

European Gas and Global LNG | September 2024

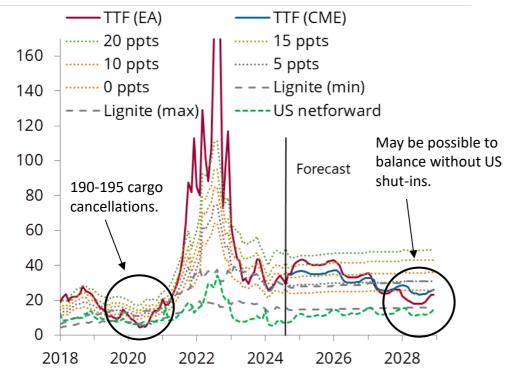
#### End of the energy crisis?





#### TTF to rise next year, pre-crisis levels by 2027; Russian gas supply to Europe falling

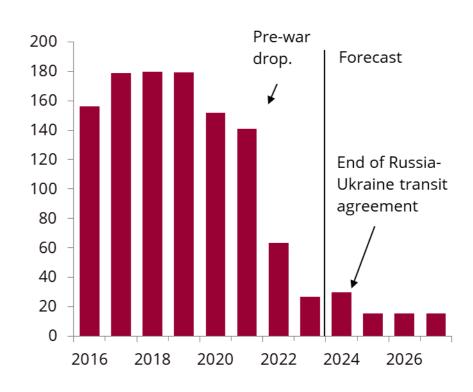
# TTF vs coal breakevens and LNG shut-in price €/MWh



We are bullish against the TTF curve for winter and 2025, given the likely loss of Russian gas through Ukraine. The end of the curve is defined by US LNG shut-in risks.

Source: ENTSOG, GTSOU, CME, LSEG, Bloomberg, ECB, Energy Aspects

### Russian pipeline deliveries to Europe bcm (LHS); mb/d (RHS)

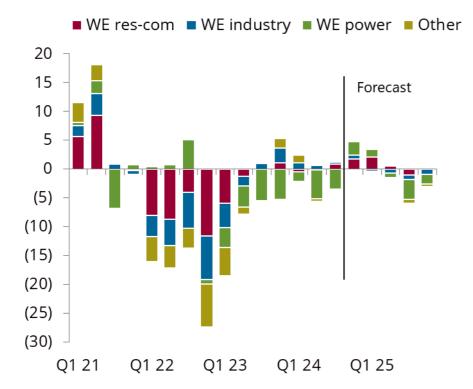


Europe's pipeline supply from Russia fell by 78 bcm y/y in 2022 and dropped by 39 bcm y/y in 2023. Likely loss of residual Ukrainian flows in 2025, but not those through TurkStream.



#### European demand below pre-crisis levels, but normal weather drives winter bounce

# European gas demand, y/y bcm

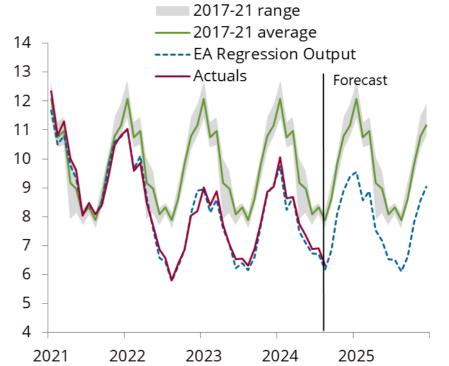


European demand will fall by 2.4 bcm y/y in 2024 and hold around 20% below the 2017–21 average over our forecast horizon. But normal weather would boost winter demand y/y.

Note: Western Europe comprises Belgium, Germany, France, the Netherlands, the UK, Spain and Italy Source: Bloomberg, system operators, ENTSOG, ISE, DESNZ, Energy Aspects

#### Western European industrial gas demand



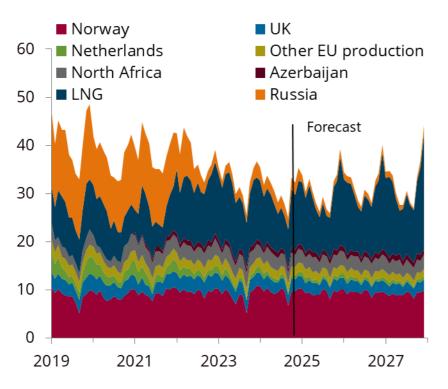


We expect Western European industrial demand to hold 16–20% below the 2017–21 average over the coming years, including permanent losses of 8–11%.



#### European LNG imports will fall in 2024 but remain high historically

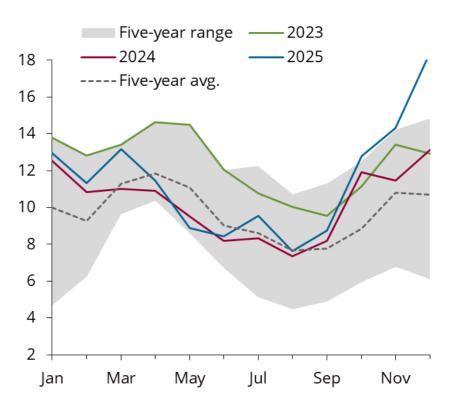
### Europe's supply mix



LNG is filling in for Europe's previous Russian gas supply. LNG now makes up 35–40% of Europe's supply mix, having been around 15–17% historically.

Source: GTT, ENTSOG, system operators, Energy Aspects

#### European LNG imports bcm



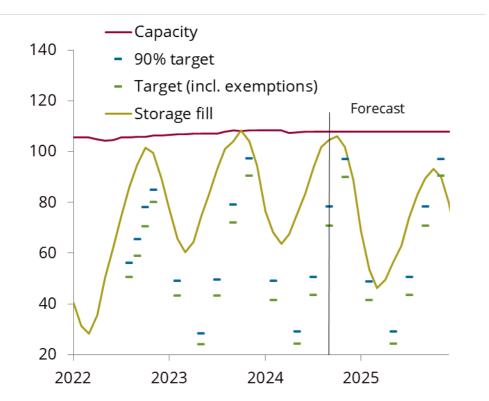
We see European (ex-Turkish) LNG receipts down by 25.6 bcm y/y in 2024 on recovering Asian demand. European winter imports will rise y/y, driven mainly by higher Q1 25 takes.



#### High stocks create winter buffer, but stocks drawn sharply lower y/y in our base case

#### European stocks

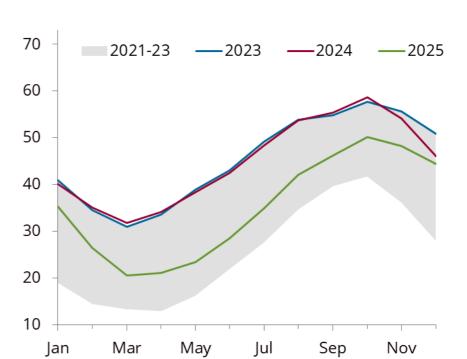
bcm



We think stocks will hit 106-107 bcm by end-October in our base case, with 1–2 bcm of floating storage, but no meaningful European injections into Ukrainian sites.

Note: European buffers are fully unlocked if TTF climbs to the top of the coal–gas fuel-switching range Source: GIE, system operators, Energy Aspects

### NW Europe stocks



High stocks give Europe a significant supply buffer this winter, but normal winter weather and the loss of Russian gas flows via Ukraine could quickly erode the overhang.



#### TTF speculative positions reached long side limits in mid-August

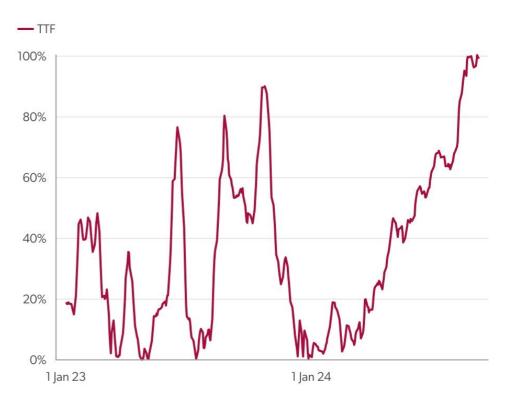
### TTF paper balance (M+1) k lots



TTF discretionary hedge fund positions constrained as they reach their maximum VaR levels seen since 2023. CTAs now neutral.

Source: ICE, LEBA, Energy Aspects

TTF discretionary hedge fund VaR vs max since 2023 %



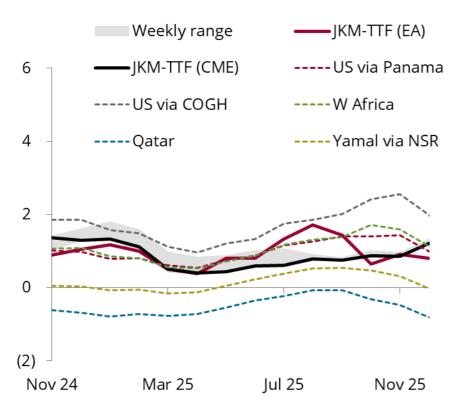
TTF discretionary fund positions now sit around €9 billion in notional value. In VaR terms, it is the largest position they have held since 2022.





#### JKM-TTF to anchor around US via Panama freight differential; canal congestion easing

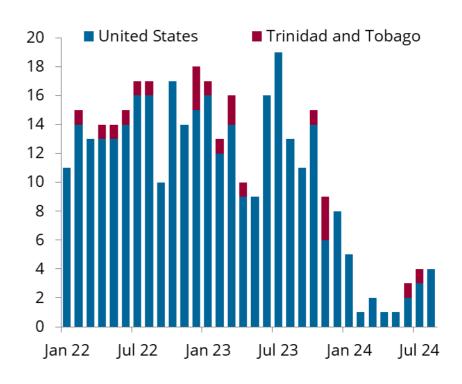
### JKM-TTF spreads and LNG shipping differentials \$/MMBtu



Steady Asian demand growth and new export projects in North America will require JKM-TTF spreads wide enough to keep the cross-basin arb for US LNG flows to East Asia open through 2025.

Note: Shipping differentials adjust for our forecast Northwest European DES—TTF spreads Source: CME, Fearnleys, Argus Media Group, Bloomberg, GTT, LSEG, Energy Aspects

### LNG exports to Asia via the Panama Canal # cargoes

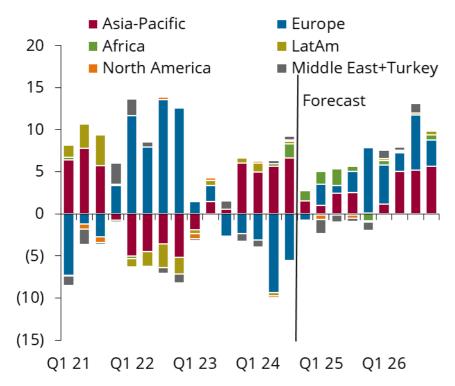


Panama transits will continue to recover into winter. More shorter voyages to East Asia via Panama will counterbalance the impact of a seasonal rise in charter rates on JKM-TTF spreads.



#### Asian y/y import growth to slow in winter 2024–25 on higher global gas prices

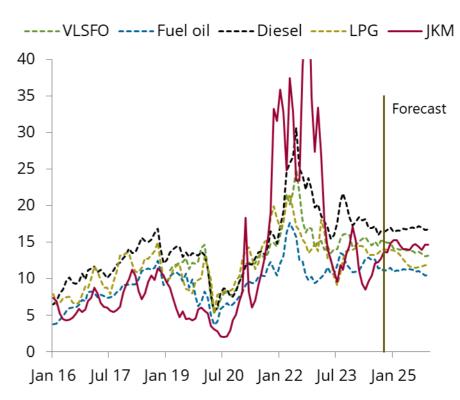
# Global LNG imports, y/y Mt



We expect Asian y/y import growth to slow over winter 2024–25. The gradual ramp-up of North American LNG exports next year will boost supply to both Asia and Europe in late 2025.

Source: GTT, LSEG, ICE, CME, Energy Aspects

### JKM vs competing liquids prices \$/MMBtu

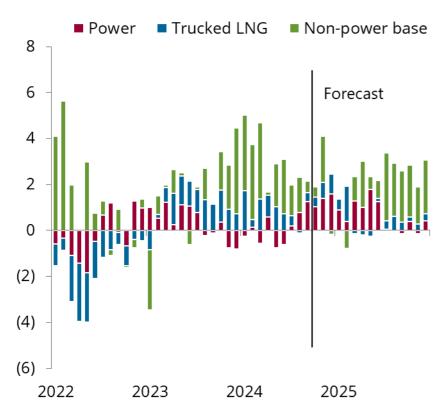


Global gas prices fell relative to oil products last winter, spurring a recovery in LNG use in industry in Asia. But rising prices since then will slow y/y demand growth this winter.



#### Fuel switching and structural growth are key drivers of Chinese and Indian demand

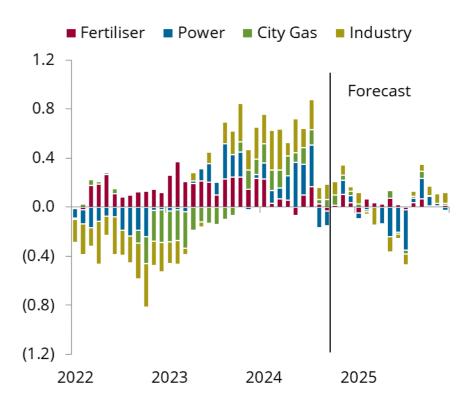
### China sectoral gas demand, y/y bcm



We think the growth momentum of Chinese gas demand will continue into the coming winter on structural drivers. But rising global gas prices will slow growth in the trucked LNG sector.

Source: CEIC, NBS, China Customs, CEC, OilChem, Bloomberg, PPAC, CEA, Energy Aspects

#### India sectoral LNG demand, y/y Mt

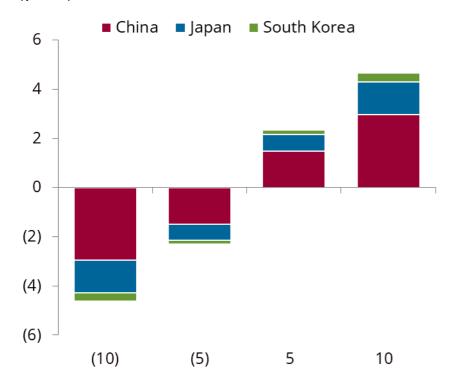


Price-sensitive and structural demand growth in industry and city gas has boosted Indian LNG demand in 2024, but higher prices will slow growth this winter.



#### Asia will need an additional 5.8 Mt of LNG if winter HDDs are 10% above normal

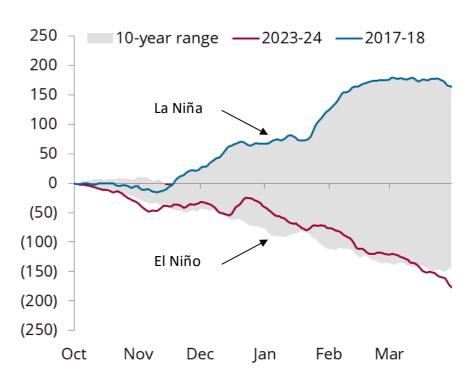
# Sensitivity of Northeast Asian gas demand against HDDs % (x-axis); Mt (y-axis)



Northeast Asian gas demand will be 5.8 Mt higher or 5.6 Mt lower than our base case if HDDs are 10% above or below the 10-year average, respectively.

Source: GFS, METI, KESIS, CQPGX, Energy Aspects

### Cumulative Northeast Asia HDDs vs 10-year normal degree days

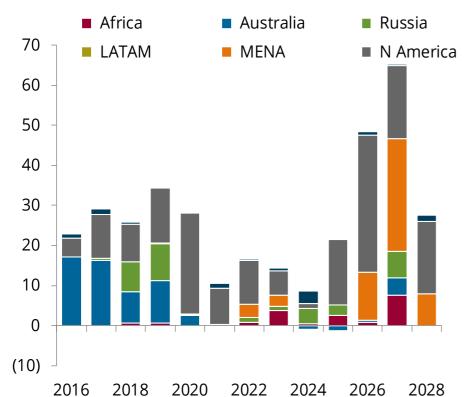


The prevailing <u>La Niña weather pattern</u> typically brings cold and dry conditions to Northeast Asia, posing some upside risks to our base case.



#### Global liquefaction expansions to be driven by US and Qatari projects

# Under-construction liquefaction capacity by region Mtpa



North American and Qatari buildout will drive the next wave of LNG growth over 2025–28. Russian capacity is at risk as sanctions continue to constrain logistics.

Source: Company reports, selected media reports, GTT, Energy Aspects

# Upcoming liquefaction additions Mtpa

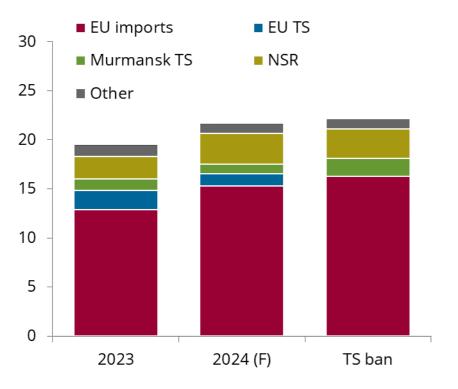
Project	Country	Company	Train/Phase	Year	MTPA
Tortue FLNG	Mauritania	Kosmos Energy, BP	T1	Jan-25	2.4
Corpus Christi	US	Cheniere	T4	Feb-25	1.4
Corpus Christi	US	Cheniere	T5	May-25	1.4
LNG Canada	Canada	Petronas, Shell	T1	Jul-25	7.0
Corpus Christi	US	Cheniere	Т6	Aug-25	1.4
Corpus Christi	US	Cheniere	T7	Oct-25	1.4
Golden Pass	US	ExxonMobil, Qatar Energy	T1	Dec-25	6.0
Plaquemines	US	Venture Global	T4-12	2025	8.9
LNG Canada	Canada	Petronas, Shell	T2-3	Jan-26	7.0
Energia Costa Azul	Mexico	Sempra	T1	Apr-26	3.3
West Papua FLNG	Indonesia	Genting Energy	T1	Apr-26	1.2
Gabon LNG	Gabon	Perenco	P1	Oct-26	0.7
Pluto LNG	Australia	Woodside, MidOcean Energy	T2-3	Oct-26	4.9
Golden Pass	US	ExxonMobil, Qatar Energy	T2-3	2026	12.0
Altamira FLNG	Mexico	New Fortress Energy	P2-3	2026	2.8
North Field East	Qatar	QatarEnergy	T1-2	2026	16.0
Plaquemines	US	Venture Global	T13-15	2026	3.3
Corpus Christi	US	Cheniere	T8-10	2026	4.3

A combined 161.5 Mtpa is set to start over 2025–28 (2016–19: 112 Mtpa; 2020–24: 77.1 Mtpa). US pause on project reviews has minimal short-term impact and is expected to end by 2025.



#### Sanctions against Russian LNG industry are a major headwind to export growth

# Russian LNG exports from Atlantic basin Mtpa



An EU ban on Russian LNG transshipments <u>will drive an increase</u> <u>in direct EU imports from Russia</u>. Stronger Northern Sea Route flows and Murmansk transshipments will also offset ban impact.

Source: LSEG, GTT, Energy Aspects

#### Sanctioned carriers associated with Russian LNG

Name	Ice class?	Cargo assumption	Location	ALNG2 cargo count
Pioneer	No	ALNG2	North of Suez Canal	1
Asya Energy	No	ALNG2	NSR eastbound	2
Everest Energy	No	ALNG2	Koryak FSU (Kamchatka)	2
North Air	Yes	Ballast	Barents Sea	
North Mountain	Yes	Ballast	Indian Ocean	
North Sky	Yes	Ballast	Kara Sea	
North Way	Yes	Ballast	North Atlantic	
Mulan	No	ALNG2	Arctic LNG 2	1
New Energy	No	Ballast	Murmansk	
Total				6

Six Arctic LNG 2 cargoes may have been loaded, although none have been delivered to end users. US sanctions on the project, its FSUs and LNG carriers will keep exports low.





#### Extensive coverage of cross-energy markets

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- Europe gas
- Long term

- North America gas
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- North America emissions
- European emissions
- Global LNG
- Data dashboards and API

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- Macro energy





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