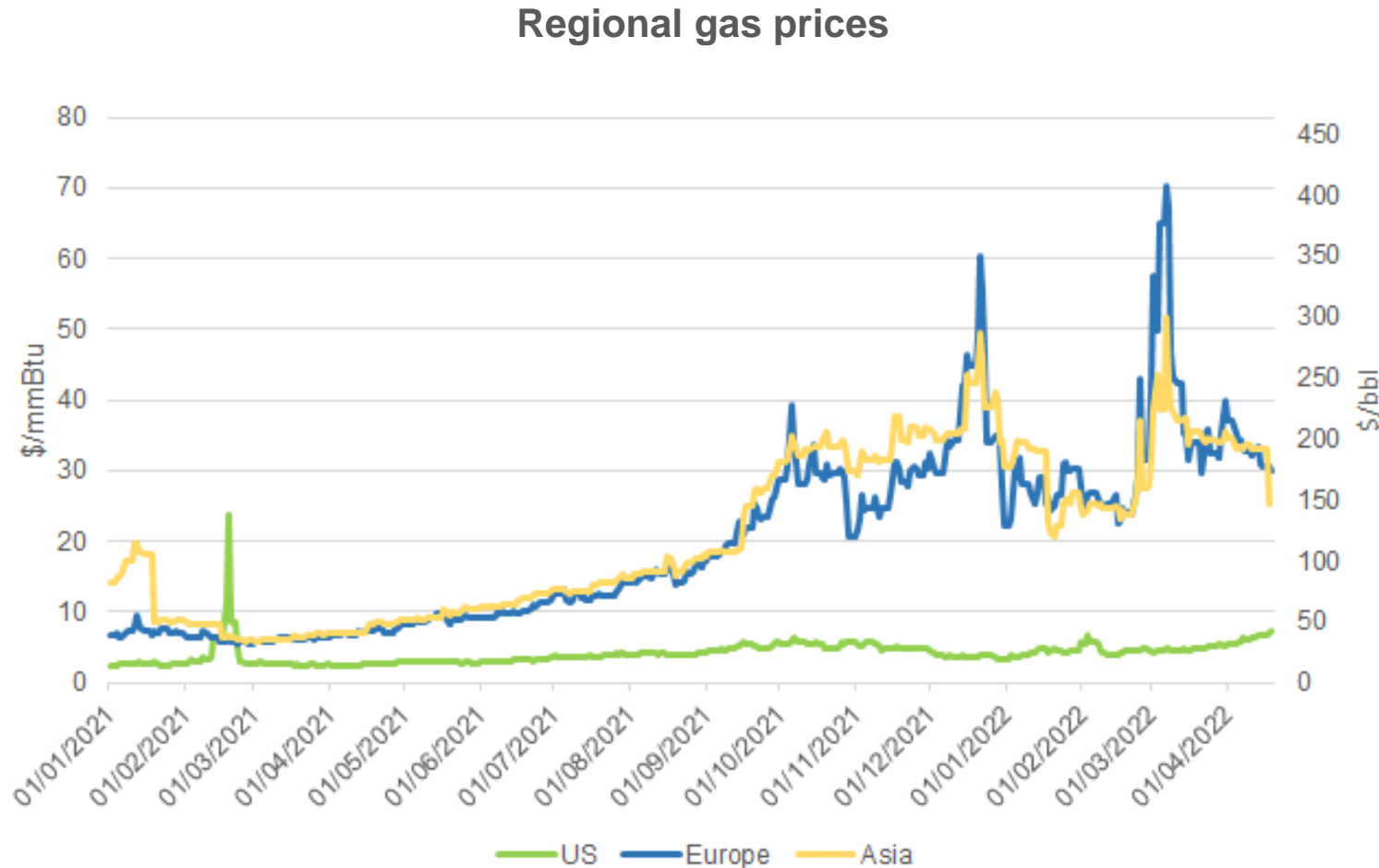


APERC Annual Conference 2022

Supply side investments

Anne-Sophie Corbeau
April 25, 2022

European and Asian gas spot prices are at record high levels



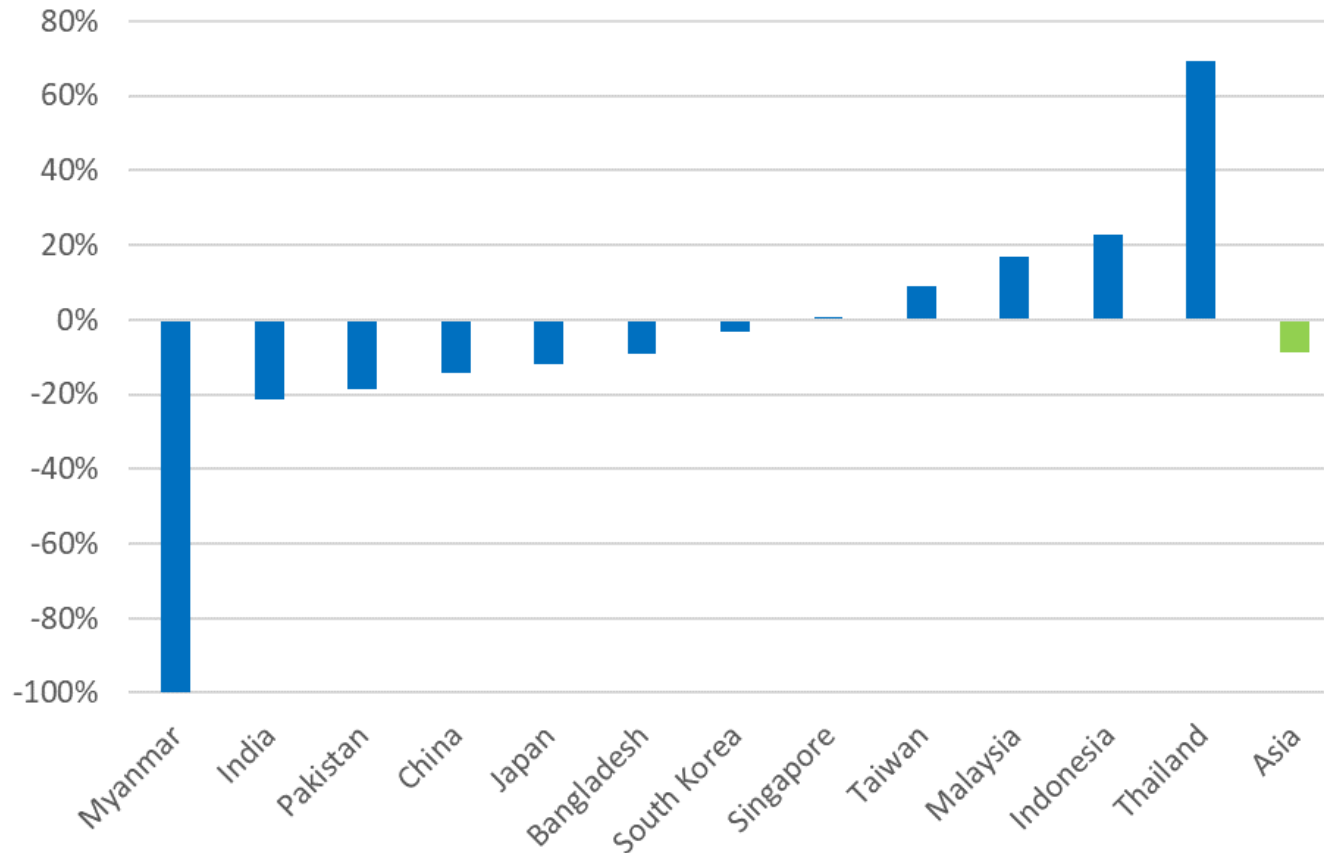
High gas prices are usually an incentive to invest

- Signal a need for more supply
- Example: 2010-14 LNG investment cycle

Source: Bloomberg.

Impact on Asian LNG demand

LNG imports in Asia, Q1 2022 vs Q1 2021



Source: Bloomberg.

Asian LNG demand dropped by around 9% (~ -6 mt) in Q1 22

This LNG was diverted to Europe (+67%, ~ +13 mt)

Global supply has been increasing strongly by 5.7%

There have been in the past very few instances of Asian LNG demand dropping: 2009, 2015

How is Europe's natural gas crisis changing the supply picture?

Need for more gas supply

- Revival of many LNG projects and increased interest from those quite advanced
- US-EU announcement
- Exim to support US LNG projects
- ENI to increase deliveries from Algeria and Egypt
- Increased interest in East Mediterranean
- Potential gas from the Middle East/Caspian region?
- Remember: Europe's will look carefully at the gas supply's carbon footprint!

Uncertain need for more gas supply

- LNG projects unlikely to start before 2025, while supply is needed now
- How is Europe changing the global LNG equilibrium? (ie: from a balancing market to a competitor?)
- How much gas/LNG does Europe **really** need by 2030? By 2040?
- Impact of high gas/LNG prices on Asian gas/LNG demand in the short and medium term
- Will European players sign LT contracts?

Will Europe sign new long-term contracts?

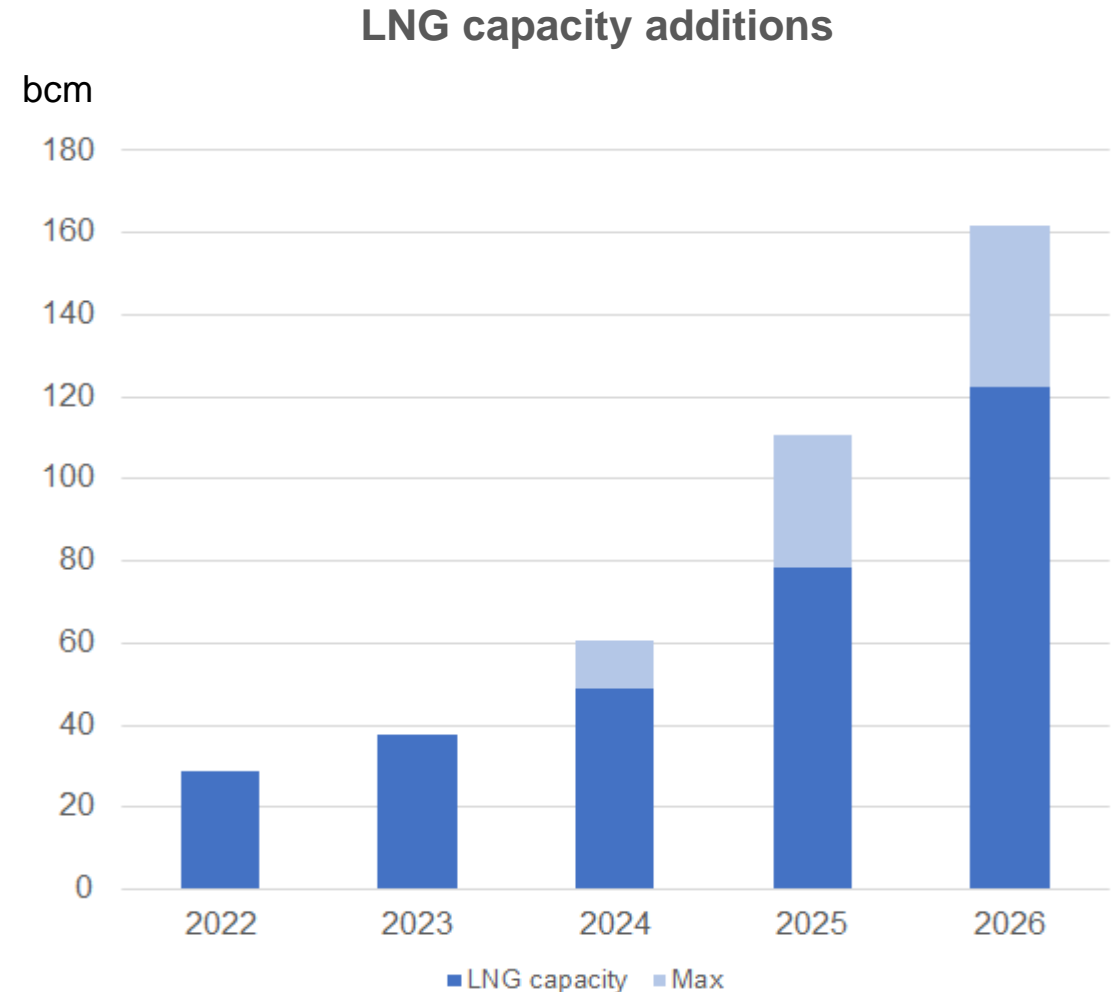
Chinese buyers have been very active in 2021

Date	Buyer	Seller	Quantity	Start	Duration
Feb 2021	Shenergy	Novatek	3.0 mtpa	Arctic 2	15 years
Mar 2021	Shenergy	Totalenergies	1.4 mtpa		20 years
Mar 2021	Sinopec	Qatargas	2.0 mtpa	2022	10 years
July 2021	Guangzhou Dev	bp	0.65 mtpa	2022	13 years
July 2021	CNOOC	Petronas	2.2 mtpa	Canada LNG	10 years
Sept 2021	CNOOC	Qatargas	3.5 mtpa	2022	15 years
Oct 2021	Shenzhen Gas	bp	0.3 mtpa	2023	10 years
Oct 2021	ENN	Cheniere	0.9 mtpa	July 2022	13 years
Nov 2021	Sinochem	Cheniere	0.9-1.8 mtpa	July 2022	17.5 years
Nov 2021	China Gas	Vitol	0.8-5.0 mtpa	2023	na
Nov 2021	Foran	Cheniere	0.3 mtpa	2023	20 years
Nov 2021	Sinopec	Venture Global	4.0 mtpa	Plaquemines	20 years
Nov 2021	Unipecc	Venture Global	3.5 mtpa	March 2023	short
Dec 2021	CNOOC	Venture Global	2.0 mtpa	Plaquemines	20 years
Dec 2021	CNOOC	Venture Global	1.5 mtpa	March 2023	short
TOTAL			26.95-32.05 mtpa		

Sources: press releases

Global LNG market is expected to be tight...

- Expectations that high gas prices are here to stay (EC's draft response to high gas prices)
 - Unless significant demand destruction occurs
- Potential for gas/LNG demand being affected by sustained high gas prices in the long term
- How much additional LNG can/will be redirected to Europe?
- Additions of LNG export capacity are growing at a slower pace over 2022-24
 - Significant uncertainty regarding 2025-26
 - How many FIDs will be taken in 2022?

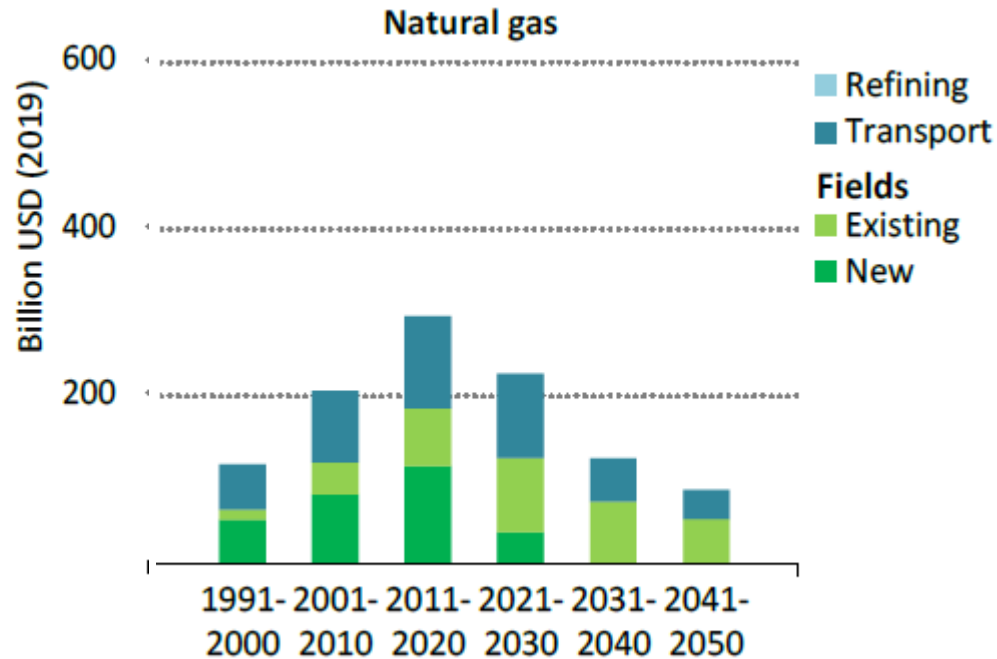


Source: press releases, author's assessment

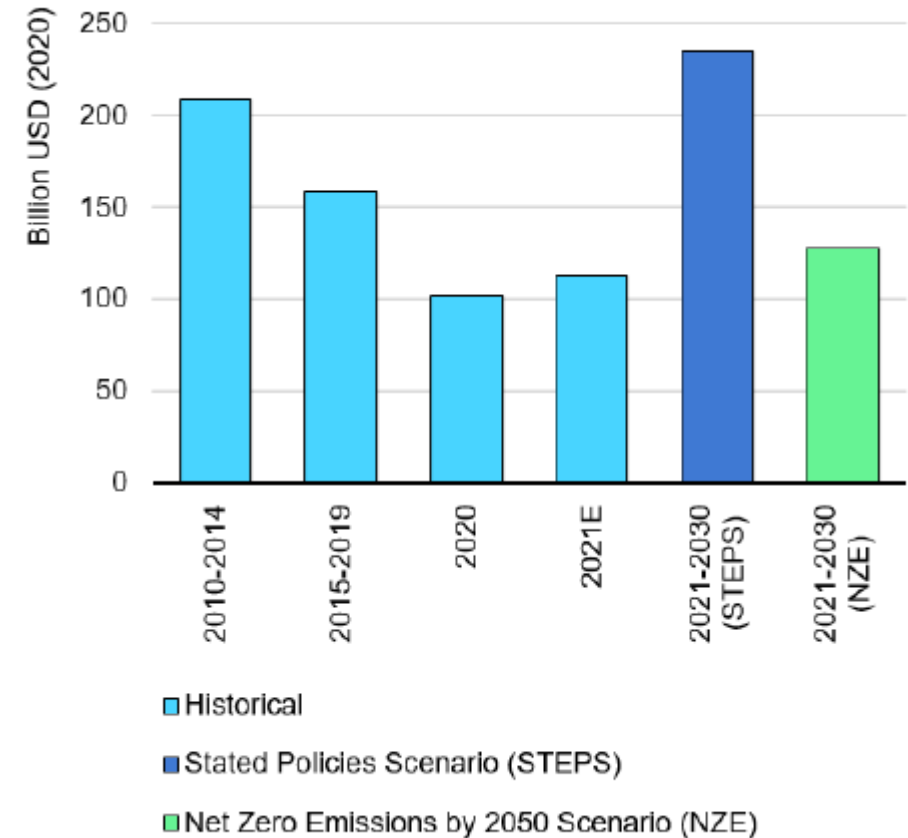
IEA's Net Zero

No need for investment in new fossil fuel supply

Investments in Natural gas supply in the NZE



Annual upstream investment in natural gas supply



Source: IEA

Thank You

The background of the slide features a series of faint, light-blue icons representing various energy sources and infrastructure. From left to right, these include an offshore oil rig, a nuclear power plant with a radiation symbol, a wind turbine, a solar panel array, a high-voltage power transmission tower, a lightning bolt, a factory with smokestacks, and an oil pumpjack.

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