



Investor Relations 2020

Doosan Fuel Cell 4Q19 Earnings Release

February 10, 2020



Disclaimer

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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.



4Q19 Earnings Release

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1. Company Overview

<u>Name</u>	Doosan Fuel Cell
<u>Establishment</u>	2019.10.01
<u>Listing</u>	2019.10.18(KOSPI)
<u>Assets</u>	495.8 KRW bn ¹⁾
<u>Employees</u>	340
<u>Head Office</u>	Iksan, Korea

1) ' As of 4Q19

Supply of fuel cell for power generation



Provide fuel cell generating power and heat

Long-term maintenance service offer



Provide stable maintenance/management service of the plant for 20 years

2. History



2) Took over fuel cell business of UTC Power in 2013

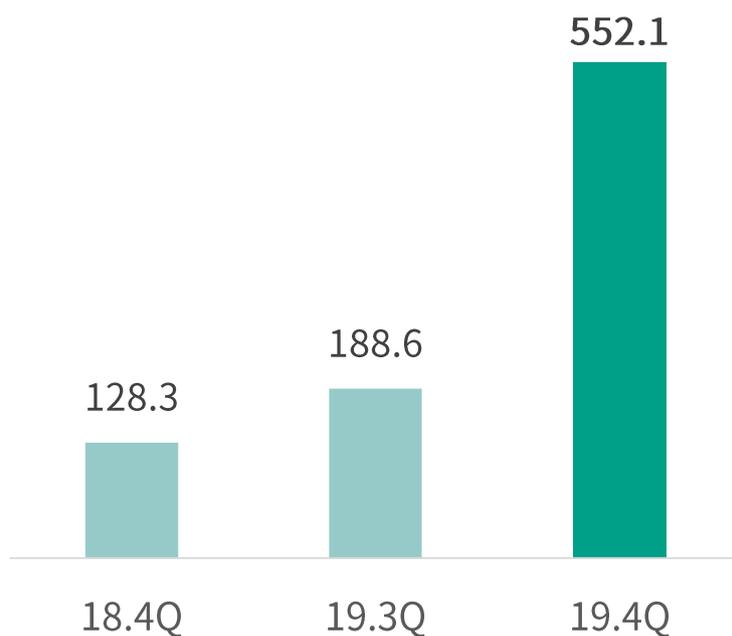
3) Hanwha Total Petrochemical 50.16MW

4Q19 Results

- Achieved KRW 552.1 bn of order amounts in 4Q19 and KRW 1.2 tn annually for the 2nd year in a row
- Sales revenue and operating income grew significantly QoQ and YoY
 - Recorded KRW 19.5 bn operating income due to the sales increase based on customer delivery schedules

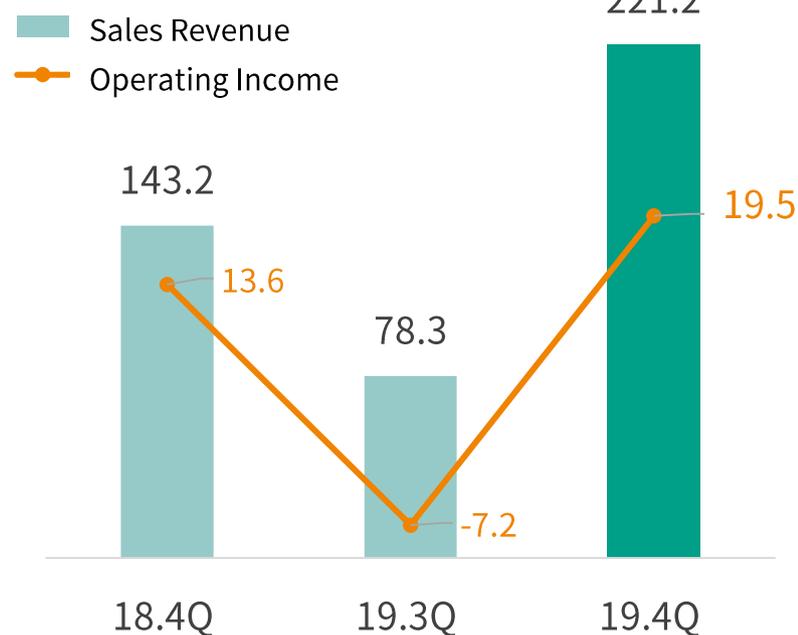
[Orders¹⁾]

Unit: KRW bn



[Quarterly Earnings Results²⁾]

Unit: KRW bn



**Operating
Margin**

9%

-9%

9%

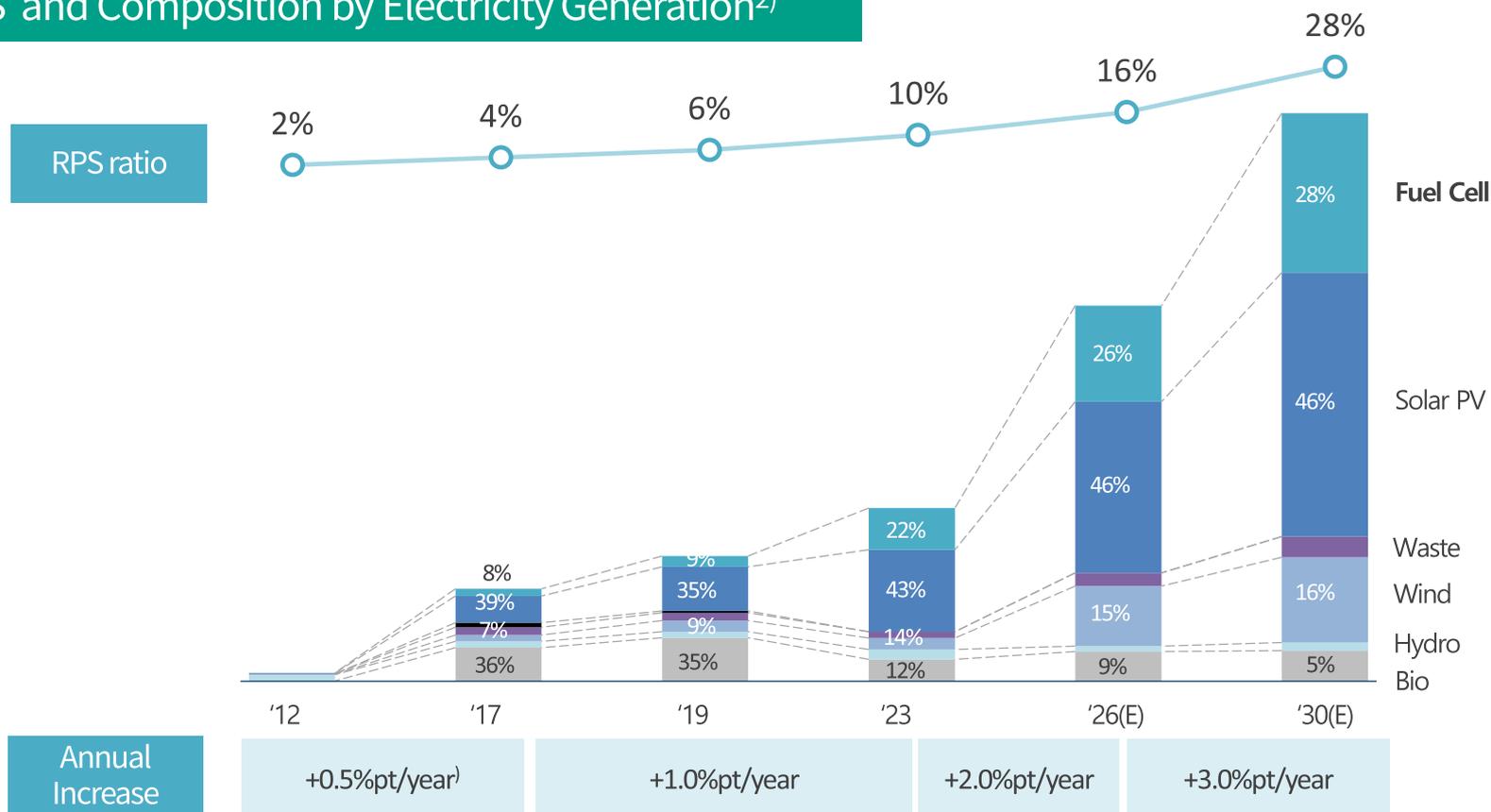
1) The figures for orders were counted by internal management standards, excluded VAT

2) 4Q.18 and 3Q.19 results are based on the spin-off criteria

New & Renewable Energy Policy

- The market is expected to grow driven by the increase in RPS¹⁾ and policy support
- Fuel cell has the advantage of small installation area, distributed generation and clean energy
- Favorable business environment to continue with the government’s roadmap for hydrogen economy and legalization, and the exclusive rate for LNG used in fuel cell

RPS and Composition by Electricity Generation²⁾



1) Renewable Portfolio Standard : A system that enforces power producers to supply a certain amount of the total power generation by new and renewable energy

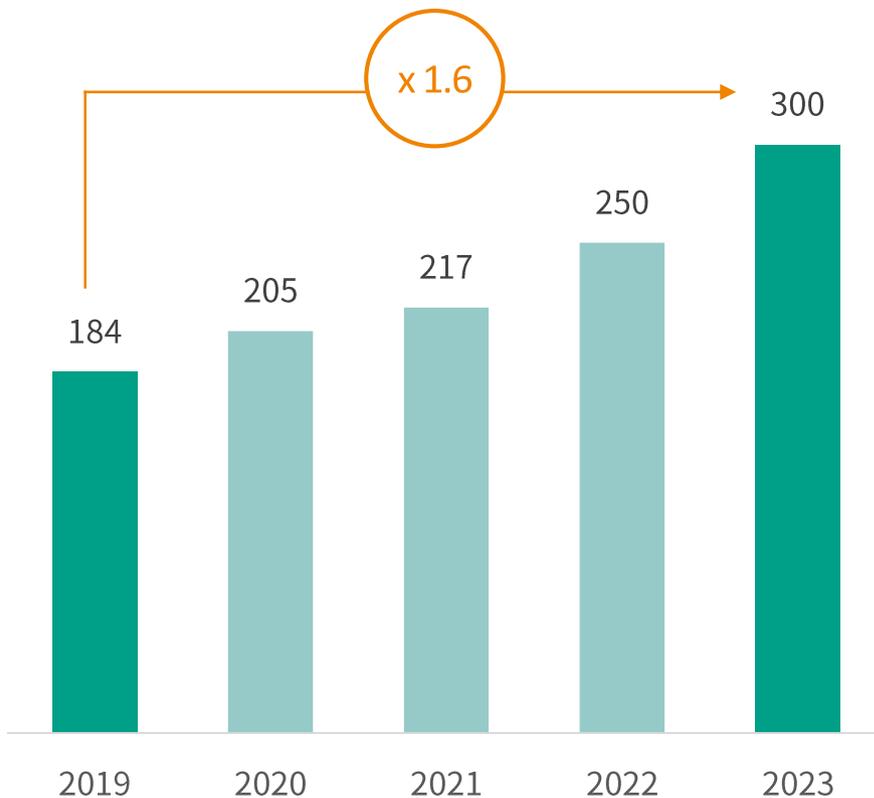
2) Capacity calculated inversely based on power generation (92% fuel cell operating rate assumed)

Fuel Cell Market- Stable High-growth Market Outlook

- 300MW-market is expected in 2023 considering projects under development
- To maintain 70% of market share (2019 70%) with our competitive advantages of high combined efficiency, long life-span and cost competitiveness

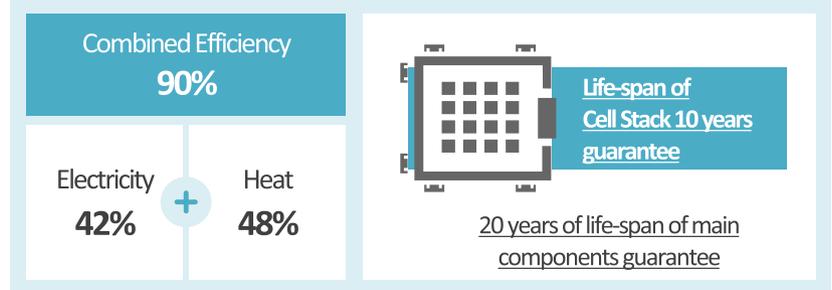
Korean Market Forecast (Order based)

Unit: MW

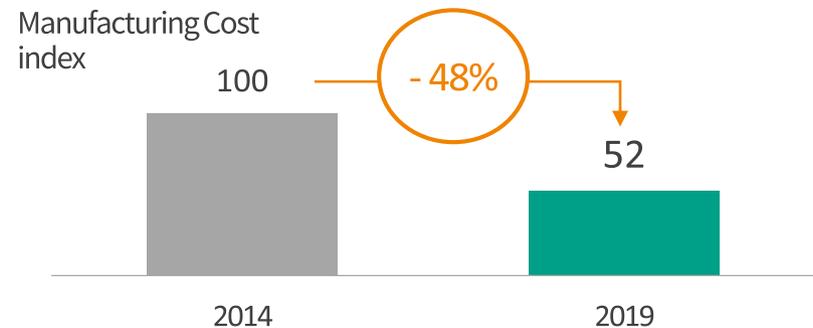


Our Competitive Advantage

High CHP¹⁾ efficiency and long life-span based on PAFC



Cost competitiveness through automated facility and localization of components



1) Combined Heat & Power

Long-term Growth Strategy

- Target to achieve KRW 1 trillion of sales revenue in 2023 by expanding the new and existing markets and securing long-term growth engine

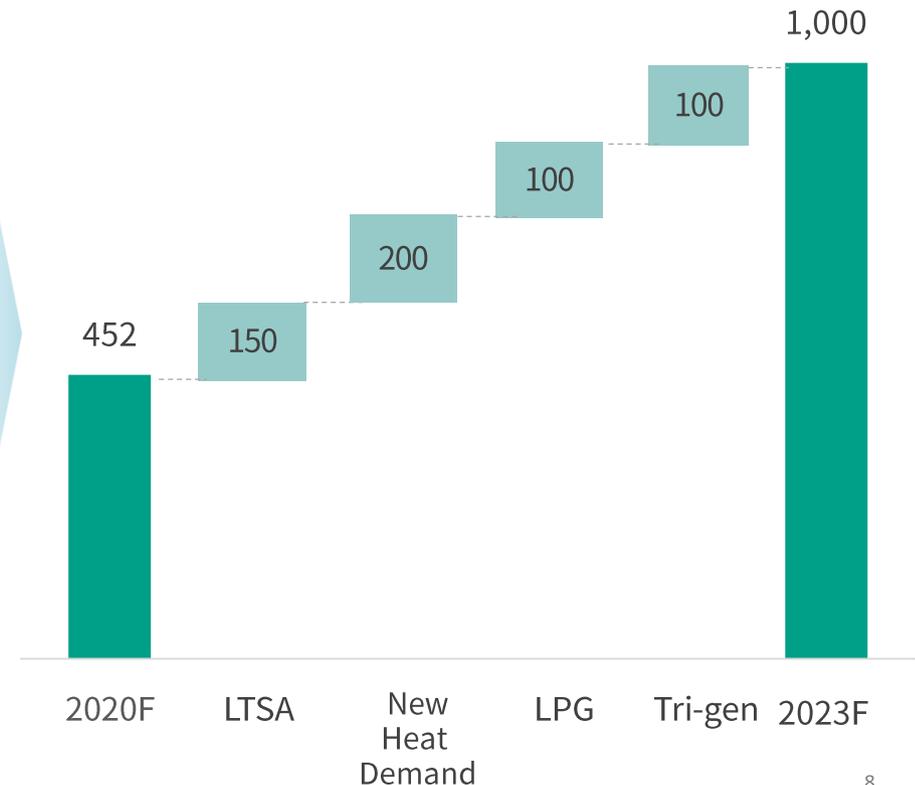
Growth Strategies

Existing market	1 Expansion of heat demand applications	<ul style="list-style-type: none"> Replacement of aged CHP plants/incinerator Discovery of LNG Boil-off-Gas and smart farm within 2020
New market	2 Commercialization of LPG dual model	<ul style="list-style-type: none"> LPG/NG dual model - Completed test in Nov. 2019
	3 Entry into the hydrogen market for transportation	<ul style="list-style-type: none"> Entry into transportation with Tri-gen model¹⁾ - Under development with the government (~Dec. 2020)
Long-term growth	3 SOFC development	<ul style="list-style-type: none"> Expansion into the E-only market - Plans to participate in the project with the government in 1Q20

1) New business model which generate electricity, heat and hydrogen

Sales Revenue Target in 2023

Unit: KRW bn



Business Plan in 2020

- Targets to maintain 1st place in market share in Korea with new order of 142MW
- Plan to achieve sales revenue of KRW 452.3 bn and operating income of KRW 25.0 bn

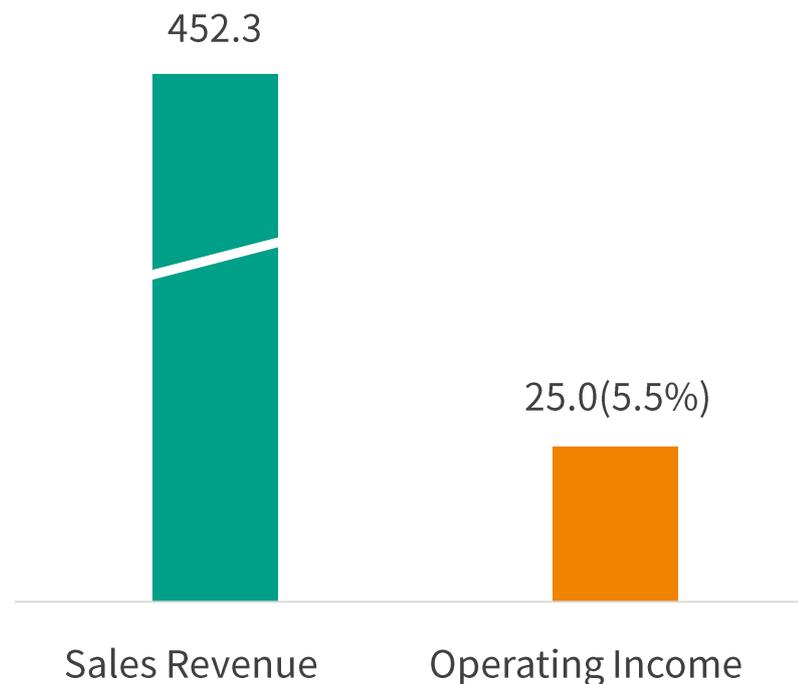
[New Order in 2020¹⁾]

Unit: MW



[Earnings Target in 2020]

Unit: KRW bn



1) The figures for new orders are counted by internal management standards, excluded VAT

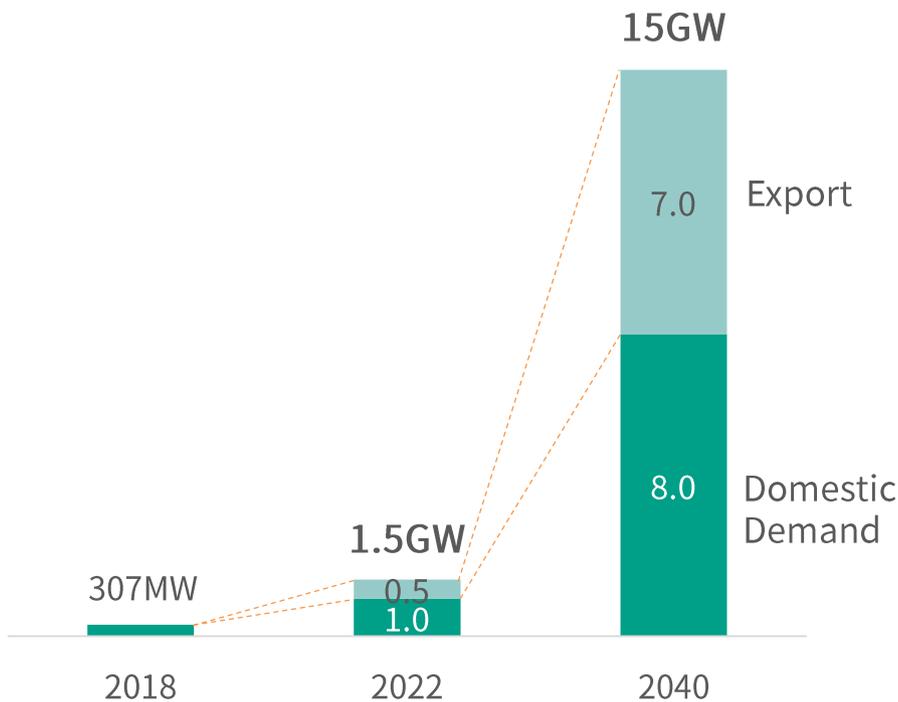
Appendix. Summary of Financial Position

(Unit: KRW bn)	'18.4Q	'19. 10. 1	'19.4Q
Total Assets	422.1	435.3	495.8
Current Assets	334.8	351.4	408.4
Non-current Assets	87.3	83.8	87.4
Total Liabilities	270.0	279.4	329.0
Current Liabilities	169.7	178.3	225.3
Non-current Liabilities	100.3	101.2	103.7
Shareholder's Equity	152.0	155.9	166.8
Share Capital	7.2	7.2	7.2
Leverage Ratio	178%	179%	197%
Debt	99.0	99.0	99.0
Cash	34.0	34.0	153.3
Net Debt	65.0	65.0	-54.3

Appendix. Roadmap for Hydrogen Economy & Hydrogen Economy Act

- The Korean government announced the Roadmap for Hydrogen Economy in January 2019
- First in the world, the Hydrogen Economy Act was enacted to execute the roadmap in January 2020, which ensure policy permanence

The Roadmap for Stationary Sector¹⁾



1) Accumulated basis

Hydrogen Economy Act

Planning and modification	<ul style="list-style-type: none"> • Government to make plans to execute the Hydrogen Economy → To mitigate the risk for policy changes
Support for Hydrogen-specialized companies	<ul style="list-style-type: none"> • Hydrogen-specialized companies to be set by the Presidential Decree • Government loan and cost support • National and local tax cuts
Exclusive rate for LNG used in fuel cell	<ul style="list-style-type: none"> • LNG rates for fuel cells were down 6.5% from the current 13.16 /MJ to 12.30/MJ