



Daily Rundown

- Wood Mackenzie said LNG buyers are increasingly using short-term “bridge” contracts
- Equinor plans to spend more on renewables in a strategy shift

ANALYSIS

Global LNG Buyers Said Looking to ‘Bridge’ Current Supply Crunch with Short-Term Contracts

Global liquefied natural gas (LNG) buyers, hammered by high spot prices in Asia, are increasingly looking to short-term “bridge” contracts to ensure ample supply until demand is expected to cool down later this decade, according to an analysis by Wood Mackenzie.

Asian spot prices are hovering around \$12/MMBtu for June and July delivery as demand grows and supply is scarce. However, buyers looking for supply post-2025 are spoiled for choice as new export facilities are expected to come online, the consultancy said. Currently there is more LNG available for sale via long-term contracts than there are buyers.

[Fundamental Data: The North American natural gas market now has global reach. Empower your business decisions with NGI's LNG Data Suite.]

“Will this buyers’ market for long-term LNG continue? At the moment it seems so. We expect contract prices for shorter term deals of less than five years to rise,” said Wood Mackenzie’s Giles Farrer, director of global LNG.

“But if a buyer commits to a long-term deal, lower prices are possible – even if that deal is starting next year. Many sellers are offering contracts which ‘bridge’ the short and long-term market, giving buyers a potentially lower price over the next five years in exchange for the seller receiving long-term demand security. This allows the seller to de-risk project investments they have already committed to.”

The long-term LNG volume surplus exists largely because uncontracted supply from legacy projects is growing as existing contracts expire. In addition, major suppliers including Russia’s Novatek, France’s TotalEnergies SE and Malaysia’s Petrolia Nasional Berhad, aka Petronas, have already sanctioned projects over the past few years without contracting all of the associated supply.

The analysis comes as LNG suppliers have racked up a number of long-term supply contracts following a dearth of activity last year as the pandemic weighed on demand. The terms tend to be shorter as LNG has become more commoditized. Buyers are favoring five- or 10-year contracts over once popular 20-year agreements.

Wood Mackenzie said the long-term buyers’ market is likely

Prompt Month Statistics - Previous 5 Trading Days

	9-Jun	10-Jun	11-Jun	14-Jun	15-Jun
Max GOM Netback (\$US/MMBtu)	9.274	9.404	9.220	9.364	9.224
L48 LNG Feedgas Del (Million dth/d)	9.07	9.48	9.79	8.92	9.57
Futures (\$US/MMBtu)					
Henry Hub	3.129	3.149	3.296	3.352	3.240
JPN/KOR	10.900	10.925	10.920	10.920	10.924
NBP	9.781	9.959	9.537	9.911	9.698
TTF	10.109	10.241	9.883	10.239	10.004
Shipping (\$US/MMBtu)*					
Sabine Pass to Tokyo	1.632	1.632	1.700	1.699	1.700
Sabine Pass to Milford Haven (U.K.)	0.790	0.793	0.822	0.828	0.825
Sabine Pass to Gate (NW Europe)	0.835	0.837	0.869	0.875	0.871
Landed Price Arbitrage (\$US/MMBtu)**					
Sabine to Tokyo	5.670	5.671	5.430	5.366	5.498
Sabine to Gate	5.676	5.782	5.224	5.509	5.407
Europe Fundamentals					
Gas in Storage (TWh)***	450.5	454.1	456.6	467.8	473.4
% Full	40.5%	40.8%	41.0%	42.0%	42.5%
Difference to Last Year (TWh)	-370.2	-370.4	-370.2	-362.9	-360.9
Gas in LNG Storage (10 ³ m ³)***	4533.73	4688.8	4802.2	4500.9	4698.7
% Full	53.5%	55.3%	56.7%	53.1%	55.5%
Spark Spread (Eur/MWh)	21.41	21.65	21.88	21.60	21.01
Clean Spark Spread (Eur/MWh)	-1.19	-0.78	-0.51	-0.73	-0.85
Dark Spread (Eur/MWh)	42.92	42.38	40.76	43.01	43.08
Clean Dark Spread (Eur/MWh)	-11.01	-11.13	-12.67	-10.29	-9.07
PVB/TTF Premium (%) (Jul)	-2.6%	-2.5%	-2.9%	-2.3%	-2.2%
NW Europe Mean Temp (°F)	67	68	67	68	TBD
% Diff From 30-Yr Normal	12.3%	13.5%	9.9%	12.2%	N/A
Asia Fundamentals					
JKM/KOR Oil Parity Slope	15.1%	15.1%	15.0%	15.0%	14.8%
Brent Oil Price Parity (\$US/MMBtu)	12.42	12.47	12.50	12.53	12.73
JKM/KOR Futures (\$US/MMBtu)	10.90	10.93	10.92	10.92	10.92
Japan Coal Price (\$US/MMBtu)	6.31	6.42	6.47	6.47	6.45
Beijing Mean Temp (°F)	72	78	82	75	78
% Diff From Normal	-5.4%	1.7%	6.8%	-3.0%	0.2%
Seoul Mean Temp (°F)	74	73	68	69	71
% Diff From Normal	10.8%	9.7%	1.5%	1.9%	4.0%
Tokyo Mean Temp (°F)	76	75	74	71	75
% Diff From Normal	11.1%	9.3%	7.5%	1.8%	7.3%
Latin America Fundamentals (\$US/MMBtu) (July Prompt Month)					
Mexico					
East (Altamira) DES	9.46	9.59	9.41	9.55	9.41
West (Manzanillo) DES	10.00	10.13	9.97	10.12	9.98
Argentina DES	10.18	10.31	10.17	10.32	10.19
Brazil DES	9.83	9.96	9.80	9.95	9.81
Chile DES	10.13	10.26	10.11	10.26	10.12
Colombia DES	9.56	9.69	9.51	9.66	9.52
Panama DES	9.57	9.70	9.53	9.68	9.54

Current prompt month prices are for July, unless otherwise noted.

*Assumes full freight for both laden and ballast legs.

**Excludes regas fees.

***Most recent data available. Typically delayed by two calendar days.

to recede only when it becomes clear that demand will outstrip supply from Qatar and Russia. The consultancy anticipates a 50 million metric tons/year (mmt) supply gap by 2030, almost all of which could be satisfied by new projects in those two countries. Qatar and Russia also appear willing to develop new projects without firm contracts in place, WoodMac said.

The consultancy said the addition of supply controlled by Qatar Petroleum (QP) would be key in the coming

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U.S. Gulf Coast LNG Netback Prices (12-Month Strip) 15-Jun-2021

Futures Settle (\$US/MMBtu)

Est Shipping Cost from Gulf Coast (\$US/MMBtu)

Gulf Coast Netback (\$US/MMBtu)

Netback Less Henry Hub Futures (\$US/MMBtu)

Spot Month (shipping based on spot market vessel rate)

Month	JPN/KOR	NBP	TTF	JPN/KOR	NBP	TTF	JPN/KOR	NBP	TTF	Max	Chg	HH	Diff (Margin)
Jul-21	\$10.924	\$9.698	\$10.004	\$1.700	\$0.825	\$0.871	\$9.224	\$8.874	\$9.133	\$9.224	(\$0.140)	\$3.240	\$5.984

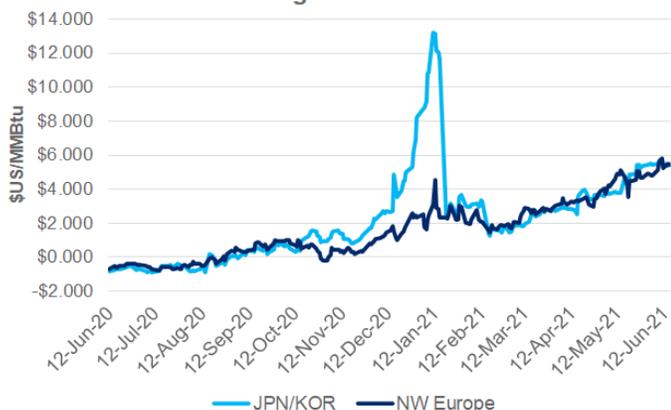
Rest of Curve (shipping based on 1-Yr vessel rate, adjusted for seasonality)

Aug-21	\$11.575	\$9.712	\$9.935	\$1.957	\$0.952	\$1.006	\$9.618	\$8.761	\$8.929	\$9.618	(\$0.209)	\$3.256	\$6.362
Sep-21	\$11.515	\$9.812	\$9.883	\$2.072	\$1.015	\$1.072	\$9.443	\$8.796	\$8.812	\$9.443	(\$0.267)	\$3.244	\$6.199
Oct-21	\$11.615	\$9.968	\$9.935	\$2.518	\$1.254	\$1.326	\$9.097	\$8.714	\$8.609	\$9.097	(\$0.267)	\$3.259	\$5.838
Nov-21	\$11.965	\$10.636	\$10.097	\$2.691	\$1.351	\$1.422	\$9.274	\$9.285	\$8.675	\$9.285	(\$0.266)	\$3.314	\$5.971
Dec-21	\$12.390	\$11.060	\$10.192	\$2.542	\$1.271	\$1.331	\$9.848	\$9.789	\$8.861	\$9.848	(\$0.262)	\$3.421	\$6.427
Jan-22	\$12.600	\$11.170	\$10.269	\$2.219	\$1.097	\$1.144	\$10.381	\$10.073	\$9.125	\$10.381	(\$0.286)	\$3.499	\$6.882
Feb-22	\$12.690	\$11.172	\$10.288	\$1.990	\$0.974	\$1.012	\$10.700	\$10.198	\$9.277	\$10.700	(\$0.291)	\$3.432	\$7.268
Mar-22	\$11.585	\$10.469	\$9.875	\$1.743	\$0.849	\$0.883	\$9.842	\$9.620	\$8.993	\$9.842	(\$0.291)	\$3.247	\$6.595
Apr-22	\$8.940	\$7.985	\$7.509	\$1.574	\$0.764	\$0.793	\$7.366	\$7.221	\$6.717	\$7.366	(\$0.243)	\$2.817	\$4.549
May-22	\$7.720	\$6.890	\$6.870	\$1.571	\$0.765	\$0.801	\$6.149	\$6.125	\$6.069	\$6.149	(\$0.163)	\$2.754	\$3.395
Jun-22	\$7.620	\$6.265	\$6.725	\$1.681	\$0.815	\$0.864	\$5.939	\$5.450	\$5.862	\$5.939	(\$0.082)	\$2.780	\$3.159
NTM Avg	\$10.928	\$9.570	\$9.298				\$8.907	\$8.576	\$8.255	\$8.908	(\$0.231)	\$3.189	\$5.719

West of Suez Spot 174K XDF/MEGI Day Rate: \$75,000

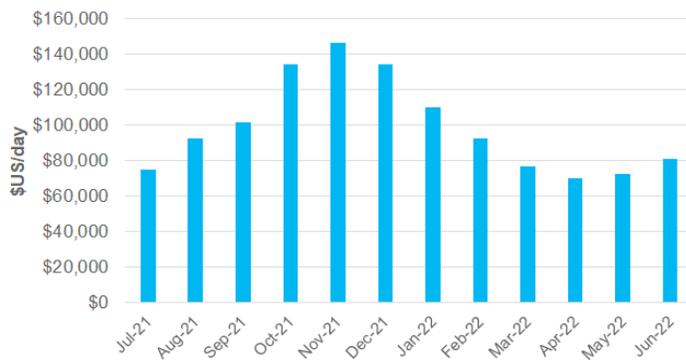
West of Suez 1-Yr TC 174K XDF/MEGI Vessel Rate: \$99,000

Spot Month Sabine Pass Export Landed Price Arbitrage Continuation Chart



Source: NGI calculations, CSI, Fearnleys

West of Suez LNG Vessel Rate Curve



Note: Based on 174,000 m³ XDF/MEGI vessels. This is not an actual traded curve. Figures represent NGI's estimate of a laden leg forward curve based on current spot market and 1-yr charter rates, adjusted for historical seasonality. The simple average of all months equals the 1-yr charter rate.

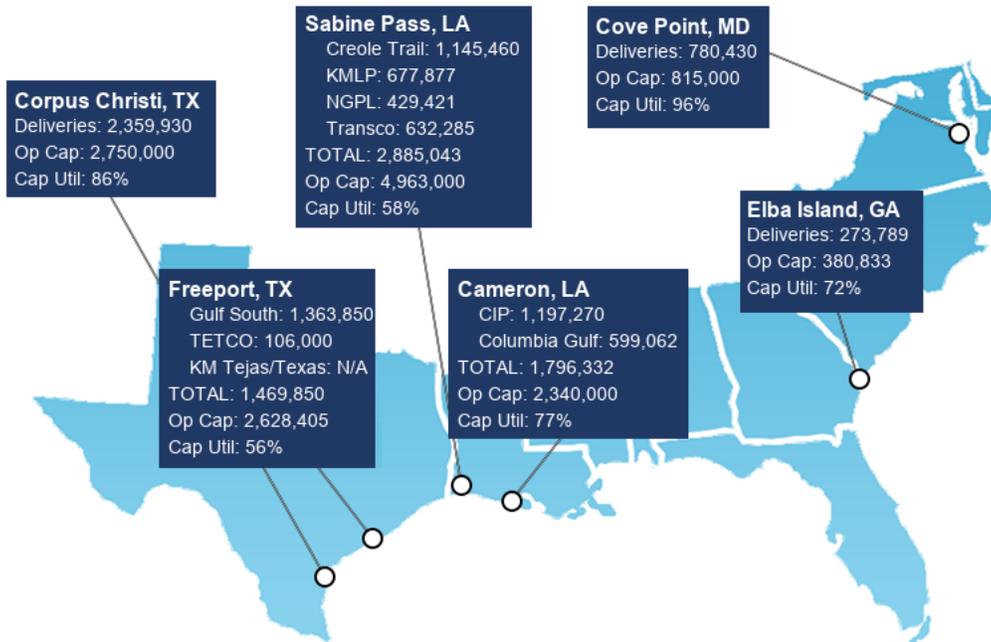
Other North America LNG Netback Prices 15-Jun-2021

	Netback to Western Canada				NGI's AECO Forwards				Netback to Costa Azul				NGI's SoCal Border Forwards				Netback to Cove Point				NGI's Transco Zn 5 Forwards				NGI's Waha Forwards			
	\$US/MMBtu	\$US/MMBtu	\$US/MMBtu	Diff %	\$US/MMBtu	\$US/MMBtu	\$US/MMBtu	Diff %	\$US/MMBtu	\$US/MMBtu	\$US/MMBtu	Diff %	\$US/MMBtu	\$US/MMBtu	\$US/MMBtu	Diff %	\$US/MMBtu	\$US/MMBtu	\$US/MMBtu	Diff %	\$US/MMBtu	\$US/MMBtu	\$US/MMBtu	Diff %				
Jul-21	\$10.251	\$2.728	\$7.523	276%	\$10.106	\$5.008	\$5.098	102%	\$9.396	\$3.451	\$5.945	172%	\$3.368															
Aug-21	\$10.793	\$2.561	\$8.232	321%	\$10.624	\$5.758	\$4.866	85%	\$9.715	\$3.491	\$6.224	178%	\$3.401															
Sep-21	\$10.719	\$2.743	\$7.976	291%	\$10.547	\$5.292	\$5.255	99%	\$9.625	\$3.058	\$6.567	215%	\$3.383															
Oct-21	\$10.759	\$2.807	\$7.952	283%	\$10.574	\$4.206	\$6.368	151%	\$9.591	\$2.995	\$6.596	220%	\$3.279															
Nov-21	\$11.050	\$2.883	\$8.167	283%	\$10.851	\$4.468	\$6.383	143%	\$9.858	\$3.441	\$6.417	186%	\$3.320															
Dec-21	\$11.261	\$2.928	\$8.333	285%	\$11.015	\$5.392	\$5.623	104%	\$10.103	\$4.396	\$5.707	130%	\$3.593															
Jan-22	\$11.392	\$2.969	\$8.423	284%	\$11.129	\$5.271	\$5.858	111%	\$10.148	\$6.302	\$3.846	61%	\$3.682															
Feb-22	\$11.557	\$2.954	\$8.603	291%	\$11.310	\$5.096	\$6.214	122%	\$10.214	\$6.007	\$4.207	70%	\$3.604															
Mar-22	\$10.621	\$2.749	\$7.872	286%	\$10.412	\$3.981	\$6.431	162%	\$9.648	\$3.619	\$6.029	167%	\$3.238															
Apr-22	\$8.120	\$2.254	\$5.866	260%	\$7.943	\$2.901	\$5.042	174%	\$7.281	\$2.995	\$4.286	143%	\$2.451															
May-22	\$7.016	\$2.108	\$4.908	233%	\$6.866	\$2.815	\$4.051	144%	\$6.282	\$3.009	\$3.273	109%	\$2.323															
Jun-22	\$6.959	\$2.110	\$4.849	230%	\$6.818	\$2.909	\$3.909	134%	\$6.119	\$2.843	\$3.276	115%	\$2.387															
NTM Avg	\$10.042	\$2.650	\$7.392	279%	\$9.850	\$4.425	\$5.425	123%	\$8.998	\$3.801	\$5.198	137%	\$3.169															

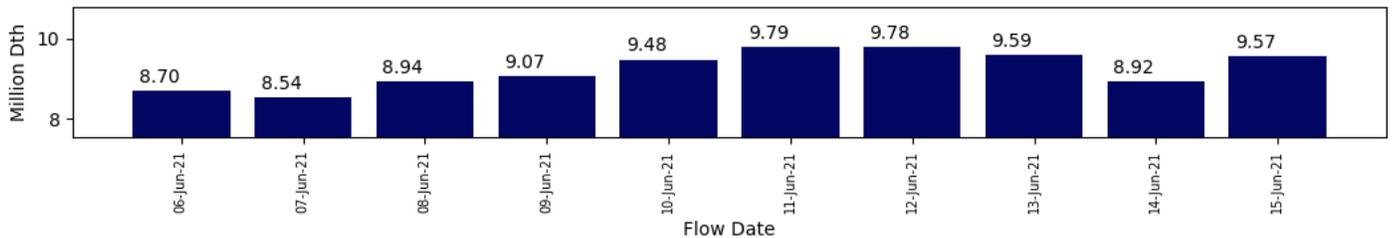
Note: Netbacks are based on deliveries to Asia & Europe. LNG Canada and Costa Azul liquefaction facilities are not expected to be in-service until 2025 and 2023, respectively. But the above calculations give an indication of how LNG may be priced on an FOB basis if those locations were operational. NGI's Forward Look has 10-year forward curves for more than 60 locations in North America. For more information, please visit our Forward Look product page at natgasintel.com/product/forward-look

Source: NGI's Forward Look, CSI, Fearnleys, NGI calculations

NGI's LNG INSIGHT U.S. LNG EXPORT TRACKER 15-Jun-2021



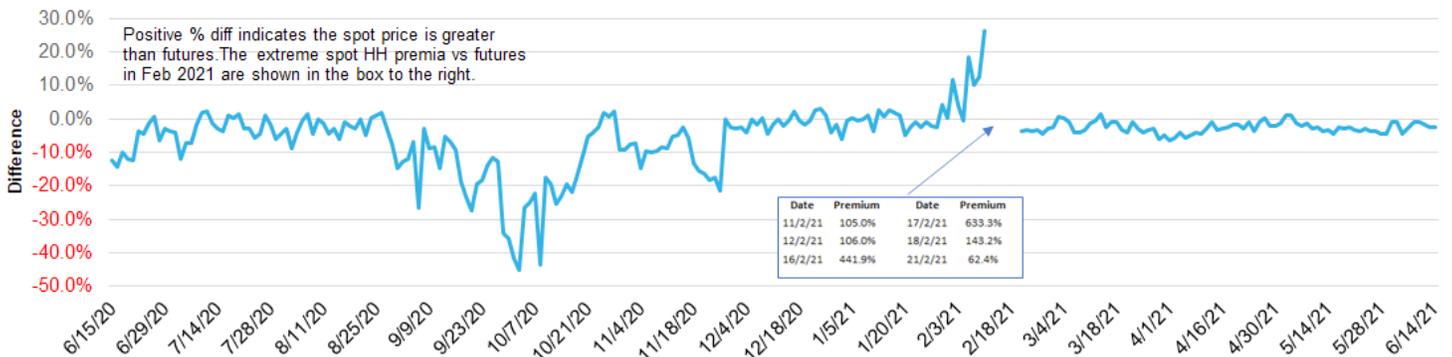
Daily Summary (Volumes Listed in Dekatherms)	
Total Deliveries to U.S. LNG Export Facilities:	9,565,374
Previous Day:	8,922,009
Change:	643,365



Note: Figures are NGI's estimates of gas delivered to each respective LNG liquefaction facility, listed in dekatherms, and based on best available cycle as of the morning of each listed gas day.

Source: Pipeline EBBs, NGI calculations

NGI's Daily Henry Hub Spot Index vs. Prompt (CME) Futures Contract 15-Jun-2021



Interested in the data behind this chart? NGI publishes daily and monthly spot market prices for Henry Hub and more than 140 other locations in North America. Please go to natgasintel.com/product/daily-gpi for more details.

Source: NGI's Daily Gas Price Index, CSI, NGI calculations



LNG Freight Costs for Selected Routes

15-Jun-2021

Trade Route (\$ / MMBtu)	174k MEGI			160k TFDE			145k ST		
Bonny / Montoir	0.873	0.000	↔	0.891	0.000	↔	1.003	0.000	↔
Bonny / Tokyo	1.839	-0.001	▼	1.862	0.000	↔	2.114	0.001	▲
Ras Laffan / Montoir	1.012	0.003	▲	1.110	0.005	▲	1.275	0.008	▲
Ras Laffan / Tokyo	0.862	0.003	▲	0.947	0.005	▲	1.116	0.008	▲
Dampier / Tokyo	0.574	0.000	↔	0.625	0.001	▲	0.739	0.001	▲
Zeebrugge / Bahia Blanca	1.045	0.008	▲	1.146	0.007	▲	1.298	0.012	▲
Zeebrugge / Dahej	1.006	0.001	▲	1.058	0.001	▲	1.383	0.012	▲
Zeebrugge / Tokyo	1.754	0.014	▲	1.934	0.013	▲	2.173	0.020	▲
Sabine / Bahia Blanca	0.931	0.003	▲	1.063	0.003	▲	1.158	0.005	▲
Sabine / Dahej	1.375	0.004	▲	1.586	0.005	▲	1.707	0.008	▲
Sabine / Tokyo	1.364	0.005	▲	1.560	0.005	▲	1.690	0.008	▲
Sabine / Zeebrugge	0.701	0.001	▲	0.792	0.002	▲	0.862	0.004	▲
Port Moresby / Tokyo	0.574	0.000	↔	0.623	0.000	↔	0.734	0.001	▲

Source: Fearnleys (www.fearnleys.com). Assumes cold vessel. Speed used is 17 knots on laden passage and 16 knots on ballast passage.

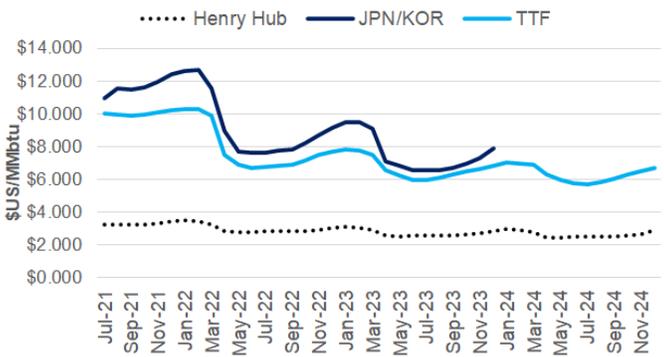
Spot LNG Vessel Rates (\$USD/day)
15-Jun-2021

Vessel Rates		
Vessel Type / Region	WEST	EAST
174k XDF / MEGI	75,000	65,000
155k - 165k TFDE	62,000	52,000
138k - 145k ST	45,000	39,000

Pacific Voyage Parameters	
Fuel and 100% Hire on Ballast Bonus to Load Port	
Middle East Voyage Parameters	
Fuel and 100% Hire on Ballast Bonus to Load Port	
Atlantic Voyage Parameters	
Fuel and 100% Hire on Ballast Bonus to Load Port	

Source: Fearnleys (www.fearnleys.com)

Global Futures Settles Through 2024 15-Jun-2021



Contract	Date	12-Month Strip*	CY2022	CY2023	CY2024
Henry Hub	15-Jun-21	\$3.189	\$2.979	\$2.713	\$2.644
	14-Jun-21	\$3.268	\$3.010	\$2.729	\$2.659
	Chg	(\$0.080)	(\$0.031)	(\$0.016)	(\$0.015)
JPN/KOR	15-Jun-21	\$10.928	\$9.196	\$7.543	N/A
	14-Jun-21	\$11.144	\$9.385	\$7.688	N/A
	Chg	(\$0.216)	(\$0.189)	(\$0.144)	N/A
TTF	15-Jun-21	\$9.298	\$7.864	\$6.672	\$6.333
	14-Jun-21	\$9.521	\$8.047	\$6.807	\$6.422
	Chg	(\$0.222)	(\$0.184)	(\$0.135)	(\$0.089)

*Jul 2021 through Jun 2022

Source: Bloomberg, CSI, NGI calculations



West of Suez LNG Vessel Rate Curve 15-Jun-2021

Month	15-Jun	14-Jun	Chg
Jul-21	75,000	75,000	0
Aug-21	92,729	92,729	0
Sep-21	101,425	101,425	0
Oct-21	134,509	134,509	0
Nov-21	146,604	146,604	0
Dec-21	134,574	134,574	0
Jan-22	109,968	109,968	0
Feb-22	92,707	92,707	0
Mar-22	76,758	76,758	0
Apr-22	70,100	70,100	0
May-22	72,587	72,587	0
Jun-22	81,038	81,038	0
Average	99,000	99,000	0

Note: Based on 174,000 m³XDF/MEGI vessels. This is not an actual traded curve. Figures represent NGI's estimate of a laden leg forward curve based on current spot market and 1-yr charter rates, adjusted for historical seasonality. The simple average of all months equals the 1-yr charter rate.



Source: NGI estimates based on Fearnleys data

Global LNG & NatGas Futures Prices (Jul 2021) 15-Jun-2021

Contract	Cur/Unit	Settle	Chg	% Chg	Settle (\$US/MMBtu)
JPN/KOR	\$US/MMBtu	\$10.924	\$0.004	0.0%	\$10.924
NBP	pence/therm	68.87p	-1.36p	-1.9%	\$9.698
TTF	Eur/MWh	€ 28.133	-€ 0.677	-2.3%	\$10.004
Henry Hub	\$US/MMBtu	\$3.240	-\$0.112	-3.3%	\$3.240

NBP & TTF converted to \$US/MMBtu using same month forex futures contracts.

Source: NGI calculations, CSI

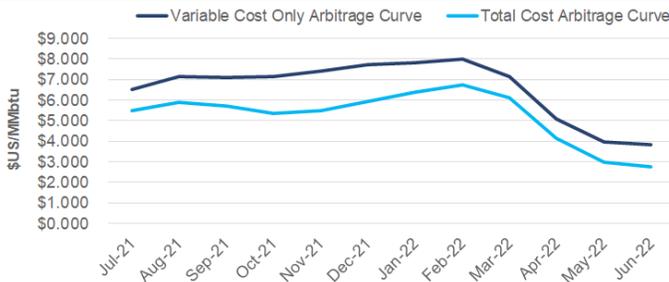


... from ANALYSIS - LNG Buyers Looking to 'Bridge' Current Supply Crunch, pg. 1 years. New volumes from the Golden Pass LNG joint venture with ExxonMobil and the North Field East expansion are expected to boost its portfolio, while about 20 mmt of legacy contracts are expected to expire. That means that more than 60% of the QP portfolio could be uncontracted by the end of the decade.

"Qatar has what buyers want – it is offering reliable low-cost and low-carbon LNG – and it has plenty of it to market," the consultancy said. "This is putting pressure on competitors and

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Estimated Sabine Pass / Asia 12-Month Forward LNG Arbitrage Curves 15-Jun-2021



Note: Assumes title changes hands at sea, so no regas fees. Negative GOM/Asia spreads may not increase the risk of GOM LNG shut-ins as much as those between GOM and Europe, since Europe has much more storage capacity than Asia. As such, Europe often serves as the market of "last resort." Variable costs assume vessels have been chartered, and include fuel, boiloff, Panama Canal and port fees only. Total costs includes variable expenses and fixed vessel chartering fees.

Month	115% HH Futures	Shipping Costs Variable	Shipping Costs Fixed	Variable Only Landed Cost	Total Landed Cost	JPN/KOR Futures	Variable Arbitrage Spread	Total Arbitrage Spread
Jul-21	\$3.726	\$0.694	\$1.005	\$4.420	\$5.426	\$10.924	\$6.504	\$5.498
Aug-21	\$3.744	\$0.714	\$1.243	\$4.458	\$5.701	\$11.575	\$7.117	\$5.874
Sep-21	\$3.731	\$0.712	\$1.360	\$4.443	\$5.802	\$11.515	\$7.072	\$5.713
Oct-21	\$3.748	\$0.715	\$1.803	\$4.463	\$6.266	\$11.615	\$7.152	\$5.349
Nov-21	\$3.811	\$0.726	\$1.965	\$4.537	\$6.502	\$11.965	\$7.428	\$5.463
Dec-21	\$3.934	\$0.738	\$1.804	\$4.672	\$6.476	\$12.390	\$7.718	\$5.914
Jan-22	\$4.024	\$0.745	\$1.474	\$4.769	\$6.243	\$12.600	\$7.831	\$6.357
Feb-22	\$3.947	\$0.747	\$1.243	\$4.694	\$5.937	\$12.690	\$7.996	\$6.753
Mar-22	\$3.734	\$0.714	\$1.029	\$4.448	\$5.477	\$11.585	\$7.137	\$6.108
Apr-22	\$3.240	\$0.634	\$0.940	\$3.874	\$4.814	\$8.940	\$5.066	\$4.126
May-22	\$3.167	\$0.598	\$0.973	\$3.765	\$4.738	\$7.720	\$3.955	\$2.982
Jun-22	\$3.197	\$0.595	\$1.086	\$3.792	\$4.878	\$7.620	\$3.828	\$2.742

Source: NGI calculations, CSI, Fearnleys

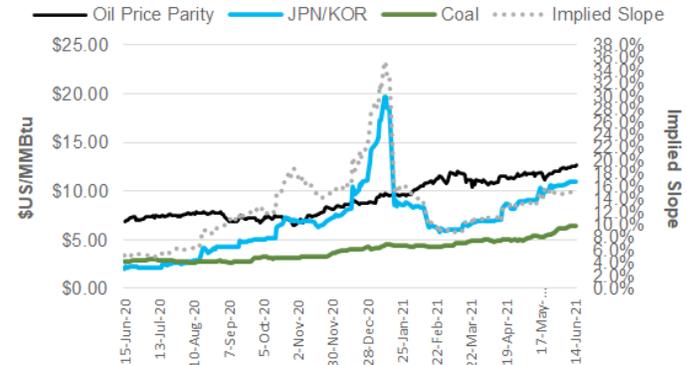


Asia LNG Parity Prices 15-Jun-2021

Current Spot Month Japan/Korea Futures Contract Price (Jul): **\$10.924**
 Current Spot Month Brent Crude Oil Futures Price (Aug): **\$73.99**
 Current Spot Month Japan Coal Price (Jun): **\$6.45**
 Implied Current Japan/Korea Slope to Brent: **14.8%**

Crude Mo.	3 Mo Avg JCC	Brent	3 Mo Avg JCC	Brent
Aug-21	\$55.88	\$73.99	\$9.61	\$12.73

Trailing 12M Daily Prompt Japan/Korea Futures



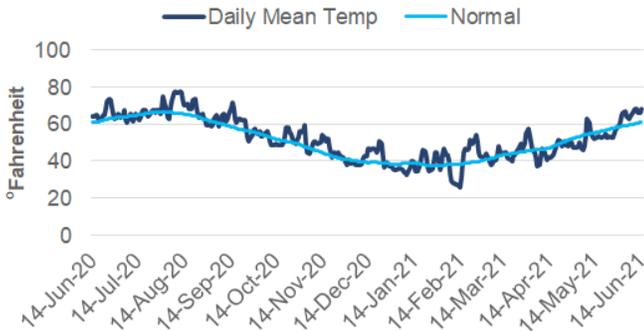
Note: Oil linked parity figures tend to serve as a cap on Asian LNG market prices, while coal prices can help act as a floor.

Source: NGI calculations, ICE, CSI, METI

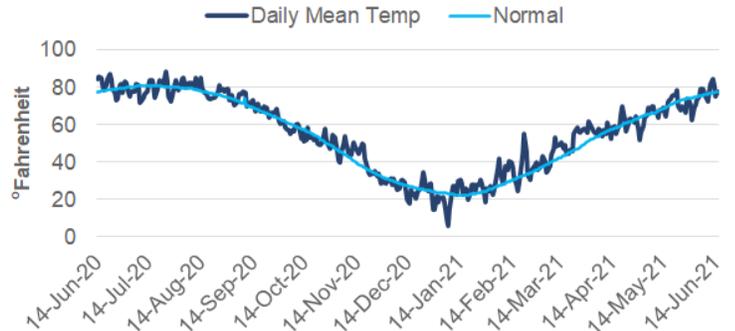


Europe & Asia Weather Data 15-Jun-2021

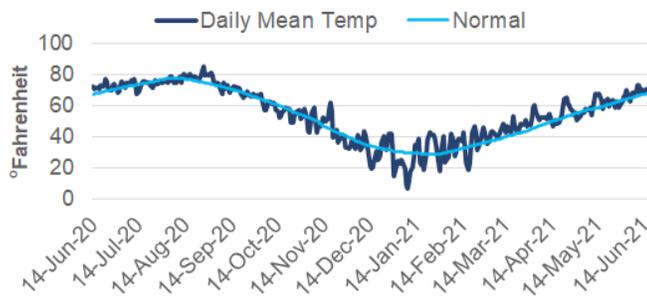
Trailing 365 Day Mean Temperatures - Northwest Europe



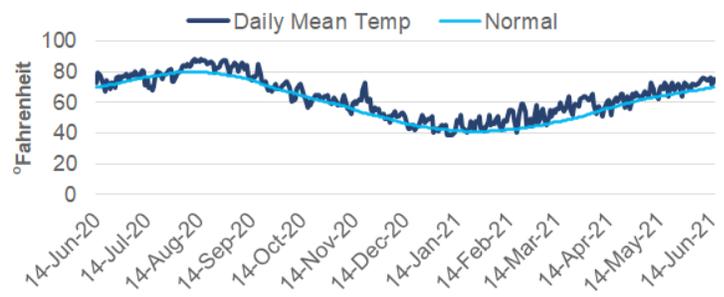
Trailing 365 Day Mean Temperatures - Beijing



Trailing 365 Day Mean Temperatures - Seoul



Trailing 365 Day Mean Temperatures - Tokyo



Source: NGI calculations, Bloomberg



U.S. Landed vs. European Prices July 2021 15-Jun-2021

Estimated U.S. LNG Landed Price (\$US/MMBtu)				
Source	Pricing Point	HH Price	Gate Landed Price (GLP)	
GOM	Henry Hub	\$3.240	\$4.022	

European NatGas Futures Prices (Eur/MWh & Pound/therm)				
Country	Pricing Point	Local Price MWh or therm	Local Price \$US/MMBtu	Diff to GLP* \$US/MMBtu
Belgium	ZTP	€ 27.72	\$9.857	\$5.835
Czech Rep	CZ VTP	€ 28.85	\$10.258	\$6.235
France	PEG	€ 27.95	\$9.939	\$5.917
Germany	NCG	€ 28.13	\$10.003	\$5.980
Italy	PSV	€ 28.20	\$10.028	\$6.005
Netherlands	TTF	€ 28.13	\$10.004	\$5.982
Slovakia	CEGH VTP	€ 28.28	\$10.055	\$6.032
Spain	PVB	€ 27.52	\$9.784	\$5.762
UK	NBP	68.87p	\$9.698	\$5.676

Euro Exchange Rate:	1.2134
Pound Exchange Rate:	1.4082

Note: U.S. landed price is to the Gate Terminal in the Netherlands, and exclude any regas or European pipeline grid access fees. We estimate the variable portion of such charges range between \$0.10-\$0.50 per MMBtu. All local European prices are Eur/MWh, except UK, which is pence/therm.

*Negative numbers indicate imported U.S. LNG is more expensive than the local price.

Source: NGI calculations, CME, ICE, EEX, Powernext, CSI, Fearnleys



forcing other sellers, who are keen to lock in long-term contracts, to the same level – presently around 10.2% Brent plus a small constant” in some cases.

While Qatar and Russia are expected to be key players, the consultancy said there could be some opportunities for North American developers to attract buyers as well.

“Rising oil and gas prices could see U.S. LNG and Henry Hub-linked deals back in the money,” Farrer said. “And it is possible that portfolio players and traders who are short ...cont' pg. 7

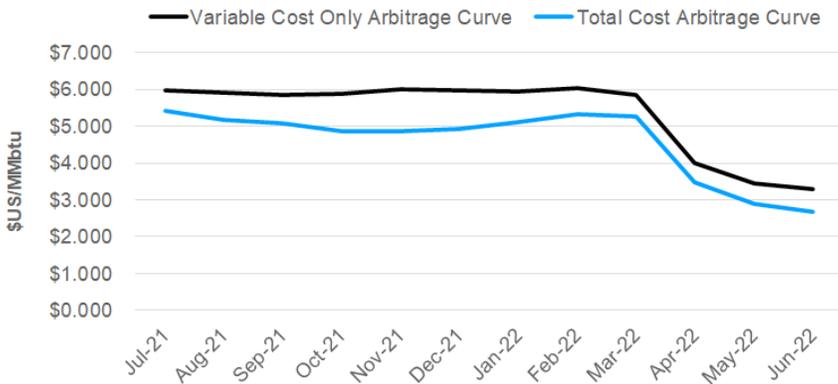
Spanish PVB vs. Dutch TTF Futures 15-Jun-2021

Period	PVB	TTF	PVB/TTF	PVB/TTF		
	\$US/ MMBtu		Chg	Premium (\$)	Premium %	
Jul-21	\$9.784	-\$0.222	\$10.004	-\$0.235	-\$0.220	-2.2%
Aug-21	\$10.060	-\$0.232	\$9.935	-\$0.225	\$0.125	1.3%
Sep-21	\$11.345	-\$0.244	\$9.883	-\$0.238	\$1.462	14.8%
3Q21	\$10.385	-\$0.234	\$9.941	-\$0.233	\$0.445	4.5%
4Q21	\$10.347	-\$0.243	\$10.074	-\$0.242	\$0.272	2.7%
1Q22	\$10.754	-\$0.233	\$10.144	-\$0.251	\$0.610	6.0%

Source: NGI calculations, CSI



Estimated Sabine Pass / Europe (Gate) 12-Month Forward LNG Arbitrage Curves 15-Jun-2021



Note: Negative spreads increase the odds of U.S. Gulf of Mexico sourced LNG cargoes being shut-in. Variable costs assume vessels have been chartered, and include fuel, boil-off, and port fees only. Total costs include both variable expenses and fixed vessel chartering fees. Both exclude regas fees, which we estimate would add another \$0.10-\$0.50 in additional costs to each arbitrage curve calculation.



Month	115% Henry Hub Futures		Shipping Costs		Variable Only Landed Cost	Total Landed Cost	TTF Futures	Variable Arbitrage Spread	Total Arbitrage Spread
	Hub	Futures	Variable	Fixed					
Jul-21	\$3.726	\$0.296	\$0.575	\$0.575	\$4.022	\$4.597	\$10.004	\$5.982	\$5.407
Aug-21	\$3.744	\$0.295	\$0.711	\$0.711	\$4.040	\$4.750	\$9.935	\$5.895	\$5.184
Sep-21	\$3.731	\$0.294	\$0.777	\$0.777	\$4.025	\$4.802	\$9.883	\$5.858	\$5.081
Oct-21	\$3.748	\$0.295	\$1.031	\$1.031	\$4.043	\$5.074	\$9.935	\$5.892	\$4.861
Nov-21	\$3.811	\$0.298	\$1.124	\$1.124	\$4.109	\$5.233	\$10.097	\$5.988	\$4.864
Dec-21	\$3.934	\$0.300	\$1.031	\$1.031	\$4.234	\$5.265	\$10.192	\$5.958	\$4.926
Jan-22	\$4.024	\$0.301	\$0.843	\$0.843	\$4.325	\$5.167	\$10.269	\$5.944	\$5.101
Feb-22	\$3.947	\$0.301	\$0.711	\$0.711	\$4.248	\$4.958	\$10.288	\$6.040	\$5.330
Mar-22	\$3.734	\$0.294	\$0.588	\$0.588	\$4.028	\$4.617	\$9.875	\$5.847	\$5.258
Apr-22	\$3.240	\$0.255	\$0.537	\$0.537	\$3.495	\$4.032	\$7.509	\$4.014	\$3.477
May-22	\$3.167	\$0.245	\$0.556	\$0.556	\$3.412	\$3.968	\$6.870	\$3.458	\$2.901
Jun-22	\$3.197	\$0.242	\$0.621	\$0.621	\$3.439	\$4.061	\$6.725	\$3.286	\$2.665

Source: NGI calculations, CSI, Fearnleys

European Spark/Dark Spreads (July 2021) 15-Jun-2021

EUA Carbon Price (Eur/mt): 51.39

Nation	Spark Spread				Clean Spark Spread	
	EFFCY 49%		45%		49%	45%
	Power Futures	Gas Futures	Spark Spread	Spark Spread	Spark Spread	Spark Spread
BE	69.70	27.720	13.28	8.10	-7.64	-14.97
CZ	74.71	28.846	16.00	10.61	-4.92	-12.47
FR	72.94	27.950	16.05	10.83	-4.87	-12.25
DE	71.96	28.129	14.71	9.45	-6.21	-13.62
IT	85.78	28.199	28.38	23.12	7.47	0.04
NL	73.20	28.133	15.94	10.68	-4.98	-12.39
SK	78.01	28.275	20.46	15.18	-0.46	-7.90
ES	88.00	27.515	32.00	26.86	11.08	3.78
UK*	87.83	27.273	32.32	27.23	2.90	-5.23
Average			21.01	15.78	-0.85	-8.33

Nation	Dark Spread		Clean Dark Spread	
	EFFCY 35%		35%	
	Power Futures	Coal Futures	Dark Spread	Dark Spread
BE	69.70	103.85	34.77	-15.13
CZ	74.71	103.85	39.78	-10.12
FR	72.94	103.85	38.01	-11.89
DE	71.96	103.85	37.03	-12.87
IT	85.78	103.85	50.85	0.95
NL	73.20	103.85	38.27	-11.63
SK	78.01	103.85	43.08	-6.82
ES	88.00	103.85	53.07	3.17
UK*	87.83	103.85	52.90	-17.29
Average			43.08	-9.07

Belgium (BE) / Czech Rep (CZ) / France (FR) / Germany (DE) / Italy (IT) / Holland (NL) / Slovakia (SK) / Spain (ES) / United Kingdom (UK)

*UK clean spark and dark spreads incorporate the cost of the UK Carbon Price Support levy. See methodology for all assumptions.

Source: NGI calculations, CSI



in the mid-2020s may see an opportunity to access new North American supply now.”

Wood Mackenzie expects the rally in Asian spot prices to continue over the next five years as Asian LNG demand overtakes supply growth and pulls more Atlantic volumes into the Pacific, causing the market to tighten further.

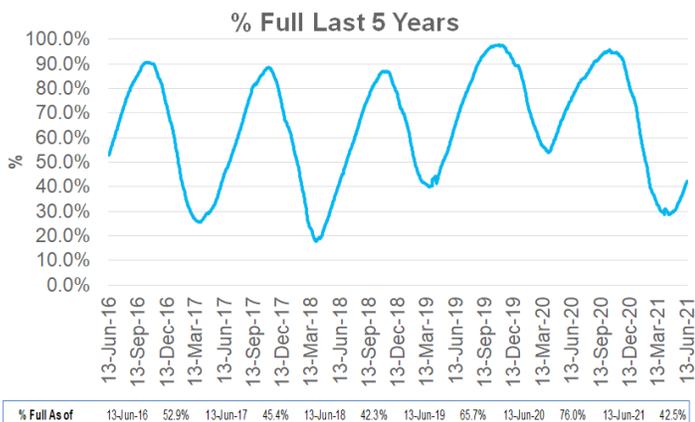
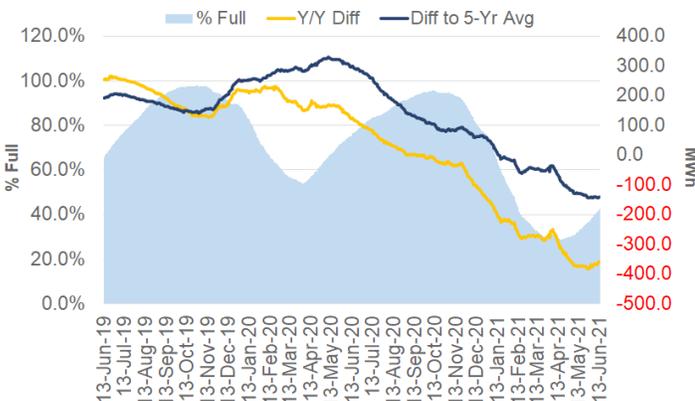
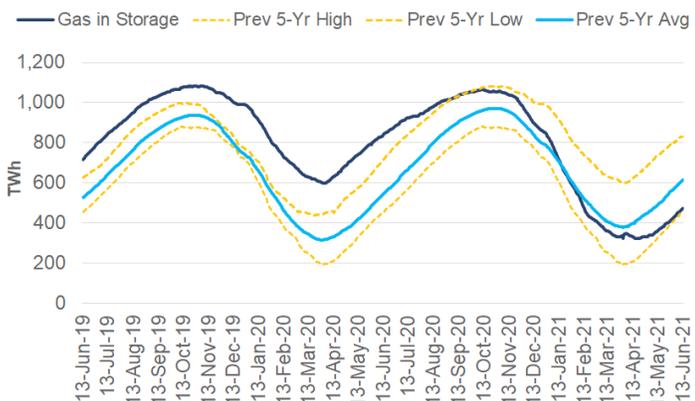
Most legacy buyers in Asia are not looking for new long-term volumes and are focusing instead on increasing flexibility in their LNG procurement portfolio, “partly due to energy transition

...cont' pg. 8

European Union Gas Storage

Data as of 13-Jun-21 Chart Last Updated 15-Jun-21

Volumes in TWh	Gas in Storage		Working Gas		Gas in Storage		Prev	5-Yr
	13-Jun-21	Volume	% Full	13-Jun-20	Y/Y Diff	5-Yr Avg	Avg Diff	
Europe	473.36	1113.42	42.5%	834.28	-360.92	614.25	-140.89	

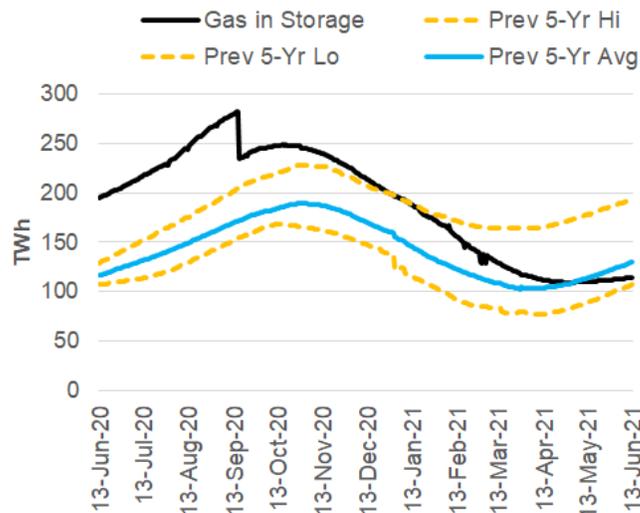


Source: NGI calculations, GIE

Ukraine Gas Storage

Data as of 13-Jun-21 Chart Last Updated: 15-Jun-21

13/6/21	Volumes in TWh		13/6/20	Y/Y Diff	Prev	5-Yr
	WG Vol	% Full			5-Yr Avg	Avg Diff
114.47	318.68	35.9%	194.66	-80.19	129.85	-15.38



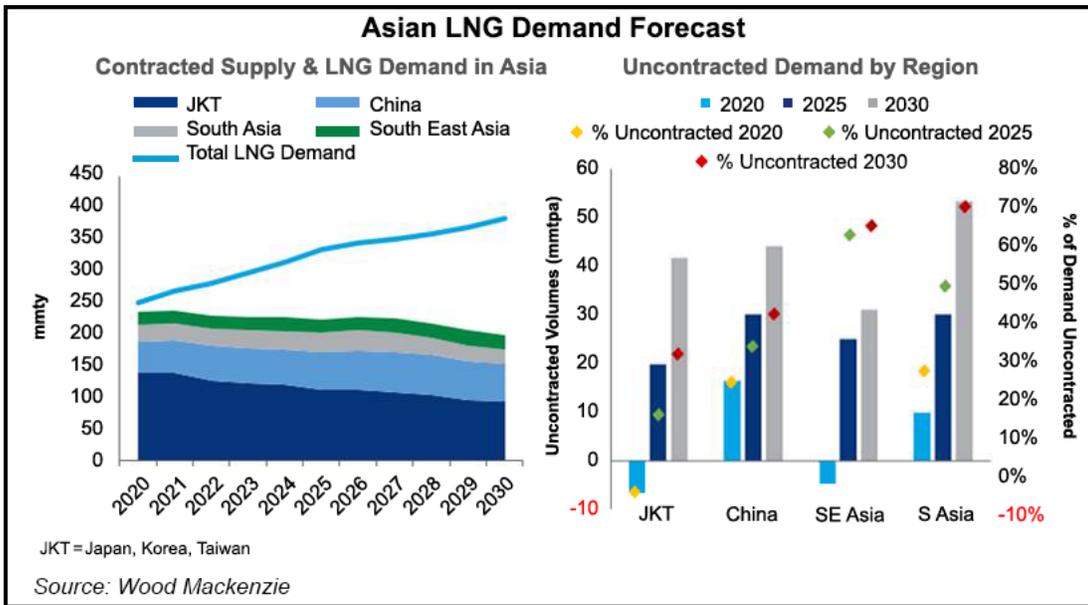
Source: NGI calculations, GIE

European Union LNG Regas Terminal Storage

Data as of 13-Jun-21 Chart Last Updated: 15-Jun-21

Country	Terminal	Inventory		Max Cap	
		(10 ³ m ³)	Chg	(10 ³ m ³)	% Util
Belgium	Zeebrugge	223.7	-16.5	563.5	39.7%
Croatia	Krk	54.4	-8.1	140.0	38.9%
France	Dunkerque	295.6	-12.1	586.1	50.4%
	Fos Tonkin	64.8	-8.8	80.0	81.0%
	Montoir	169.4	-19.3	360.0	47.1%
	Fas Cavaou	264.8	44.7	330.0	80.2%
Greece	Revythoussa	0.0	0.0	225.0	0.0%
Italy	Porto Levante	206.3	8.2	250.0	82.5%
	Panigaglia	11.0	0.0	40.0	27.4%
	Toscana	109.1	69.9	137.2	79.5%
Lithuania	Klaipėdos	84.5	84.5	166.7	50.7%
Netherlands	Gate	263.4	28.7	540.0	48.8%
Poland	Swinoujście	100.7	-24.4	320.0	31.5%
Portugal	Sines	163.6	-25.2	390.0	42.0%
Spain	Barcelona	633.8	117.3	760.0	83.4%
	Bilbao	351.4	0.0	450.0	78.1%
	Cartagena	258.3	-5.7	587.0	44.0%
	Huelva	273.7	-7.0	619.5	44.2%
	Mugaros	151.4	-16.6	300.0	50.5%
	Sagunto	235.3	-6.8	600.0	39.2%
	TVB (Virtual)	0.0	0.0	0.0	0.0%
	UK	Grain	783.6	-5.0	1026.4
Total		4698.7	197.8	8471.4	55.5%

Source: NGI calculations, GIE



Chalk. Operatorship also could be handed off for its stakes in the Terra Nova field offshore Newfoundland, as well as interests in Argentina.

[In the Know: Subscribe to NGI's All New Access and gain the ability to read every article NGI publishes daily.]

“That way we can enjoy regional expertise and economies of scale in a way we never could as an onshore operator,” said Equinor’s Al Cook, who took over in January as executive vice president of Exploration & Production International.

Opedal said reducing emissions is central to the strategy. “Significant growth within renewables and low carbon solutions will

concerns,” said the consultancy’s Daniel Toleman, senior analyst, LNG Asia. However, some buyers are looking for term contracts in markets such as China, South Korea, Pakistan and Bangladesh. ■

increase the pace of change toward 2030 and 2035.”

To finance the makeover, the oil and gas portfolio between now and 2026 is forecast to deliver free cash flow (FCF) after tax and investments of \$45 billion. New projects coming onstream by 2030 should have an average breakeven below \$35//bbl oil “and a short payback time of less than 2.5 years.”

E&P NEWS

Equinor Optimizing Global Portfolio, Moving by 2030 to 50%-Plus Spending for Renewables, Low Carbon

Supermajor Equinor ASA is not giving up on global natural gas and oil per se, but it is looking to give up control in Lower 48 projects and across the Americas as it optimizes the portfolio, executives said Tuesday.

During the Capital Markets Day, the executive team laid out a strategy that overall is designed to target net zero emissions by 2050. More than 50% of gross annual investments by 2030 are to be directed to renewables and low carbon investments.

“Our strategy is backed up by clear actions to accelerate our transition while growing cash flow and returns,” CEO Anders Opedal said. “We are optimizing our oil and gas portfolio to deliver even stronger cash flow and returns with reduced emissions from production, and we expect significant profitable growth within renewables and low carbon solutions. This is a strategy to create value as a leader in the energy transition.”

Competing Long Term

Equinor’s “clear ambition” is to become a net-zero energy company within 30 years. The path is directed to reduce by 20% net carbon intensity by 2030 and 40% by 2035.

“This is a business strategy to ensure long-term competitiveness during a period with profound changes in the energy systems, as society moves toward net zero,” Opedal said. “We are building on our position as a global leader within carbon-efficient production of oil and gas.

Equinor, under its former moniker Statoil, was one of the first European majors to place big bets on Lower 48 fields. Those days are long gone. The Bakken Shale assets were sold off earlier this year. In late 2019 Equinor sold operatorship of the Eagle Ford Shale joint venture to partner Repsol SA.

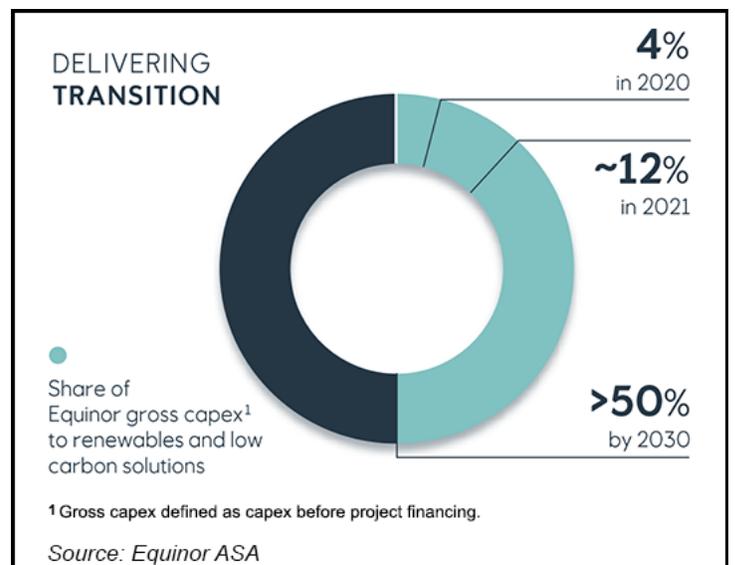
Giving up operator control is proving to be key for Equinor. The strategy unveiled for investors would hand off operatorship for other Lower 48 unconventional assets, including the Utica Shale and Austin

Anchors Away

There are many global opportunities that are not going away, particularly in the global offshore.

For example, on the Norwegian Continental Shelf, where Equinor is the primary producer, average annual FCF from 2021-2030 is forecast at around \$4.5 billion. Improvements at the world-class Johan Sverdrup field should reduce the breakeven oil price by 25% to \$15/bbl. It also operates the Hammerfest liquefied natural gas export terminal, which is undergoing repairs.

Also central to the portfolio is the deepwater Gulf of Mexico (GOM), where Equinor is one of the biggest operators. Equinor has stakes in 13 projects in U.S. waters that are either producing, in development or are discoveries. The GOM portfolio is expected ...cont' pg. 9



[See NGI's LNG Glossary Here](#)

to be cash flow neutral in 2021 at an average oil price of \$30/bbl. The portfolio is forecast to provide 90% FCF growth to 2025.

Meanwhile, gross investments in renewables are set to be around \$23 billion over the next five years. Plans are to boost the share of gross capital expenditures (capex) for renewables and low carbon solutions to more than 50% by 2030 from around 4% in 2020.

“Based on early low-cost access at scale,” Equinor’s share of installed renewable capacity is forecast at 12-16 GW by 2030. “Reflecting current markets levels, Equinor is adjusting expected project base real returns to 4-8% and remains determined to capture higher equity returns through project financing and farm downs.”

Among other things, Equinor expects to deliver nominal equity returns of 12-16% from the offshore wind projects with offtake contracts in the UK and United States.

Like its plans to move operatorship to partners, Equinor sold BP plc its partnership stakes to pursue offshore wind opportunities in the United States. The partnership initially intends to develop 4.4 GW gross with four projects. Two are being readied to provide New York with power, and three of the four “will have secured offtake,” BP CEO Bernard Looney said early this year.

For Equinor, the energy transition represents an opportunity to leverage its growing position in carbon management and hydrogen, as well as develop and grow value chains and markets. By 2035, the goal is to develop the capacity to store 15-30 million metric tons/year of carbon dioxide and to provide “clean,” i.e. blue and green, hydrogen in three to five industrial clusters.

To entice shareholders, the board approved a quarterly cash dividend of 18 cents/share for 2Q2021, which is up 3 cents sequentially. It also is planning to buy back \$1.2 billion in shares starting in 2022.

Annual capex for 2021 and 2022 is set at \$9-10 billion, with production growth this year around 2% higher year/year. For 2023-2024, capex is forecast at \$12 billion. ■

Latin America DES Prices 15-Jun-2021

Country	Terminal	\$US/MMBtu					
		Jul	Chg	Aug	Chg	Sep	Chg
Argentina	Bahia Blanca	10.19	-0.14	10.58	-0.21	10.41	-0.26
Brazil	Pecem	9.81	-0.14	10.21	-0.21	10.03	-0.27
Chile	Quintero	10.12	-0.14	10.51	-0.21	10.34	-0.27
Colombia	Colombia	9.52	-0.14	9.91	-0.21	9.74	-0.27
Mexico East	Altamira	9.41	-0.14	9.81	-0.21	9.63	-0.27
Mexico West	Manzanillo	9.98	-0.14	10.37	-0.21	10.20	-0.27
Panama	Costa Norte	9.54	-0.14	9.93	-0.21	9.76	-0.27



For more regional coverage of Latin America, please see NGI's Mexico Gas Price Index at natgasintel.com/news/mexico-gas-price-index

Source: NGI calculations, CME Group, CSI, Fearnleys



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