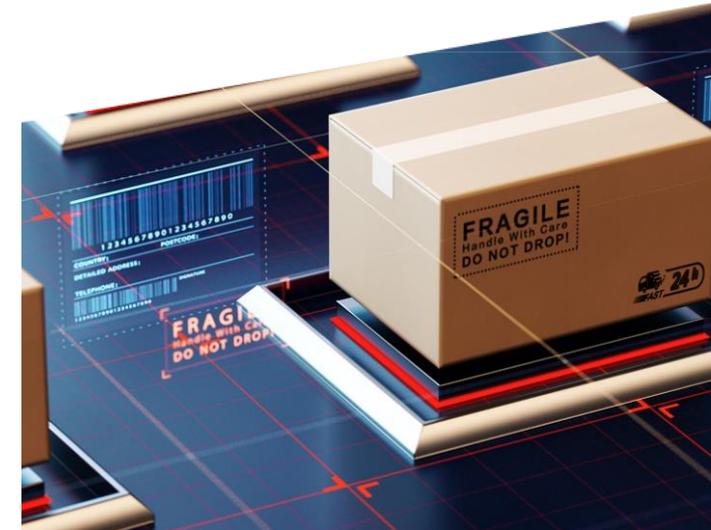
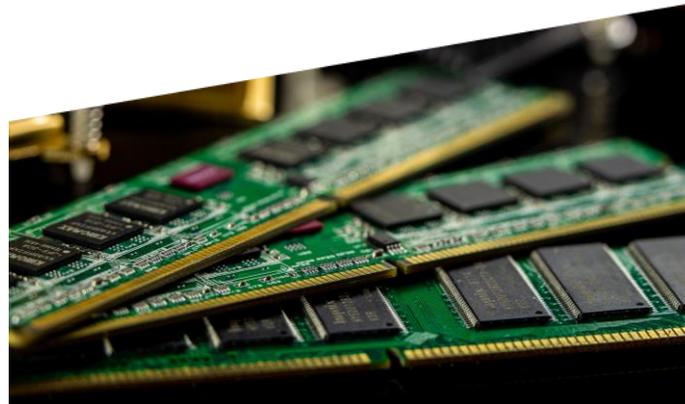


DOOSAN CORPORATION

Annual Business Review 2022



Disclaimer

The information herein is provided for your information purposes only and contains preliminary figures which may be materially different from the final figures.

Forecasts and projections contained in this material are based on current business environments and management strategies, and they may differ from the actual results upon changes and unaccounted variables. We make no guarantees and assume no responsibility for the use of information provided. We trust your decisions will be based on your own independent judgment.

Financial data in this presentation is on a IFRS consolidated and IFRS parent basis.

Chapter 1.

2022 Results

2022 Results (Consolidated)

- Sales and OP increased YoY due to continuous earnings growth of affiliates
- Net income turned to loss due to non-operating loss from impairment loss for goodwill
- Financial structure improvement continued through earnings growth and debt paydown

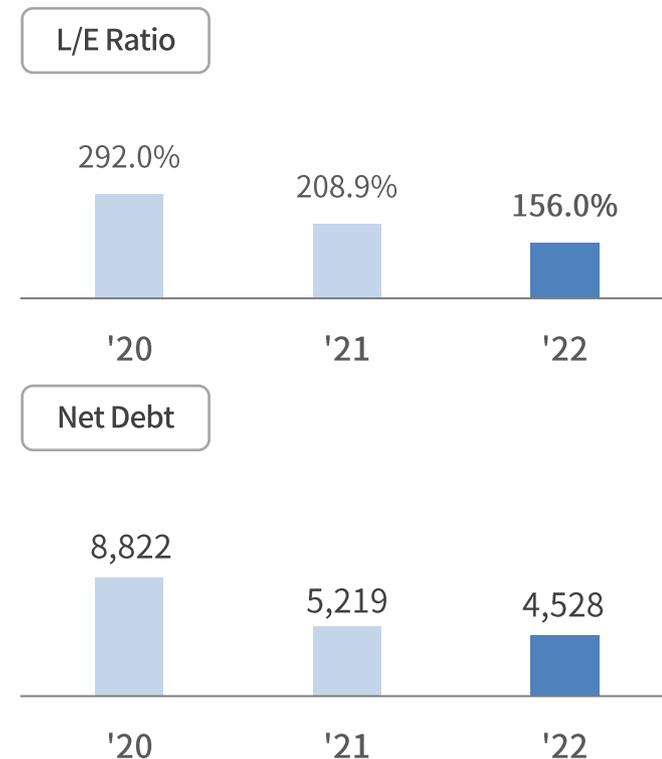
[Income Statement]

Units : KRW bn, %

	2021	2022	YoY
Sales	12,915	17,054	+32.0%
OP	921	1,128	+22.5%
(%)	7.2%	6.6%	-0.6%p
EBITDA	1,253	1,603	+27.9%
Net Income	649	-587	-

[Debt-Ratio and Net Debt]

Units : KRW bn, %



Major Subsidiaries' Annual results and 2023 Plan – Doosan Enerbility

- Sales and orders increased YoY driven by re-calibrated portfolio focusing 'Next-Gen Energy' business
- Expecting improved growth and profitability through increasing orders from nuclear power plant and SMR

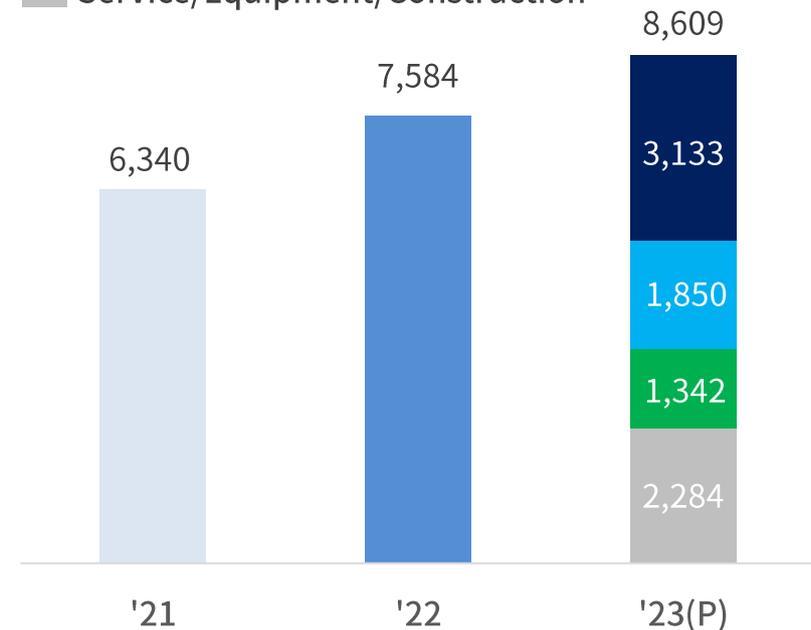
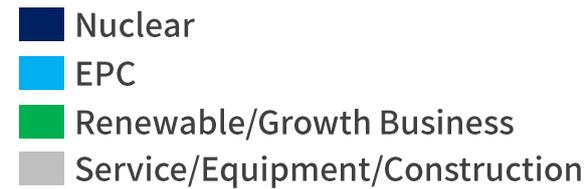
[Income Statement]

Units : KRW bn, %

	2021	2022	YoY	2023(P)
Orders	6,340	7,584	+19.6%	8,609
Sales	4,783	6,558	+37.1%	6,667
OP	241	167	-30.5%	217
(%)	5.0%	2.6%	-2.4%p	3.3%
EBITDA	423	338	-20.2%	-

[Order Plan]

Units : KRW bn, %



Major Subsidiaries' Annual results and 2023 Plan – Doosan Bobcat

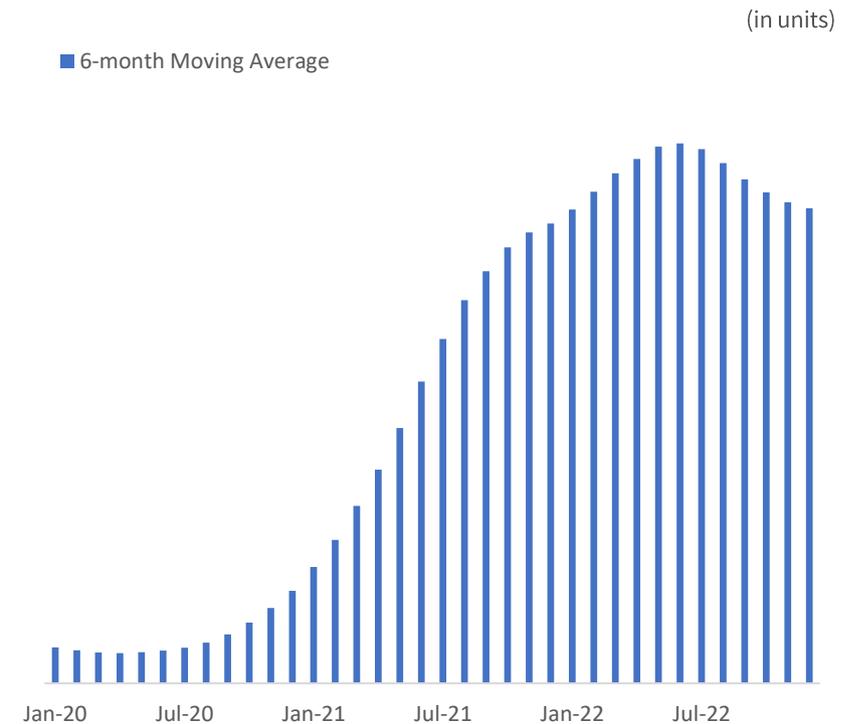
- Sales and OP increased YoY thanks to strong demand in North America and full recognition of DIV¹⁾ sales
- Growth expected to be sustained backed by solid order backlog and strong demand for industrial vehicles in NA

[Income Statement]

Units : KRW bn, %

	2021	2022	YoY	2023(P)
Sales	5,816	8,622	+48.2%	9,226
OP	595	1,072	+80.0%	898
(%)	10.2%	12.4%	+2.2%p	9.7%
EBITDA	752	1,262	+67.9%	-

[NA Order Backlog Trend]

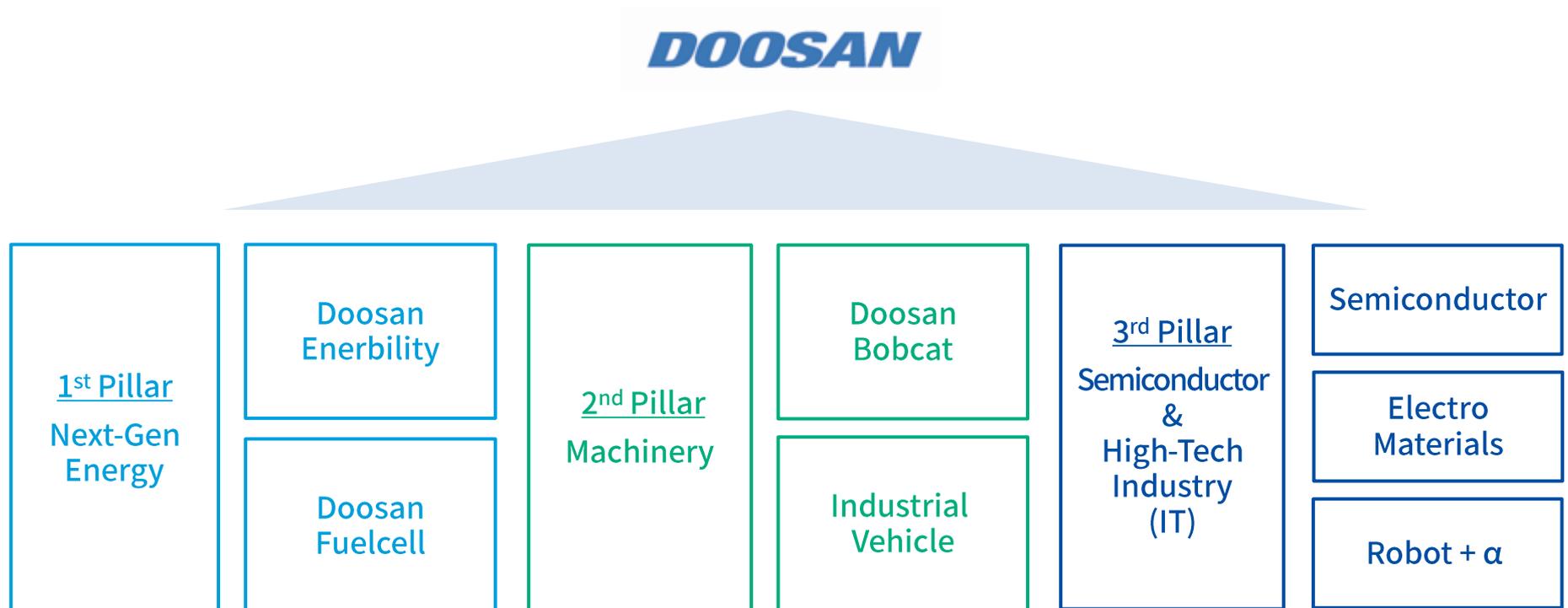


1) Acquired Doosan Industrial Vehicle from Doosan Corporation in July 2021

* Source: Company Data

Doosan group Business Portfolio

- Recalibrated business portfolio represented by 3 major pillar : 'Energy', 'Machinery', and 'Semiconductor & IT'
 - Over Doosan Group's core businesses, built long-term roadmaps based on next-generation energy and high-tech industries such as semiconductors and robots



Chapter 2.

Doosan Corp. In-house Business

2022 Results (In-house Business)

- Electro Materials

- PFC (Electro Materials)

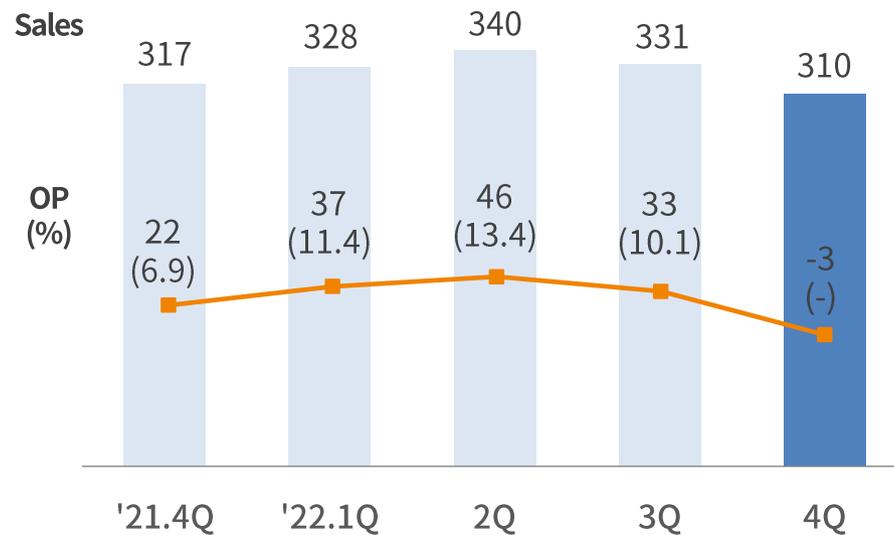
Doosan Corp.'s promising businesses

2022 Results and 2023 Plan(Doosan Corp. In-house Business)

- 2022 : Sales increased by +5.9% YoY driven by solid sales growth of Electro-Materials
 - OP slightly decreased YoY due to rise in raw-material price
- 2023 : Despite unfriendly business environments, sales are expected to increase by +2.9%(1.3KRW tn) YoY through developing new businesses and high-end focused portfolios

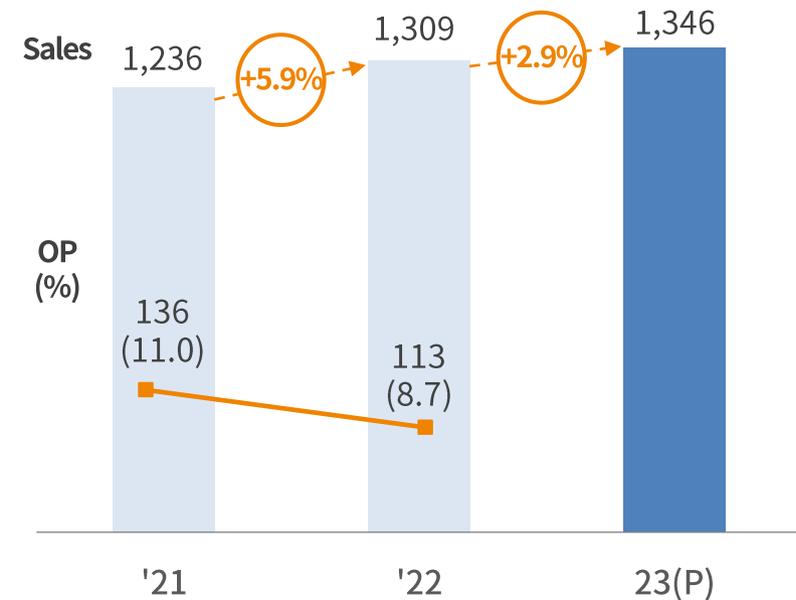
[Sales]

Units : KRW bn, %



[Annual Outlook]

Units : KRW bn, %

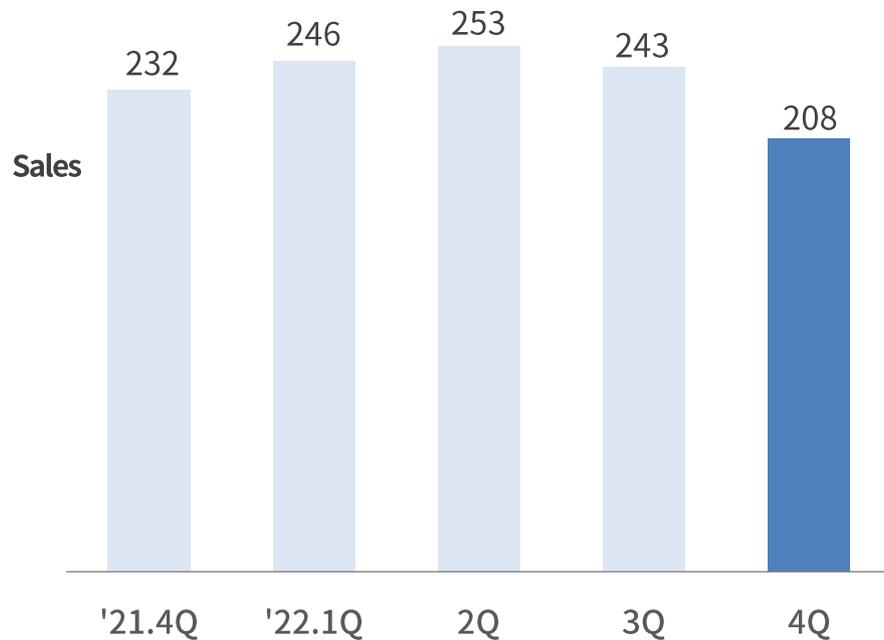


Electro-Materials

- 2022 : Annual sales increased by +3.8% YoY driven by portfolios focused on High-End products such as CCLs for semiconductors and data-centers
 - OP slightly decreased YoY due to increase in raw material prices and costs related in a new businesses
- 2023 : Sales are expected to grow by +5% YoY though increasing sales from High-End products, securing new markets such as AR/VR and expanding new businesses for EVs

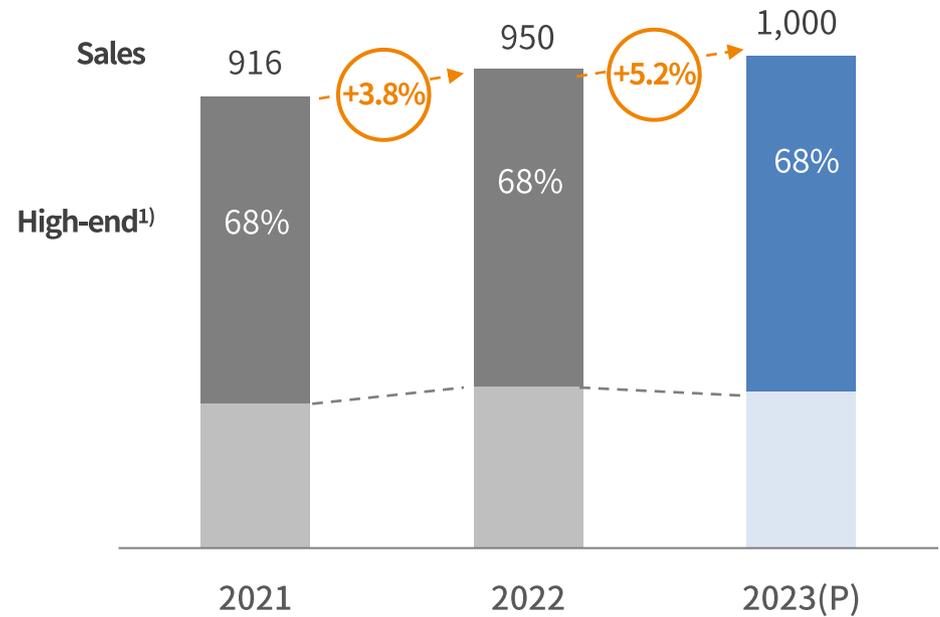
[Quarterly Sales Trend]

Units : KRW bn



[Annual Outlook]

Units : KRW bn, %

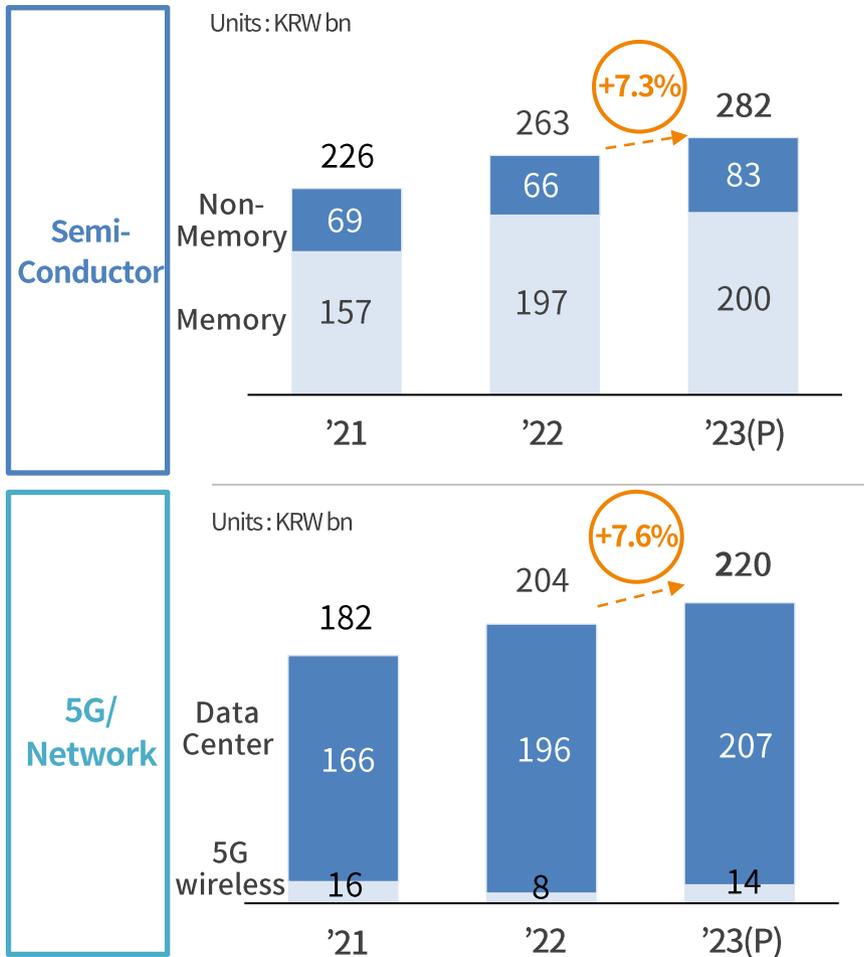


1) High-end : Semiconductor Package(PKG CCL), 5G/Network(NWB CCL), FCCL(Flexible CCL)

Major Achievements in 2022 and 2023 Strategies

Planning to improve sales and profitability based on High-end products

Sales trend of each Application



Major Achievements in 2022 and 2023 strategies

Non-Memory

- [Achievements] Began 5G AiP production for Qualcomm and increased sales in MCU¹⁾ for EVs
- [Plan] Expanding line-ups for high potential products such as 5G AiP, CPU/GPU²⁾ and accelerating market entry

Memory

- [Achievements] Increased Hi-end sales from securing customers for GDDR6 and obtained authorization for DDR5 materials
- [Plan] Preoccupying DDR5 market and increasing M/S for DRAM

DataCenter³⁾

- [Achievements] Increased sales from 400G data centers and obtained authorization for 800G/AI Accelerator materials
- [Plan] Securing solid sales via expanding M/S for 400G, diversifying portfolios and preoccupying 800G/AI Accelerator market

5G Wireless⁴⁾

- [Achievements] Delayed sales growth due to unfriendly market environments but secured future customers by acquiring product approvals
- [Plan] Increasing sales from securing new clients for low-loss materials⁵⁾ and 5G modules

1) Micron Controller Unit, 2) Graphics Processing Unit, 3) Switch, Router, Server, AI Accelerator, 4) Small Cell/ Macro Cell/ 5G Module, 5) Low-loss low-CTE, high heat resistance low-loss..

Electro-Materials' roadmap for the future

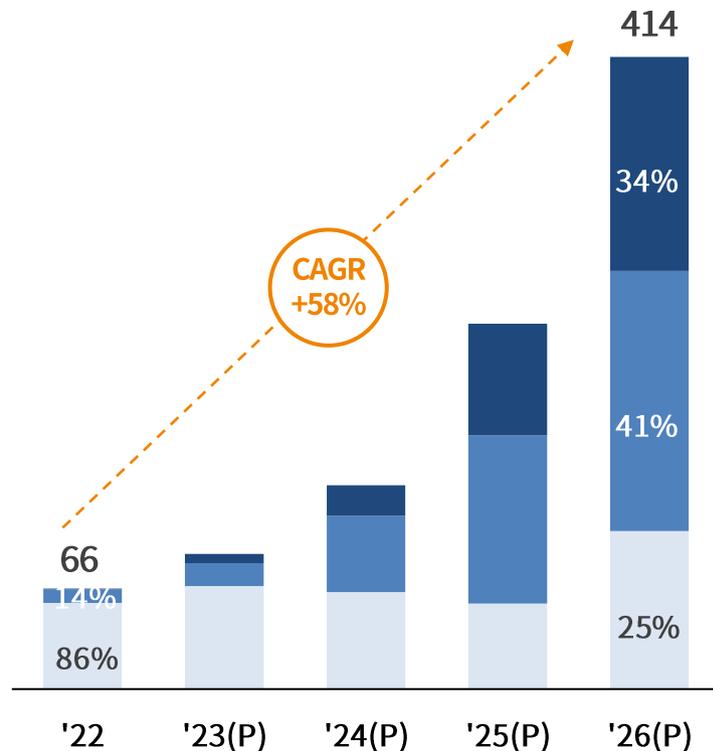
Sales from new business of Electro-Materials are expected to reach 410KRW bn by 2026

Goals of Sales

Development strategy for new business

- 5G Products
- EV materials
- Energy materials

Units: KRW bn



- 5G Products**
 - Increasing capacity to provide antenna solutions to 5G market and developing into network modules specialized company

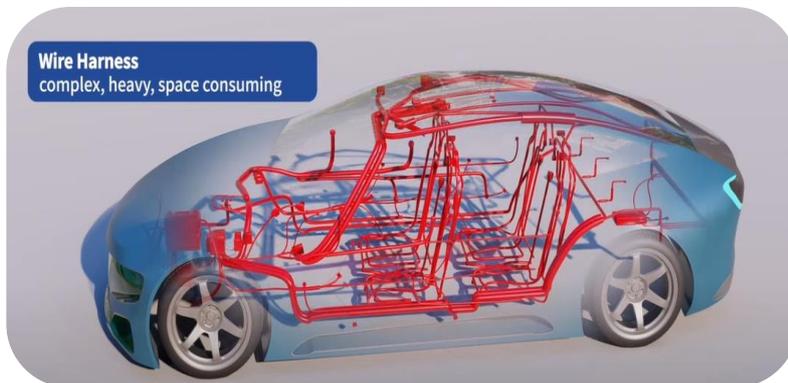
- EV Materials (PFC)**
 - Securing more PFC orders for EV batteries
 - Increasing applications over battery such as door/roof/seat

- Energy Materials**
 - Enhancing business competitiveness by dualizing necessary materials and increasing capacity to meet customers' demands
 - Expanding green energy business align with the government's green energy policies

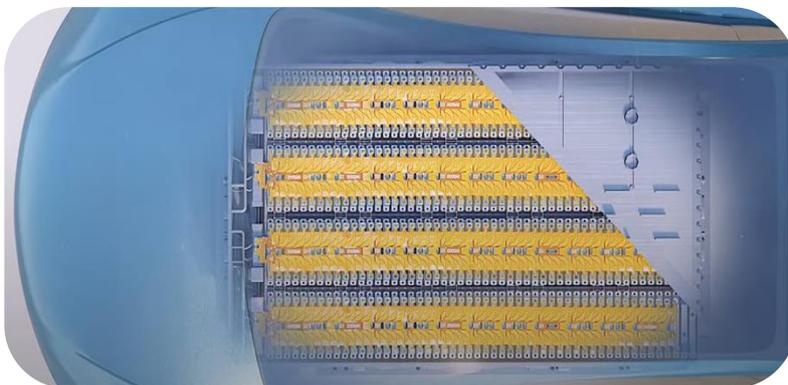
Electro Materials' New Business - PFC (Patterned Flat Cable)

As Doosan developed for the first time in the world, PFC is a next-generation cable for electronic devices which relays electrical power and control information to components such as batteries in the EV

Conventional EV vs. PFC



EV composed of Wire Harness



EV Battery connected with thin and light PFC

Features of Doosan PFC

Merit

- Reduces the weight and volume of copper wires by 80% comparing to existing Wire Harness
→ Improve mileage of EV car by weight lightening
- Overcome the length limitations up to 3m through Roll-to-Roll processing
→ capable to meet the trends of getting larger and heftier EV
- Internalizing of Fuse¹⁾, Thermistor²⁾, Battery Management System(BMS) on its PFC

Current

- Built production plant in haiduong, Vietnam, Sep 20
- Sampling now and to start production from end-22
- Acquired a certificate from global auto makers
- Ongoing contract discussions with global auto makers
- Sales expected to surge after mass production

1) Fuse : an electrical safety device to prevent its melts and interrupts the circuit when exceeds a particular amperage

2) Thermistor : a resistance thermometer whose resistance is dependent on temperature

Doosan Corp.'s promising businesses (DLS/Robotics/DMI)

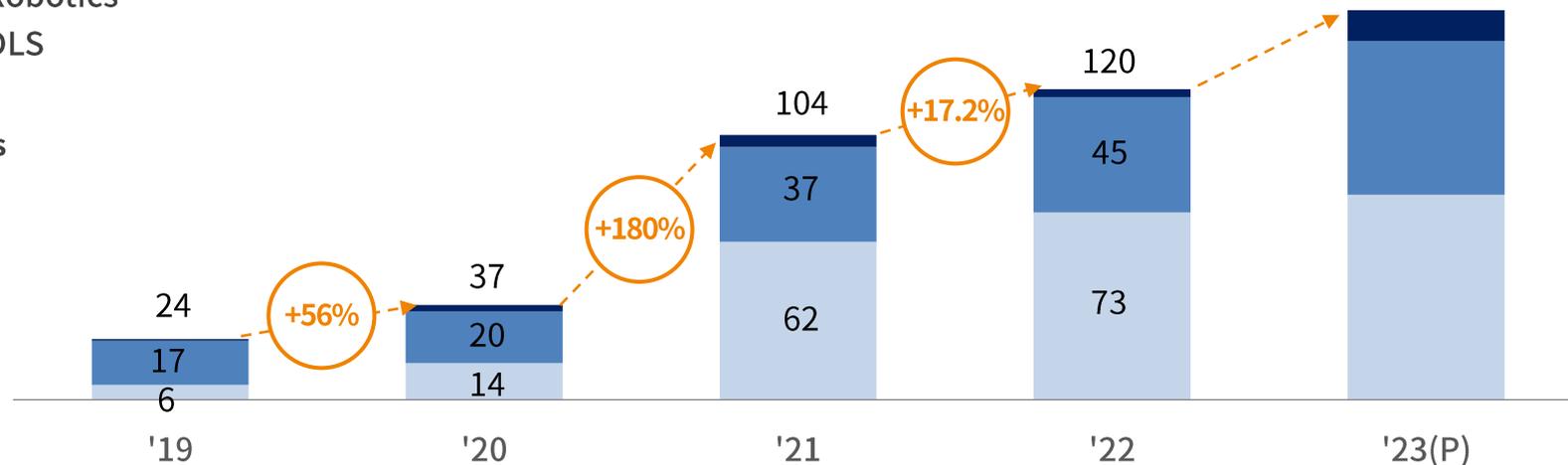
- Robotics : Despite of unfriendly business environments such as war in Ukraine, sales increased by +22% YoY. Sales growth will continue in 2023 based on M/S expansion in NA market and launching high-end solutions such as palletizing.
- DLS : Sales increased by +19% YoY from more maintenance sales from pre-orders. Sales growth will continue in 2023 through securing additional contracts with major retail companies
- DMI : Sales began to generate from military/government and DMI expanded domestic fuel-cell drone businesses for local governments. In 2023, DMI plans to expand government use applications and enter international market through local dealerships

[Sales]

Units: KRW bn



Sales



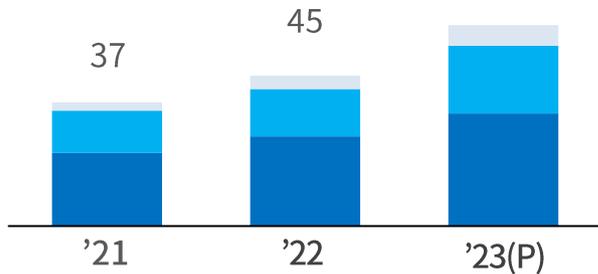
Doosan Robotics – Results and Strategy

2023 sales is expected to increase by +30% through sales expansion from North America

Sales results and Long-Term Plan

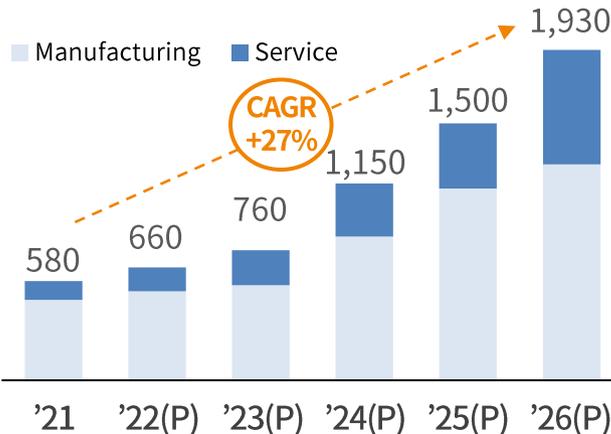
Units: KRW bn, %

■ APEC ■ Domestic ■ Europe, NA



[Corporate Robot Market Outlook] 1)

Units: KRW bn, %: CAGR



Achievements and Growth Strategy

North America

- Improving local branch's sales capacity - Expanding sales channels and improving marketing

Europe

- Securing more sales networks in major countries
- Planning to establish EU branch in 2H

New Release

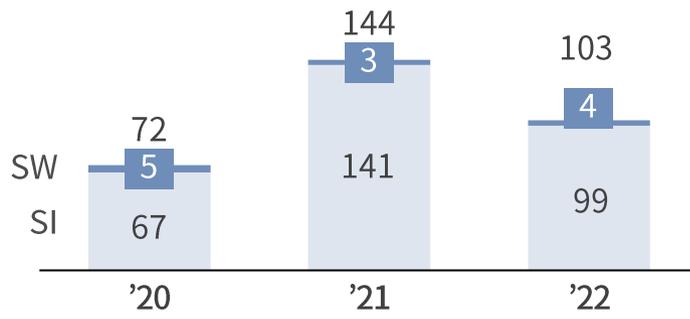
- Increasing solution (establishing robot settings based on each usage such as palletizing) sales
- Adding new line-ups (Series-E, AMR)
- Launching S/W platforms and developing applications for collaborative robots

1) Company estimates based on BCG research data

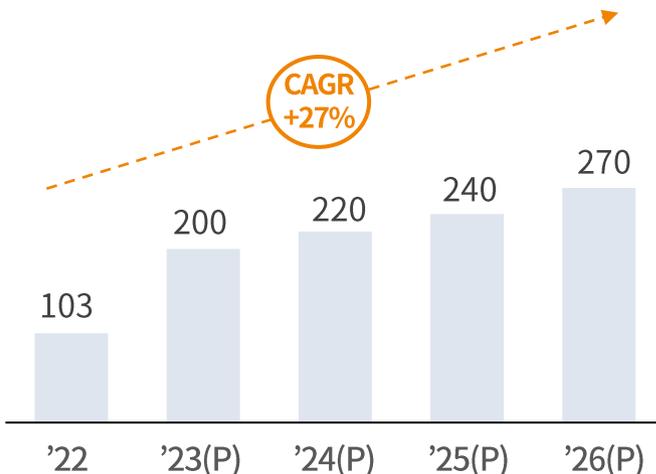
Doosan Logistics Solution - Results and Strategy

Order results and Long-Term Plan

Units: KRW bn, %



Units: KRW bn, %: CAGR



Achievements and Growth Strategy

- **Sales increased by +18% in 2022 YoY** due to sales from pre-orders
 - Secured contracts with major retail companies based on growth of logistics automation market
- **2023 : Sales are expected to grow by +10% YoY** based on growth of e-commerce market
 - Planning to secure major and mid/small sized projects
 - Annual order target 200 KRW bn (target CAGR +12% by '27)

SI

- Developing killer solutions and strategic partnerships
- Planning to expand customer pools including e-commerce/logistics service/3PL
- Improving DLS's competitiveness through enhancing cost efficiency

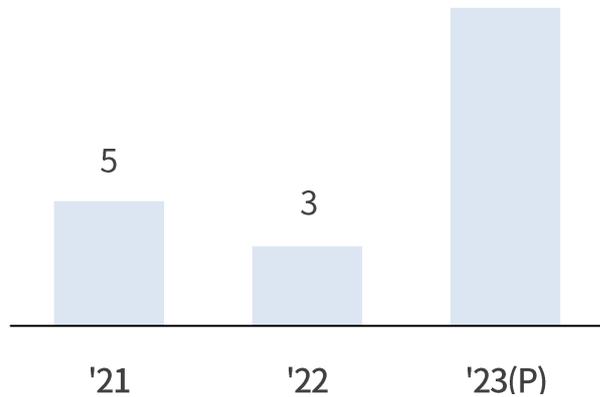
SW

- Internalizing FMS(Fleet Management System) controlling AMR, AGV and developing commercialization references

Doosan Mobility Innovation – Results and Strategy

Sales results and Long-Term Plan

Units : KRW bn, %



Fuel Cell UGV
(Unmanned Ground Vehicle)



Mobile hydrogen refueling station

Achievements and Growth Strategy

- 2023 goal of sales : Powerpacks 3.4 KRW bn, Drones 3.3 KRW bn
- Securing additional customers and partners mainly focusing on military and government
- Generating more sales from ground products such as UGV(Unmanned Ground Vehicle) and mobile hydrogen refueling station
- Expecting more sales from military market through improving durability and weather-resistance of powerpacks

Drones

- Expanding military applications over ground force
- Securing new partnerships in abroad

Powerpacks

- Developing new mobility market for DMI's powerpacks
- Generating sales from UGV and mobile hydrogen station

Long-term Strategy

- Domestic : Generating more sales from military, firefighting applications and developing new sales channels align with local governments' policies
- Global : Increasing oversea sales through securing new partnerships in NA and China

Chapter 3.

Appendix

2022 Result (Parent)
Financial Summary

Appendix : 2022 Result (Parent)

Units: KRW bn, %

	2021	2022	YoY
Sales	968	1,077	+11.3%
OP(%)	66 6.9%	72 6.7%	+8.7% -0.2%p
- In-house Biz	105	106	+1.4%
- Others	-38	-34	-
Interest Expense	74	80	+7.6%
Net Income	411	176	-57.3%

Appendix : Financial Summary

Units: KRW/bn, %

[Financial Summary]

	Parent			Consolidated	
	'22.3Q	'22.4Q		'22.3Q	'22.4Q
Current Asset	1,125	792	Current Asset	10,660	9,544
Non Current Asset	4,233	4,221	Non Current Asset	17,963	16,802
Total Assets	5,359	5,013	Total Assets	28,623	26,346
Current Liabilities	1,000	780	Current Liabilities	10,607	9,514
Non Current Liabilities	1,116	1,049	Non Current Liabilities	6,679	6,541
Total Liabilities	2,116	1,829	Total Liabilities	17,285	16,054
Paid-In Capital	124	124	Paid-In Capital	2,527	1,790
Total Equity	3,243	3,184	Total Equity	11,338	10,292
L/E Ratio	65.3%	57.5%	L/E Ratio	152.5%	156.0%

[Debt]

	Parent	
	'22.3Q	'22.4Q
Bank	960	792
Corp. Bonds	592	332
Debt	1,552	1,124
Cash	283	429
Net Debt	1,269	695
Net D/e Ratio	39.1%	21.8%