SEPTEMBER 25-27 2023, TOKYO

UPDATE ON ASIAN TERMINALS 42nd GIIGNL CSG MEETING



ITEM5 Regasification Terminals in Asia

01

Development of Regas Terminals in 2022

03

Key Take Away

02

Chinese LNG Import Trend

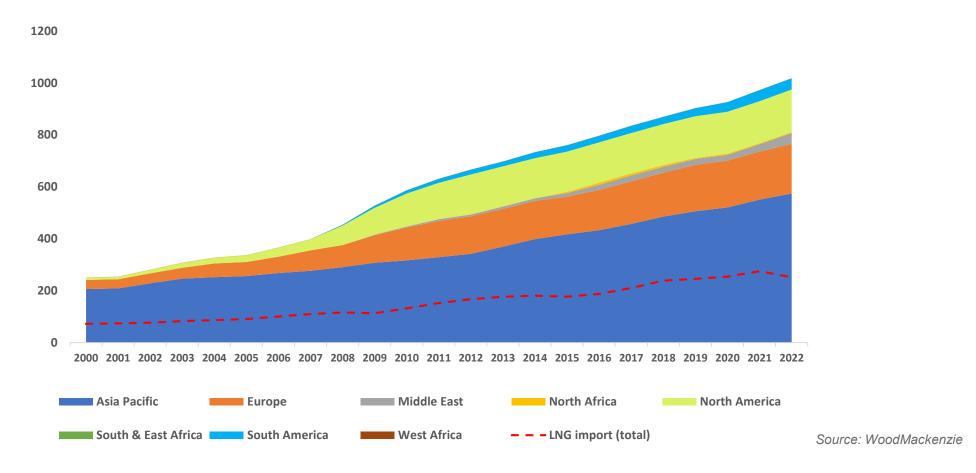


01 Development of Regas Terminals in 2022





GLOBAL REGASIFICATION CAPACITY TREND

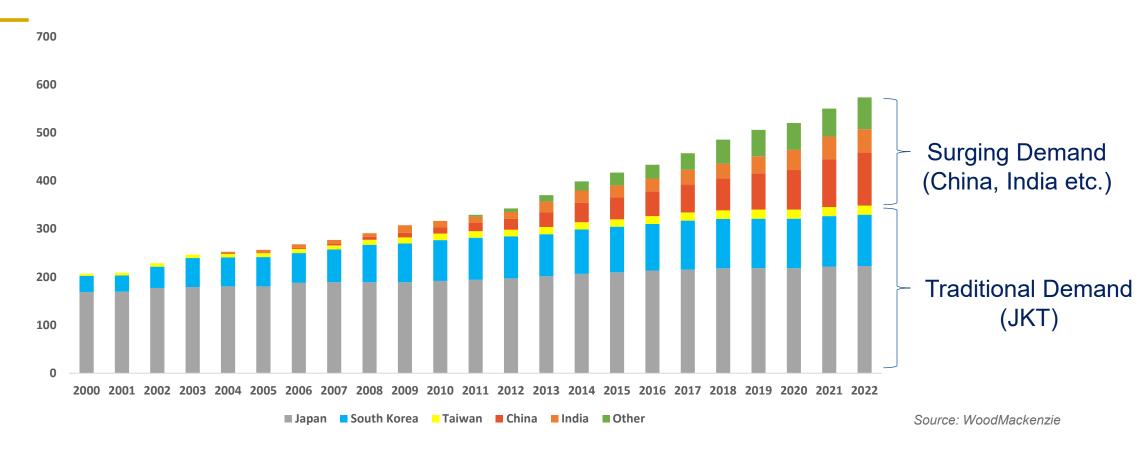


Along with the global LNG demand increase, regasification nominal capacity is steadily expanding especially in Asia.





REGASIFICATION CAPACITY IN ASIA



Development of regasification capacity in Asia is now lead by the surging demand such as China, India and other countries.

DEVELOPMENT OF REGASIFICATION IN ASIA

<Operation>

	Number of Terminal
Bangladesh	2
China	26
India	7
Indonesia	6
Japan	39
Malaysia	2
Myanmar	2
Pakistan	2
Philippines	1
Singapore	1
South Korea	7
Taiwan	2
Thailand	2
Vietnam	1
total	100

<Under Construction>

	Number of Terminal
China	23
India	3
Indonesia	2
Myanmar	1
Phillipines	3
South Korea	1
total	33

In 2022, Philippines and Vietnam became the new LNG importers.

Source: WoodMackenzie



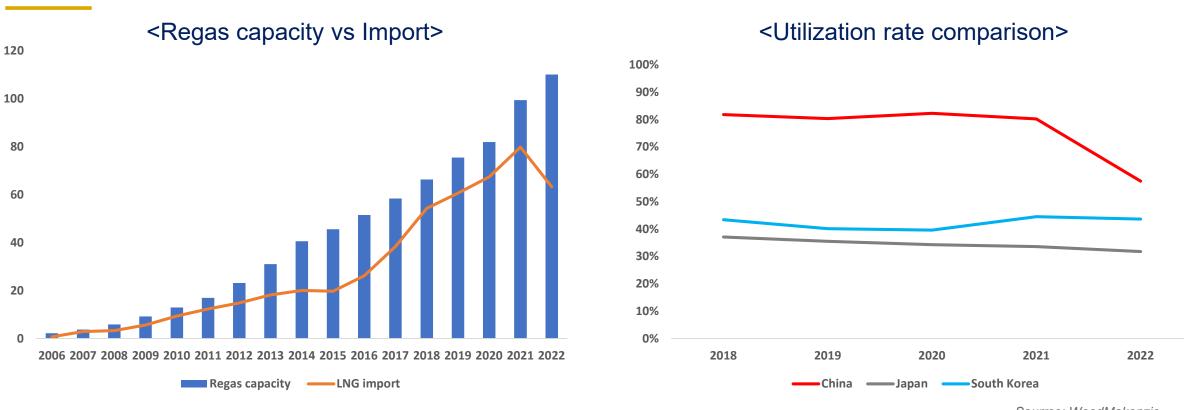


02 Chinese LNG Import Trend





REGASIFICATION CAPACITY IN CHINA IS NOT ENOUGH



Sourrce: WoodMakenzie

Despite the drop in 2022 due to low import volume, regas terminals in China is operating with high utilization rate comparing with Japan and Korea.

ITEM 5 - UPDATE ON ASIA LNG TERMINALS



NEW REGASIFICATION PROJECTS ON TRACK IN CHINA

Terminal	Startup	Project Operator	Regas capacity(MTPA)
Guangzhou LNG	2023	Guangzhou Gas Group	1.0
Tianjin LNG (Beijing Gas)	2023	Beijing Gas Group	1.8
Wenzhou LNG	2023	Zhejiang Energy Group	2.7
Zhangzhou LNG	2023	PipeChina	2.7
Chaozhou LNG	2024	Huaying Shanxi Energy Inv	2.7
Damaiyu LNG	2024	JunAn Energy	1.8
Huizhou LNG	2024	Guangdong Energy Group	3.7
Longkou LNG (PipeChina)	2024	PipeChina	2.7
Longkou LNG (Sinopec)	2024	Sinopec Corp	2.7
Wenzhou Huagang LNG	2024	Huafeng Group	2.7
Wuhu LNG	2024	Huainan Mine Group	1.4
Yangjiang LNG	2024	Guangdong Energy Group	2.6
Yueyang LNG	2024	Guanghui Energy	0.5
Chaozhou LNG (Sinoenergy)	2025	Sinoenergy Pacific	0.9
Jiangyin LNG (Jiasheng)	2025	Jiasheng Gas	1.8
Jiangyin LNG (Sinoenergy)	2025	Sinoenergy Pacific	1.8
Rudong LNG(Guoxin)	2025	Jiangsu Guoxin Investment	2.7
Shenzhen Diefubei LNG	2025	PipeChina	2.7
Yantai LNG	2025	GCL Oil & Gas	2.7
Yingkou LNG	2025	Others	2.7
Zhenjiang LNG	2025		1.4
Huidong LNG	2026	GCL Oil & Gas	2.7
Ganyu LNG (Huadian)	2027	Huadian Corp	5.5

Sourrce: WoodMakenzie

23 new regasification terminals are currently under construction across China.



ITEM 5 - UPDATE ON ASIA LNG TERMINALS

KEY TAKE AWAY

- Global regasification capacity has now reached 1btpa in 2022 thanks to the strong LNG demand growth especially in Asia.
- In 2022, there are 100 regasification operating in Asia with Philippines and Vietnam now becoming new LNG importing countries for the first time.
- Comparing to Japan and Korea, regasification terminals are operating with high utilization rate in China rating above 80% in past 5 years (average) except in 2022.
- There are 33 new regasification terminals under construction in Asia (23 in China) and these infrastructure will support the LNG demand growth.

