

First International Conference on Fuel Ammonia
October 6, 2021

Large Scale Fuel Ammonia Plant

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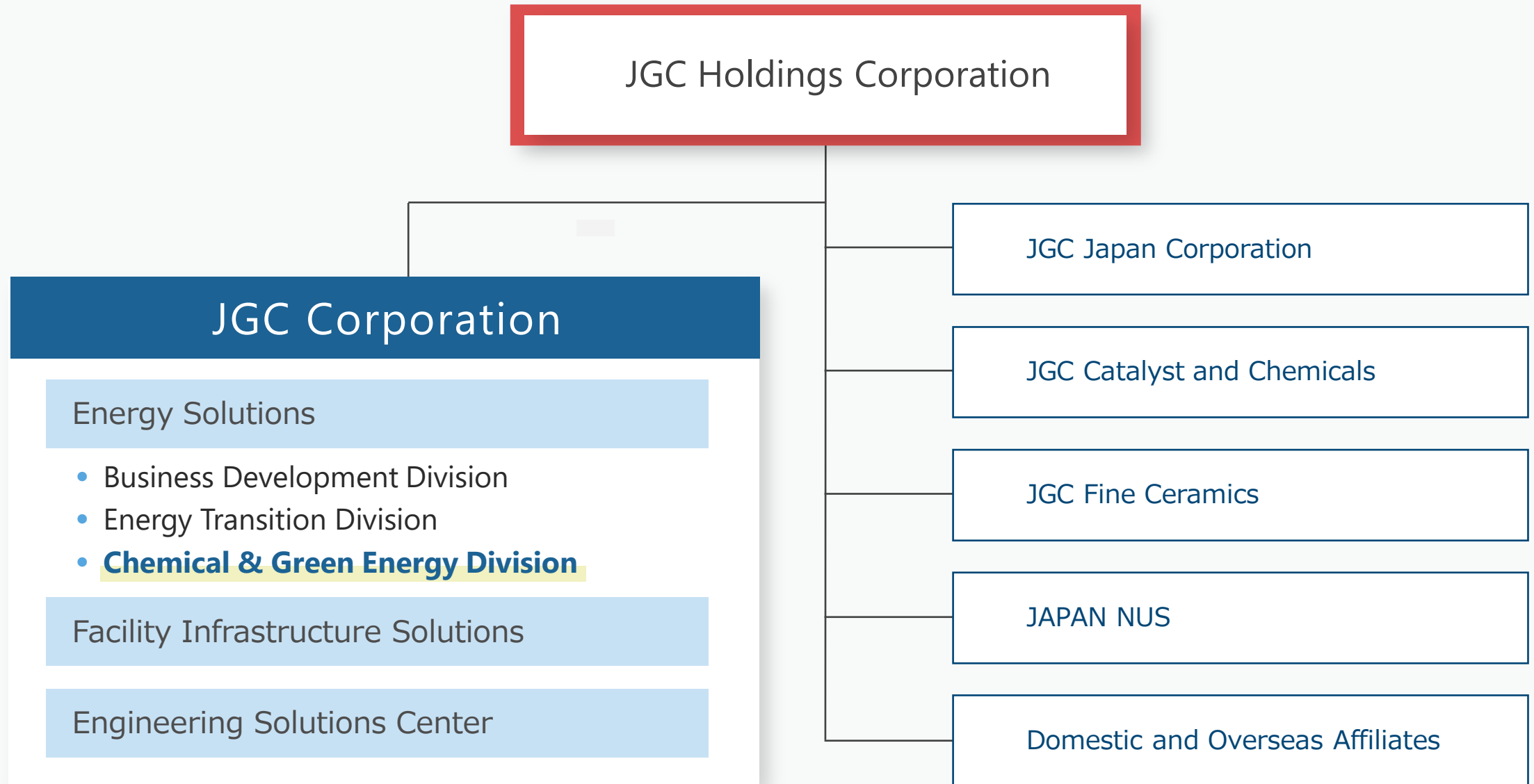
日揮グローバル株式会社

執行役員、ケミカル&グリーンエネルギー本部長







伊藤 賢治



JGC Group Structure



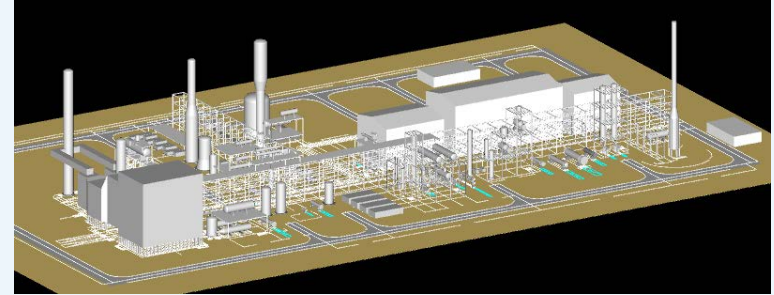
Realizing Sustainable Society

Low Carbon Solution		Decarbonization		Carbon-Free Energy	
LNG	Bio	Recycling	CCS/CCU	Renewable Energy	Hydrogen & Ammonia
					
		Technology/Concept			
<ul style="list-style-type: none"> ◆ AIRLIZE LNG® ◆ LNG Digital ◆ MixGen® ◆ LNG Fit ◆ Decarbonized LNG 	<ul style="list-style-type: none"> ◆ BIO LNG ◆ Green Chemical ◆ Methane to Protein 	<ul style="list-style-type: none"> ◆ SAF (Sustainable Aviation Fuel) ◆ Gasification of Plastic Waste ◆ Polyester Chemical Recycling 	<ul style="list-style-type: none"> ◆ DDR Membrane ◆ HiPACT® ◆ Mineral Carbonation ◆ Carbon Credit 	<ul style="list-style-type: none"> ◆ PV SMOOTHER® 	<ul style="list-style-type: none"> ◆ AMUSE™
		Experience			
<p>48 Trains Over 30% of world's total LNG production</p>	<p>4 EPC projects (Biomass Power Plant)</p>	<p>Feasibility Studies, FEED (SAF)</p>	<p>3 EPC projects, 1 License project, & Feasibility Studies</p>	<p>27 EPC projects (Total > 1GW)</p>	<p>Demonstration in Japan/ Feasibility Studies/ FEED</p>

Current : 3,300TPD SMR & ATR

	01	02
Scale	3,300TPD	3,300TPD
Reformer	SMR	SMR
Construction	Stick Built	Module
Prelim. Study	Completed	Started
Detailed Study	Completed	

3D Model for 3,300TPD SMR in Stick Built



LNG Module Transportation Large Scale Module, Max. 10,000ton



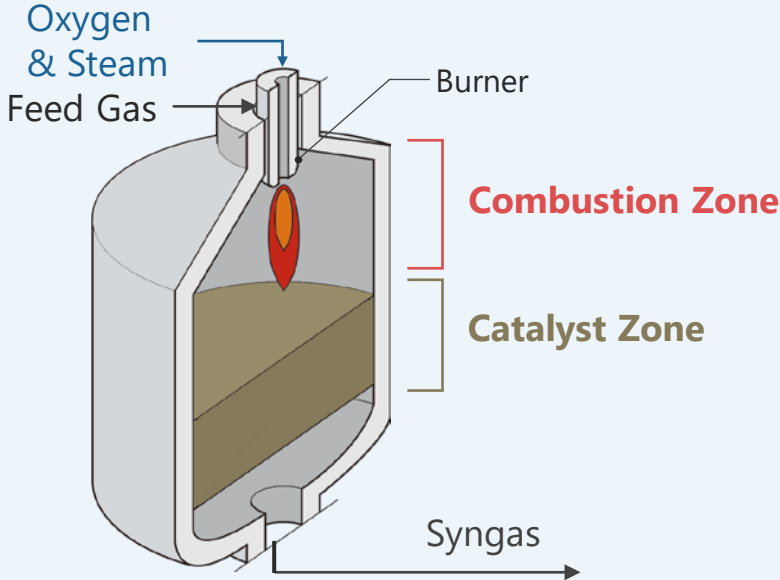
Next Step : 7,000TPD SMR & ATR

	03	04
Scale	7,000TPD	7,000TPD
Reformer	ATR	SMR&ATR
Construction	Stick Built	Module
Prelim. Study	Completed	Start Soon
Detailed Study	Start Soon	

SMR (Steam Methane Reformer)



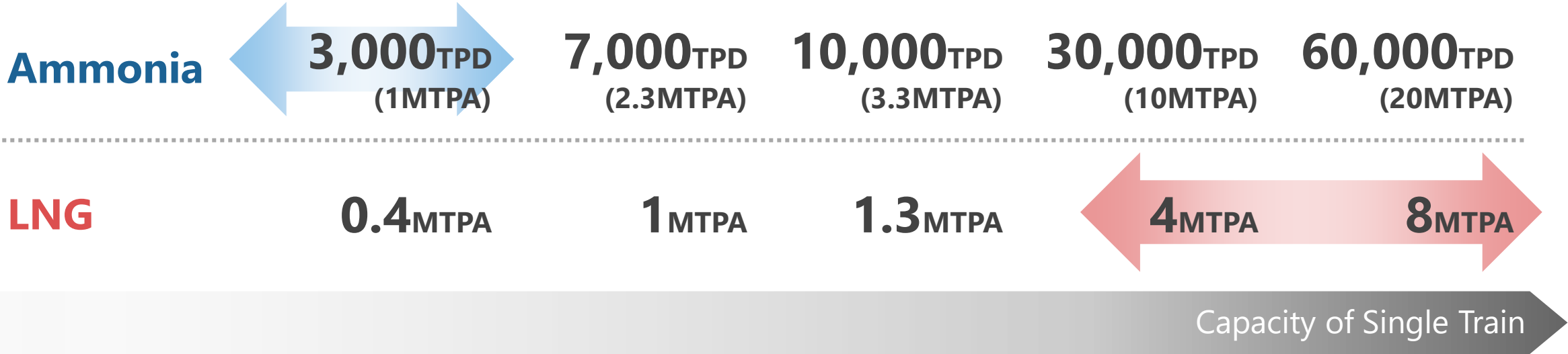
ATR (Autothermal Reformer)



In Future : 10,000TPD, Zero Emission

05 } 10,000TPD, ATR with SC-CO₂ Power Generation : Process Study Completed

Ammonia vs. LNG



A satellite view of Earth showing North and Central America. The text "Enhancing planetary health" is overlaid in white on the image.

Enhancing planetary health