

Doosan Fuel Cell

DOOSAN

IR Presentation

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Investor Relations



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PureCell®

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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 separate basis.

Contents

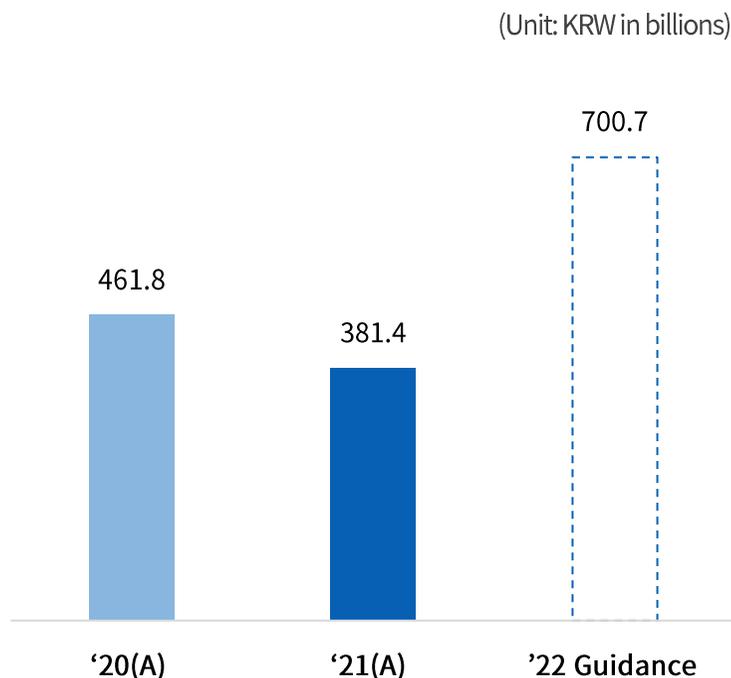


1. Results and Guidance
 2. Biz Achievements and Strategy
 3. New Growth Engine
- Appendix

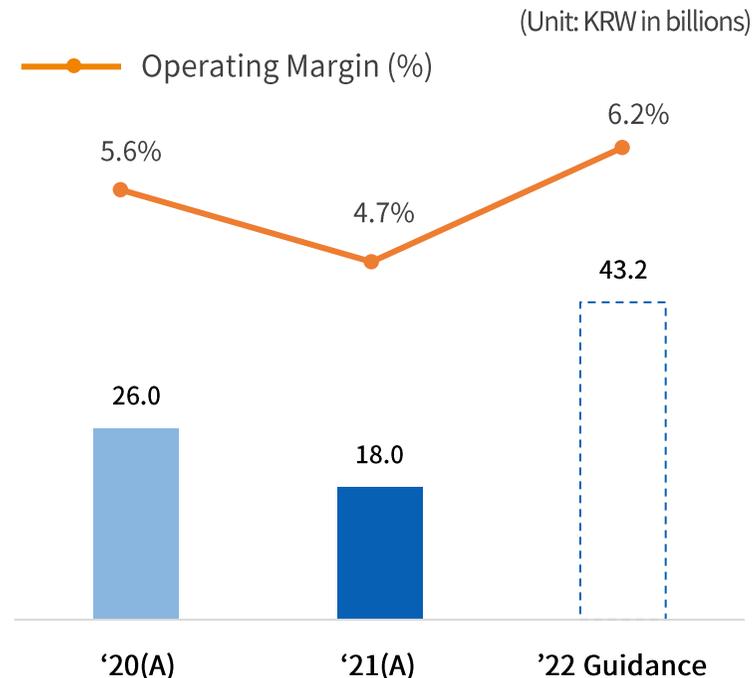
2022 Guidance: Revenue KRW 700.7 bn, operating income KRW 43.2 bn

- 2021: As new orders were concentrated at year-end of 2021, sales recognition was carried forward to the next year, which resulted in lower performance than the plan
- 2022 earnings turnaround: RPS will keep creating new orders and a big project already won late last year will be recognized as sales revenue

Sales Revenue



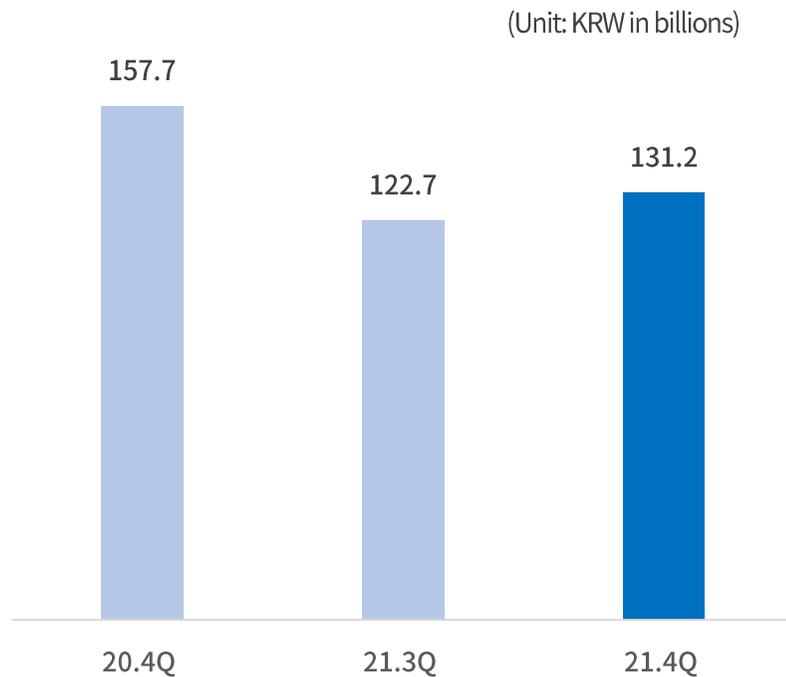
Operating Income



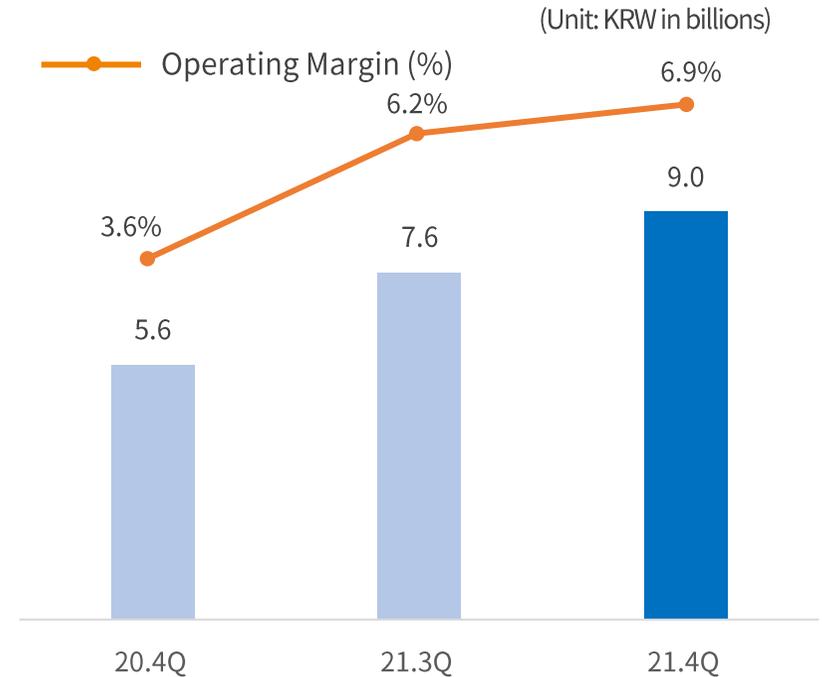
[Backup] 2021 Q4 sales revenue and operating income

- Sales revenue KRW 131.2 bn, operating income KRW 9.0

Quarterly Sales Revenue



Quarterly Operating Income



2022 order target: 240MW

- Won 130MW of new orders in 2021, 92% of the target
- 2022 target was set at 240MW as (1) RPS will keep creating mid to small scale orders, (2) additional big projects will be developed (3) Tri-gen model orders and export expansion are expected

2022 Order Intake Strategy

(1) New orders under RPS

- RPS amendment* - giving extra REC's - will resume mid to small scale orders which were deferred in '21.

(2) Big project development

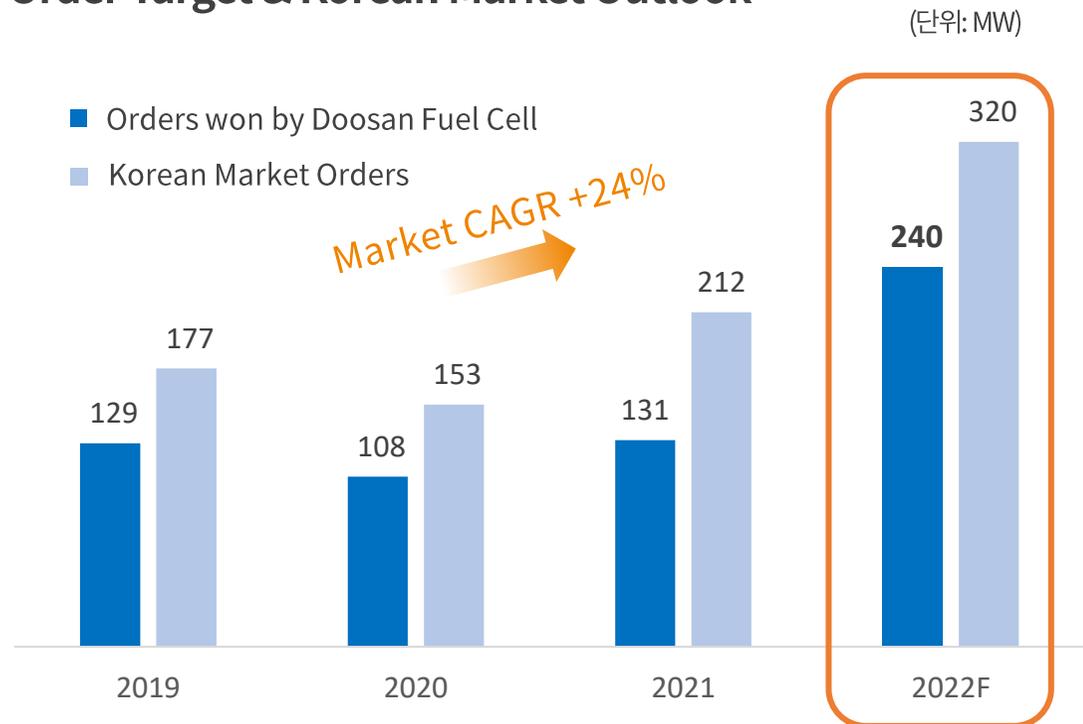
- Direct import of gas, individual rating will improve economics of stationary fuel cells

(3) Tri-gen model and export expansion

- Receiving Tri-gen model orders and expanding export to China

* RPS amendment adds 0.2REC in case of 65% combined efficiency or more and 0.1REC in case of using byproduct H2

Order Target & Korean Market Outlook



* Orders won by Doosan Fuel Cell in 2021 and 2022F include export

New Growth Engine will be secured by developing new products, expanding export and materializing new businesses

2021 Biz Achievements

New Product R&D	<ul style="list-style-type: none">• Completed Tri-gen model development<ul style="list-style-type: none">– MOU with SK Energy• SOFC development status<ul style="list-style-type: none">– Completed the design of system, cell and stack manufacturing factory– Site chosen: Saemanguem Industrial Complex
Export	<ul style="list-style-type: none">• Became 1st Stationary fuel cells exporter in Korea<ul style="list-style-type: none">– 1.8MW to Foshan, China– First global combined heat power plant reference
New Businesses	<ul style="list-style-type: none">• Marine fuel cells<ul style="list-style-type: none">– MOU with shipowners and shipbuilders home and abroad

2022 Plan and Strategy

<ul style="list-style-type: none">• Demonstrating Tri-gen and getting orders<ul style="list-style-type: none">– The product to be demonstrated– Developing charging station projects and laying foundation for relative orders• Commencement of SOFC plant construction<ul style="list-style-type: none">– On track to complete the build by the end of '23– Commercialization target: Stationary(24), maritime(25)
<ul style="list-style-type: none">• China export expansion<ul style="list-style-type: none">– Having advanced to demo project of a Chinese local government, follow up projects are being developed– Various cooperation with Chinese companies are being considered
<ul style="list-style-type: none">• Building maritime fuel cell cooperation<ul style="list-style-type: none">– SOFC demonstration partnership to be built• Mobility Powerpack<ul style="list-style-type: none">– Business model to be developed and partnership to be crafted

LOI for a Maritime fuel cell demonstration consortium signed

- LOI was signed for a consortium with Shell and KSOE thereby testing maritime fuel cells as an auxiliary power unit
- Planning to commercialize before the market opens in earnest to get ahead of competitors

Maritime FC demo consortium LOI

Shipowner & Shipping company



Ship building

Ship designing & building



SOFC manufacturing and sale

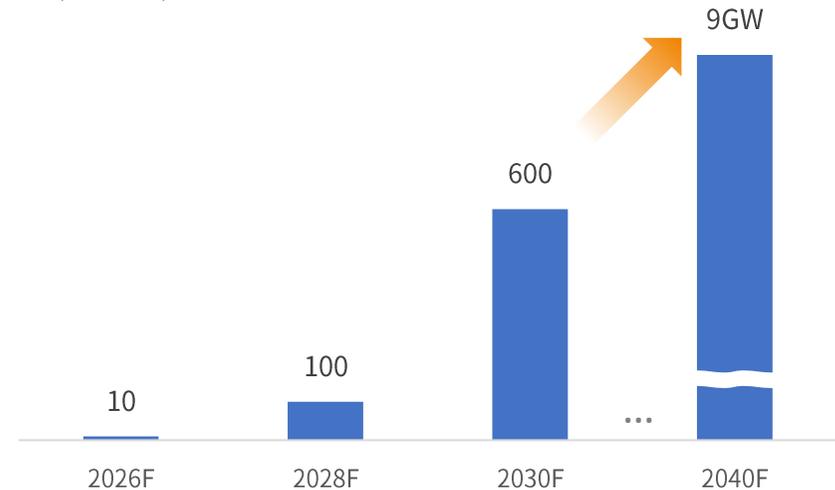
Maritime SOFC



Maritime fuel cell market outlook & strategy

- System development and certification by classification societies done by 2024; maritime fuel cell business kick-off in 2025
- Given IMO phase 4* in 2030, the market will be created in earnest in 2029

(Unit: MW)



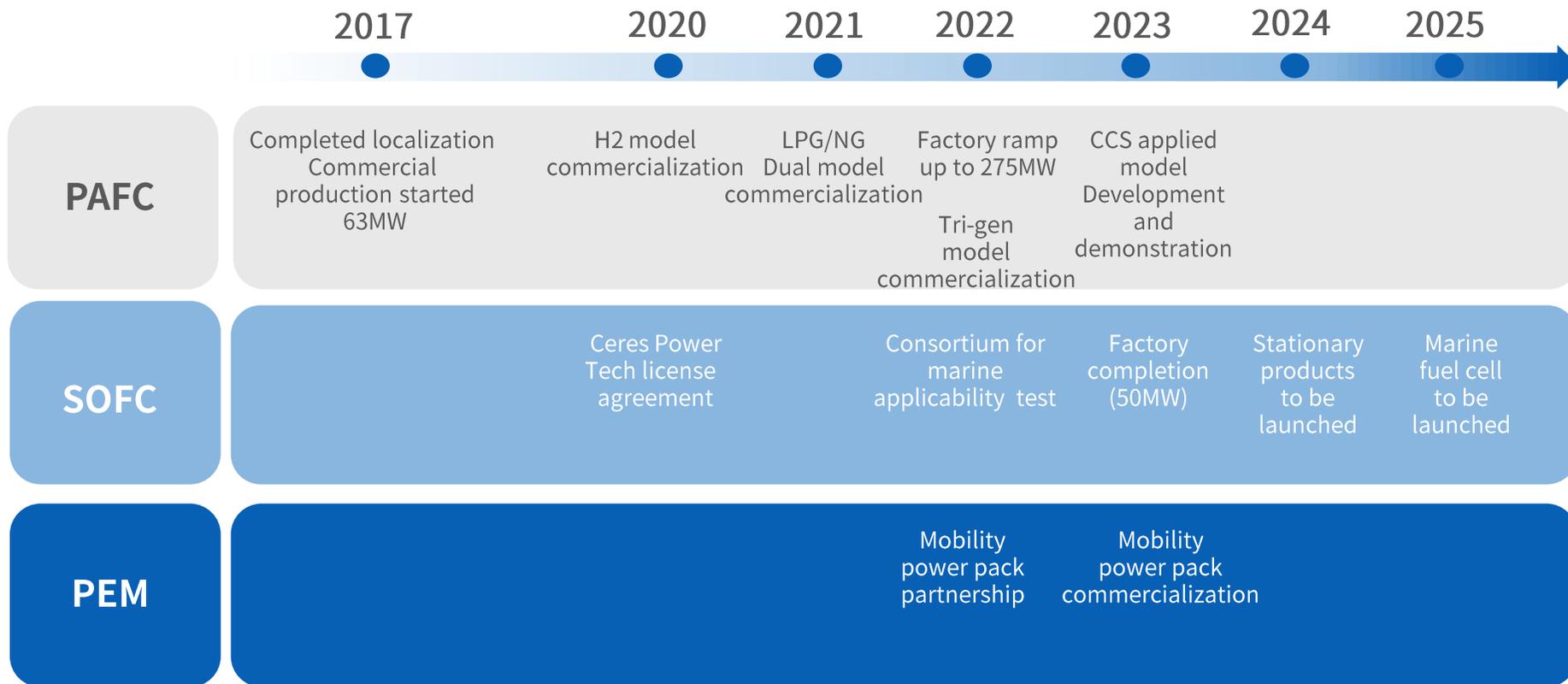
Source: estimated based on Clarkson Research

*EEDI stage 4: target to reduce CO2 emissions by 40% or above compared to 2008

3. New Growth Engine

Utilizing various technologies to build new growth engine

- PAFC ramp up in 2022 and SOFC new factory will expand our business horizon
- Maritime fuel cells and Mobility Powerpack partnership will mature so that new growth engine will be secured
- In response to national net zero strategy, we plan to develop CCS*-applied PAFC, ammonia-based SOFC and H₂ model improvement



* CCS: Carbon Capture Storage

Summary of Financial Position

(Unit: KRW in billions)	20.Q4	21.Q3	21.Q4	YoY	QoQ
Total Assets	790.2	854.8	698.9	-91.3	-156.0
Current Assets	652.0	682.1	498.2	-153.8	-183.8
Non-current Assets	138.2	172.8	200.6	62.4	27.9
Total Liabilities	277.6	341.5	180.7	-97.0	-160.8
Current Liabilities	264.6	239.6	77.6	-187.0	-162.0
Advanced Received	53.2	36.4	13.9	-39.3	-22.5
Non-current Liabilities	13.1	101.8	103.1	90.0	1.2
Shareholder's Equity	512.5	513.4	518.2	5.6	4.8
Total Liabilities and Equity	790.2	854.8	698.9	-91.3	-156.0
Leverage Ratio	54%	67%	35%		
Debt	99.0	174.0	75.0	-24.0	-99.0
Cash and Cash Equivalents*	392.8	363.0	187.0	-205.7	-176.0
Net Debt**	-293.8	-189.0	-112.0	181.7	77.0

* Cash and cash equivalents + ST financial instruments + ST financial assets

** Debt- Cash and cash equivalents and etc.

Summary of Income Statement

Yearly Earnings

(KRW in billions)	2019	2020	2021	YoY
Sales Revenue	498.1	461.8	381.4	-17%
Operating Income	17.3	26.0	18.0	-31%
Margin(%)	3.5%	5.6%	4.7%	
EBITDA	23.1	33.3	26.7	-20%
Margin(%)	4.6%	7.2%	7.0%	
Income before Tax	5.4	18.3	18.6	2%
Net Income	3.9	14.2	8.7	-39%

Quarterly Earnings

(KRW in billions)	'20.4Q	'21.3Q	'21.4Q	YoY	QoQ
Sales Revenue	157.7	122.7	131.2	-17%	7%
Operating Income	5.6	7.6	9.0	60%	18%
Margin(%)	3.6%	6.2%	6.9%		
EBITDA	7.5	9.8	11.7	56%	19%
Margin(%)	4.6%	8.0%	8.9%		
Income before Tax	0.5	9.1	6.9	1186%	-25%
Net Income	1.1	6.7	5.8	425%	-14%

Q&A Session



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