

Korean-Hellenic Maritime Cooperation Forum

『Eco-Friendly Korea Marine Equipment』

By KOMEA GREECE

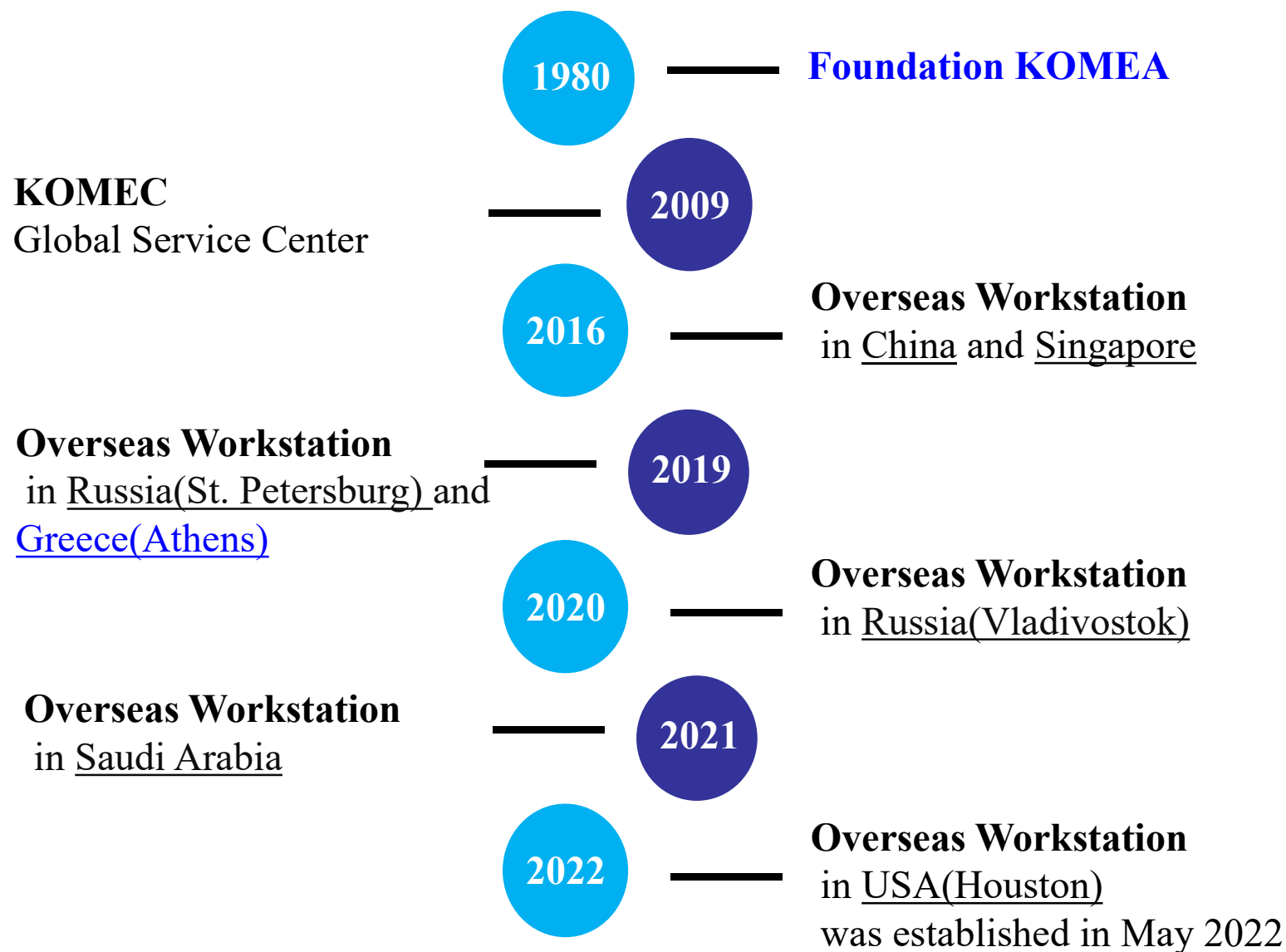
08th. Jun. 2022.



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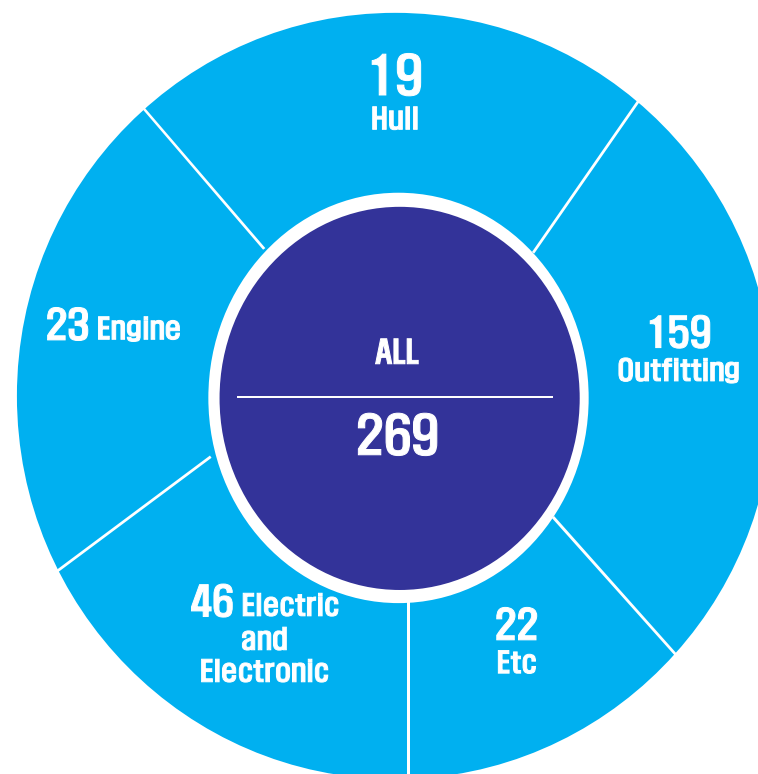
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1. Who is KOMEA ?

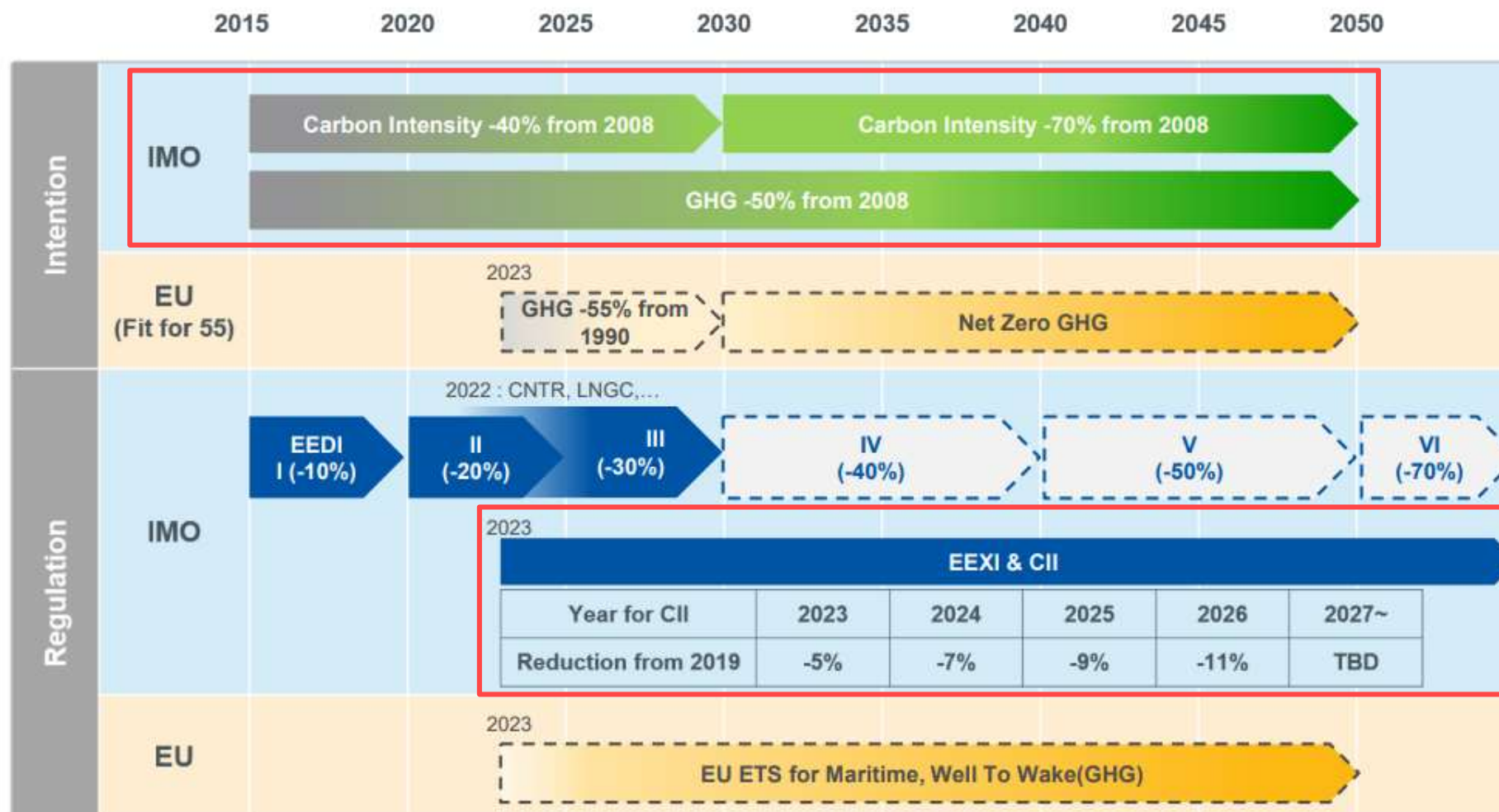


1. Who is KOMEA ?

- Member Companies of KOMEA



2. Emission Regulations : CO2 & GHG



EEDI : Energy Efficiency Design Index
EEXI : Energy Efficiency eXisting ship Index

CII : Carbon Intensity Indicator
ETS : Emission Trading System

GHG : Green House Gas

2. Emission Regulations : EEXI, CII



KR GEARs **EEXI** Program **Function Composition**

Ship Particular



Ship Speed



Calculation

2. Emission Regulations : EEXI, CII

System Portfolio in Digital & Control Division

Vessels to meet upcoming regulations

- **EEDI&EEXI** - First Survey After 1st January 2023
- **SEEMP & CII** – As of 1st January 2023



HGS Smart Ship Solution 



Onboard Solution

ISS (Integrated Smart Ship Solution)
HHI Group Newbuilding Standard

Hi-GSP (GHG Solution Platform) ISS Lite

Hi-EMS (Engine Monitoring System)

Online Solution

Hi4S (Smart Solution Service System)

Data Automation

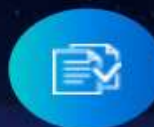
DATS+ (Data Acquisition System)

2. Emission Regulations : EEXI, CII

eCBM : e-Condition Based Monitoring System

toogram

A System What an Analyzes and Processes to Large Amounts of Data generated during Voyages using Data Analysis Technology, and which provides predictive Diagnosis for Engine Defects.



Carbon Intensity Indicator (CII) Rating Diagnosis.

Diagnosis of the Carbon Intensity Indicator(CII) regard as Regulation as for IMO, classification of ships etc..



Comparison of Conditions between Same Specification Ships in Fleet.

Compares to Performance between Ships of the Same Specification in Fleet.



Efficient(Economical) Voyages.

Provides Fuel Efficiency Information During Voyage.



Analysis and Monitoring in Real time.

Provides to Ship Location and Engine Condition Information with Satellite in Real Time.



Fault Predictive Diagnosis.

Predictive Diagnosis for Ship Engine Failures with AI(Artificial Intelligence) with Satellite in Real Time.



Safe Routes.

Displays on Navigational Sailing Plan Information and Recommend to Safe Routes with Satellite in Real Time.

3. Engine



3. Engine

HSD engine



3. Engine

stx Engine

stx Heavy Industries



4. SOx SCRUBBER



PANASIA



KWANGSUNG



**HYUNDAI
MATERIALS**

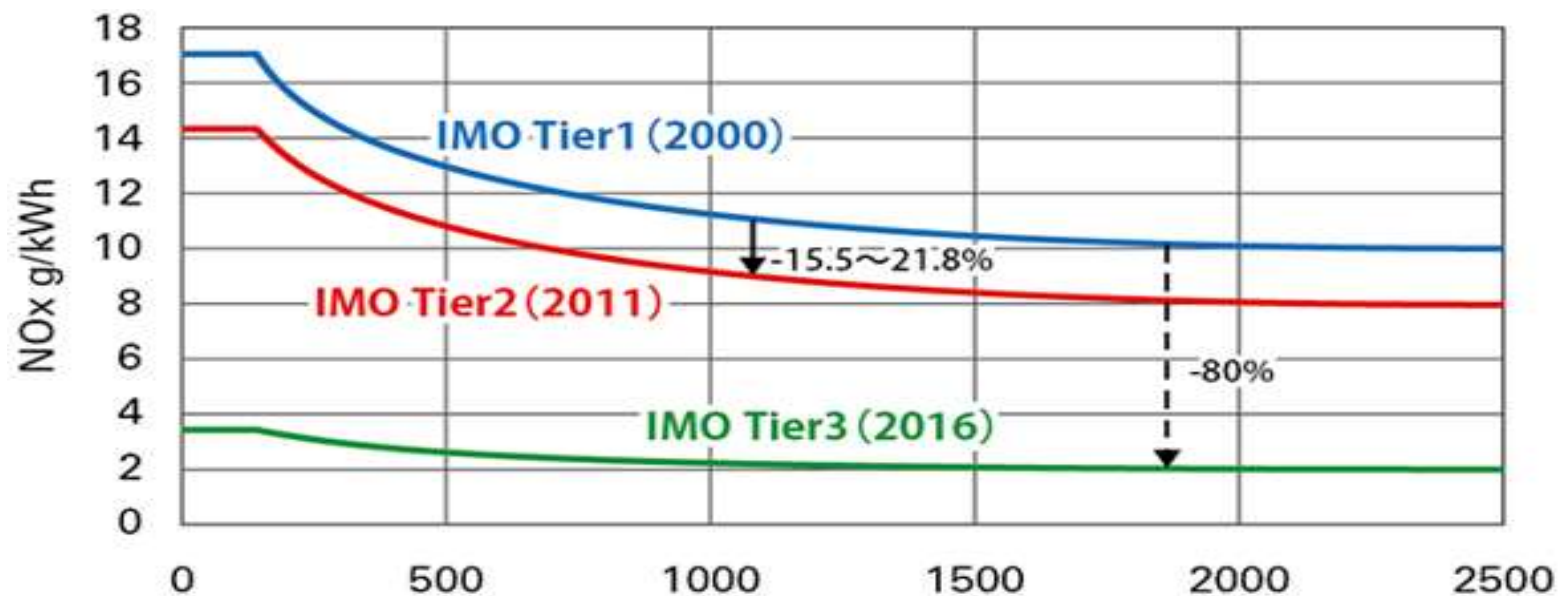


HI AIR KOREA Co., Ltd.



**MS-SOx
SCRUBBER**

5. NOx SCR (Selective Catalytic Reduction)



HYUNDAI ENGINE & MACHINERY
HEAVY INDUSTRIES

HSD engine

stx Engine

PANASIA

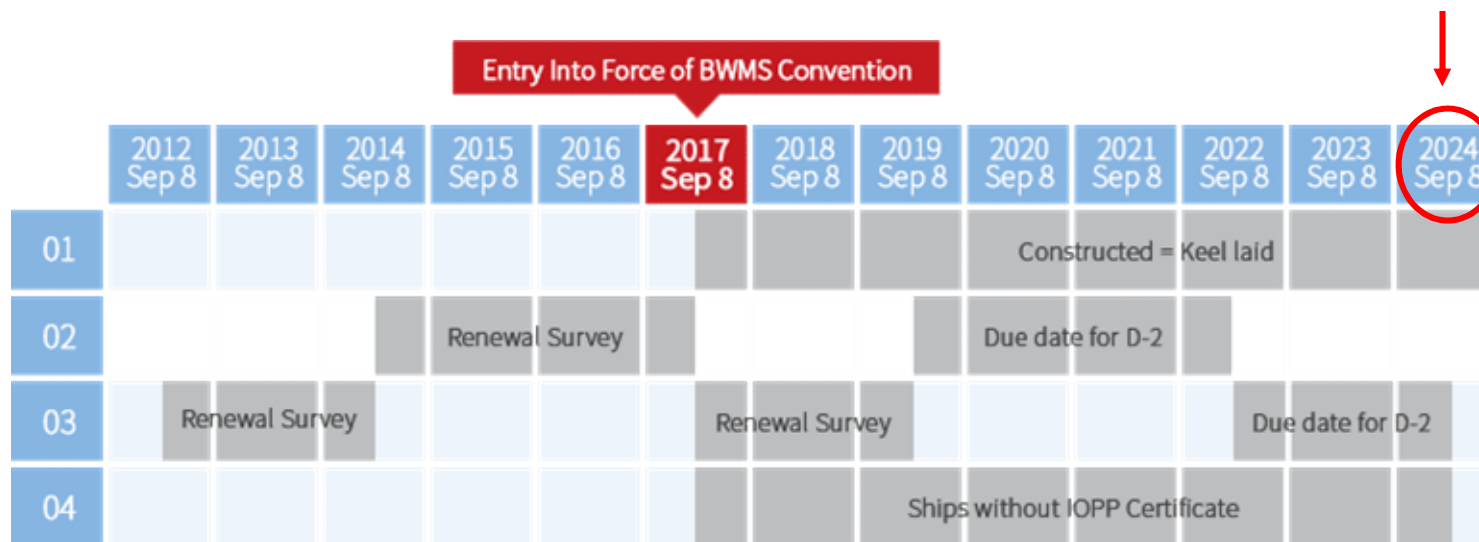
KWANGSUNG

HANLA
ENS

ILSEUNG

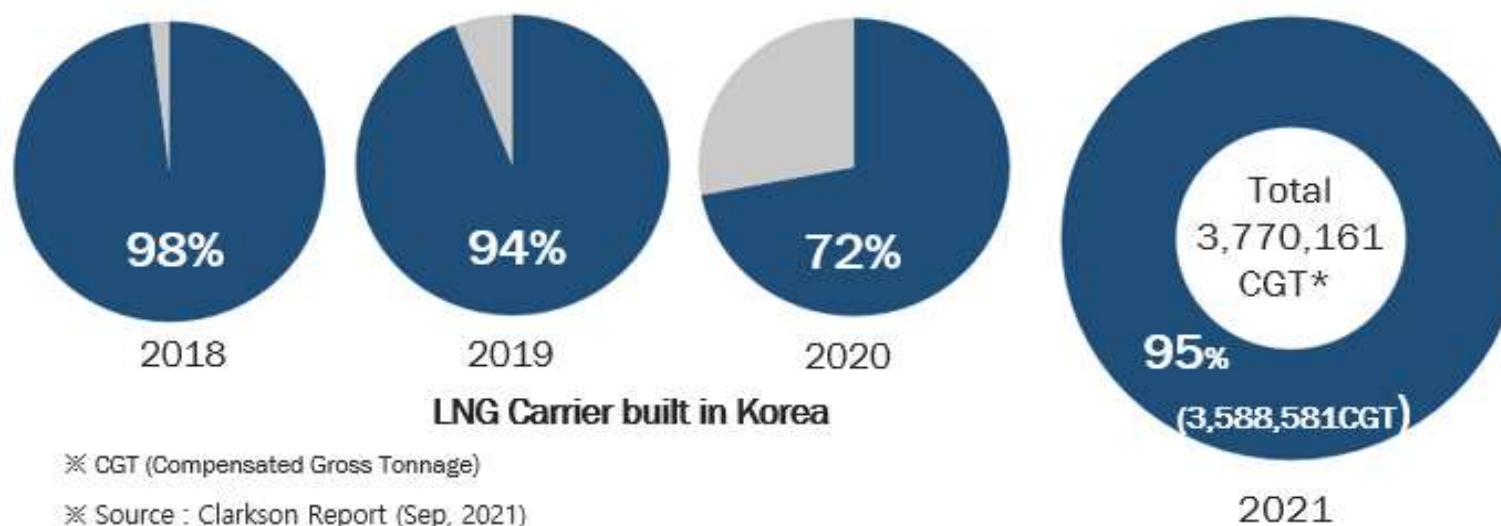
HYUNDAI
MATERIALS

6. BWTS (Ballast Water Treatment System)



7. For LNG Carrier

- M/S of Korean Shipbuilder for LNG Carrier orders



[LNGC orders of Big 3 in 2021]

(as of 30 Sep. 2021)

	HHI (w/HSI)	SHI	DSME	Total
LNGC orders	23 LNGC	13 LNGC	6 LNGC	<u>42 LNGC</u>

(HHI) : Hyundai Heavy Industries
(SHI) : Samsung Heavy Industries
(DSME) : Daewoo Shipbuilding & Marine Engineering

G. TOTAL
65 LNGCs

7. For LNG Carrier

- FGSS (Fuel Gas Supply System)



Trans^{GAS}
LNG Solution Provider

SnP LET'S GO 2025
Branding · ECO-LNG Biz · Technology · Shared Value

- LNG FUEL TANK

TAEJIN
HEAVY INDUSTRY CO., LTD.

SEJIN SEJIN HEAVY IND.

Dongsung Finetec

CRYOS 크리오스

DHI

S&SYS

- CRYOGENIC INSULATION

HANKUK CARBON

Dongsung Finetec



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THANK YOU !

"KOMEA IS OCEAN VALUE CHAIN"



Korea Marine
Equipment Association



Global Service Center
Korea Marine Equipment Association