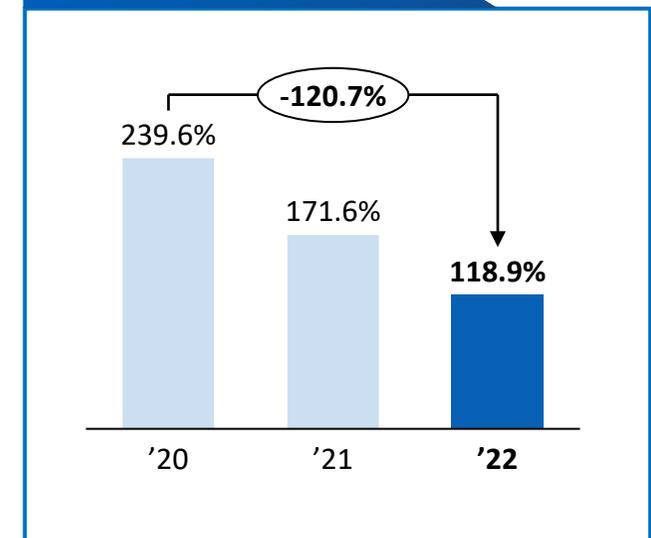
## Net P/L



## FCF



## L/E ratio improvement



<sup>1)</sup> Invested stock's revaluation loss KRW -634B, Financial restructuring(Subsidiary sale) KRW -122B, etc.

<sup>2)</sup> Invested stock's revaluation loss (No impact), Financial restructuring(Capital increase, Warrant, Subsidiary sale) KRW 1,722B, etc.

# '22 Consolidated Results Summary

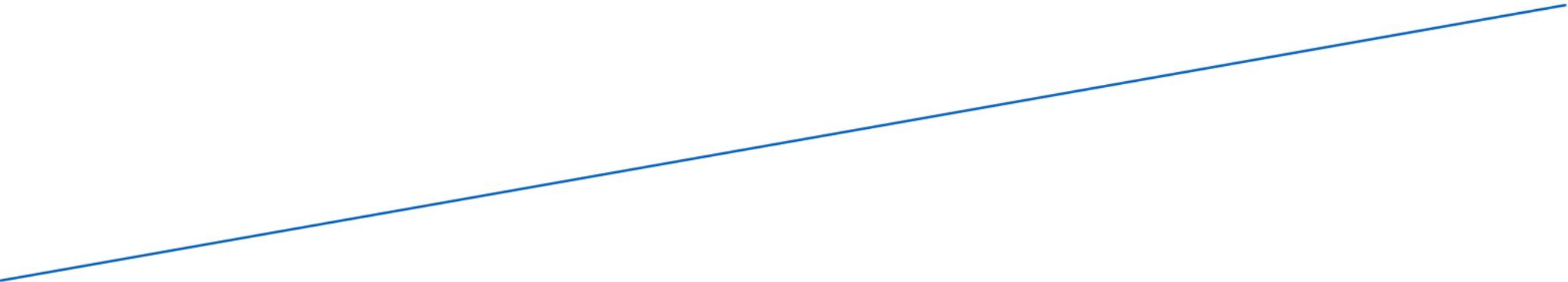
- Sales increased by 40.5% YoY by sales growth of Doosan Enerbility, Bobcat, and Fuel Cell
- EBIT increased by 27.4% YoY driven by Bobcat's EBIT, despite of impact from raw material price hike
- Net loss due to Enerbility's one-off non-cash valuation loss
- Net Debt decreased by KRW 1,371Bn, resulted 40.4%p improvement on L/E ratio with financial re-structuring effort

## Summary

(Unit : KRW Bn, %)

	'21	'22	YoY	'22.3Q	'22.4Q	QoQ
Sales	10,991	15,443	+40.5%	3,960	4,644	+17.3%
EBIT	869	1,107	+27.4%	315	273	-13.3%
%	7.9%	7.2%	-0.7%p	7.9%	5.9%	-2.0%p
EBITDA	1,221	1,493	+272	407	370	-37
Non-OP	-306	-1,295	-990	-138	-849	-711
Interest Balance	-271	-239	+32	-61	-65	-4
Others	-35	-1,056	-1,021	-77	-784	-707
Net Profit	646	-460	-1,106	145	-491	-636
Net Debt	4,776	3,405	-1,371	3,560	3,405	-155
Liability/Equity ratio	169.3%	128.9%	-40.4%p	128.1%	128.9%	+0.8%p

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1. 2022 Results

**2. 2023/Mid-term Business Plan**

**- '23 Orders**

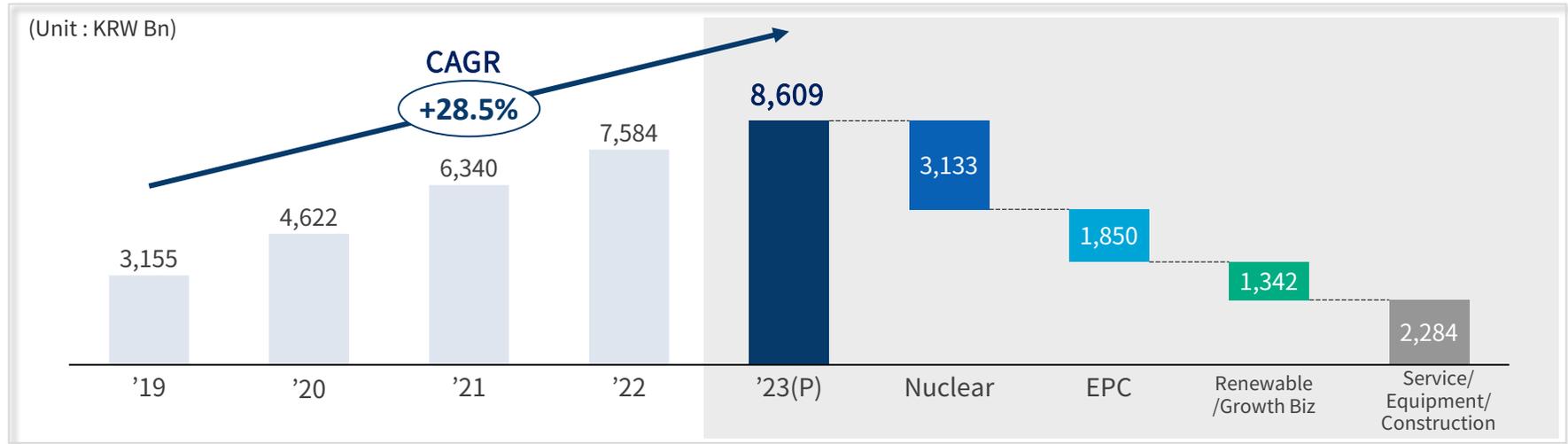
**- '23 and Mid-term Business**

3. Key Business Outlook

# '23 Business Plan\_Orders

- New order target is KRW 8.6T which is KRW 1.2T higher than '22 based on orders expected in the domestic conventional nuclear power plant and SMR

## '23 Orders Plan



- Orders continue to grow since '19
- Achieved KRW 7.6T of new orders in '22 without domestic conventional nuclear project orders
- Nuclear new orders are expected up to 36% (KRW 3.1T) of entire '23 annual target (KRW 8.6T)
- Profitability will be improved with higher margin nuclear projects
- Propel to achieve annual target through tight management on overseas EPC, renewable/growth business targets

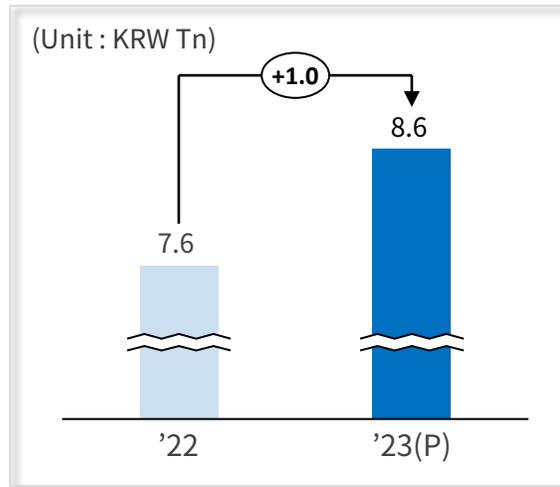
Nuclear		EPC	
Conventional, SMR, etc.	3.1T	Middle East CCPP	1.7T
		Southeast Asia CCPP	0.2T
Renewable/Growth business		Service/Equipment/Construction	
Korean GT demonstration	0.5T	Korean/overseas recurring service / equipment retrofit	1.7T
Changwon Fuel Cell	0.6T	Civil Engineering	0.6T
Hydrogen, renewable, etc.	0.2T		

# '23 and Mid-term Business Plan

Expecting improved growth and profitability with re-calibrated portfolio focusing profitability in '23, after successful completion of government support program in '22

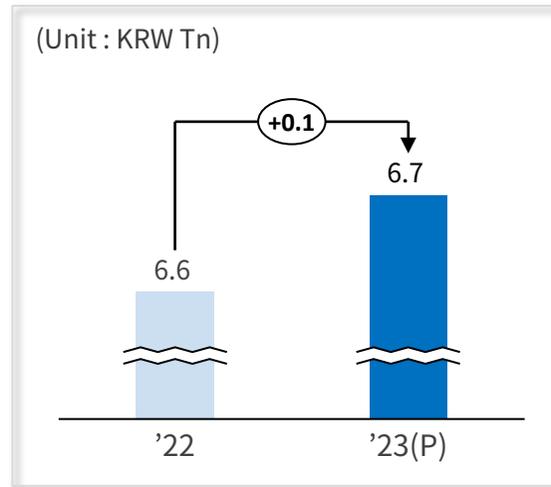
- **Focusing on key business** : 1 Conventional nuclear, 2 SMR, 3 GT and 4 Renewable with profitability and strong competitiveness
- **Key Business Investment** : focused investment to expand SMR capacity and early commercialization of GT service
- **Profitability Improvement** : strong profitability expected in '25 and onwards from temporal dip due to portfolio restructuring
- **Uncertainty Elimination** : continuing review on businesses and subsidiaries in deficit and low profitability for phase-out

## Orders



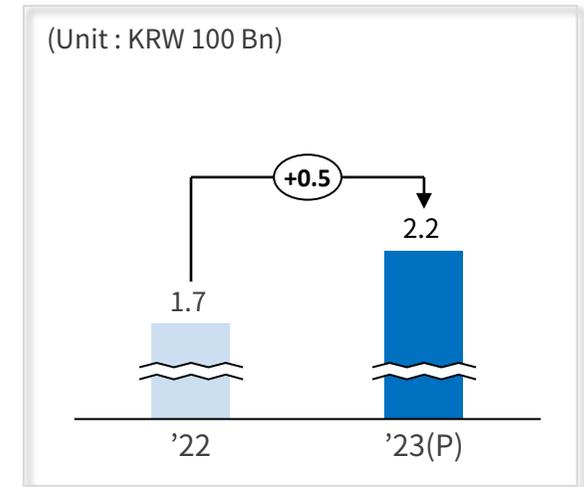
- Expect over KRW 10T orders from nuclear, SMR, etc. in mid-term
- EPC → Equipment<sup>1)</sup> Biz. conversion  
- Equip.(%) : '22(25%)→'27(58%)

## Sales



- Sales growth driven by order growth
- Accelerate to convert sales' volume in equipment  
- Nuclear Biz.('23: 1.1T → '27: 2.2T)  
- Power/Service Biz. ('23: 2.1T → 3.6T)

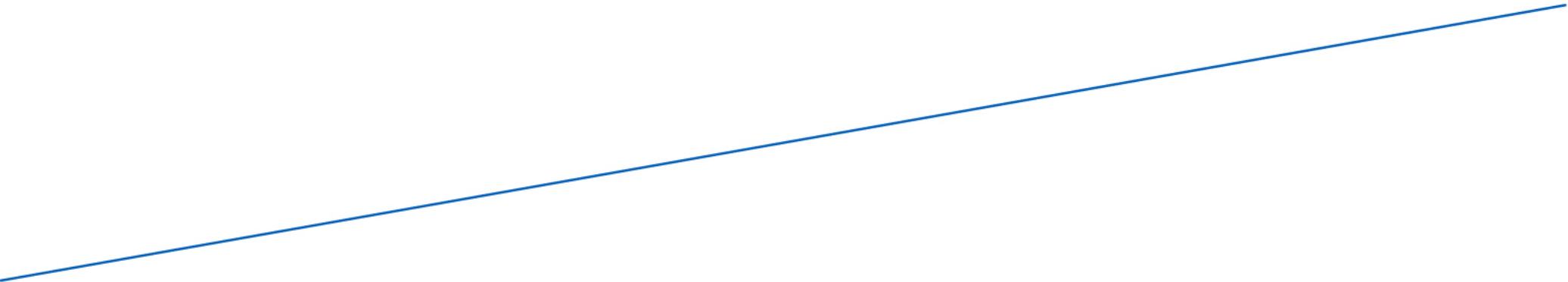
## EBIT



- Expected EBIT margin growth from '25, via orders from higher margin conventional nuclear power projects and equipment order

<sup>1)</sup> Conventional Nuclear, SMR, GT, ST, wind, etc.

# Contents



1. 2022 Result

2. Mid-term Business Plan

**3. Key Business Outlook**

**1** Nuclear

**2** SMR

**3** Gas Turbine

**4** Wind

# 1 2 3 4 Korean Nuclear Power Target Markets' Status

With robust sales activities for nuclear power export towards the Czech Republic, Poland and Saudi Arabia, Team Korea is expanding sales into Slovenia, Belgium, Holland, etc.

## Czech

- Proposal submitted in '22
  - Differentiated via proposal of joint development of reactor (APR1000) and link-up with hydrogen production
- Selection of preferred bidders in '24 (KOR/US/France)
- Plan to enter a bid for following 3 units

## Saudi

- Prepare to enter a bid for 2 new nuclear power plants planned

## UK

- Reviewing joint participation with UAE for new nuclear power project

## UAE follow-Up

- Completed BNPP<sup>2)</sup> unit 1~4 in UAE / In discussion for the follow-up units

<sup>2)</sup> Barakah Nuclear Power Plant

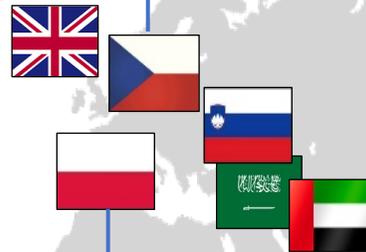
## Others

- Executing sales as Team Korea level for new nuclear project in Belgium, Kazakhstan, Vietnam, S. Africa, Turkiye, Slovenia, Finland, Holland, Philippine and others

## Poland

- Construction of New Nuclear Power Plant<sup>1)</sup> led by ZEPAK, a private developer, along with KHNP and Polish public power utility
- Intergovernmental MOU signed between Korea and Poland and target to finish feasibility study within '23

<sup>1)</sup> Distinct from the Polish government propelling 6 nuclear power plants

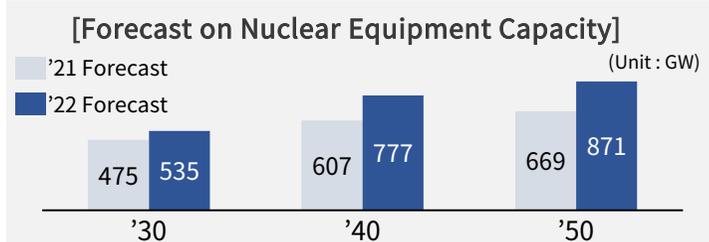


# 1 2 3 4 SMR Major Market Forecast

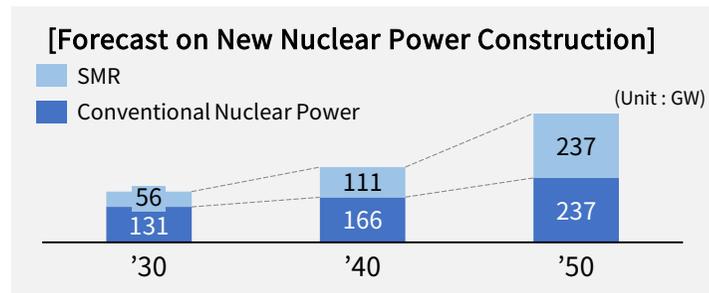
SMR market is expected to grow continuously for demand in carbon neutrality, energy security and distributed power Target for new orders via selective pre-emptive investment strategy

## Nuclear Power Market & SMR's proportion Forecast

- IEA<sup>1)</sup> raised its forecast on installed nuclear power capacity by 25% against last year
  - Nuclear power construction and operation will increase due to
    - ① carbon neutrality, ② LNG price hike, ③ energy security threat



- US INL<sup>2)</sup> forecasts SMR will consist up to 50% of new nuclear power construction
  - Forecast increased demand of dispersed generation aimed to reduce grid construction cost and intermittency in renewables



## SMR Order Forecast

- Target to secure new orders on SMR via pre-emptive CAPEX on capacity anticipating rapid market expansion
  - Increase mfg. capacity with dedicated production lines
  - Improve delivery time and cost using innovative technology



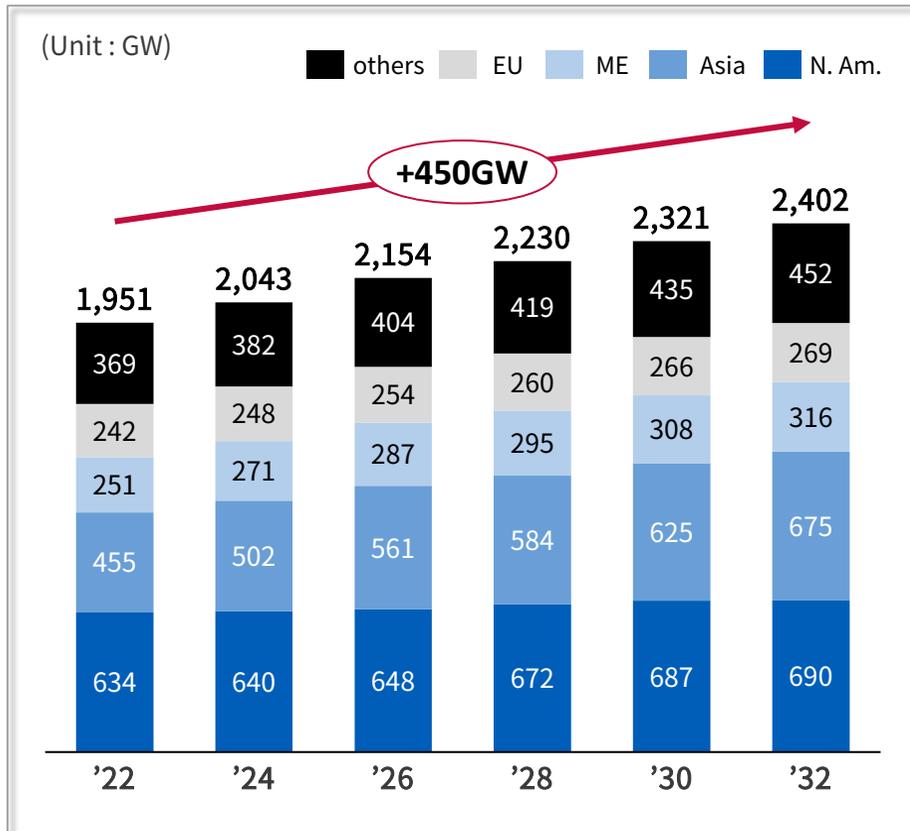
※ Starting with supply of reactor modules for a leading SMR developer with the most commercially, Doosan plans to expand its role as reactor module foundry and scale up orders from other SMR players

<sup>1)</sup> IEA(International Energy Agency)'s World Energy Outlook 2021, 2022  
<sup>2)</sup> Idaho National Laboratory's DOE Microreactor Program (2021) High Projection

# 1 2 3 4 Gas Turbine Major Market Forecast

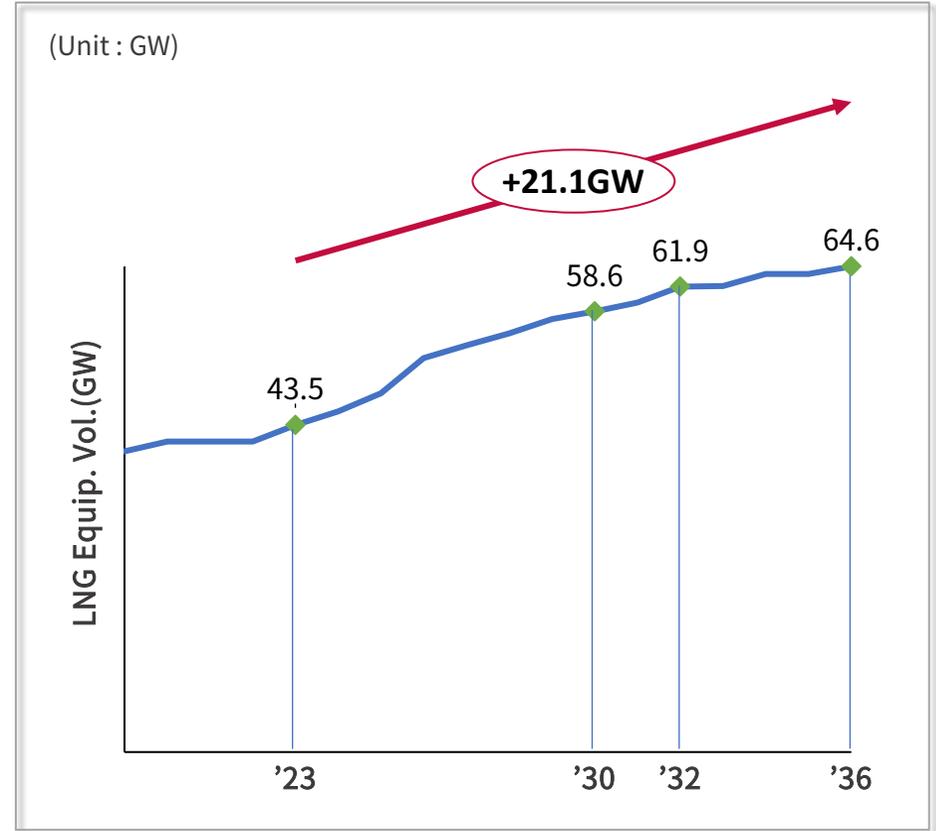
Due to Energy transition towards greener energy, LNG Power market is expected to grow continuously  
 Domestic LNG Power market is also expected to grow to replace existing coal-fired power plants

## Global LNG Power Market Forecast



• Market to grow up to 820 units of 550MW heavy-duty gas CCPP

## Korean LNG Power Market Forecast



• Expected to grow up to 38 units (KRW 14T) market  
 - Equipment KRW 9.4T / Service KRW 4.5T

# 1 2 3 4 Gas Turbine Business Expansion Plan

Commercial operation of Doosan G/T is expected in '23 and using domestic track records Doosan is expected to enter overseas market incl. US and Saudi Arabia. Target to expand non-OEM service solution for overseas market from '24.

## G/T Business Forecast

### Korean Market

- Commercial operation in '23 and target to contract for KSCCP<sup>2)</sup> incl. Boryeong Shin CCPP and Bundang cogen (KRW 14T until '36)

### Overseas Market

- Accelerate overseas market penetration in US, Saudi Arabia based on domestic track records (US KRW 37T, Saudi KRW 13T until '32)

## G/T Additional Business Potential

- Expanding G/T service business (improvement & maintenance)

### [Yearly Service Market<sup>1)</sup>]

(Unit : KRW T)



- Globally KRW 20T Market of G/T service - Plan to expand to M.E. after N. Am.
- Target to expand LTS<sup>3)</sup> market incl. part supply, rotor repair and improvement

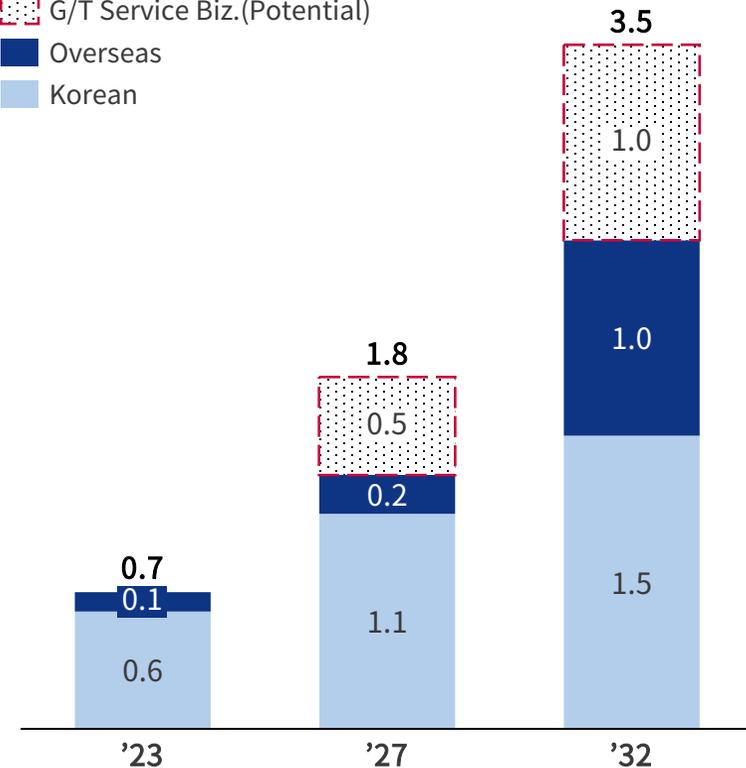
### Doosan's Capability

- Received G/T rotor Repair order in '22
- Non-OEM parts supply, perform. Improve. capability developed by '23 / Enter US GT Service market in '24

## G/T Long Term Business Forecast

(Unit : KRW T)

- G/T Service Biz. (Potential)
- Overseas
- Korean



<sup>1)</sup> Source: Global Market Insights Report

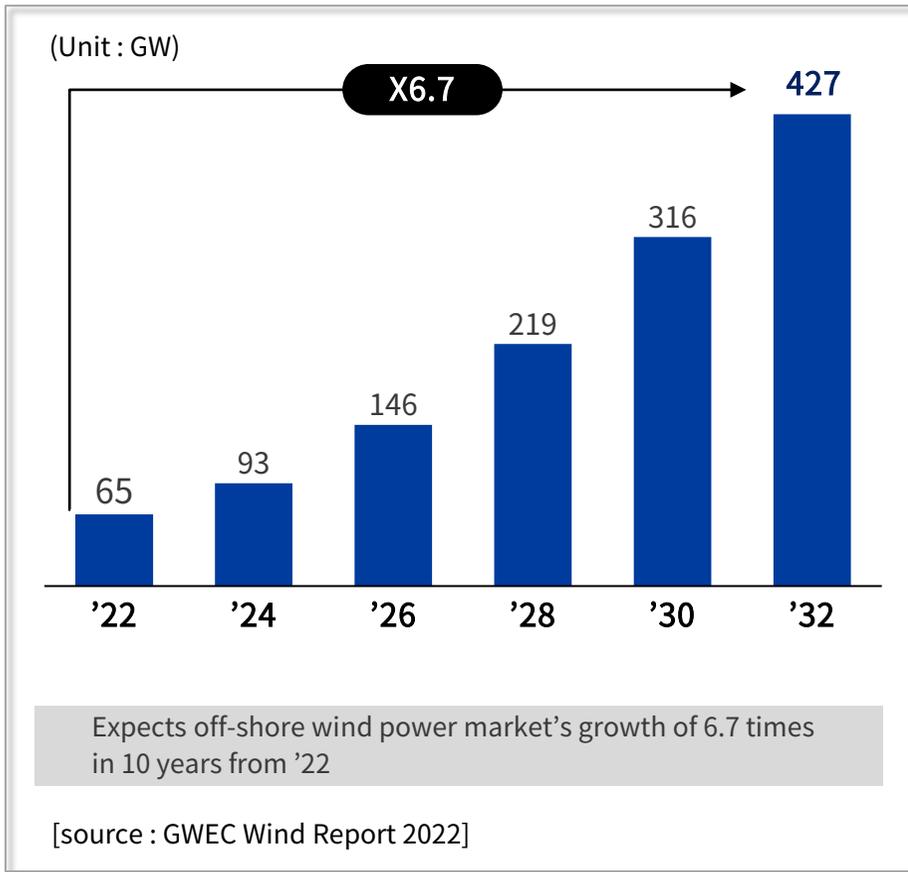
<sup>2)</sup> KSCCP : Korean Standard Combined Cycle Power – designed to replace 48 units of 500~600MW coal fired power plants in Korea

<sup>3)</sup> LTS : Long Term Supply

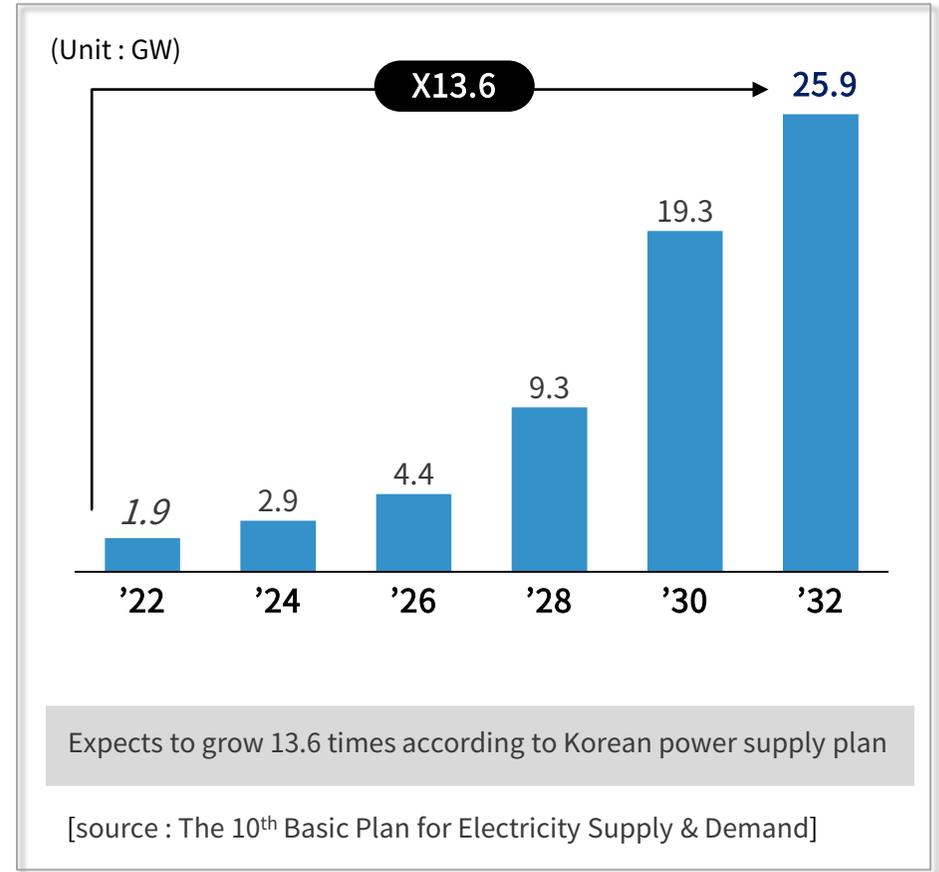
# 1 2 3 4 Wind Power Major Market Forecast

The global wind power market is expected to grow continuously due to ESG and Energy Security issues, which drive a rapid expansion of Korean wind power market

## Global off-shore Wind Power Market Forecast



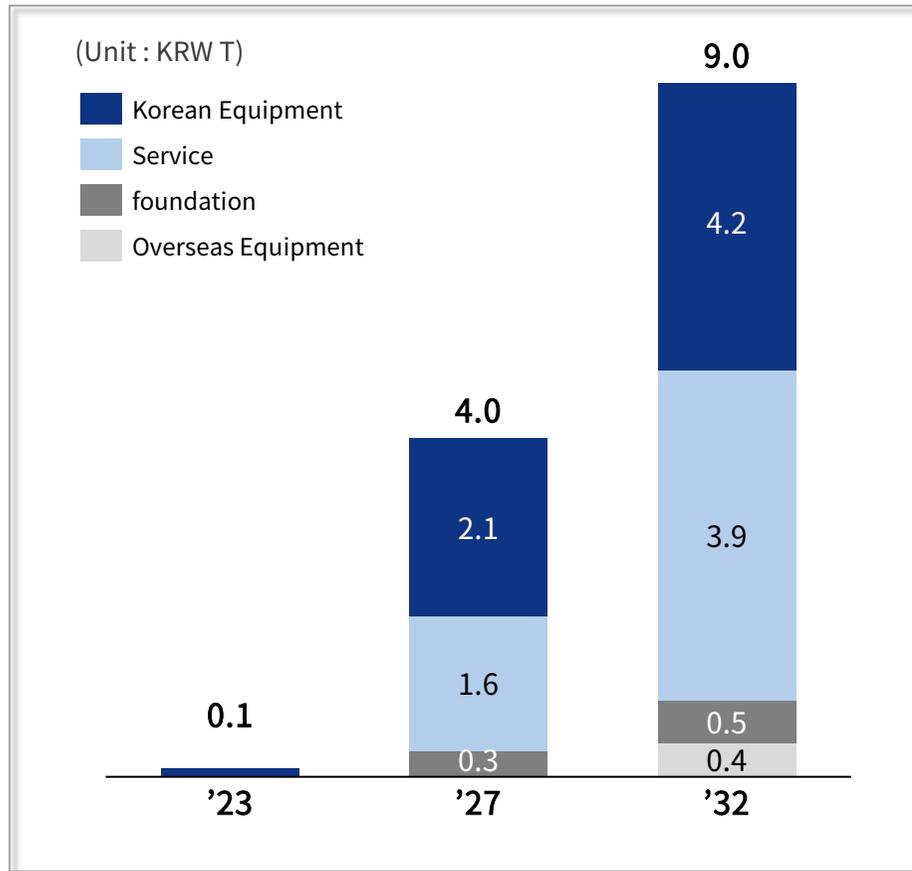
## Korean Wind Power Market Forecast



# 1 2 3 4 Wind Power Business Expansion Plan

Propel to secure stable orders of 8MW Wind Turbine Generator model (Equipment), long term service and off-shore wind foundation structure

## Order Forecast



### Equipment

- Expand wind power turbine's supply through models of 8MW & the next generation
  - Acquired German DEWI-OCC's Type Certification (Dec. '22)
- Co-op. with SGRE for large scaled model through Tech. exchange

### Service

- Korean wind power turbine service business
  - Long term maintenance Cont., based on Equip. track records
  - 24 hr remote monitoring and response in real time

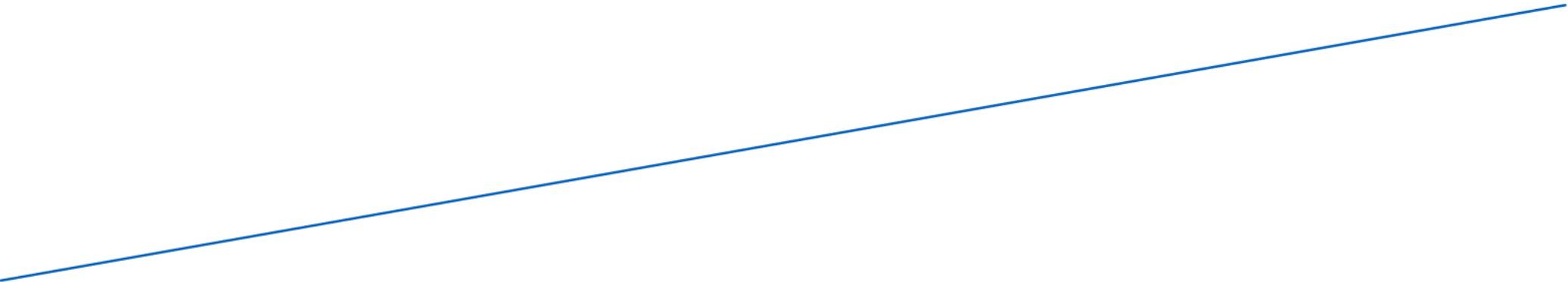
### Foundation

- Co-op. with Orsted , the global No. 1 developer of off-shore wind power on supply of foundation
  - Framework Agreement for business Co-operation (Dec. '23)

### Overseas Equipment

- Targets Southeast Asian market incl. Vietnam, through Doosan Vina, equipment manufacturing base, in Vietnam

# APPENDIX



- 1. Summarized Balance Sheet**
  - Managerial consolidation
  - Consolidated
  - Separate
- 2. '22 Results Summary**
  - Separate

# Summarized Balance sheet \_ Managerial consolidation

(Unit : KRW Bn, %)

	2020	2021	2022	YoY
Current Asset	4,299	5,230	4,332	-899
<i>cash equivalents</i>	742	1,418	748	-670
Non-Current Asset	9,473	11,047	10,555	-492
Total Asset	13,771	16,278	14,887	-1,391
Total Liabilities	9,716	10,284	8,087	-2,197
<i>Net Debt</i>	4,842	3,914	2,570	-1,344
Total Equity	4,056	5,994	6,800	806
Total Liabilities and Equity	13,771	16,278	14,887	-1,391
Liability/Equity ratio	239.6%	171.6%	118.9%	-52.7%p

# Summarized Balance sheet \_ Consolidated

(Unit : KRW Bn, %)

	2020	2021	2022	YoY
Current Asset	9,947	8,418	8,116	-301
<i>cash equivalents</i>	2,654	2,429	1,503	-926
Non-Current Asset	15,620	15,303	14,943	-360
Total Asset	25,567	23,721	23,059	-661
Total Liabilities	18,461	14,913	12,986	-1,927
<i>Net Debt</i>	7,408	4,776	3,405	-1,371
Total Equity	7,107	8,808	10,073	1,265
Total Liabilities and Equity	25,567	23,721	23,059	-661
Liability/Equity ratio	259.8%	169.3%	128.9%	-40.4%p

# Summarized Balance sheet \_ Separate

(Unit : KRW Bn, %)

	2020	2021	2022	YoY
Current Asset	2,970	3,684	3,555	-129
<i>cash equivalents</i>	398	872	394	-479
Non-Current Asset	8,177	10,348	9,649	-699
Total Asset	11,147	14,032	13,204	-828
Total Liabilities	7,687	8,330	7,091	-1,239
<i>Net Debt</i>	4,470	3,836	2,851	-985
Total Equity	3,461	5,702	6,113	411
Total Liabilities and Equity	11,147	14,032	13,204	-828
Liability/Equity ratio	222.1%	146.1%	116.0%	-30.1%p

# '22 Results Summary \_ Separate

(Unit : KRW Bn, %)

	'21	'22	YoY	'22.3Q	'22.4Q	QoQ
Orders	5,559	7,053	+26.9%	1,408	2,654	+88.5%
Backlog	11,125	12,871	+15.7%	11,843	12,871	+8.7%
Sales	3,593	5,307	+47.7%	1,234	1,626	+31.8%
EBIT	135	86	-36.1%	43	-33	turn red
%	3.8%	1.6%	-2.2%p	3.5%	-2.0%	-5.5%p
EBITDA	283	221	-62	76	-1	turn red
Non-OP	-270	-1,408	-1,138	-134	-951	-817
Interest Balance	-167	-115	52	-24	-30	-6
Others	-103	-1,292	-1,189	-110	-921	-811
Net Profit	27	-1,213	-1,240	-85	-883	-798
Net Debt	3,836	2,851	-985	2,776	2,851	75
Liability/Equity ratio	146.1%	116.0%	-30.1%p	108.8%	116.0%	+7.2%p

