

Doosan Fuel Cell

DOOSAN

IR Presentation

November 2022
Investor Relations



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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.

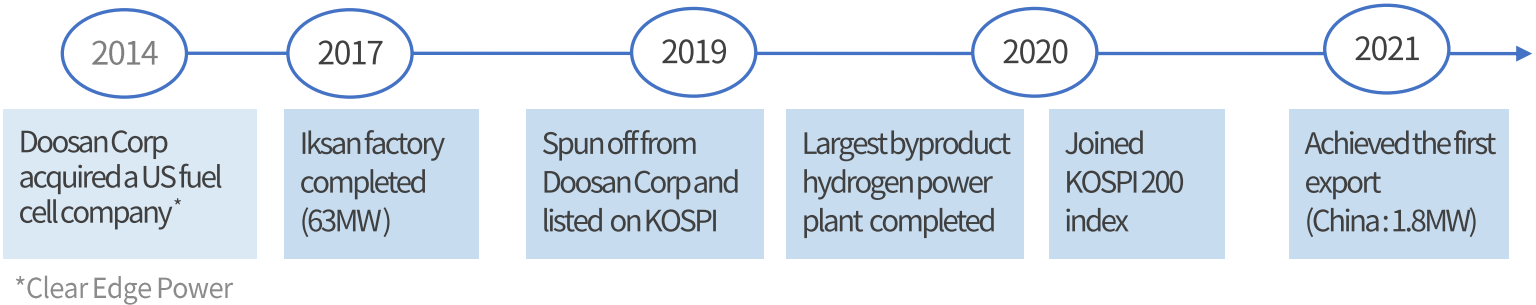
Company at a Glance

Overview

- Business : fuel cells, long-term service, H₂ generator installation & management, FCEV charging stations, mobility powerpack and fuel cells for eco-friendly vessels
- Assets : KRW 871.1 billion
- Employees : 449

As at the end of Sep. 2022

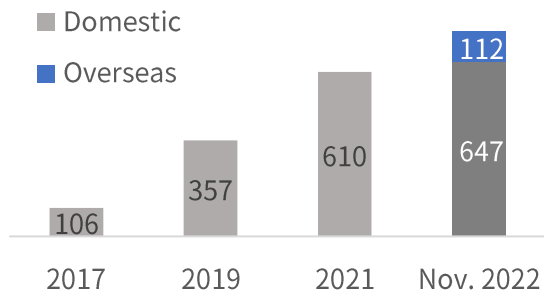
History



Performance

Accumulated Orders (MW)

Korean No.1 in 4 consecutive years



Footprints

468MW installed in 41 sites in Korea



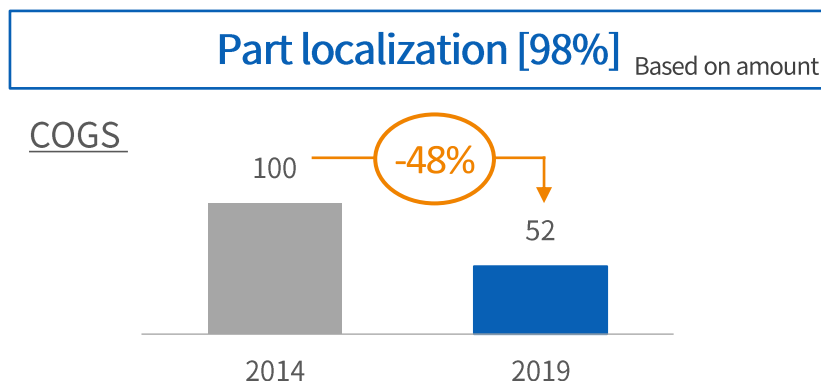
As at the end of Sep. 2022

Key Advantages of PAFC Technology

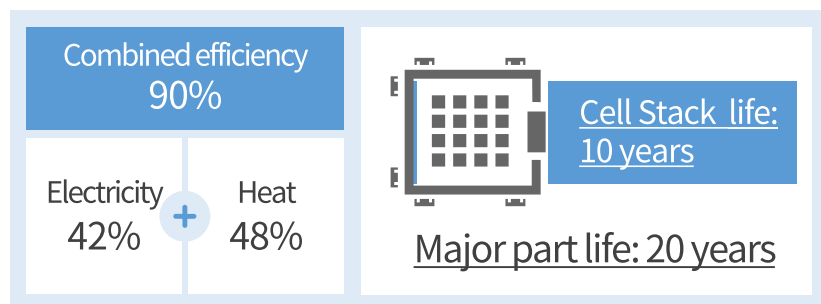
Our PAFC serves the government green initiatives

- Higher localization rates drive cost reduction and create jobs
- Higher combined efficiency and first and only hydrogen model support government policy including CHPS⁽¹⁾

✓ High localization & combined efficiency

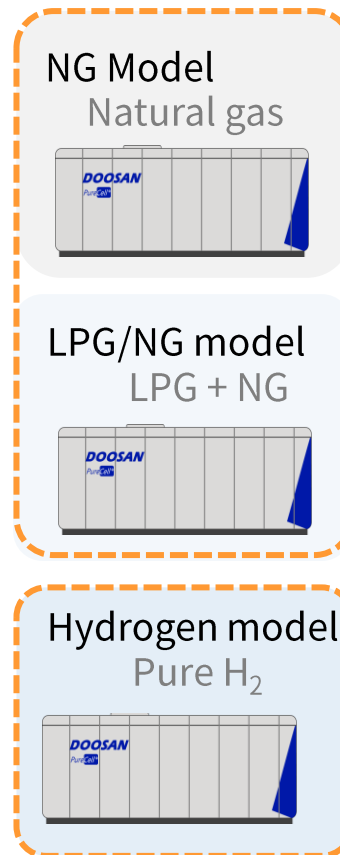


High combined efficiency & long lifespan



(1) CHPS: Clean Hydrogen Portfolio Standard

✓ Easy convert o H₂ model



“Hydrogen Ready”
Legacy models are
convertible to hydrogen
model

First commercialized to
usher in Green H₂
economy

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1. 3Q Earnings

3Q Earnings

Order Outlook

New Biz Update

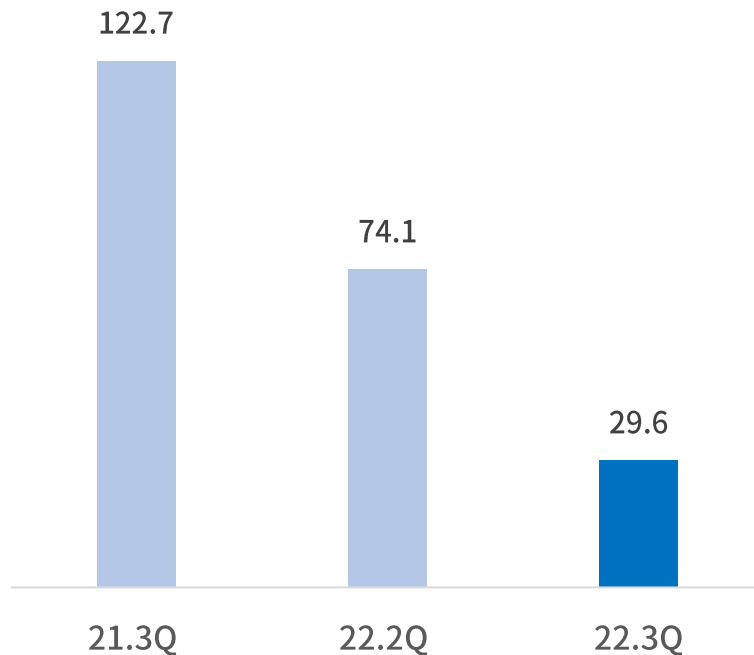
Technology Roadmap

Recorded Q3 sales revenue 29.6 billion won and operating loss 2.9 billion won

- Slow sales revenue and operating losses due to delays in some orders
- Sales revenue and operating income are forecast to improve in 4Q

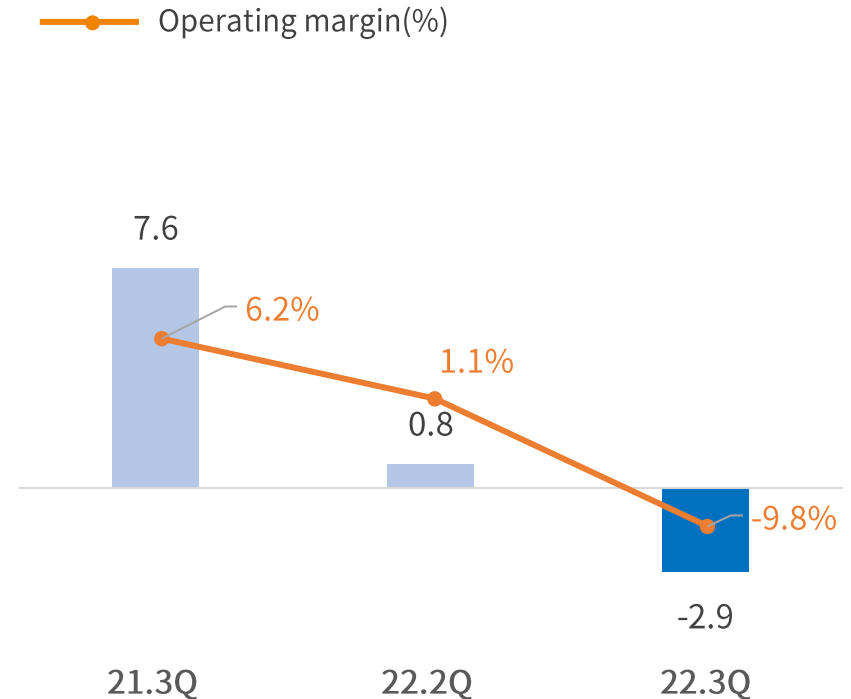
Quarterly Sales Revenue

(Unit: KRW in billions)



Quarterly Operating Income

(Unit: KRW in billions)



Maintain 240MW order target for 2022

- Recorded 149MW of accumulated orders received in Nov. 2022
- Efforts to achieve the annual target by winning RPS-based orders
- Securing order pipeline ahead of new policy

2022 Order Status & Strategy

(1) Continuing to win orders under RPS

- Efforts to win additional orders for small and medium-sized power plants

(2) Developing large projects

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

(3) Tri-gen model and export expansion

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

(4) Securing order pipeline

- Efforts to secure conditional PJT prior to new policy

2022 Orders & Outlook



To sign large scale order and establish joint venture (JV) factory

- Signed a supply contract with ZKRG⁽¹⁾ to supply a total 105 MW(50MW stationary fuel cells and 55MW parts) based on the first export track record in Foshan, China.
- JV factory will be built in Foshan city, Guangdong province, China to build a foundation for entering the Chinese market.

Background for entering China

China's NDRC announces mid- to long-term plans for H₂ industry development

- Phase 1(~2025): forming value chain
- Phase 2(~2030): Completing the H₂ industry system focusing on green H₂
- Phase 3(~2035): applying to all industries

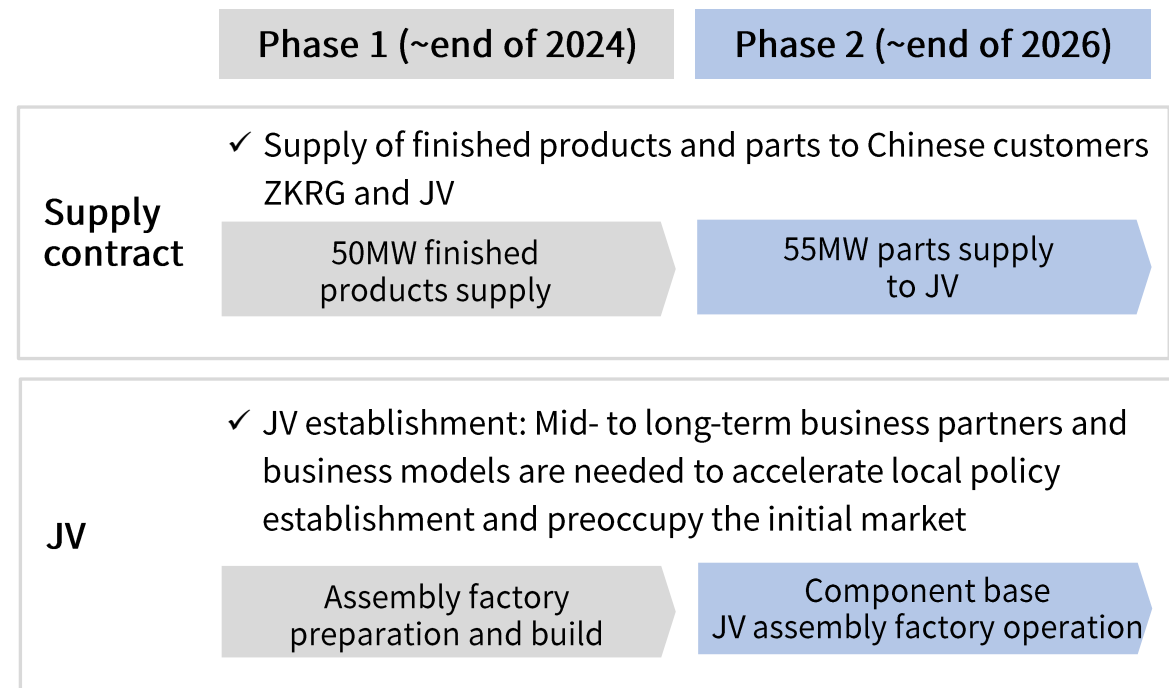
Expansion of local government H₂ pilot projects

- When combined with the fuel cell supply target by 2025, including the capital economic zone, Yangtze River Delta, and Pearl River Delta, it is expected to form a market of up to 1.6 GW.

Eco-friendly distributed heat source required

- CHP (Combined Heat & Power) Fuel Cell-centered supply target setting

Overview of Supply Contract & JV



(1) ZKRG Smart Energy Technology (Foshan) Co. Ltd is China based company focusing on the promotion and application of fuel cell CHP(Combined Heat & Power) technology.

3. New Business Update

3Q Earnings

Order Outlook

New Biz Update

Technology Roadmap

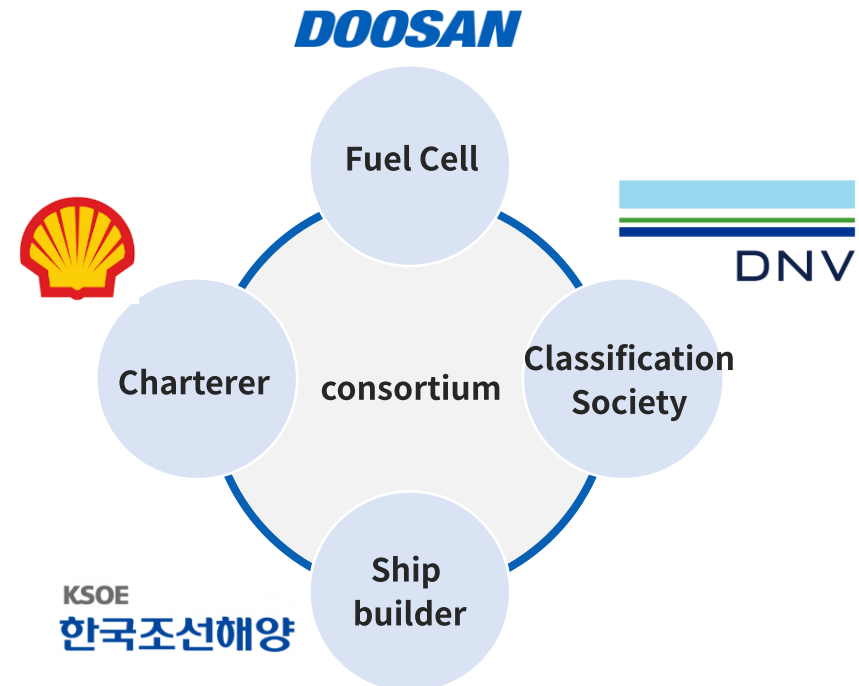
Successful demonstration of maritime SOFC to dominate the market in early stage

- Signed a consortium contract with global charterer, shipbuilder and classification society to demonstrate SOFC for auxiliary power
- After completing system development and classification certification by 2024, SOFC will be demonstrated in ships in 2025-2026

Consortium contract signing ceremony(Oct. 2022)



Maritime fuel cell demonstration consortium



4. Technology Roadmap

3Q Earnings

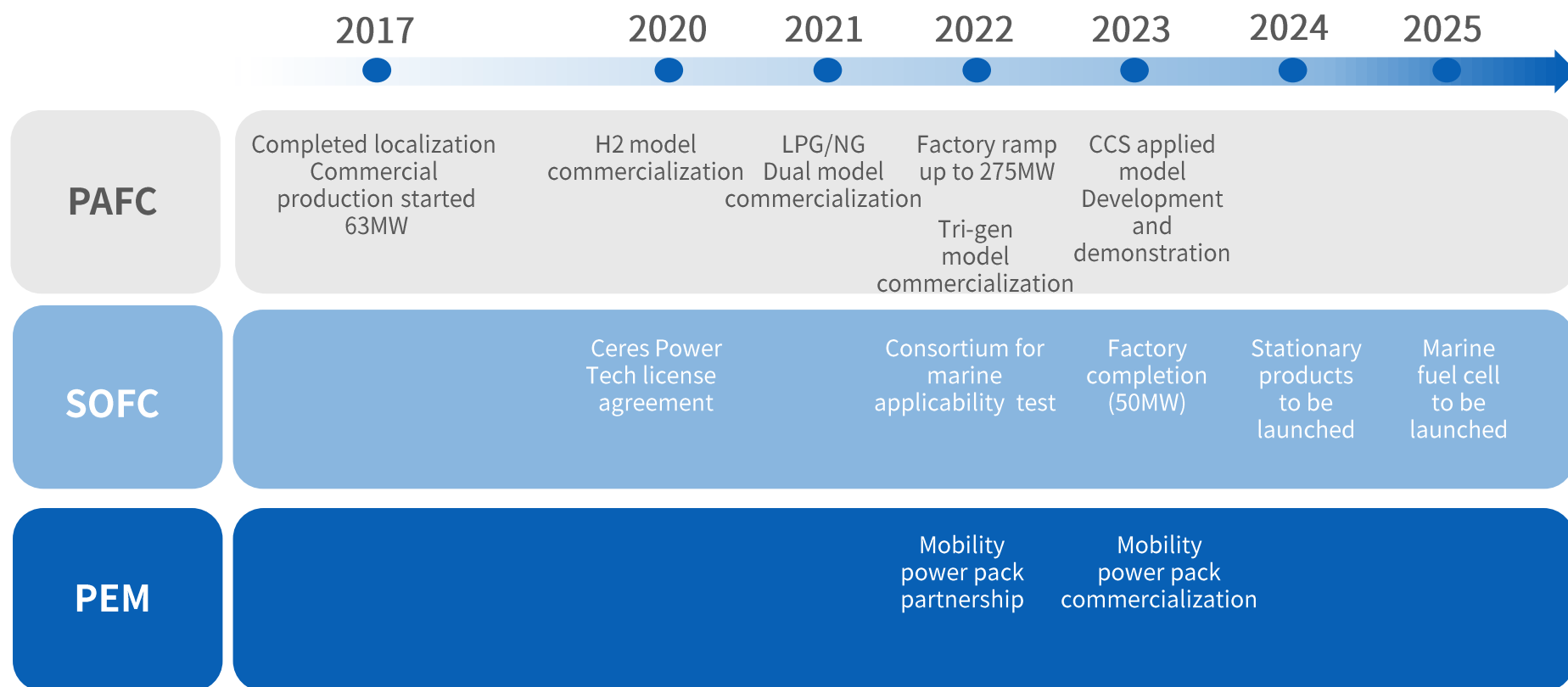
Order Outlook

New Biz Update

Technology Roadmap

Utilizing various technologies to build new growth engine

- Completed PAFC expansion in Oct. 2022 and plan to complete SOFC new build by 2023
- 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 improve H₂ model and develop CCS⁽¹⁾-applied PAFC and ammonia-based SOFC



(1) CCS: Carbon Capture Storage

Summary of Financial Position

(Unit: KRW in billions)	21.Q3	22.Q2	22.Q3	YoY	QoQ
Total Assets	854.8	764.6	871.1	16.3	106.5
Current Assets	682.1	525.1	607.6	-74.4	82.5
Non-current Assets	172.8	239.5	263.5	90.7	24.0
Total Liabilities	341.5	249.5	354.9	13.4	105.4
Current Liabilities	239.6	138.3	245.5	5.9	107.3
Advanced Received	36.4	17.0	13.7	-22.7	-3.4
Non-current Liabilities	101.8	111.2	109.3	7.5	-1.9
Shareholder's Equity	513.4	515.1	516.3	2.9	1.1
Total Liabilities and Equity	854.8	764.6	871.1	16.3	106.5
Leverage Ratio	67%	48%	69%	2%p	20%p
Debt	174.0	75.0	175.0	1.0	100.0
Cash and Cash Equivalents⁽¹⁾	363.0	67.0	24.9	-338.1	-42.1
Net Debt⁽²⁾	-189.0	8.0	150.1	339.1	142.1

(1) Cash and cash equivalents + ST financial instruments + ST financial assets

(2) Debt- Cash and cash equivalents and etc.

Summary of Income Statement

(KRW in billions)	21.3Q	22.2Q	22.3Q	YoY	QoQ
Sales Revenue	122.7	74.1	29.6	-76%	-60%
Operating Income	7.6	0.8	-2.9	-138%	Turned to loss
Margin(%)	6.2%	1.1%	-9.8%		
EBITDA	9.8	3.6	0.2	-100%	-99%
Margin(%)	8.0%	4.8%	0.1%		
Income before Tax	9.1	-0.5	1.2	-87%	Turned to profit
Net Income	6.7	0.1	1.1	-84%	1246%

Q&A Session

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