

LNG DAILY

Volume 18 / Issue 221 / November 10, 2021

JKM falls on additional supply, lower prices in Atlantic

KEY DRIVERS / MARKET HIGHLIGHTS

- Asia-Pacific derivatives MOC: 6 trades for January contracts
- Asia-Pacific physical MOC: Vitol and Uniper post 1 bid, 1 offer
- A Japanese importer purchased a Jan. 5-10 delivery cargo
- Petronas closed sell tender for Dec. 5-6 delivery cargo from PFLNG 2
- UK continues to see storage withdrawals
- Limited spot liquidity seen after volatile October

SHIPPING MARKET HIGHLIGHTS

- Day rates remain at \$260,000/day in the Pacific
- Kogas heard with vessel requirement from Darwin

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SHIPPING RATES, NOV 10

		\$/day		Ballast rate
Asia Pacific day rate	AARXT00	260,000	AAXTN00	100%
Atlantic day rate	AASYC00	195,000	AAXTM00	100%
TCR Australia-Japan	ATCRA00	260,000.00		
TCR USG-NWE	ATCRB00	195,000.00		
TCR USG-Japan	ATCRC00	195,000.00		

DAILY CUMULATIVE AVERAGES AND MONTHLY AVERAGES

Nov 10 (\$/MMBtu)		Cumulative monthly average		Previous month average	
JKM	AAOV500	31.792	Dec	AAOV503	33.254
DES West India	AALIC00	29.671	Dec	AAWIC03	31.934
DES Mediterranean	AADC000	27.533	Dec	AASWC03	29.207
DES Northwest Europe	AASDF00	27.587	Dec	AASDE03	29.202
FOB GCM Loading Month	LGCSM00	24.725	Dec	LGCSM31	27.329
JKM Yen	AAOVT00	3618.407	Dec	AAOVT03	3707.118
JKM Yuan	LJCWM00	203.513	Dec	LJCWM03	189.189

JKM™	AAOVQ00	27.450	-3.109 ▼
Cumulative monthly average (Dec)	AAOV500	31.792	
Previous month average (Nov)	AAOV503	33.254	
CNL WTW JKTC	ACNLF00	0.865	

PLATTS DAILY LNG MARKERS (\$/MMBtu)

Nov 10			Change
DES Japan/Korea Marker (JKM)			
JKM (Dec)	AAOVQ00	27.450	-3.109 ▼
H1 Dec	AAPSU00	26.950	-3.108 ▼
H2 Dec	AAPSV00	27.950	-3.109 ▼
H1 Jan	AAPSW00	28.750	-3.111 ▼
H2 Jan	AAPXA00	28.800	-3.150 ▼
JKM (Dec) Japanese Yen	AAOVR00	3104.870	-347.380 ▼
JKM (Dec) Chinese Yuan (CNY/mt)	LJCMS00	9127.938	-1026.683 ▼
DES Japan/Korea (JKM) derivatives Singapore close*			
Balmo-ND	LJKMB00	23.247	-7.001 ▼
Dec	LJKM000	30.510	-1.190 ▼
Jan	LJKM001	28.200	-3.790 ▼
Feb	LJKM002	27.600	-2.675 ▼
DES Japan/Korea (JKM) derivatives London close*			
Dec	JKLM000	31.505	1.729 ▲
Jan	JKLM001	29.195	-0.871 ▼
Feb	JKLM002	28.486	-0.664 ▼
DES Mediterranean Marker (MED)			
MED (Dec)	AASXY00	24.300	-0.074 ▼
H1 Dec	AASXZ00	24.200	-0.074 ▼
H2 Dec	AASYA00	24.400	-0.074 ▼
H1 Jan	AASYB00	24.459	-0.046 ▼
DES Northwest Europe Marker (NWE)			
NWE (Dec)	AASXU00	24.300	-0.074 ▼
H1 Dec	AASXV00	24.200	-0.074 ▼
H2 Dec	AASXW00	24.400	-0.074 ▼
H1 Jan	AASXX00	24.509	-0.046 ▼
Middle East Marker (MEM)			
MEM (Dec)	LMEMA00	24.850	-3.102 ▼
H1 Dec	LMEMB00	24.525	-3.105 ▼
H2 Dec	LMEMC00	25.175	-3.098 ▼
H1 Jan	LMEMD00	25.900	-3.061 ▼
H2 Jan	LMEME00	25.950	-3.152 ▼
DES West India Marker (WIM)			
WIM (Dec)	AARXS00	24.850	-3.102 ▼
H2 Nov	LMEEA00	24.425	-3.100 ▼
H1 Dec	LMEEB00	24.525	-3.105 ▼
H2 Dec	LMEEC00	25.175	-3.098 ▼
H1 Jan	LMEEA00	25.900	-3.061 ▼
H2 Jan	LMEEB00	25.950	-3.152 ▼
DES West India Marker (WIM) derivatives Singapore close*			
Dec	AWIMB00	28.460	-1.190 ▼
Jan	AWIMM01	26.450	-3.990 ▼
Feb	AWIMM02	25.950	-2.925 ▼
FOB Gulf Coast Marker (GCM)			
GCM	LGCSM01	21.750	-0.250 ▼

*For full forward curve, see page 4

LNG NETBACK PRICES (\$/MMBtu)

Nov 10			Change
FOB Australia	AARXR00	25.130	-3.020 ▼
FOB Middle East	AARXQ00	24.050	-3.050 ▼
DES Brazil Netforward	LEBMM01	24.350	-0.350 ▼
FOB Singapore	AARXU00	25.550	-3.079 ▼
FOB Murmansk	AARXV00	23.350	-0.074 ▼

MARKET COMMENTARIES

JKM falls on additional supply, lower prices in Atlantic

Asian LNG spot prices fell on Nov. 10, following additional supply and lower prices in the Atlantic.

The S&P Global Platts JKM for December was assessed at \$27.450/MMBtu on Nov. 10.

Platts assessed the first half of December at \$26.950/MMBtu and the second half of December at \$27.950/MMBtu, with a narrower intra-month contango structure of \$1.000/MMBtu on Nov. 10, compared to a contango of \$1.001/MMBtu on Nov. 9.

On November 10, Petronas closed a sell tender for Dec. 5-6 delivery cargo from PFLNG 2, according to three market participants. However, the buyer and the settled price could not be determined by the time of publication.

Supply uncertainty surrounding Bintulu, Freeport and Tangguh

remained on Nov. 10.

"I am getting the impression that Tangguh's impact is not as big as the other two," a Japanese power utility commented.

On the buy side, an independent Korean importer purchased an early Jan. delivery cargo to Gwangyang terminal from a trader on Nov. 9, according to four sources. Multiple sources also added that another independent Korean importer is seeking a mid-Jan. delivery cargo.

A western Japanese power utility closed limited participation buy tender for Jan. 5-10 delivery. The tender closed on Nov. 10 at 6:30 PM Japan standard time and had a 1-hour validity until 7:30 PM JST. However, pricing details regarding this requirement remained limited at the time of reporting.

Multiple Japanese gas utilities expressed interest in a late December delivery cargo, sources said.

"[Some] Japanese buyers can't make the decision to buy yet. If they buy now, they will over-purchase", a Japanese trader said, and added, "I think they will eventually come to the market, but sellers like us will sell our winter cargoes to those who come to the market first".

PLATTS LNG ASIA JKM RATIONALE & EXCLUSIONS

The Platts JKM for December was assessed at \$27.450/MMBtu Nov. 10. The first half of December was assessed at \$26.950/MMBtu and H2 December at \$27.950/MMBtu, with a narrower intra-month contango structure of \$1.000/MMBtu compared with the contango of \$1.001/MMBtu on Nov. 9. Vitol reported a bid for a Dec. 27-31 DES JKTC cargo at the TTF January average plus \$3.60/MMBtu, with GHV of 1,000-1,110 Btu/cu ft, which was normalized 10 cents lower on lower maximum GHV limit compared with the Platts standard of 1,030-1,130 Btu/cu ft, and equated to a fixed price of \$26.525/MMBtu. Uniper reported an offer for a Jan. 1-3 DES JKTC cargo at the JKM January average plus 15 cents/MMBtu, with volume of 3.3-3.5 TBtu and total sulfur limit of 30 mg/Nm³. The offer was normalized 40 cents/MMBtu higher on larger quantity range and higher sulfur limit, and equated to a fixed price of \$28.750/MMBtu.

During the derivatives MOC process, Dare reported the most competitive bid for December JKM derivatives at \$30.50/MMBtu. Platts assessed December JKM Singapore close at \$30.51/MMBtu, above the bid.

For the January JKM derivatives MOC process, the most competitive bid was at \$27.30/MMBtu while the most competitive offer was at \$28.60/MMBtu, both from Dare. There were 125 lots traded at \$28.20/MMBtu with PetroChina the seller. Platts assessed January JKM Singapore close at \$28.20/MMBtu on the repeated trades.

Platts valued ICE TTF January at 4:30 pm Singapore time at \$23.025/MMBtu, based on a \$5.175/MMBtu differential between JKM January and TTF January. This rationale applies to symbol(s) <AAOVQ00>

Exclusions: none

PLATTS LNG ASIA WIM RATIONALE & EXCLUSIONS

The Platts WIM for December was assessed at \$24.850/MMBtu Nov. 10. Platts assessed first-half and H2 December at \$24.525/MMBtu and \$25.175/MMBtu, respectively, with a wider intra-month contango structure of 65 cents/MMBtu compared with 64.3 cents/MMBtu Nov. 9. Platts assessed the December JKM-WIM spread narrower at \$2.600/MMBtu

from \$2.607/MMBtu Nov. 9. Market participants surveyed on Nov. 10 reported a spread of \$2.50-\$2.70/MMBtu between JKM and WIM.

This rationale applies to symbol(s) <AARXS00>.

Exclusions: None

PLATTS LNG US FOB GULF COAST DAILY RATIONALE & EXCLUSIONS

The FOB Gulf Coast Marker (GCM) was assessed at \$21.75/MMBtu Nov. 10. The assessment was based on tradable values reported by market participants at \$20.90/MMBtu by the middle of the day for FOB USGC cargoes loading 30 to 60 days forward, in conjunction with sustained strength in shipping rates for

deliveries through the Atlantic and Pacific and slightly weakening price movements in the major destination markets.

This rationale applies to symbol(s) <LGCSM01>.

Exclusions: None.

PLATTS LNG EUROPEAN ASSESSMENT RATIONALE & EXCLUSIONS

The Northwest Europe Marker (NWE) for December was assessed Nov. 10 at \$24.300/MMBtu. H1 NWE for December was assessed at \$24.200/MMBtu. H2 NWE for December was assessed at \$24.400/MMBtu. The NWE prices were assessed lower day-on-day reflecting falling flat prices for December TTF. The TTF December contract rose from an intraday low of Eur 63.515/MWh to Eur 71.335/MWh at market close. NBP/TTF premiums fell by 1 cent/MMBtu day-on-day, to 57 cents/MMBtu at 4:30 pm London time on Nov 10. The UK continued to see storage withdrawals in Dragon, South Hook and Isle of Grain terminals, according to data from the National Grid. Russian gas flow nominations increased for the gas day Nov. 10-11. The gas flows, nominated at 324 million kWh/d, is the highest daily flow of gas to Western Europe since Sept. 30, according to data from operator Gascade. Market sources pegged tradeable

values for Jan NWE at TTF plus 20 cents/MMBtu. Traders alluded to a wide range of prices seen in the market, dependent on whether market participants had their own freight availability, amid rising shipping costs.

The Mediterranean Marker (MED) for December was assessed at \$24.300/MMBtu. H1 MED for December was assessed at \$24.200/MMBtu.

H2 MED for December was assessed at \$24.400/MMBtu.

The MED price was assessed lower day-on-day. MED prices were assessed flat to NWE, with comparable premiums into both UK and Spanish gas hubs.

The assessments were based on pricing information from market sources for cargoes delivering within the region for December delivery.

This rationale applies to symbol(s) <AASXU00, AASXY00>

Exclusions: none

REPORTED ATLANTIC BIDS, OFFERS AND TRADES (\$/MMBtu)

Date	Seller	Loading	Buyer	Basis	Loading window	Offer/Bid	Notes
Best bids/offers							

REPORTED APAC BIDS, OFFERS AND TRADES (\$/MMBtu)

Date	Buyer	Destination	Seller	Source	Basis	Delivery period	Bid/Offer	Notes
Best bids/offers								
Nov 10	Vitol	JKTC			DES	Dec 27-31	Jan TTF+3.6 bid	MOC
Nov 10		JKTC	Uniper		DES	Jan 1-3	Jan JKM+0.15 offer	MOC
Nov 10	BP		PetroChina			Jan JKM derivatives	28.15 traded offer	MOC, 25 lots
Nov 10	BP		PetroChina			Jan JKM derivatives	28.20 traded offer	MOC, 4 x 25 lots
Nov 10	Vitol		PetroChina			Jan JKM derivatives	28.20 traded offer	MOC, 25 lots
Last 5 trades		APAC						
Nov 09	Trafigura	JKTC	Shell		DES	Jan 5-7	32.30	MOC
Oct 26	PTT	Thailand		Qatar	DES	Nov 27-29, Dec 3-5	low-33	Tender
Oct 26	Shell, Total		EGAS	Egypt	FOB	Nov 14-15, Nov 24-25	28.25, 28.70	Tender
Oct 22	Vitol	JKTC	PetroChina		DES	Dec 6-8	Dec TTF plus 3.05 traded offer	MOC
Oct 21	Vitol	JKTC	PetroChina		DES	Dec 7-11	Dec TTF plus 3.45 traded bid	MOC

On the Japanese domestic power market, some utilities noticed slightly lower electricity prices in eastern Japan while prices in western Japan were rising.

According to data from the Japan Electricity Power Exchange on November 10, Kyushu Electric plans to lower their electricity output from Shin-Ooita thermal power plant Units 1-3 (total output capacity of 2.855 GW) by 1.106 GW from Nov. 11.

Hokuriku Electric plans to lower their electricity output from their Toyama Shin-Minato gas-fired thermal power plant Unit 1 (total output capacity of 424.7 MW) by 246.4 MW on Nov. 13, according to JEPX data on Nov. 10.

Shikoku Electric has lowered the output of electricity generation from Sakaide gas-fired thermal power plant Unit 1 (total capacity of 296 MW) by 130 MW and Unit 3 (total output capacity of 350 MW) by 257 MW since Nov. 9, according to the JEPX on Nov. 10.

"A huge volume of power is being sold from Kyushu region to Honshu through the Kanmon interconnection [line]. I suspect a Japanese power utility is purchasing electricity rather than consuming LNG for the prompt", a Japanese power trader said.

"Demand has recovered these days, and our inventory is getting lower", a Japanese end-user commented.

During the physical MOC process, Vitol placed a bid for Dec. 27-31 delivery at TTF Jan. plus \$3.6/MMBtu, with a GHV of 1,000-1,110 Btu cu/ft, while Uniper offered a Jan. 1-3 delivery cargo at JKM Jan. plus 15 cents/MMBtu, for a volume of 3.3-3.5 TBtu.

In the derivatives MOC process, Dare posted the most competitive bid for 25 lots of Dec. JKM contract at \$30.50/MMBtu, while Unipecc offered 25 lots at \$31.30/MMBtu. Platts assessed JKM Dec. derivatives Singapore close at \$30.51/MMBtu, above the bid.

For the January derivatives contract, BP and Vitol bought a total of 150 lots from PetroChina at \$28.15-28.20/MMBtu. The most competitive bid outstanding stood at \$27.30/MMBtu by Dare (25 lots) while the most competitive offer was at \$28.60/MMBtu (25 lots) by the same entity.

Platts assessed JKM January derivatives Singapore close at \$28.20/MMBtu, at the same level of the five repeated trades at \$28.20/MMBtu. — [Masanori Odaka](#)

Russian pipeline gas flow rise nudges European LNG prices lower for second day

European LNG prices fell for the second straight day Nov. 10, as Russian pipeline gas flows to Germany rose to the highest level in six weeks.

S&P Global Platts assessed DES Northwest Europe for December at \$24.300/MMBtu, down 7.4 cents/MMBtu from the previous day. The first half of December was assessed at \$24.200/MMBtu and the second half was assessed at \$24.400/MMBtu, keeping the contango of 20 cents/MMBtu seen the previous two days.

The UK continued to see storage withdrawals in Dragon, South Hook and Isle of Grain terminals, according to data from utility National Grid. Russian gas flow nominations increased for gas day Nov. 10-11. Russian gas flows, nominated at 324 million kWh/d, were the highest daily flow to Western Europe since Sept. 30, according to data from operator Gascade.

Dutch TTF December futures rose from an intraday low of Eur63.515/MWh to Eur71.335/MWh at market close. Platts assessed TTF December at \$24.088/MMBtu Nov. 10. NBP/TTF premiums fell by 1 cent/MMBtu day on day to 57 cents/MMBtu at 4:30 pm London time.

"Very limited to no liquidity on the spot and shipping economics are wildly variable from one company to the other depending on if they have term versus spot shipping," a Europe-based trader said.

Tanker day rates remained high, though unchanged for the second day in a row.

Day rates were at \$260,000/day for the Pacific basin and at \$195,000/day in the Atlantic. South Korea's Kogas International was heard with a vessel requirement for Dec. 12-14 loading from Australia's Darwin to East Asia's JKTC region for a period of 12 days plus up to an additional 10 days.

Congestion at the Panama Canal has weighed recently on shipping of cargoes between the US Gulf Coast and East Asia, at times prompting longer routes eastward around the Cape of Good Hope.

The NYMEX Henry Hub prompt-month contract has lost steam in recent days, falling below \$5/MMBtu for Nov. 9-10, as rising US production volumes erode fears of a supply crunch this winter. As of afternoon US time Nov. 10, NYMEX Henry Hub December was trading at \$4.87/MMBtu. — [Harry Weber](#), [Zack Smith](#)

ASIA/MIDDLE EAST (\$/MMBtu), NOV 10*

DES Japan/Korea Marker (JKM)

JKM (Dec)	AAOVQ00	27.450
JKM (H1 Dec)	AAPSU00	26.950
JKM (H2 Dec)	AAPSV00	27.950
JKM (H1 Jan)	AAPSW00	28.750
JKM (H2 Jan)	AAPXA00	28.800
Asian Dated Brent (16:30 Singapore)	ADBA00	14.80
JKM vs Henry Hub futures	AAPRZ00	22.517
JKM vs NBP futures	AAPSA00	3.956
JKM vs TTF	LNTFJ00	3.362
JKM vs Asian Dated Brent (16:30 Singapore)	AAPSB00	12.646
JKM vs MED (16:30 London)	ALNGB00	3.150
JKM vs NWE (16:30 London)	ALNGA00	3.150

DES Japan/Korea (JKM) derivatives Singapore close

Balmo-ND	LJKMB00	23.247
Dec	LJKMO00	30.510
Jan	LJKMO01	28.200
Feb	LJKMO02	27.600
Mar	LJKMO03	23.000
Q1 2022	LJKQR01	26.267
Q2 2022	LJKQR02	14.000
Summer 2022	LJKSN01	13.500
Winter 2022	LJKSN02	14.125
2022	LJKYR01	17.250
2023	LJKYR02	11.550
2024	LJKYR03	9.000

DES Japan/Korea (JKM) derivatives London close

Dec	JKLMO00	31.505
Jan	JKLMO01	29.195
Feb	JKLMO02	28.486
Mar	JKLMO03	23.909
Q1 2022	JKLQR01	27.197
Q2 2022	JKLQR02	14.930
Summer 2022	JKLSN01	15.300
Winter 2022	JKLSN02	15.600
2022	JKLYR01	17.900
2023	JKLYR02	11.650
2024	JKLYR03	9.150

DES West India Marker (WIM)

WIM (Dec)	AARXS00	24.850
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DES West India Marker (WIM) derivatives Singapore close

Dec	AWIMB00	28.460
Jan	AWIMM01	26.450
Feb	AWIMM02	25.950
Mar	AWIMM03	21.575
Q1 2022	AWIMQ01	24.658
Q2 2022	AWIMQ02	12.450
Summer 2022	AWISN01	11.975
Winter 2022	AWISN02	12.575
2022	AWIMY01	15.700
2023	AWIMY02	10.075
2024	AWIMY03	7.550

Carbon Neutral LNG

CNL WTW JKTC Differential (ex-Australia)	ACNLF00	0.865
CNL WTT JKTC Differential (ex-Australia)	ACNLB00	0.191
CNL DES JKTC Differential (ex-Australia)	ACNLG00	0.184
CNL Combustion JKTC	ACNLJ00	0.674

FOB Middle East

FOB Middle East	AARXQ00	24.050
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FOB Australia (netback)

JKM (Dec)	AAOVQ00	27.450
(-) Freight	AAUSA00	2.32
FOB Australia	AARXR00	25.13

Key gas price benchmarks

Japan Customs Cleared LNG (Aug)	LAKPN00	10.15	Final
Japan Customs Cleared LNG (Sep)	LAKPM00	10.78	Estimated

Platts Dutch TTF

Dec	GTFWM10	24.088
Jan	GTFWM20	24.147

Competing fuel prices

Japan Customs Cleared crude oil (Aug) (\$/b)	AAKOP00	73.78	Final
Japan Customs Cleared crude oil (Sep) (\$/b)	AAKOM00	73.81	Estimated
HSFO 3.5% sulfur 180 CST FOB Singapore	LUAXZ00	11.69	
NEAT Coal Index	JKTCB00	6.092	
Minas crude oil	LCABO00	13.982	
Naphtha CFR Japan	LNPHJ00	17.153	

EUROPE (\$/MMBtu), NOV 10

\$/MMBtu Eur/MWh Eur/MMBtu

DES Mediterranean Marker (MED)

MED (Dec)	AASXY00	24.300	LNMTA00	71.875	LNNXA00	21.081
MED (H1 Dec)	AASXZ00	24.200				
MED (H2 Dec)	AASYA00	24.400				
MED (H1 Jan)	AASYB00	24.459				
Dated Brent (16:30 London)	ADBA00	14.53				
MED vs Henry Hub futures	AASYF00	19.371				
MED vs TTF	LNTFS00	0.212				
MED vs NBP futures	AASYH00	-0.393				
MED vs Dated Brent (16:30 London)	AASYJ00	9.766				
MED vs NWE	ALNSA00	0.000				
MED vs JKM	AASYM00	-3.150				

DES Northwest Europe Marker (NWE)

NWE (Dec)	AASXU00	24.300	LNNTA00	71.875	LNNXA00	21.081
NWE (H1 Dec)	AASXV00	24.200				
NWE (H2 Dec)	AASXW00	24.400				
NWE (H1 Jan)	AASXX00	24.509				
Dated Brent (16:30 London)	ADBA00	14.53				
NWE vs Henry Hub futures	AASYE00	19.371				
NWE vs TTF	LNTFN00	0.212				
NWE vs NBP futures	AASYG00	-0.393				
NWE vs Dated Brent (16:30 London)	AASYI00	9.766				
NWE vs MED	AASYK00	0.000				
NWE vs JKM	AASYL00	-3.150				
NWE as a % of NBP	AASYD00	98.41				

Competing fuel prices

Northwest Europe fuel oil	LAEGR00	13.01
CIF ARA 15-60 day thermal coal	CSAAB00	6.22

NORTH AMERICA (\$/MMBtu), NOV 10

FOB Gulf Coast Marker (GCM)

GCM	LGCSM01	21.750
Dated Brent (16:30 London)	ADBA00	14.53
GCM vs JKM	LGMIJ01	-5.700
GCM vs Henry Hub futures	LGMMH01	16.870
GCM vs TTF	LNTFG00	-2.338
GCM vs NWE	LGEUR00	-2.550
GCM vs MED	LGMET00	-2.550
GCM vs NBP futures	LGMMN01	-2.943
GCM vs Dated Brent (16:30 London)	LGMDB00	7.216
GCM vs USGC HSFO	LGMF000	10.690

Competing fuel prices

US Gulf Coast high sulfur fuel oil	LUAXJ00	10.73
New York Harbor 1%S fuel oil	LUAXD00	12.63

*Japan Customs Cleared value shows latest available CIF price published by the Ministry of Finance, converted to US dollars per MMBtu. All other values reflect Platts most recent one-month forward assessments for each product in each region, converted to US dollars per MMBtu. JKM Marker, SWE LNG and NWE LNG average the assessments of the two half-months comprising the first full month of forward delivery. Asian LNG assessments assessed at Singapore market close 0830 GMT, European LNG assessment assessed at London market close 1630 UK time. NYMEX Henry Hub futures and ICE NBP futures values taken at Singapore market close and London market close. ICE NBP futures converted from Pence/Therm to \$/MMBtu. Asian Dated Brent crude oil assessed at Asian market close 0830 GMT and converted from \$/barrel to \$/MMBtu. Detailed assessment methodology is found on www.platts.com.

RECENT TENDERS AND STRIPS

Tender/strip	Issuer/location	Tender type	(Loading) or delivery period	Slots/cargoes	Opening	Closing date	Validity	Notes	Results
November 10									
Tender	Kansai Electric - Japan	Buy	05-Jan-22 - 10-Jan-22	1 DES or FOB	10-Nov-21	10-Nov-21	10-Nov-21	Closed on 6:30 PM Japan standard time, 1-hour validity until 7:30 PM JST	
Tender	Angola LNG - Angola LNG	Sell	16-Nov-21 - 15-Dec-21	1 DES		10-Nov-21		furthest delivery to Arun	
Tender	Sonatrach - Algeria	Sell	(01-Nov-21 - 15-Nov-21)	3 FOB					
Tender	APLNG - Australia Pacific LNG	Sell	(28-Dec-21 - 28-Dec-21)	1 DES or FOB	08-Nov-21				
Tender	Adnoc - ADNOC Das Island	Sell	(07-Apr-22 - 23-Sep-22)	6 FOB		09-Nov-21		loading dates: April 7-13, May 15-21, June 12-18, July 20-26, Aug 20-26, Sep 17-23 Brent-linked basis	
Tender	BOTAS - Turkey	Buy	01-Dec-21 - 28-Feb-22	9 DES		04-Nov-21		9 cargo tender, closing Nov.4	
Tender	EGAT - Map Ta Phut	Buy	10-Dec-21 - 18-Dec-21	1 DES		03-Nov-21		One cargo buy tender for Dec. 10-12 or Dec. 16-18 delivery	
Tender	Pakistan LNG - Port Qasim	Buy	19-Nov-21 - 27-Nov-21	2 DES	02-Nov-21	05-Nov-21	05-Nov-21	Two cargo buy tender for Nov. 19-20 and Nov. 26-27 delivery. Closes on Nov. 5, 1200 hours PST. Validity until 2300 hours PST.	
Tender	Oman LNG - Oman LNG	Sell	(01-Dec-21 - 03-Dec-21)	1 DES or FOB		21-Oct-21		Closing 1pm Oman time	heard awarded to Gunvor around \$30/MMBtu FOB
Tender	Ichthys LNG - Ichthys LNG	Sell	(13-Nov-21 - 17-Nov-21)	1 DES or FOB	25-Oct-21	27-Oct-21	27-Oct-21	FOB or DES cargo, 13-17 November loading. The tender closes on Oct. 27, noon Tokyo time. Validity until 7 PM Tokyo time (7 hour validity).	heard awarded at approximately \$31/MMBtu FOB
Tender	Darwin LNG - Darwin	Sell	(01-Dec-21 - 03-Dec-21)	1 DES or FOB		28-Oct-21		Dec 1-3 load or Dec 14-17 DES JKTC	heard awarded at approximately \$31/MMBtu FOB
Tender	Petronet - Dahej	Buy	16-Nov-21 - 30-Nov-21	1 DES	21-Oct-21	27-Oct-21	28-Oct-21	Seller to nominate delivery window for H2 Nov, fixed price only, DES Dahej or Kochi, 3.2 Tbtu	heard not awarded
Tender	Egas - Egypt	Sell	(13-Nov-21 - 25-Nov-21)	2 DES or FOB		26-Oct-21	26-Oct-21		Heard awarded approximately \$28s/MMBtu
Tender	PTT - Map Ta Phut	Buy	27-Nov-21 - 05-Dec-21	2 DES	25-Oct-21	26-Oct-21	26-Oct-21	Seeking two cargoes for Nov. 27-29 delivery and Dec. 3-5 delivery. Closes on 4 PM Thailand time on Oct. 26, and has a 3 hour validity until 7 PM Thailand time.	Heard awarded around \$33-\$34/MMBtu
Tender	IEASA - Escobar	Buy	19-Nov-21 - 19-Dec-21			26-Oct-21		Two cargo buy tender for Nov. 19 & Dec. 19 delivery	
Tender	Novatek - Yamal	Sell	05-Dec-21 - 31-Mar-22	3 DES		21-Oct-21		Dec. 5-23, Jan. 3-21, and March 25-31 delivery	Heard partially awarded
Tender	Sakhalin Energy - Sakhalin	Sell	(01-Dec-21 - 01-Dec-21)	1 DES or FOB		21-Oct-21	22-Oct-21		heard awarded at approximately \$34/MMBtu
Tender	Angola LNG - Angola LNG	Sell	05-Nov-21 - 19-Nov-21	1 DES		25-Oct-21	26-Oct-21	Furthest to India, onboard Seri Balqis	
Tender	BOTAS - Turkey	Buy	01-Nov-21 - 31-Mar-22	19 DES		18-Oct-21		DW: Nov.1-7, Nov.8-14, Nov.15-21, Nov.22-28, Nov.29-Dec.5, Dec.6-12, Dec.13-19, Dec.20-26, Dec.27-Jan.2, Jan.3-9, Jan.10-16, Jan.17-23, Jan.24-30, Jan.31-Feb.6, Feb.7-13, Feb.14-20, Feb.21-27, Feb.28-Mar.6, Mar.7-13	Heard partially awarded at TTF+\$0.40/MMBtu to +\$0.70/MMBtu
Tender	Darwin LNG - Darwin	Sell	20-Nov-21 - 27-Nov-21	1 DES	12-Oct-21	14-Oct-21	14-Oct-21	Nov 14-16 loading or Nov 20-27 DES	heard awarded to a trader at high \$36 or approximately \$37/MMBtu FOB to BP

NEWS

Japex defers spot LNG cargo purchase amid high prices, sufficient supply

- Defers one spot LNG cargo purchase beyond April 2022
- Focusing on term LNG supply for winter

Japan Petroleum Exploration has deferred the scheduled procurement of a spot LNG cargo amid high spot LNG prices, a company official said

Nov. 10, as it has secured sufficient LNG supply mainly from term contracts through to the end of March 2022.

Japex is focusing on securing LNG supplies for winter mainly from term contracts, the official said, adding that it has deferred the spot LNG cargo beyond April amid high spot LNG prices.

The Platts JKM for December was assessed at \$30.559/MMBtu Nov. 9, while the December-January contango widened further as buying interest emerged for January.

Japex's focus on term LNG supply for winter is generally in line with the approach of Japanese power and gas utilities.

Power utilities are ensuring their generating fuel supplies for the approaching winter after Japan experienced a power shortage last winter as demand surged during extreme cold spells in January, with local utilities forced to restrict gas-fired power generation due to low LNG stocks.

That was exacerbated by glitches at coal-fired power plants, low hydropower generation due to drought, fluctuations in solar power output due to weather conditions, reduced oil-fired power generation capacity, and low nuclear power output.

Volumes steady

Japex expects to handle about 1.41 million mt of LNG equivalent of gas — comprising imported LNG, domestic gas output and pipeline gas — in fiscal year 2021-22 (April-March), nearly flat from a year ago amid the prolonged negative impact of the coronavirus pandemic, the official said.

Japex holds a 33% stake in the 1.18 GW Fukushima natural gas power plant in the northeast, which has two combined cycle gas turbines each with a capacity of 590 MW. The other stakeholders are Mitsui with 29%, Osaka Gas 20%, Mitsubishi Gas Chemical 9% and Hokkaido Electric Power Co. 9%.

Japex's adjacent Soma LNG import terminal has two 230,000 kl LNG storage tanks and a shipping facility for maximum 4,800 cubic meters class LNG coastal vessels.

The company also sends LNG from the Soma terminal on coastal vessels to its Yufutsu LNG satellite terminal in Hokkaido, northern Japan for regional pipeline gas supply, together with gas produced from the Yufutsu oil and gas field.

Japex imports up to 480,000 mt/year of LNG from the Malaysia LNG Tiga project under a 20-year contract to 2022, and also has other term supply. — [Takeo Kumagai](#)

Spain's Naturgy still in talks with Morocco, Algeria over GME gas link extension

- Flows halted on Nov. 1 after non-renewal of transit deal
- Additional volume would be 'upside': Naturgy
- Medgaz flows up to 25 million cu m/d this month

Spain's largest gas group Naturgy said Nov. 10 it remained in continued talks with parties in Morocco and Algeria to potentially achieve an extension of the gas transit agreement for supplies of Algerian gas in the GME pipeline via Morocco to Spain.

Gas deliveries through the GME pipeline fell to zero Nov. 1 after the long-term transit deal between Algeria and Morocco was not renewed ahead of its expiry on Oct. 31.

Relations between Algiers and Rabat have worsened significantly in recent months, with Algerian President Abdelmadjid Tebboune on Oct. 31 ordering state-owned Sonatrach to break all commercial relations with Morocco's state utility ONEE.

Jon Ganuza, Global Head of Controlling at Naturgy, said Nov. 10 after the company released its third-quarter earnings report that talks continued to see whether the concession for the pipeline could be extended.

SOUTH AMERICA (\$/MMBtu), NOV 10

DES Brazil Netforward

DES Brazil (Dec)	LEBMH01	24.350
DES Brazil vs NWE Fuel Oil Derivative	LAARM01	11.340
DES Brazil vs DES MED LNG	LASWM01	0.050
DES Brazil vs Dated Brent	LADBM01	9.816
DES Brazil vs Henry Hub (16:30 London)	LAHHM01	19.421
DES Brazil vs JKM (16:30 London)	LAJKM01	-3.100
DES Brazil vs NBP (16:30 London)	LABPM01	-0.343

NORTH AMERICAN FEEDGAS (\$/MMBtu), NOV 9

Daily average US LNG feedgas cost	ALNFG00	4.778
30-day moving average US LNG feedgas cost	ALNUS00	5.335
Daily average USGC LNG feedgas cost	ALNFH00	4.799
30-day moving average USGC LNG feedgas cost	ALNUG00	5.371

Export facility	Estimated feedgas cost	
Sabine Pass	ALNFA00	4.820
Corpus Christi	ALNFB00	4.781
Cove Point	ALNFC00	4.570
Cameron	ALNFD00	4.888
Freeport	ALNFE00	4.652
Elba Island	ALNFF00	5.082

Facility feedgas costs represent a calculation derived from S&P Global Platts' North American gas spot price indices at the hub(s) from which feedgas would be procured most economically for the export facility. The average summary costs are an average of the relevant export facilities' feedgas costs weighted by Platts Analytics' daily estimated volume delivered to each facility.

US CARGO CANCELLATIONS, NOV 10

Dec-21	0
Nov-21	0
Oct-21	0
Sep-21	0
Aug-21	0
Jul-21	0
Jun-21	0
May-21	0
Apr-21	0
Mar-21	0
Feb-21	5
Jan-21	2

The figures are collected from market sources.

NATURAL GAS FUTURES (\$/MMBtu), NOV 10

NYMEX HH Singapore close	(Dec)	AAPSD00	4.933
NYMEX HH Singapore close	(Jan)	AAPSE00	5.025
ICE NBP Singapore close	(Dec)	AAPSF00	23.493
ICE NBP Singapore close	(Jan)	AAPSG00	24.018
NYMEX HH London close	(Dec 21)	AASYN00	4.929
NYMEX HH London close	(Jan 22)	AASYO00	5.029
ICE NBP London close	(Dec 21)	AASYR00	24.693
ICE NBP London close	(Jan 22)	AASYS00	25.075
NYMEX HH US close	(Dec 21)	NMNG001	4.880
NYMEX HH US close	(Jan 22)	NMNG002	4.974

MARINE FUEL LNG BUNKER, NOV 10

	\$/MMBtu	\$/mt (Oil)	\$/mt (LNG)
Singapore	LNBSG00 26.950	LNBSM00 1041.429	LNBSF00 1401.400
	Eur/MWh	\$/mt (Oil)	\$/mt (LNG)
Rotterdam	LNBR00 70.300	LNBRM00 917.476	LNBRF00 1235.884

MMBtu to \$/mt (oil) factor: 38.643; MWh to \$/mt (oil) factor: 11.322; MMBtu to \$/mt (LNG) factor: 52.000.

Ganuza said it would be “sensible” for all parties and “create value for all.”

Algeria has repeatedly said it can meet Spanish gas demand using only the direct Medgaz gas pipeline and LNG deliveries, with Sonatrach CEO Toufik Hakkar reiterating that there was no cause for concern.

Cited by the state news agency APS on Nov. 8, Hakkar said that Medgaz alone “currently ensures the entire volume of Algerian gas exports to Spain stipulated under long-term contracts.”

Ganuza said Nov. 10 that the company had sufficient firm gas volumes to meet its customer needs and that this guaranteed volume was independent of any outcome of the negotiations with Morocco and Algeria, whereby any additional volume would be an “upside.”

He added that Naturgy had been aware since July 2018 that the GME concession was unlikely to be continued.

Despite Algeria’s assurances, the non-renewal of the GME transit contract has caused some concern in Europe given the current tight gas market and high prices.

The TTF day-ahead contract hit a record high on Oct. 5 of Eur116.10/MWh, according to S&P Global Platts price assessments, and has remained volatile through the remainder of October and into November.

Platts assessed the TTF day-ahead price on Nov. 9 at Eur72/MWh, up by 420% from a year ago.

Medgaz expansion

Algeria is currently working to expand the capacity of the Medgaz pipeline from 8 Bcm/year to 10.7 Bcm/year, with the work expected to be completed in the fourth quarter.

Naturgy’s Ganuza confirmed Nov. 10 that the company — whose capacity on the pipeline is contracted via a euro-denominated send-or-pay contract through to 2031 — was also involved in adding the fourth

PLATTS WIM RLNG DAILY PRICES, NOV 10

	\$/MMBtu	Rupee/MMBtu
Ex-Terminal		
Dahej	RLEDA00 26.49	RLEIA00 1967.21
Hazira	RLEDB00 26.64	RLEIB00 1978.68
Dabhol	RLEDC00 26.57	RLEIC00 1972.99
Mundra	RLEDE00 26.60	RLEEI00 1975.72
Kochi	RLEDD00 27.10	RLEDI00 2012.90
Average	RLEDF00 26.68	RLEIF00 1981.50
Location		
Ahmedabad	RLDDJ00 26.99	RLDIJ00 2004.34
Morbi	RLDDK00 27.10	RLDIK00 2012.85
Parvel	RLDDL00 27.24	RLDIL00 2023.31
Dabhol	RLDDC00 27.24	RLDIC00 2023.31
Vijaipur	RLDDM00 27.17	RLDIM00 2018.04
Kota	RLDDN00 27.17	RLDIN00 2018.04
Chhainsa	RLDDO00 27.24	RLDIO00 2022.81
Jagdishpur	RLDDP00 27.24	RLDIP00 2022.81
New Delhi	RLDDQ00 27.24	RLDIQ00 2022.81
Koottanad	RLDDR00 27.75	RLDIR00 2060.81
Kakinada	RLDDS00 27.85	RLDIS00 2068.45
Average	RLDDT00 27.29	RLDIT00 2027.05

Prices are net-forward calculations derived from the Platts WIM and exclude VAT and CST sales taxes. Delivered prices represent the cost of delivery from the nearest connected LNG terminal via pipeline.

compressor to Medgaz.

There is also scope for further upgrades to eventually take the capacity to 16 Bcm/year.

In early 2020, Naturgy boosted its stake in Medgaz to 49%, buying out a 34% stake held by Abu Dhabi’s Mubadala, and then split its holding with Black Rock.

Thanks to a Spanish ruling in July 2021, the partners were granted a 10-year extension to exempt them from having to offer third-party access in Medgaz, allowing them to face financing costs including the capacity expansion.

Naturgy signed a 9 Bcm/year supply contract with Sonatrach, itself a minority shareholder in Naturgy, in 2018 running to 2030, although

[\(continued on page 9\)](#)

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LNG Daily is published daily by Platts, a division of S&P Global, registered office: 55 Water Street, 37th Floor, New York, N.Y. 10038.

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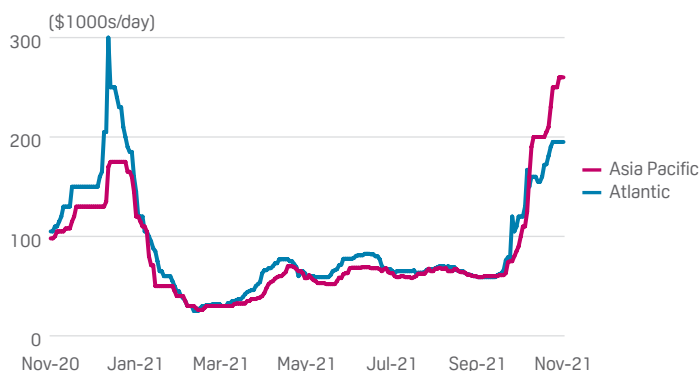
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SHIPPING PRICES

SHIPPING RATES, NOV 10

		\$/day
Asia Pacific day rate	AAAXT00	260,000
Atlantic day rate	AASYC00	195,000
TCR Australia-Japan	ATCRA00	260,000.00
TCR USG-NWE	ATCRB00	195,000.00
TCR USG-Japan	ATCRC00	195,000.00
		\$/MMBtu
PLF1 Middle East-Japan/Korea	AAUUA00	3.69
PLF2 Middle East-NWE	AAUTE00	4.02
PLF3 Trinidad-NWE	AAUUC00	1.83

SHIPPING RATES



Source: S&P Global Platts

SHIPPING CALCULATOR, NOV 10

	Australia-Japan/Korea	Middle East-India
Ship size (mt)	72980.77	72980.77
Trip length (days)	9	3
Carrier day rate (\$/day)	260000	260000
Day rate cost (\$/MMBtu)	1.50	0.63
Boil-off cost	0.56	0.18
Supplementary boil-off cost (\$/MMBtu)	0.18	0.05
Cost of voyage* (\$/MMBtu)	2.32	0.91

*Includes port cost.

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FREIGHT ROUTE COSTS, NOV 10 (\$/MMBtu)

Asian discharge ports

		Japan/Korea		South China/Taiwan		West India
Middle East	AAUUA00	3.69	AAUSH00	3.22	AAUSP00	0.91
Australia (Dampier)	AAUSA00	2.32	AAUSI00	1.87	AAUSQ00	2.23
Australia (Gladstone)	ACABA00	2.33	ACABB00	2.56	ACABC00	3.59
Bontang	AOJKA00	1.61	AOCTA00	1.17	AOWIA00	2.20
Binulu	ABJKA00	1.64	ABCTA00	0.98	ABWIA00	2.01
Singapore	ASJKA00	1.84	ASCTA00	1.17	ASWIA00	1.54
Tangguh	ATJKA00	1.60	ATCTA00	1.38	ATWIA00	2.63
Trinidad via Suez	AAUSB00	7.07	AAUSJ00	6.63	AAUSR00	4.53
Trinidad via Panama	AAUXB00	4.91	AAUZB00	5.96		
Trinidad*	AAUZC00	4.91	AAUZD00	5.96		
Nigeria	AAUSC00	5.56	AAUSK00	4.94	AAUSS00	3.55
Algeria	AAUSD00	5.17	AAUSL00	4.76	AAUST00	2.83
Belgium	AAUSE00	6.01	AAUSM00	5.37	AAUSU00	3.39
Peru	AAUSF00	5.15	AAUSN00	5.89	AAUSV00	6.41
Russia	AAUSG00	0.94	AAUSO00	1.39	AAUSW00	3.54
Spain	ACAAA00	5.40	ACAAB00	4.78	ACAAC00	3.04
Norway	ACAAH00	6.89	ACAAI00	6.03	ACAAJ00	4.18
USGC*	LAUVA00	5.15	LAUVB00	6.21	LAUVC00	4.97
USGC via Panama	LAUVI00	5.15	LAUVL00	6.21		
USGC via Suez	LAUVJ00	7.77	LAUVM00	6.89	LAUV000	4.97
USGC via Cape	LAUVK00	7.99	LAUVN00	7.31	LAUVP00	6.16

EMEA discharge ports

		South West Europe		North West Europe		Kuwait/UAE
Middle East	AAUSX00	3.37	AAUTE00	4.02	LMEMM00	0.50
Australia (Dampier)	AAUSY00	5.23	AAUTF00	5.91	LMEMN00	2.69
Australia (Gladstone)	ACABD00	6.67	ACABE00	7.38	ACABI00	4.06
Trinidad	AAUSZ00	1.86	AAUUC00	1.83	LMEPM00	4.15
Nigeria	AAUTA00	2.09	AAUTG00	2.24	LMEMQ00	3.81
Algeria	AAUTB00	0.46	AAUTH00	0.96	LMEMR00	2.47
Belgium	AAUTC00	0.80			LMEMS00	3.21
Peru	AAUTD00	5.46	AAUTI00	5.67	LMENT00	6.92
Russia	AAUUB00	6.62	AAUTJ00	7.08	LMEMU00	4.94
Spain			ACAAD00	0.80	LMEMV00	2.68
Norway	ACAAK00	1.36	ACAAL00	0.79	LMEMW00	3.80
Murmansk			AARXW00	0.95		
USGC*	LAUVD00	2.44	LAUVE00	2.41	LMEMX00	4.78
USGC via Suez					LMEMY00	4.78
USGC via Cape					LMEMZ00	5.96

Americas discharge ports

	US Atlantic Coast		Argentina		Brazil	
Middle East	AAUTK00	4.66	AAUTS00	4.90	ACAAP00	5.65
Australia (Dampier)	AAUTL00	5.85	AAUTT00	4.92	ACAAQ00	5.91
Australia (Gladstone)	ACABF00	5.67	ACABH00	4.24	ACABG00	5.21
Trinidad	AAUTM00	0.97	AAUTU00	2.16	ACAAR00	1.47
Nigeria	AAUTN00	2.38	AAUTV00	2.39	ACAAS00	2.06
Algeria	AAUTO00	1.58	AAUTW00	2.74	ACAAT00	2.41
Belgium	AAUTP00	1.42	AAUTX00	3.11	ACA AU00	2.77
Peru	AAUTQ00	4.84	AAUTY00	2.21	ACA AV00	3.35
Russia	AAUTR00	7.32	AAUTZ00	6.31	ACA AW00	8.86
Spain	ACAAE00	1.31	ACA AF00	2.76	ACA AG00	2.25
Norway	ACAAM00	1.59	ACA AN00	3.70	ACA AO00	3.55
USGC*			LAUVG00	3.32	LAUVH00	2.60

*Most economic.

All values calculated based on prevailing spot market values during the day for LNG, bunker fuel and ship chartering. No route cost is calculated for Zeebrugge to NW Europe, or Spain to SW Europe. Other routes appear blank on days when a public holiday in one or another location means underlying values are not published. Detailed assessment methodology, including assumed route times and underlying values, is found on www.platts.com.

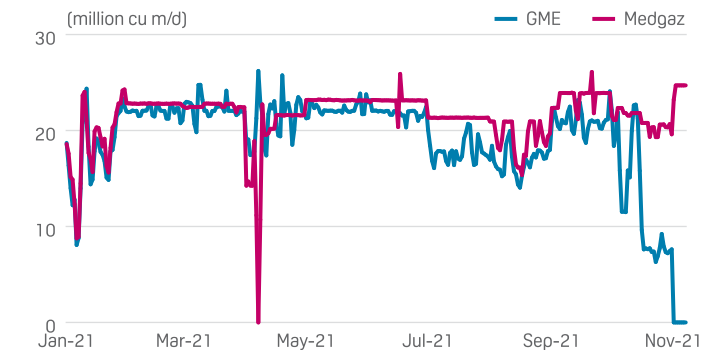
the agreements were modified in October 2020, without details being disclosed.

Current flows

Since the flows in the GME pipeline were halted on Nov. 1, Medgaz deliveries have stepped up and are now running at some 25 million cu m/d, or around 4 million cu m/d higher than the average in the first 10 months of the year, according to S&P Global Platts Analytics data.

According to shipper nominations, flows on Medgaz are seen reaching 26 million cu m/d this month.

MEDGAZ STEADY AT 25 MILLION CU M/D AFTER GME HALT



Source: S&P Global Platts Analytics

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At 25 million cu m/d, current flows already suggest an annual capacity on Medgaz of 9.1 Bcm/year, and once Medgaz reaches capacity of 10.7 Bcm/year, daily flows could come in at close to 30 million cu m/d.

The GME pipeline transited 5.93 Bcm of Algerian gas via Morocco to Spain in the first 10 months of 2021 — an average of 20 million cu m/d — according to Platts Analytics data.

That was enough to meet roughly 25% of Spanish gas demand.

Meanwhile, Sonatrach's Hakkar said Nov. 8 that it was too early to assess the supply picture in the event of additional Spanish gas demand in the future.

"Let's talk about how to meet additional needs only when there is an additional demand", he said, adding: "The capacities of Sonatrach to meet Spanish demand are sufficient, whether through the [Medgaz] pipeline or LNG tankers."

According to Platts Analytics, Medgaz alone may not be enough to cover its forecast of Algerian supply to Spain for the balance of this winter, with 14 million cu m/d at risk, even after considering the capacity expansion.

However, Platts Analytics expects the impact on the Spanish balance this winter to be "subdued."

"Platts Analytics currently estimates that Algeria has sufficient LNG export capacity to cover the GME shortfall after factoring in Sonatrach's contractual obligations," it said. — [Gianluca Baratti, Stuart Elliott](#)

Indian Petronet LNG's Q2 regas volumes fall at Dahej

- High spot prices lower Dahej terminal's run
- Price sensitive power demand shrinks

Indian Petronet LNG's terminal at Dahej handled 225 trillion Btu of regasification volumes in the September quarter, company officials said Nov. 10.

LNG imports in the second quarter of the fiscal year 2021-22 (April-March) were 7.4% lower at Dahej from the year-ago quarter, but 16% higher compared with the April-June quarter.

The decline was attributed to a squeeze in demand from user sectors such as power, fertilizer, refinery, and city gas distribution due to high global prices.

The flagship Dahej terminal ran at 109% capacity in Q2 compared with 108% in the year-ago quarter and 81% in the April-June quarter.

The Dahej terminal on the west coast has a nameplate capacity of 17.5 million mt/year.

Petronet, India's No. 1 LNG importer, also operates a 5 million mt/year LNG terminal at Kochi in Kerala.

The Kochi terminal ran at around one-fifth of its capacity in the quarter in the absence of developed pipeline networks in south India.

Overall, Petronet processed 240 trillion Btu at both terminals in the second quarter, down 5.5% year on year, but 14.8% higher from the first quarter of the fiscal year, the company said.

The Kochi terminal operated at 22%-23% in Q2 and 17% in the year-ago period.

"There has been demand destruction in the power sector during the second quarter due to the abnormal high spot prices," A.K. Singh,

CEO and managing director of Petronet LNG, said.

Singh said the Indian power sector is too price-sensitive to afford high LNG prices on a sustained basis.

Petronet is comfortable at \$9-\$10/MMBtu for long-term LNG supplies, Singh said, and did not give any near-term forecast for spot prices.

"Spot prices are very volatile these days for any guess," he said, and added that the high spot prices might not be sustainable after the winter season gets over by the first quarter of 2022.

Singh said domestic business for LNG has not been impacted though the country is not getting spot cargoes at competitive prices.

Usually, Petronet sources around 23 LNG cargoes to meet local LNG demand, including 11 cargoes sourced from Qatar's RasGas under a long-term deal.

India sources 77% of its LNG imports of around 26 million mt/year via long-term supplies, he said.

Petronet is open to the idea of investing in liquefaction facilities and upstream gas projects in case such deals make sense, Singh added. — [Staff, Ratnajyoti Dutta](#)

China's Guangdong to build LNG bunkering stations in inland waterways

China's Guangdong province plans to begin construction of six LNG bunkering stations for inland river waterways before the end of 2021, and complete construction of another eight LNG bunkering stations for the main navigation channels on arterial waterways, including two coastal stations, by 2022, the Guangdong Development and Reform Commission said Nov. 9.

The purpose of the plan is to accelerate setting up of LNG bunkering stations, ensure LNG bunker supply, promote clean energy in inland waterways and help meet the country's carbon peak and carbon neutrality targets, according to GDRC.

The province will consider adding more LNG bunkering stations in other locations based on demand, GDRC said, adding that Guangdong will promote the creation of an LNG bunkering hub across a network of stations.

GDRC said among the arterial waterways that will be prioritized for LNG bunkering stations are the waterway from Bei River in the north to the Pearl River Delta, from Xi River to the estuary of the Pearl River, and waterways within the extensive Pearl River Delta itself, which is also the hub for economic, manufacturing and shipping activity in the industrialized Guangdong province.

The province will speed up the construction of LNG bunkering stations to meet the refueling needs of LNG-powered vessels and encourage more switching to gas as a marine fuel, according to GDRC.

According to commitments by some energy companies, the LNG bunker price will be capped at 70% of the most expensive zero-vapor gasoil set by the government in the same period, GDRC said.

LNG-fueled ships

The building of LNG bunkering stations follows moves to boost LNG-powered shipping in the province.

Guangdong introduced subsidies worth Yuan 550 million (\$86 million) for ship owners to convert existing vessels or vessels under construction that are registered in the province to LNG from July 1, 2021 to Dec. 31, 2022, according to a notice by Guangdong Transportation Department on Oct. 11.

Cargo ships on inland waterways less than 15 years old and with tonnage not less than 400 dwt, are qualified for the fuel-switching subsidy, the notice said.

These ships, with engine power ranging from less than 300kW to more than 1,500kW, can get a subsidy of Yuan 900,000-Yuan 3.8 million/ship. But the number of ships that can receive subsidies is limited to 300, the notice said.

Meanwhile, state-owned shipbuilder CSSC's Guangzhou branch and Guangzhou Port signed a contract for converting eight inland transport vessels to LNG power on Oct. 14, the first batch of conversions for inland vessels in Guangdong, CSSC said on its official WeChat platform on the day.

Prior to that, CNOOC, CSSC and provincial government-owned Guangdong Province Navigation Group had signed an agreement for the construction and fuel supply of 50 LNG-powered river vessels in March, and scheduled to be delivered by March 2022.

CSSC said it had delivered the first batch of two LNG-powered vessels on Nov. 2, and that it planned to deliver 13 more by the end of 2021.

Guangdong signed an initial agreement with CSSC and state-owned oil and gas major CNOOC on May 29, 2020, under which it plans to complete the conversion of 1,500 vessels to LNG power and the construction of 19 LNG bunkering stations, which is expected to create LNG bunker demand of 400,000 mt/year as well as reduce oil product demand by 390,000 mt/year, according to CNOOC.

With the launch of more and more LNG-power vessels, Guangdong's demand for LNG is expected to grow. Guangdong's natural gas consumption was estimated at nearly 29 Bcm in 2020, making it the second-largest natural gas consuming province after Jiangsu. — [Staff](#)

Pakistan to award one of two spot LNG cargoes tendered for November

Pakistan has accepted Qatar Energy's lowest bid of \$30.65/MMBtu for a spot LNG cargo to be shipped by end-November, in a tender that initially called for two spot LNG cargoes this month to meet a gas deficit in the country, according to an official at the ministry of petroleum.

State-owned importer Pakistan LNG Ltd. had floated a tender for two spot cargoes in the delivery windows of Nov. 19-20 and Nov. 26-27.

Vitol Bahrain was the lowest bidder for the first window of Nov. 19-20 at \$29.8966/MMBtu, and Qatar Petroleum Trading was the second bidder at \$30.05/MMBtu. However, Pakistan LNG has decided not to proceed with this cargo, the official said, declining to give a reason.

Three bids were received for the second window of Nov. 26-27, and Pakistan LNG has accepted the lowest bid by Qatar Petroleum Trading at \$30.65/MMBtu, the official said. Total Energies Gas and Power at \$30.86/MMBtu and Vitol Bahrain at \$31.0566/MMBtu were the other two bidders for this delivery window.

Qatar Petroleum Trading is the LNG trading arm of Qatar Energy.

Pakistan LNG had to float an emergency tender as Gunvor and Eni were unable to provide cargoes under their respective contracts due to supply disruptions.

Pakistan has two long-term supply agreements with Qatar, the first signed in 2016 for 15 years priced at a 13.37% slope of Brent crude, and the second signed in February 2021 at a 10.2% slope of Brent crude for 10 years.

The S&P Global Platts JKM for December was assessed at \$30.559/MMBtu on Nov. 9. — [Haris Zamir](#)

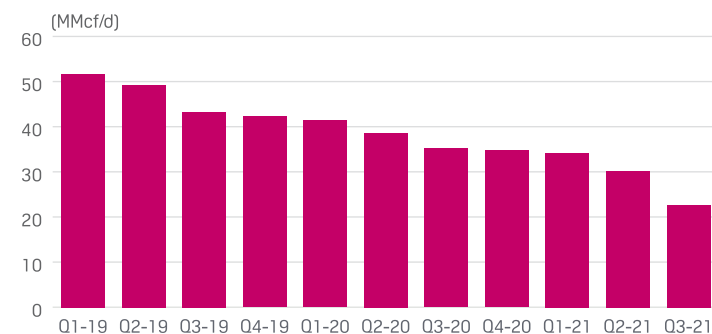
Gas output from Corrib field offshore Ireland continues to decline: operator

- Q3 output net to Vermilion down 35% on year
- Field underwent three-week turnaround in Q3
- As European gas prices remain at sustained high

Gas production from the Corrib field offshore northwest Ireland continues to fall, with output in the third quarter net to operator Vermilion Energy down 35% year on year, the Canadian company said late Nov. 9.

Corrib is Ireland's only gas producing asset of note, but since its startup in 2015 has seen gradual decline rates in output as the field matures.

FALLING GAS PRODUCTION AT CORRIB (NET TO VERMILION)



Source: Vermilion Energy

Production net to Vermilion — which holds a 20% operating stake in the project — in the third quarter averaged 22.7 MMcf/d, a 35% fall year on year and another consecutive quarterly decline.

The decline, it said, was due to a three-week planned turnaround.

RECENT FIXTURES, NOV 03 TO NOV 10

Vessel	Capacity	Note
LNG Finima II	174,000	Fixed by Vitol for a late November loading for Atlantic voyage at rate of \$190,000/d
Cheniere controlled MEGI ship	170,000	Fixed by CNOOC for a mid-December loading ex Australia to North Asia at rate of \$250,000/d
BW newbuild ship	170,000	Fixed by ENN for a period of ten years at rate in the high \$70,000s/d starting the third quarter of 2022
Gunvor controlled TFDE ship	160,000	Fixed by IOC for a mid-December loading for a period of thirty five days ex USG at rate of \$215,000/d plus eleven million on ballast bonus
LNG Ogun	150,000	Fixed by Vitol for a single voyage ex Bethioua, Algeria for a Nov. 10 loading at rate of \$150,000/d
BW newbuild ship	170,000	Fixed by BP for a period of ten years starting the third quarter of 2022 with the rate not reported

Source: S&P Global Platts

“The turnaround was successfully completed in July and production resumed in August,” Vermilion said.

It added that most of the impact from the planned turnaround in Ireland was offset by new production added in the Netherlands and Germany and strong operational uptime in Australia.

High prices

The lost production at Corrib came during a period of very high European gas prices.

According to S&P Global Platts price assessments, the TTF day-ahead contract averaged Eur36.10/MWh in July and Eur43.90/MWh in August.

The contract hit a record high on Oct. 5 of Eur116.10/MWh and has remained volatile through the remainder of October and into November.

Platts assessed the TTF day-ahead price on Nov. 9 at Eur72/MWh, up 420% from a year ago.

Vermilion posted revenues of \$47.8 million — or \$137.58/boe — from its Irish production in the third quarter, up from just \$10.5 million in W3 2020 when its production was higher, but European gas prices were low.

Vermilion took over from Shell as operator of Corrib in 2018. The field started in 2015 and has produced at rates as high as 350 MMcf/d gross (about 3.6 Bcm/year).

According to industry estimates, Corrib may only produce for 15 years — meaning it could reach the end of its operational life as early as 2030.

Ireland has pledged to end the licensing of new gas exploration blocks, a move that industry believes will make the country more dependent on gas imports from the UK. — [Stuart Elliott](#)

LNG SHIPPING WEEKLY: Spot rates strengthened for Pacific as Atlantic edges sideways

- Pacific rates rose to \$260,000/d
- Three cold TFDE or DFDE tankers heard marketed

The LNG Shipping market saw increased spot activity during the Nov. 3-10 period, with many fixtures reported in the market and day rates increasing for the Pacific basin while moving sideways in the Atlantic.

The Pacific shipping rate increased at \$260,000/d from \$250,000/d during the period, while the Atlantic shipping rate stayed level at \$195,000/d. The Atlantic and Pacific ballast rates remained steady at 100%, during the same period.

In the Pacific, up to three cold TFDE or DFDE tankers were heard marketed open for loading from Dec. 8 until late December, including a

SHIPPING RECAP AND DELIVERIES, NOV 03 TO NOV 10

Vessel	Capacity	Source	Load date	Delivered port/country	Delivered date	Commentary
Arctic Lady	147,835	Idku	10/30/2021	Aliaga/Turkey	11/5/2021	Total-controlled ship delivers cargo
Bahrain Spirit	173,000	Freeport	10/3/2021	Zhoushan/China	11/4/2021	Gunvor-controlled ship delivers cargo
BW Brussels	162,514	Arun LNG Terminal	10/25/2021	Beihai/China	11/7/2021	Total-controlled ship delivers cargo
BW Paris	162,400	Point Fortin	10/17/2021	Martas/Turkey	11/9/2021	
BW Pavilion Anathera	173,400	Idku	10/21/2021	Dahej/India	11/4/2021	Total-controlled ship delivers cargo
Cool Voyager	160,000	Port Wentworth	10/22/2021	Salvador de Bahia/Brazil	11/8/2021	Petrochina-controlled ship delivers cargo
Corcovado LNG	159,800	Freeport	10/22/2021	Swinoujscie/Poland	11/6/2021	
Global Energy	173,400	Freeport	10/15/2021	Rotterdam/Netherlands	11/4/2021	Cheniere-controlled ship delivers cargo
Grace Cosmos	153,500	Dampier	10/16/2021	Tianjin/China	11/6/2021	
Hoegh Galleon	174,000	Freeport	10/31/2021	Andres/Dominican Republic	11/8/2021	Cheniere-controlled ship delivers cargo
Maran Gas Delphi	160,000	Cameron	10/9/2021	Ennore/India	11/6/2021	
Maria Energy	174,000	Wheatstone	10/28/2021	Futtsu/Japan	11/7/2021	Uniper-controlled ship delivers cargo
Pskov	170,000	Freeport	10/1/2021	Yung An/Taiwan	11/6/2021	Total-controlled ship delivers cargo
Trinity Glory	154,000	Wheatstone	10/20/2021	Futtsu/Japan	11/6/2021	Jera-controlled ship delivers cargo

Source: S&P Global Platts

Gunvor-controlled ship. However, up to eight steam turbine ships were reported open for November-December laycans in the Pacific basin, including the Umm Al Ashtan. On the ME-GI class type, up to three LNG tankers were heard marketed open for November laycans, including a Gunvor controlled ship. On the X-DF class type, one LNG tanker was heard marketed open for loading from early January onwards.

In the Atlantic, up to two cold TFDE or DFDE tankers were heard marketed open for loading from now until mid-December, including a Gunvor-controlled ship. On the steam turbine type, one ship was reported open from Nov. 10 onwards.

ENOC was reported with a tonnage requirement for December loading. The Torben Spirit, 173,400 cu m, was heard on subs by Petrobras for a period of three years with rate in the mid \$80,000s/d. An NLNG ship was heard fixed by Yamal LNG for a period of 45 days for a mid-January loading with delivery in Zeebrugge and redelivery in the JKTC region with the rate not reported. The Woodside requirement for an early January loading ex USG was heard still not covered. — [Alkis Mouratis](#)

HYDROGEN

Shell, RWE to partner on low-carbon hydrogen, CCS in Europe

- MOU on hydrogen production, use, distribution
- To explore decarbonizing RWE power plants with CCS
- Scope for green hydrogen in UK, Germany, Netherlands

Shell and RWE have signed a memorandum of understanding on the production, use and distribution of renewable hydrogen, as well as agreeing to explore options to decarbonize RWE gas and biomass-fired power plants in Northwest Europe, the companies said in a statement Nov. 10.

The companies are exploring options, including renewable

hydrogen production in the UK, Germany and the Netherlands and hydrogen produced from fossil fuels with carbon capture and storage for use in several of RWE's power plants, they said.

The two parties are also to investigate decarbonizing existing RWE gas- and biomass-fired power plants with the addition of CCS.

"Progress towards net-zero emissions needs government policy to support the energy transition and our customers' needs for low-carbon energy solutions," Shell Director of Integrated Gas, Renewables and Energy Solutions Wael Sawan said in the statement.

"It makes sense for us to evaluate the potential of joint decarbonization projects and make the best of the global energy experience both companies bring to the table," Sawan added.

The companies said they would identify "concrete project options" before developing towards investment decisions.

RWE and Shell said they wanted to examine the potential for producing green hydrogen by electrolysis of water powered by "gigawatt scale" offshore wind in industrial regions in the Northeast of England, such as Teesside and Humberside.

The companies will also assess locations that have potential hydrogen pipeline capacity, but are difficult to connect to the power grid.

Elsewhere in Europe, RWE and Shell aim to develop renewable hydrogen for industrial customers around Shell's Rheinland plant in Germany and Shell's Rotterdam and Moerdijk facilities in the Netherlands.

In the mobility sector, the two companies are exploring hydrogen applications in Germany the Netherlands and the UK, building on Shell's plans for a hydrogen refueling network for trucks between Rotterdam, Cologne and Hamburg by 2024.

In the power sector, the memorandum includes examining options for decarbonizing RWE's gas and biomass power plants, including adding CCS technology.

Shell could also supply blue hydrogen, produced from fossil fuels and combined with CCS, to RWE's gas-fired plants in Pembroke in Wales, Emsland in Germany and Moerdijk in the Netherlands.

The companies said the results of such tests could be transferred

to other RWE facilities.

Calculated costs of blue hydrogen production are significantly below those for green hydrogen, based on spot feedstock gas and power prices plus capex, but the gap is expected to narrow rapidly by 2030.

S&P Global Platts assessed the cost of producing renewable hydrogen via alkaline electrolysis in Europe at Eur10.16/kg (\$11.70/kg) Nov. 9 (Netherlands, including capex), based on month-ahead power prices. Blue hydrogen production by steam methane reforming (including carbon, CCS and capex) was less than half the price, at Eur4.85/kg.

Other partnerships

Shell and RWE have already partnered on hydrogen projects including the 3 GW NorthH2 offshore wind-powered electrolyzer project in the Netherlands and the 28 MW AquaVentus project in Germany.

Separately, Shell signed an MOU with Hydro on developing renewable hydrogen production to help decarbonize the two companies' own operations and to supply customers in heavy industries, as well as the marine and road transport sectors, Hydro said in a statement Nov. 9.

Shell and Hydro aim to build renewable hydrogen production around existing production sites for the two companies, where they see "strong potential for scaling production" for demand from heavy industry and transport.

Hydro said it plans to replace natural gas used for heating in its aluminum production with renewable hydrogen, helping to meet its target of cutting greenhouse gas emissions by 30% by 2030. — [James Burgess](#)

COP26: Hydrogen key to decarbonizing rail transport to meet net-zero goals: Alstom

- Hydrogen 'true diesel replacement' for trains
- Alstom launches new UK hydrogen fleet

Hydrogen will be key to decarbonizing rail transport to meet mid-century climate goals, train manufacturer Alstom said at the UN Climate Change Conference Nov. 10.

The company also signed an agreement with British train owner and financier Eversholt Rail for a new hydrogen train fleet in the UK.

"It is important that we start sooner rather than later to decarbonize UK Rail if we are to meet the 2050 net-zero target," Eversholt Rail CEO Mary Kenny said in a statement. "Hydrogen propulsion will play an important role, and this project with Alstom will demonstrate how the private sector can work together to make a difference."

Alstom Product Manager James O'Sullivan said at the COP26 summit in Glasgow that hydrogen trains would be critical to decarbonizing the rail fleet, as electrifying the entire rail network in time to meet mid-century decarbonization goals would not be possible.

Rail lines currently served by diesel trains, particularly on rural routes, would be best decarbonized by switching to hydrogen,

O'Sullivan said.

Hydrogen is the "true diesel replacement" for rail transport, he said.

There are around 6,000 diesel trains in operation in Europe at present, while only around 50% of the European rail network was electrified, he said.

Battery-electric trains were a feasible solution for short distance routes, he added.

Alstom Head of Business Development Mike Muldoon said hydrogen-fueled trains could plug the gap between battery-electric trains and full electrification of lines, and such trains were already operating in Germany.

Alstom and Eversholt on Nov. 10 signed a memorandum of understanding to develop a fleet of 10 hydrogen trains in the UK, with an aim of signing final contracts in early 2022.

Under the agreement, Alstom is to design, build, commission and support the fleet of three-car trains.

The company also has orders for two full fleets in Germany, with 41 hydrogen fuel cell trains coming into service in 2022.

Alstom has been running hydrogen-fueled trains in large-scale trials across Europe since 2018.

Muldoon added that sourcing hydrogen would be challenging in the early stages of developing a hydrogen economy, but said that train stations and rail networks could act as hubs for building demand across other transport sectors, and would provide a steady offtake for producers.

A single hydrogen train could take hundreds of kilograms of hydrogen a day, Muldoon said, around 10 times the volume a bus might consume. So a single fleet would provide in the region of multiple tons per day of hydrogen demand, he added.

Alstom is aiming to fuel its hydrogen trains with renewable hydrogen, produced from electrolysis of water powered by wind and solar.

Production costs for renewable hydrogen are expected to fall dramatically this decade, underpinned by falling renewable power prices and power purchase agreements.

UK solar PPA offers in Q2 2021 were GBP46.59/MWh (\$62.87/MWh), while wind PPA offers were GBP48.09/MWh, according to the Zeigo platform. By contrast, S&P Global Platts assessed day-ahead baseload UK power prices at GBP154.25/MWh Nov. 10, up from GBP68.00/MWh at the start of the year. — [James Burgess](#)

TotalEnergies, Daimler to partner on hydrogen for road transport in Europe

- To develop hydrogen supply chains, logistics
- TotalEnergies targets 150 hydrogen stations by 2030
- Aim to lower total cost of hydrogen truck ownership

TotalEnergies and Daimler Truck are partnering to develop supply chains and logistics for hydrogen-powered trucks in Europe, the companies said in a statement Nov. 10.

Daimler Truck and TotalEnergies aim to bring down the total cost of ownership of hydrogen truck operations through their collaboration.

Industry group Hydrogen Europe said Oct. 28 hydrogen pump prices would need to fall to around Eur5/kg to compete with diesel trucks at the pump.

S&P Global Platts assessed monthly hydrogen pump prices in Germany at Eur9.50/kg (\$11.01/kg) on Nov. 1.

Daimler Truck and TotalEnergies have signed an agreement committing to decarbonizing road freight in the EU, focusing on hydrogen sourcing and logistics, hydrogen service stations developing hydrogen-powered trucks and establishing a customer base, they said.

"Hydrogen will have its role in TotalEnergies' journey to decarbonize mobility, especially in European long-haul transportation," TotalEnergies President of Marketing & Services Alexis Vovk said in the statement.

"Our company is actively exploring all aspects of the value chain of Hydrogen for mobility, from production to supply and distribution, and is building important partnerships to this effect," Vovk said.

"The creation of a European network of hydrogen truck stations for mobility is one of the key challenges we intend to tackle," he added.

TotalEnergies aims to operate up to 150 hydrogen refueling stations in Germany, the Netherlands, Belgium, Luxembourg and France by 2030.

There are just under that number in operation across the whole of Europe at present, according to data from H2Mobility.

TotalEnergies operates 24 hydrogen refueling stations in Germany as part of the H2 Mobility joint venture with Air Liquide, Daimler, Linde, OMV and Shell. In January, Total signed a cooperation agreement with utility Engie to design, develop, build and operate a renewable hydrogen production site near Total's La Mede biorefinery in France.

Under the agreement, Daimler Truck will supply hydrogen fuel cell trucks to customers in the Netherlands, Belgium, Luxembourg and France by 2025.

Daimler signed an agreement with BP in late October on hydrogen-powered trucks in Europe.

Daimler Truck board member Karin Radstrom said in the statement the company was convinced that hydrogen fuel cell trucks, along with battery-powered trucks, would drive the decarbonization of road freight.

"For this, we want to establish a pan-European hydrogen ecosystem together with strong partners," Radstrom said.

Daimler Truck has a preference for liquid hydrogen in its truck fueling systems, giving a higher energy density, and taking up a smaller volume. The company is road testing a prototype Mercedes-Benz GenH2 truck on public roads in Germany, with first orders to be delivered from 2027.

The company said the series version of the truck would be suitable for multi-day long-haul transport, competing with diesel-powered trucks. — [James Burgess](#)

SUBSCRIBER NOTES

Platts proposes new daily carbon neutral hydrogen assessments

S&P Global Platts is proposing to launch its first suite of carbon-neutral hydrogen assessments, effective Dec. 9, 2021.

Building on its industry-leading price valuations for hydrogen, Platts would launch new carbon-neutral hydrogen price assessments that incorporate the cost of carbon capture, renewable energy certificates and where appropriate the cost of offsetting carbon emissions generated during production.

Carbon offset costs would be accounted for using Platts CNC nature-based carbon credits, as measured in \$/mtCO₂e in certain markets. Platts would complement these backstop calculated prices with available source data including bids, offers and reported trades as these become available. Other factors that will be considered include market information on power-purchase agreements and hydrogen offtake agreements. In the absence of spot market activity, Platts would consider carbon neutral hydrogen production costs as a baseline against which market prices would be assessed.

Platts would start publishing daily assessments in six locations, which have the potential to become hydrogen hubs as global markets emerge: California and US Gulf Coast in the Americas, the Netherlands and Saudi Arabia in Europe and the Middle East, and Japan and Australia in Asia-Pacific.

Assessments would be measured in \$/kg, \$/MMBtu, Eur/kg, Eur/MMBtu, Yen/kg, Yen/MMBtu, A\$/kg, A\$/MMBtu.

The prices would be published on Platts Dimensions Pro and under the Market Data Category: HY.

The following symbols would be created:

- Australia Carbon Neutral Hydrogen A\$/kg
- Australia Carbon Neutral Hydrogen A\$/kg MAvg
- Australia Carbon Neutral Hydrogen A\$/MMBtu
- Australia Carbon Neutral Hydrogen A\$/kg MAvg
- Australia Carbon Neutral Hydrogen \$/kg
- Australia Carbon Neutral Hydrogen \$/kg MAvg
- Australia Carbon Neutral Hydrogen \$/MMBtu
- Australia Carbon Neutral Hydrogen \$/MMBtu MAvg
- California Carbon Neutral Hydrogen \$/kg

- California Carbon Neutral Hydrogen \$/kg MAvg
- California Carbon Neutral Hydrogen \$/MMBtu
- California Carbon Neutral Hydrogen \$/MMBtu MAvg
- Far East Asia Carbon Neutral Hydrogen Yen/kg
- Far East Asia Carbon Neutral Hydrogen Yen/kg MAvg
- Far East Asia Carbon Neutral Hydrogen Yen/MMBtu
- Far East Asia Carbon Neutral Hydrogen Yen/MMBtu MAvg
- Far East Asia Carbon Neutral Hydrogen \$/kg
- Far East Asia Carbon Neutral Hydrogen \$/kg MAvg
- Far East Asia Carbon Neutral Hydrogen \$/MMBtu
- Far East Asia Carbon Neutral Hydrogen \$/MMBtu MAvg
- Middle East Carbon Neutral Hydrogen \$/kg
- Middle East Carbon Neutral Hydrogen \$/kg MAvg
- Middle East Carbon Neutral Hydrogen \$/MMBtu
- Middle East Carbon Neutral Hydrogen \$/MMBtu MAvg
- NW Europe Carbon Neutral Hydrogen Eur/kg
- NW Europe Carbon Neutral Hydrogen Eur/kg MAvg
- NW Europe Carbon Neutral Hydrogen Eur/MMBtu
- NW Europe Carbon Neutral Hydrogen Eur/MMBtu MAvg
- NW Europe Carbon Neutral Hydrogen \$/kg
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- NW Europe Carbon Neutral Hydrogen \$/MMBtu
- NW Europe Carbon Neutral Hydrogen \$/MMBtu MAvg
- USGC Carbon Neutral Hydrogen \$/kg
- USGC Carbon Neutral Hydrogen \$/kg MAvg
- USGC Carbon Neutral Hydrogen \$/MMBtu
- USGC Carbon Neutral Hydrogen \$/MMBtu MAvg

Please send all questions and comments to hydrogenassessments@spglobal.com and pricegroup@spglobal.com by Nov. 11, 2021. For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing. Platts will consider all comments received and will make comments not marked as confidential available upon request.

Vercer Capital Markets Trading Limited changes entity name to Dare Global Limited

Vercer Capital Markets Trading Limited has advised Platts that it would like to change its participating entity name in the Platts Market on Close assessment processes for:

Americas Fuel Oil - Paper
Asia Naphtha-Paper
Asia Mogas-Paper
Asia Jet Fuel-Paper
Asia Gasoil-Paper
Asia Fuel Oil-Paper
Asia APAC LNG - Paper
EMEA Naphtha-Paper
EMEA Mogas-Paper
EMEA Jet Fuel-Paper
EMEA Gasoil/Diesel- Paper
EMEA Fuel Oil - Paper
EMEA Crude BFOE CFDs- Paper

This follows the Vercer Capital Markets Trading Limited name change to Dare Global Limited.

Platts has reviewed Dare Global Limited and will consider information from Dare Global Limited in the Americas, Asia and EMEA assessment processes for the abovementioned markets, subject at all times to adherence with Platts editorial standards.

Platts will publish all relevant information from Dare Global Limited accordingly. Platts welcomes all relevant feedback regarding MOC participation. Platts considers bids, offers and transactions by all credible and creditworthy parties in its assessment processes. For comments and feedback, please contact: Platts editors at oilgroup@spglobal.com and PriceGroup@spglobal.com.

Platts launches Atlantic LNG physical eWindow

S&P Global Platts has launched the Platts Editorial Window, or eWindow, communication tool for its Atlantic LNG physical Market on Close (MOC) assessment process for its DES Northwest Europe (NWE), DES Mediterranean (MED) and FOB Gulf Coast Marker (GCM) price assessments on Sept. 24, 2021. Participants in the Platts MOC process are now able to submit bids, offers and expressions of interest to trade for publication directly through the eWindow communication tool or through an editor, who would then publish the information using the software.

The instruments that are launched for the Platts Atlantic LNG are from the third to the fifth half-month forward (H+3 to H+5) in dollars per MMBtu for the DES NWE and DES MED assessments, and 30-60 days forward for FOB GCM. Market participants can state their specific bid or offer delivery windows — for example, 3-day or 5-day delivery or loading windows — within these instruments.

The instruments will allow for a variety of different delivery or loading locations to be used in bids and offers, such as: DES UK, DES Spain, etc.

For delivery locations that are not listed individually, market participants can select “DES in TQC” and input the details directly the DES basis of the bid or offer in the Terms, Quality & Comments (TQC) box.

The instruments will allow for a volume range to be expressed for bids and offers, up to 0.3 Tbtu.

If the bid or offer is in a volume range, then the instrument called Platts Atlantic LNG (Qty Range) would be selected. The instruments will also allow for a variety of pricing basis.

Market participants can also input directly other terms related to their bids or offers in the TQC box.

The eWindow instruments will generate a different format for headlines of bids, offers and trades published on Platts LNG Alert and via other Platts services. For example, a headline that currently appears as:

Atlantic LNG MOC: COMPANY Offers Oct TTF ICE Front Month Average +0.15 \$/MMBTU DES Pricing 24-30 September. 2 Day Delivery Window: 11-12 October. Base Discharge Port: Buyer to advise during CN process. No later than 20 days prior to the 2 Day Arrival Period, Buyer can nominate substitute Discharge Port in Mugardos, Rotterdam, Dragon, Isle of Grain, South Hook, Montoir, Dunkirk, Zeebrugge, Bilbao, Huelva, Barcelona, Sagunto, FOS. GHV: 1000 to 1120 Btu/SCF.

Contract Quantity 3.65 Tbtu +/-5%. Base ship: will be nominated upon completion of deal. No later than 15 days prior to the 1 Day Arrival Period, Seller may nominate an Alternate LNG Ship subject to SSCS and terminal acceptance. Base Load Port: Freeport. Seller's option to nominate an Alternative Load Port no later than 15 days prior to the 2 day Arrival Period. Laytime 36 hours., will be published as:

Platts Atlantic LNG DES NWE+MED H3-H5, COMPANY offers Oct11-Oct12 100% TTF Full Month Oct \$0.15 for 3.65 Pricing 24-30 September. Base Discharge Port: buyer to provide at trade confirmation. No later than 20 days prior to the 2 Day Arrival Period, Buyer can nominate substitute Discharge Port in Mugardos, Rotterdam, Dragon, Isle of Grain, South Hook, Montoir, Dunkirk, Zeebrugge, Bilbao, Huelva, Barcelona, Sagunto, FOS. GHV: 1000 to 1120 Btu/SCF. Base ship: will be nominated upon completion of deal. No later than 15 days prior to the 1 Day Arrival Period, Seller may nominate an Alternate LNG Ship subject to SSCS and terminal acceptance. Base Load Port: Freeport. Seller's option to nominate an Alternative Load Port no later than 15 days prior to the 2 day Arrival Period. Laytime 36 hours.

TIMING: All bids and offers will still have to be submitted by 16.00.00.000 London time. Following any trade, market participants will have 60 seconds to rebid or re-offer. No price changes are allowed from 16:28:00:000 to the close of the MOC process at 16.30.00.999. A rebid or re-offer, following a trade, in last 120 seconds prior to the close of the MOC will trigger a 120-second extension from 16.30.01.000 to 16.32.00.999, in order to adequately test that rebid or re-offer.

INCREMENTABILITY: Bids and offers can be improved by a maximum of \$0.05/MMBtu and a minimum of \$0.01/MMBtu every 120 seconds. As per Platts editorial guidelines, buyers or sellers can withdraw bids/offers at any time when communicating through eWindow, provided no prior interest to transact has been expressed by any potential counterparty. All bids and offers are firm from the moment they are submitted into eWindow to the moment they are traded, the MOC process closes or the bid/offer is withdrawn from the system by the trader or a Platts editor. Market participants can still send bids and offers directly to an LNG editor for publication via eWindow. In markets where Platts eWindow is in operation, the eWindow clock will be used to determine the correct sequence of events when a bid or offer is amended, withdrawn, or traded by an interested counterparty. Bids or offers submitted by phone, or any other medium, such as instant messaging software, shall be measured at the time the bid, offer or trade indication is actually transmitted through the eWindow system via the editor.

Guidelines for the publication of bids and offers in the MOC process are published in the LNG Timing and Increment Guidelines available here: <https://www.spglobal.com/platts/en/our-methodology/methodology-specifications/lng/lng-timing-and-increment-guidelines>.

Full information relevant to these assessments can be found in the Global LNG specifications guide available here: <https://www.spglobal.com/platts/en/our-methodology/methodology-specifications/lng/liquefied-natural-gas-lng-assessments-and-netbacks-methodology>.

Platts expects credit relationships that prevail inside its assessment environment to fully reflect relationships in the markets as a whole. eWindow provides direct entry and management of credit filters which should mirror those normally applied in the marketplaces.

Where Platts editors publish bids and offers on behalf of a company that submits data to an editor, counterparty credit settings are set to “open” for regular participants in the assessment process unless companies have notified Platts in advance of any restrictions.

If a counterparty submitting information through an editor has not already notified Platts of any counterparty credit restrictions, they should notify Platts at least one hour prior to the start of the MOC process if any counterparty credit filters need to be modified.

Please send all feedback, comments and questions to lngeditorialteam@spglobal.com and pricegroup@spglobal.com.

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing.

Platts will consider all comments received and will make comments not marked as confidential available upon request.

Platts proposes to change timing and increment guidelines for Asia LNG MOC

S&P Global Platts is proposing to change the timing and increment guidelines for its Asia LNG Market on Close assessment process.

Platts proposes to allow a maximum price move of 5 cents/MMBtu per 60 seconds for bids and offers submitted through the eWindow communication tool and through a Platts editor for the Asia LNG physical MOC process, and a maximum price move of 5 cents/MMBtu per 30 seconds for bids and offers submitted through the eWindow communication tool and 5 cents/MMBtu per 60 seconds for bids and offers through the Platts editor for the Asia LNG derivatives MOC process from Jan. 17, 2022.

Platts is also proposing to change the final state for the Asia LNG physical MOC process to 16:29:00 Singapore time for eWindow or manual MOC environment, and Asia LNG derivatives to 16:29:30 Singapore time for eWindow MOC environment and 16:29:00 Singapore time for manual MOC environment.

Time allowed for participants to repeat a bid or offer for Asia LNG physical will remain unchanged from the current guideline of maximum 60 seconds following a trade, while the maximum time allowed for participants to repeat a bid or offer for Asia LNG derivatives following a trade will be shortened to 30 seconds, from 60 seconds currently.

An extension of the MOC process will be triggered by a rebid or re-offer following a trade between 16:29:00 and 16:30:00 Singapore time for Asia LNG physical, and between 16:29:30 and 16:30:00 Singapore time for Asia LNG derivatives.

The extension period will last for one minute until 16:31:00 Singapore time for both Asia LNG physical and derivatives in order to adequately test that bid or offer.

The proposed changes will apply to bids and offers submitted by market participants for the Platts JKM, WIM and MEM assessments directly through the Platts Editorial Window, or eWindow, communication tool and through a Platts

editor who would then publish bids and offers using the software.

Under Platts existing timing and increment guidelines, bids and offers for Asia LNG physical submitted directly through the eWindow tool and through a Platts editor can improve by up to 5 cents/MMBtu per 120 seconds, with final state at 16:28:00 Singapore time.

Bids and offers for Asia LNG derivatives submitted directly through the eWindow communication tool can improve by a maximum of 5 cents/MMBtu every 60 seconds, and by a maximum of 5 cents/MMBtu every two minutes in the manual MOC process, with final state at 16:29:00 Singapore time.

The increments have been amended to a maximum of 10 cents/MMBtu every 30 seconds for Asia LNG derivatives since Oct. 12, and to a maximum of 5 cents/MMBtu every 60 seconds for Asia LNG physical since Oct. 8 until further notice, to reflect the current volatility in the market due to European gas market price movements (<https://www.spglobal.com/platts/en/our-methodology/subscriber-notes/101221-platts-asia-lng-derivatives-market-on-close-incrementability-changes>).

Platts has established clearly defined timing guidelines and standards of incrementability that apply when publishing bids and offers in the MOC process, in order to ensure an orderly and transparent price assessment process.

Guidelines for the publication of bids and offers in the MOC process are available in the Platts LNG Timing and Increment Guide, available here: <https://www.spglobal.com/platts/en/our-methodology/methodology-specifications/lng/lng-timing-and-increment-guidelines>.

Please send all comments, feedback and questions to

LNGeditorialteam@spglobal.com and pricegroup@spglobal.com by Dec. 1.

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing.

Platts will consider all comments received and will make comments not marked as confidential available upon request.

HYDROGEN & CARBON

NORTH AMERICA HYDROGEN ASSESSMENTS, NOVEMBER 9*

Production Pathway	Excluding Capex		Including Capex	
	\$/kg	Change	\$/kg	Change
Alberta (C\$/kg)				
SMR w/o CCS	0.8056	-0.0639	1.5272	-0.0639
Alkaline Electrolysis	4.9600	-0.2764	6.1516	-0.2764
PEM Electrolysis	5.7296	-0.3192	7.8646	-0.3193
Appalachia				
SMR w/o CCS	0.6513	-0.0821	1.2467	-0.0820
Alkaline Electrolysis	2.8947	-0.4358	3.7741	-0.4358
PEM Electrolysis	3.3439	-0.5034	4.9194	-0.5034
Gulf Coast				
SMR w/o CCS	0.7565	-0.0491	1.2606	-0.0490
Alkaline Electrolysis	2.2140	-0.0057	3.0464	-0.0057
PEM Electrolysis	2.5576	-0.0064	4.0489	-0.0065
Midcontinent				
SMR w/o CCS	0.6892	-0.0547	1.2204	-0.0548
Alkaline Electrolysis	2.6360	+0.9024	3.4899	+0.9024
PEM Electrolysis	3.0450	+1.0424	4.5749	+1.0425
Northeast				
SMR w/o CCS	0.7010	-0.0562	1.3357	-0.0561
Alkaline Electrolysis	2.8191	-0.1362	3.7237	-0.1362
PEM Electrolysis	3.2565	-0.1573	4.8772	-0.1574
Northern California				
SMR w/o CCS	0.9653	-0.0225	1.6956	-0.0225
Alkaline Electrolysis	3.1631	-0.0051	4.1493	-0.0051
PEM Electrolysis	3.6538	-0.0059	5.4209	-0.0059
Northwest				
SMR w/o CCS	0.7845	-0.0174	1.3671	-0.0173
Alkaline Electrolysis	2.6333	+0.2828	3.5294	+0.2828
PEM Electrolysis	3.0418	+0.3266	4.6474	+0.3266
Rockies				
SMR w/o CCS	0.7404	-0.0517	1.2985	-0.0518
Alkaline Electrolysis	3.0249	-0.1095	3.8915	-0.1094
PEM Electrolysis	3.4942	-0.1265	5.0469	-0.1264
Southeast				
SMR w/o CCS	0.7945	-0.0486	1.3141	-0.0487
Alkaline Electrolysis	2.4230	-0.5245	3.2776	-0.5245
PEM Electrolysis	2.7989	-0.6059	4.3302	-0.6059
Southern California				
SMR w/o CCS	1.0580	-0.0315	1.7588	-0.0315
Alkaline Electrolysis	3.1564	+0.1189	4.1223	+0.1189
PEM Electrolysis	3.6461	+0.1373	5.3767	+0.1373
Upper Midwest				
SMR w/o CCS	0.7331	-0.0769	1.3016	-0.0769
Alkaline Electrolysis	3.2098	-0.3132	4.1162	-0.3132
PEM Electrolysis	3.7078	-0.3618	5.3318	-0.3618

*Assessed previous day

JAPAN HYDROGEN ASSESSMENTS, NOVEMBER 10

Production Pathway	Excluding Capex		Including Capex	
	Yen/kg	Change	Yen/kg	Change
SMR w/o CCS	488.0770	-52.0781	573.5961	-51.9723
Alkaline Electrolysis	936.7558	-9.9493	1077.9823	-9.7745
PEM Electrolysis	1082.1092	-11.4932	1335.1453	-11.1799

ASSESSMENT RATIONALE

The S&P Global Platts hydrogen prices are daily valuations that incorporate the cost of variable natural gas, electricity, and carbon inputs, where applicable. A second set of valuations include fixed assumptions for capital and operating expenses. The Platts hydrogen prices are not based on observed or reported market transactions. Details on the Platts hydrogen methodology can be found at:

<https://www.spglobal.com/platts/en/our-methodology/methodology-specifications/energy-transition/hydrogen-methodology>.

VOLUNTARY CARBON CREDITS, NOVEMBER 10

	\$/mtCO ₂ e	Change	Eur/mtCO ₂ e	Change
Platts CEC	8.350	+0.300	7.230	+0.278

Note: The Platts CEC assessment reflects the value of CORSIA-eligible credits in the voluntary carbon market, and is not a component of Platts hydrogen assessments.

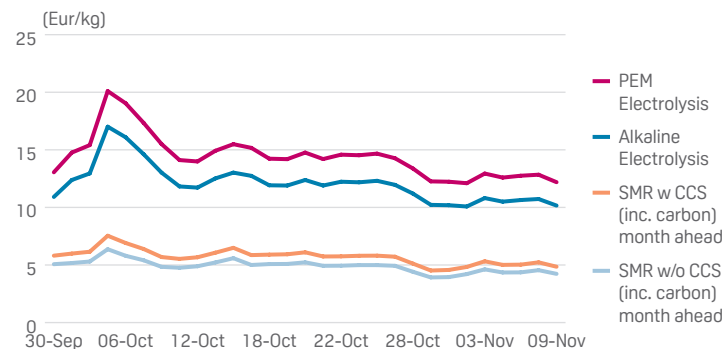
UK HYDROGEN ASSESSMENTS, NOVEMBER 10

Production Pathway	GBP/kg	Change	GBP/KWh	Change
ATR w CCS	3.7781	+0.0046	0.1134	+0.0002
ATR w CCS (inc. Capex & Carbon)	4.0973	+0.0046	0.1229	+0.0001
Alkaline Electrolysis	9.9816	+0.0461	0.2995	+0.0014
Alkaline Electrolysis (inc. Capex)	10.5988	+0.0479	0.3180	+0.0014
PEM Electrolysis	11.5277	+0.0531	0.3459	+0.0016
PEM Electrolysis (inc. Capex)	12.6336	+0.0565	0.3790	+0.0016

NETHERLANDS HYDROGEN ASSESSMENTS, NOVEMBER 10

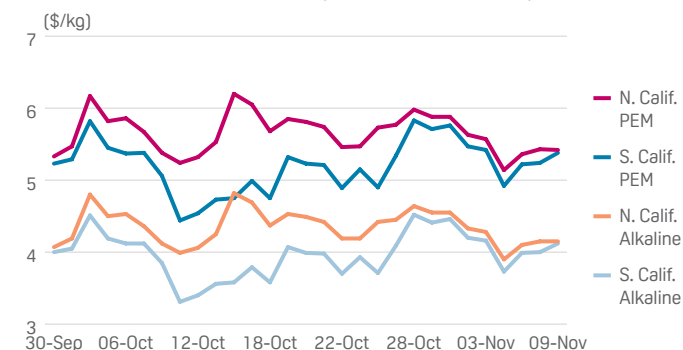
Production Pathway	Eur/kg	Change	Eur/KWh	Change
SMR w/o CCS	3.2617	+0.0002	0.0979	0.0000
SMR w/o CCS (inc. Capex)	3.6990	+0.0021	0.1110	+0.0001
SMR w/o CCS (inc. Carbon)	3.8231	+0.0251	0.1147	+0.0007
SMR w/o CCS (inc. Capex & Carbon)	4.2604	+0.0270	0.1278	+0.0008
SMR w CCS	4.0803	-0.0146	0.1224	-0.0005
SMR w CCS (inc. Capex)	4.7884	-0.0115	0.1437	-0.0003
SMR w CCS (inc. Carbon)	4.1365	-0.0121	0.1241	-0.0004
SMR w CCS (inc. Capex & Carbon)	4.8445	-0.0090	0.1453	-0.0003
Alkaline Electrolysis	9.1621	-0.2741	0.2749	-0.0082
Alkaline Electrolysis (inc. Capex)	9.8843	-0.2710	0.2966	-0.0081
PEM Electrolysis	10.5810	-0.3167	0.3175	-0.0095
PEM Electrolysis (inc. Capex)	11.8748	-0.3111	0.3563	-0.0093

NETHERLANDS HYDROGEN (INCLUDING CAPEX)



Source: S&P Global Platts

CALIFORNIA ELECTROLYSIS (INCLUDING CAPEX)



Source: S&P Global Platts