

## MARKET COMMENTARY

### Price rally ends

Prices eased from their recent highs, in the absence of US trade on the Thanksgiving holiday. Towards 4.30pm in London, the Argus January North Sea price was \$47.73/bl, a drop of 40¢/bl from the same time in the previous session.

### Sonatrach raises Saharan Blend price

Algeria's state-owned Sonatrach raised the official formula price for Saharan Blend for the second consecutive month.

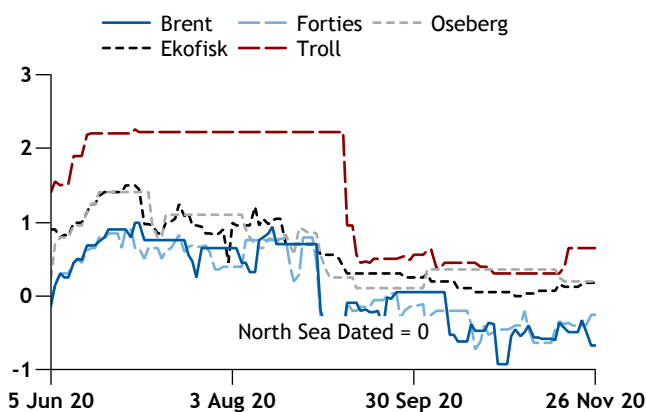
### Angola's January loadings revised higher

Export loadings of Angolan crude for January were set at 1.18mn b/d in the final schedule, up from 1.15mn b/d in the preliminary programme and in line with December levels.

### Libya's Es Sider quality fluctuating

The quality of Libya's flagship Es Sider crude has been fluctuating in a 1.0-1.5°API range in recent weeks, according to traders.

Brent, Forties, Oseberg, Ekofisk vs Dated \$/bl



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## PRICE SUMMARY

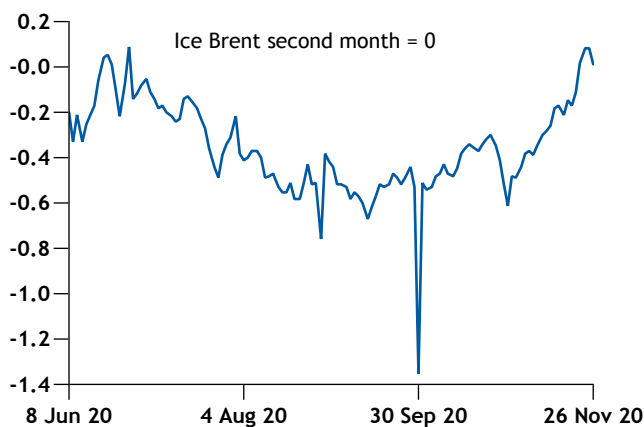
Price summary		\$/bl			
	Basis	Diff	Bid	Ask	±
<b>North Sea</b>					
Dated	Jan	-1.39	46.31	46.37	-0.30
Dated (new)	Jan	-1.39	46.31	46.37	-0.30
Brent	Dated	-0.68	45.63	45.69	-0.30
Forties	Dated	-0.25	46.06	46.12	-0.30
Oseberg	Dated	+0.20	46.51	46.57	-0.30
Ekofisk	Dated	+0.18	46.49	46.55	-0.29
Troll	Dated	+0.65	46.96	47.02	-0.30
<b>Russia-Caspian</b>					
Urals NWE	Dated	+0.00	46.31	46.37	-0.50
Urals Med Aframax	Dated	+0.95	47.26	47.32	-0.30
BTC Blend	Dated	+1.20	47.51	47.57	-0.30
CPC Blend	Dated	-1.20	45.11	45.17	-0.15
<b>Russia-Caspian fob netbacks</b>					
Urals fob Primorsk	Dated	-0.74	45.57	45.63	-0.59
Urals fob Novo Aframax	Dated	+0.00	46.31	46.37	-0.33
CPC fob terminal	Dated	-1.80	44.51	44.57	-0.15
BTC fob Ceyhan	Dated	+0.59	46.90	46.96	-0.33
<b>Mediterranean</b>					
Saharan Blend	Dated	+0.20	46.51	46.57	-0.35
Es Sider	Dated	-0.20	46.11	46.17	+0.80
Kirkuk	Dated	-3.50	42.81	42.87	-0.30
<b>West Africa</b>					
Bonny Light	Dated	+0.35	46.66	46.72	-0.30
Girassol	Dated	+2.05	48.36	48.42	-0.30
Hungo	Dated	+1.40	47.71	47.77	-0.30
<b>US pipeline</b>					
	Basis	Diff	VWA		±
LLS	- WTI	-	-		-
Mars	- WTI	-	-		-
<b>Argus Sour Crude Index (ASCI™)</b>					
ASCI	- WTI	na	na		-
<b>Canada pipeline</b>					
	Basis	Diff	Bid	Ask	±
Synthetic	CMA Nymex	-	-	-	-
WCS	CMA Nymex	-	-	-	-
<b>Americas cargoes</b>					
ANS	CMA Nymex	na	-	-	-
Vasconia	- WTI	na	-	-	-
<b>Asia-Pacific</b>					
Minas	ICP	+1.00	45.61	45.71	-0.46
Tapis	Dated	+0.80	47.09	47.19	-0.30
North West Shelf	Dated	-0.50	45.79	45.89	-0.30
<b>Russia Asia-Pacific</b>					
ESPO Blend	Jan Dubai	+2.04	49.03	49.13	-0.31
Sokol	Jan Dubai	+1.60	48.59	48.69	-0.31
<b>Mideast Gulf</b>					
Dubai	Jan		47.45	47.55	-0.11
Oman	Jan Dubai	+0.85	47.84	47.94	-0.34
Murban	Jan Adnoc	+0.27	47.01	47.11	-0.31

FUTURES AND FORWARD MARKETS

Futures markets							\$/bl	
	Open	High	Low	S'pore*	London†	Settle	±	
<b>Ice Brent</b>								
Jan	48.76	49.09	47.53	47.86	47.69	47.80	-0.81	
Feb	48.70	49.00	47.49	47.78	47.68	47.79	-0.74	
Mar	48.63	49.00	47.59	47.84	47.73	47.82	-0.72	
*4:30pm Singapore minute marker, †4:30pm London minute marker								
<b>Nymex Light Sweet</b>								
-	-	-	-	45.00	44.95	-	-	
-	-	-	-	45.19	45.14	-	-	
-	-	-	-	45.29	45.26	-	-	
-	-	-	-	45.35	45.33	-	-	
Dec -								
Dec -								
Dec -								
Dec -								
Dec -								
<b>DME Oman</b>								
Jan						47.89	-0.34	
Feb						47.84	-0.41	
Mar						47.59	-0.41	
Apr						47.52	-0.41	
Volume bl							243,000	
<b>Tocom Mideast Gulf (day session)</b>								
Jan						47.94	+0.85	
Feb						47.88	+0.88	
Mar						47.85	+0.82	
Apr						47.77	+0.77	
Volume bl							3,137,678	

INE crude futures					
Timing	Settle Yuan/bl	±	Settle \$/bl	±	
Dec	279.60	8.20	42.51	+1.23	
Jan	291.20	2.00	44.27	+0.28	
Feb	303.80	3.00	46.18	+0.43	
Mar	310.60	4.40	47.22	+0.65	
Volume bl					117,621,000

Ice Brent: First month vs second month \$/bl



Forward markets				\$/bl
	Bid	Ask		±
<b>North Sea, Singapore close</b>				
Dec	49.38	49.46		-0.46
Jan	47.89	47.95		-0.46
Feb	47.80	47.88		-0.43
Mar	47.86	47.94		-0.35
<b>North Sea, London close</b>				
Dated	46.31	46.37		-0.30
Dec	47.61	47.69		-0.31
Jan	47.70	47.76		-0.40
Feb	47.71	47.79		-0.32
Mar	47.76	47.84		-0.30
<b>Dubai, Singapore close</b>				
Jan	47.45	47.55		-0.11
Feb	47.18	47.28		-0.32
Mar	46.99	47.09		-0.31
Apr	46.94	47.04		-0.28
<b>Dubai, London close</b>				
Jan	47.27	47.35		-0.05
Feb	46.99	47.09		-0.26
Mar	46.80	46.90		-0.25
Apr	46.75	46.85		-0.22
<b>WTI Cushing, 1:30pm Houston</b>				
-	-	-		-
-	-	-		-
-	-	-		-
-	-	-		-

Intermonths \$/bl

	Mid
<b>North Sea Singapore close</b>	
Dec/Jan	+1.50
Jan/Feb	+0.08
Feb/Mar	-0.06
<b>North Sea London close</b>	
Dec/Jan	-0.08
Jan/Feb	-0.02
Feb/Mar	-0.05

Forward spreads 4:30pm London				\$/bl
	N Sea/Dubai	WTI/N Sea	WTI/Dubai	
Jan	+0.420	-	-	
Feb	+0.710	-	-	
Mar	+0.950	-	-	
Apr		-	-	

**NORTH SEA DATED**

North Sea Dated calculation				\$/bl
North Sea flat price				
<b>North Sea partial trade</b>	<b>Delivery period</b>	<b>Volume bl</b>	<b>Price</b>	
volume weighted average (VWA)	Jan	600,000	47.73	
CFD value against relevant basis month				
		<b>Basis</b>	<b>Midpoint</b>	
30 Nov-4 Dec		Jan	-1.03	
7 Dec-11 Dec		Jan	-0.83	
14 Dec-18 Dec		Jan	-0.70	
21 Dec-25 Dec		Jan	-0.60	
28 Dec-1 Jan		Jan	-0.60	
4 Jan-8 Jan		Jan	-0.63	
CFD value for 6 Dec-26 Dec		Jan	-0.71	
North Sea Anticipated Dated calculation				
		<b>Month</b>	<b>Price</b>	
VWA of North Sea partial trade		Jan	47.73	
CFD value for 6 Dec-26 Dec		Jan	-0.71	
Anticipated Dated			47.02	
Physical differentials for 6 Dec-26 Dec				
<b>Grade</b>		<b>Basis</b>	<b>Diff midpoint</b>	
Brent		Dated	-0.68	
Forties		Dated	-0.25	
Oseberg		Dated	+0.20	
Ekofisk		Dated	+0.18	
Troll		Dated	+0.65	
North Sea quality premiums (QP) for 6 Dec-26 Dec				
Oseberg			+0.50	
Ekofisk			+0.38	
Troll			+0.56	
North Sea Dated calculation				
	<b>Anticipated Dated</b>	<b>Add Diff midpoint</b>	<b>Subtract QP</b>	<b>Price</b>
Brent component of Dated	47.02	-0.68		46.34
Forties component of Dated	47.02	-0.25		46.77
Oseberg component of Dated	47.02	+0.20	+0.50	46.72
Ekofisk component of Dated	47.02	+0.18	+0.38	46.82
Troll component of Dated	47.02	+0.65	+0.56	47.11
<b>North Sea Dated is the lowest component</b>				<b>46.34</b>

**North Sea flat price**

Argus derives a flat price from trade of a month-ahead forward contract for the delivery of Brent, Forties, Oseberg, Ekofisk or Troll, taking a weighted average of trade between 4:29pm and 4:30pm in London. In the absence of trade, a combination of the Ice Brent futures one-minute marker and the exchange of futures for physical (EFP) market is used.

**Anticipated Dated**

We then look at contracts for difference (CFDs), with which the market anticipates North Sea Dated in the coming weeks at differentials to the forward month. Prices falling between 10 days and a full calendar month ahead are averaged.

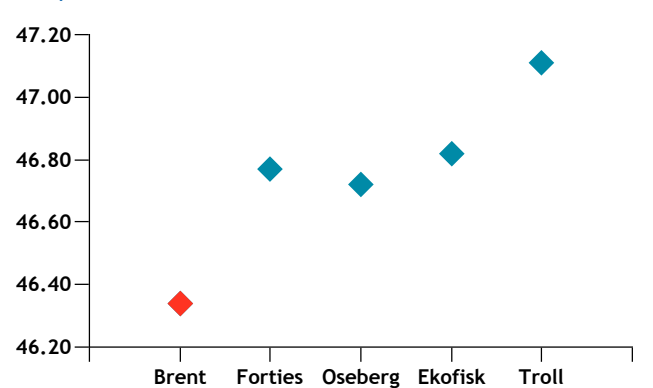
**Physical differentials**

Argus assesses trade in physical cargoes of Brent, Forties, Oseberg, Ekofisk and Troll crude, assigning differentials to North Sea Dated to each grade for the 10-days to month-ahead range.

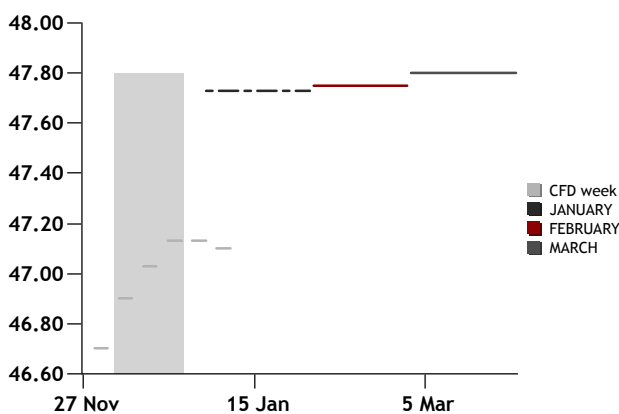
**Dated components**

The combination of the Anticipated Dated and the physical values gives each grade's component of North Sea Dated. Quality premiums are deducted from Oseberg, Ekofisk and Troll for benchmarking purposes. The lowest-priced of the five components is used to set the price of North Sea Dated.

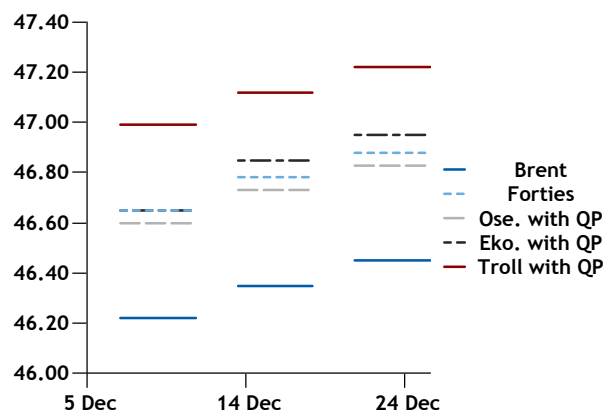
Components of North Sea Dated



North Sea forward curve establishing Anticipated Dated



Dated components-establishing North Sea Dated



## NORTH SEA

Buying interest was maintained in the latest session, as a cargo of Brent blend changed hands.

Trading firm Trafigura sold a cargo of North Sea benchmark grade Brent arriving on 11-15 December to Shell at North Sea Dated +0.15 cif Rotterdam. This translates to roughly Dated -0.68 on a fob Sullom Voe basis.

Trafigura offered another Brent cargo with 12-16 December arrival dates at Dated +0.45 cif Rotterdam. The fob price equivalent was around Dated -0.38, but the offer sparked no interest.

On Ekofisk, oil major BP struggled to offload a cargo of the grade arriving on 8-12 December aboard the *Alfa Italia* at Dated +0.80 cif Rotterdam. This equates to roughly Dated +0.34 on a fob Teesside basis.

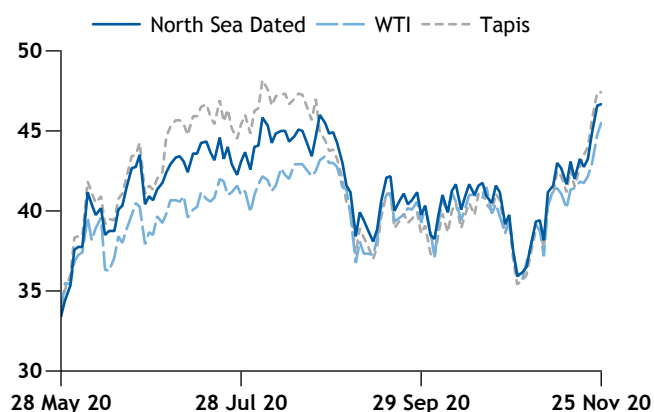
None of the day's activity could be confirmed.

Chinese demand for Johan Sverdrup hit a new high as 14.4mn bl of the grade traded for February delivery in Shandong. This compares with 8.7mn bl of trade for January delivery, according to Argus surveys. This means that the majority of Johan Sverdrup loadings in December will head to China – exports of the grade are planned at 15mn bl or 484,000b/d next month. Market participants awaited the release of Johan Sverdrup's January loading programme, which is expected imminently.

Elsewhere, UK crude supplies looked set to increase before the end of 2020 as BP began production at the 20,000 b/d of oil equivalent (boe/d) Vorchich field.

The Vorchich field – operated by Ithaca Energy – is tied back to the Greater Stella Area on the UK continental shelf which includes the Stella and Harrier fields, operated by the firm. The Stella field came on stream in February 2017 and reached a peak output of nearly 9,000 b/d in June 2017, according to data from the UK's Oil and Gas Authority (OGA).

North Sea Dated, WTI, Tapis \$/bl



North Sea					\$/bl
	Basis	Diff	Bid	Ask	±
Dated*	Jan	-1.39	46.31	46.37	-0.30
Dated (new)**	Jan	-1.39	46.31	46.37	-0.30
Brent†	Dated	-0.68	45.63	45.69	-0.30
Forties	Dated	-0.25	46.06	46.12	-0.30
Oseberg	Dated	+0.20	46.51	46.57	-0.30
Ekofisk	Dated	+0.18	46.49	46.55	-0.29
Troll	Dated	+0.65	46.96	47.02	-0.30
Statfjord cif Rotterdam	Dated	+1.00	47.31	47.37	-0.30
Statfjord fob platform	Dated	+0.43	46.74	46.80	-0.30
Gullfaks cif Rotterdam	Dated	+1.00	47.31	47.37	-0.30
Gullfaks fob platform	Dated	+0.43	46.74	46.80	-0.30
Flotta Gold	Dated	-0.20	46.11	46.17	-0.30
Grane	Dated	+0.20	46.51	46.57	-0.30

\*Argus North Sea Dated is the equivalent of Platts dated Brent

\*\*New North Sea Dated incorporates non-North Sea grades delivered into north-west Europe. A full explanation can be found on p6

†Argus Brent is the price of physical Brent calculated using Argus North Sea Dated plus the Dated-related market differential for Brent

North Sea EFP		
	Basis	Diff
Jan	Ice	+0.06
Feb	Ice	+0.09

Ice minute markers			
		1-minute	±
Jan		47.69	-0.39
Feb		47.68	-0.31
Mar		47.73	-0.30

Dated CFDs, Singapore close				
	Basis	Bid	Ask	±
30 Nov-4 Dec	Feb	-1.05	-0.97	-0.13
7 Dec-11 Dec	Feb	-0.92	-0.84	-0.13
14 Dec-18 Dec	Feb	-0.79	-0.71	-0.13
21 Dec-25 Dec	Feb	-0.67	-0.59	-0.06

Dated CFDs, London close				
	Basis	Bid	Ask	±
30 Nov-4 Dec	Feb	-1.09	-1.01	-0.04
7 Dec-11 Dec	Feb	-0.89	-0.81	+0.03
14 Dec-18 Dec	Feb	-0.76	-0.68	+0.03
21 Dec-25 Dec	Feb	-0.66	-0.58	+0.01
28 Dec-1 Jan	Feb	-0.66	-0.58	-0.01
4 Jan-8 Jan	Feb	-0.69	-0.61	-0.04

Delivered northwest Europe assessments					
	Basis	Diff	Bid	Ask	±
CPC Blend cif Rotterdam	Dated	-0.45	45.86	45.92	-0.30
BTC Blend cif Rotterdam	Dated	+1.75	48.06	48.12	-0.30
Saharan Blend cif Rotterdam	Dated	+1.65	47.96	48.02	-0.30
Bonny Light cif Rotterdam	Dated	+1.40	47.71	47.77	-0.30
Qua Iboe cif Rotterdam	Dated	+1.40	47.71	47.77	-0.30
Escravos cif Rotterdam	Dated	+1.60	47.91	47.97	-0.30
WTI cif Rotterdam (period 1)*	Dated	+0.60	46.91	46.97	-0.30
WTI cif Rotterdam (period 2)*	Dated	+0.60	46.91	46.97	-0.30

\*Period 1 covers cargoes arriving at Rotterdam from 12 days forward to one month ahead + two days. Period 2 covers cargoes arriving at Rotterdam from one month ahead + three days forward to 60 days.

## NORTH SEA

The field produced an average of roughly 1,080 b/d from January to August this year. Meanwhile, the Harrier field came on stream in June 2018 and reached a peak output of nearly 2,000 b/d only two months later. The field's production averaged 350 b/d of crude oil over January-August this year, according to OGA.

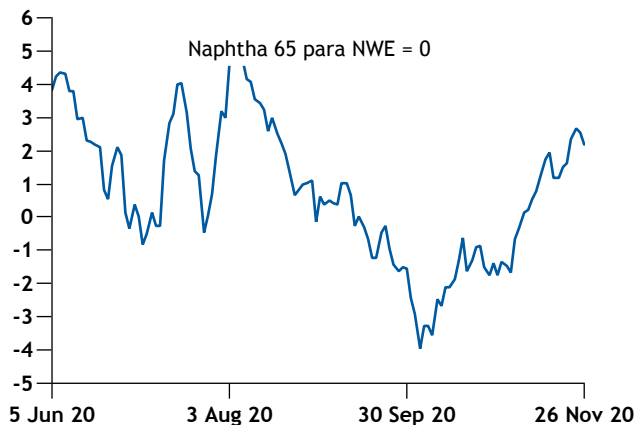
Crude and condensate output in the Netherlands was 15,100 b/d in September, down by 10pc from August. Production was 2pc below the average for the same month last year and 32pc below the average for the past five years. The country's output is in long-term decline.

The drop was likely driven by maintenance – at least three fields including the country's large offshore Amstel field were offline in September. Declines were also observed at other smaller fields.

The Argus January North Sea price was \$47.73/bl, a drop of 40¢/bl based on 600,000 bl of trade in the minute leading up to the timestamp. CFDs were mixed. The front-week 30 November - 4 December CFD was down 4¢/bl at February North Sea -\$1.05/bl, while the second-week 7-11 December CFD was up 3¢/bl at February North Sea -85¢/bl.

Ekofisk vs naphtha 65 para NWE cif

\$/bl



North Sea		\$/bl		
<b>North Sea quality premiums (QP)</b>				
		Nov	Dec	
Ekofisk		0.37	0.38	
Oseberg		0.26	0.50	
Troll		0.77	0.56	
<b>De-escalators</b>				
Sulphur			+0.09	
<b>North Sea calculations</b>				
		Basis	Price	
Volume-weighted average of North Sea partial traded		Jan	47.73	
Ice Brent marker		Jan	47.69	
Exchange of futures for physical (EFP)		Jan	+0.06	
North Sea basis (flat price)		Jan	47.73	
<b>Anticipated Dated based on 10 days-month ahead CFD strip:</b>				
		Price	±	
07 Dec-25 Dec		47.02	-0.30	
Argus Brent component of Dated*		46.34	-0.30	
Argus Forties component of Dated		46.77	-0.30	
Argus Oseberg component of Dated (QP applied)		46.72	-0.30	
Argus Oseberg component of Dated (no QP applied)		47.22	-0.30	
Argus Ekofisk component of Dated (QP applied)		46.82	-0.29	
Argus Ekofisk component of Dated (no QP applied)		47.20	-0.29	
Argus Troll component of Dated (QP applied)		47.11	-0.30	
<i>*the lowest component sets Dated</i>				
<b>Argus alternative Dated illustrations</b>				
	Basis	Diff	Price	±
Argus Dated Average	Jan	-0.69	47.04	-0.30
Argus Dated BFOE*	Jan	-1.39	46.34	-0.30
Argus Dated BFO	Jan	-1.39	46.34	-0.30
Argus Dated FOE	Jan	-1.01	46.77	-0.30
<i>Quality premiums (QP) not applied to above *Argus Dated BFOE is equivalent to North Sea Dated (no QP)</i>				
<b>Argus North Sea Reference Price</b>				
Argus North Sea Reference Price (NSRP)			47.09	-0.29
Argus Synthetic Brent (NSRP component)			46.95	-0.29
<b>Dated to Ice Brent frontline, London close</b>				
		Bid	Ask	±
Dec		-0.72	-0.64	-0.02
Jan		-0.69	-0.61	-0.05
Feb		-0.67	-0.59	-0.03
Mar		-0.65	-0.57	-0.02
1Q21		-0.67	-0.59	-0.03
2Q21		-0.57	-0.49	+0.04
2021		-0.57	-0.51	+0.01
<b>Ice Bwave, 25 Nov 20</b>				
Feb				48.31
Mar				48.32
Apr				48.35
Saudi formula base				43.20

**NEW NORTH SEA DATED**

New North Sea Dated calculation				\$/bl
North Sea flat price				
North Sea partial trade	Delivery period	Volume bl	Price	
volume weighted average (VWA)	Jan	600,000	47.73	
CFD value against relevant basis month				
		Basis	Midpoint	
30 Nov-4 Dec		Jan	-1.03	
7 Dec-11 Dec		Jan	-0.83	
14 Dec-18 Dec		Jan	-0.70	
21 Dec-25 Dec		Jan	-0.60	
28 Dec-1 Jan		Jan	-0.60	
4 Jan-8 Jan		Jan	-0.63	
CFD value for 6 Dec-26 Dec		Jan	-0.71	
North Sea Anticipated Dated calculation				
		Month	Price	
VWA of North Sea partial trade		Jan	47.73	
CFD value for 6 Dec-26 Dec		Jan	-0.71	
Anticipated Dated			47.02	
Physical differentials for 6 Dec-26 Dec				
Grade	Basis	Diff midpoint		
Brent	Dated	-0.68		
Forties	Dated	-0.25		
Oseberg	Dated	+0.20		
Ekofisk	Dated	+0.18		
Troll	Dated	+0.65		
Bonny Light cif Rotterdam	Dated	+1.40		
Qua Iboe cif Rotterdam	Dated	+1.40		
WTI cif Rotterdam (period 1)	Dated	+0.60		
Freight adjustment				
Five-day average UK-UK continent rate 19-25 Nov		0.59		
Five-day average UK-UK continent rate 20-26 Nov		0.61		
North Sea quality adjustments (QA) for 6 Dec-26 Dec				
Oseberg		+0.64		
Ekofisk		+0.52		
Troll		+0.70		
Bonny Light		+0.63		
Qua Iboe		+0.62		
New North Sea Dated calculation				
Components of New North Sea Dated	Anticipated Dated	Add Diff midpoint	Subtract QA and freight	Price
Brent	47.02	-0.68		46.34
Forties	47.02	-0.25		46.77
Oseberg	47.02	+0.20	+0.64	46.58
Ekofisk	47.02	+0.18	+0.52	46.68
Troll	47.02	+0.65	+0.70	46.97
Bonny Light	47.02	+1.40	+1.22	47.20
Qua Iboe	47.02	+1.40	+1.21	47.21
WTI	47.02	+0.60	+0.59	47.03
New North Sea Dated is the lowest component				46.34

**North Sea flat price**

Argus derives a flat price from trade of a month-ahead forward contract for the delivery of Brent, Forties, Oseberg, Ekofisk or Troll, taking a weighted average of trade between 4:29pm and 4:30pm in London. In the absence of trade, a combination of the Ice Brent futures one-minute marker and the exchange of futures for physical (EFP) market is used.

**Anticipated Dated**

We then look at contracts for difference (CFDs), with which the market anticipates North Sea Dated in the coming weeks at differentials to the forward month. Prices falling between 10 days and a full calendar month ahead are averaged.

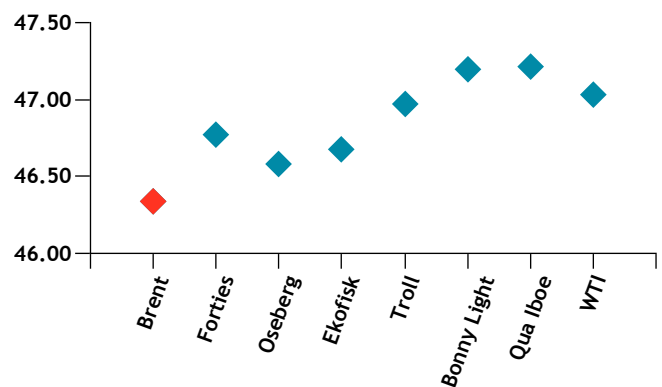
**Physical differentials**

Argus assesses fob trade in physical cargoes of Brent, Forties, Oseberg, Ekofisk and Troll crude, assigning differentials to North Sea Dated to each grade for the 10-days to month-ahead range. Argus then assesses cif Rotterdam trade in Bonny Light, Qua Iboe and WTI. Prices falling between 12 days and a calendar month ahead – plus two days – are then averaged. Then a freight value based on a five-day average of the Argus UK-UK Continent rate is applied to the cif values in order to construct virtual North Sea fob values for the three non-North Sea grades.

**Dated components**

The combination of the Anticipated Dated and the physical values gives each grade's component of North Sea Dated. Quality adjustments are deducted from Oseberg, Ekofisk, Troll, Bonny Light and Qua Iboe for benchmarking purposes. The lowest-priced of the eight components is used to set the price of North Sea Dated.

Dated components on a fob Nsea basis



RUSSIA-CASPIAN

Baltic Urals eased in northwest Europe, while Hellenic tendered for January-arrival Russian export blend.

In northwest Europe, Surgutneftegaz awarded its tender to sell a 100,000t Urals cargo loading on 12-13 December from Ust-Luga. Traders said trading firm Vitol was likely to have picked up the cargo at somewhere close to North Sea Dated flat on a delivered-Rotterdam equivalent basis, although results remained unconfirmed. The Russian producer was said to have issued another tender, for its next two parcels, loading on 17-18 December from Primorsk and 23-24 December from the Ust-Luga terminal.

In the Mediterranean, Greek refiner Hellenic Petroleum was seeking an 80,000t, 100,000t or 140,000t parcel of Urals for 1-3 January delivery to Pachi Megara. The tender closes at 1pm Greek time on 27 November. Lukoil trading-arm Litasco has a 100,000t Primorsk cargo en route for Agioi Theodoroi onboard the tanker *Pacific Treasures*. The tanker – scheduled for 7 December arrival – could be headed to Motor Oil Hellas’ 175,000 b/d Corinth plant.

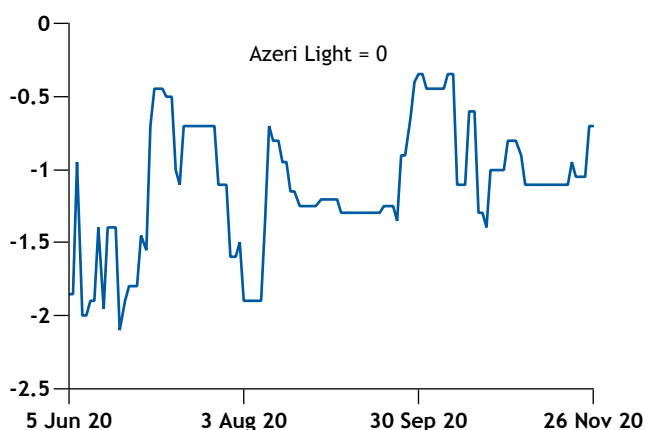
Traders viewed light Caspian sour CPC Blend a touch firmer than most recent price discussions, despite sustained pressure from weak regional light-distillate refining margins. Shell had earlier in the week offered early-December supplies at just Dated -1.30 cif Augusta without success, but a flurry of Mediterranean buy tenders have now helped to place a handful of cargoes loading in the second half of next month. Traders pegged CPC Blend in a wide Dated -1.20/-0.90 range on a delivered-Italy basis.

Shipments of December CPC Blend to India continued to grow. Data from oil analytics firm Vortexa showed the Suezmax *Tataki* had been fixed to carry a 135,000t cargo to an unknown Indian port on 12 December. Traders said as many as 10 Suezmax parcels had already been sold to Asia-Pacific buyers from December’s plan. Fixture reports now suggest

Russia-Caspian					\$/bl
	Basis	Diff	Bid	Ask	±
Urals NWE	Dated	+0.00	46.31	46.37	-0.50
Urals Med Aframax	Dated	+0.95	47.26	47.32	-0.30
Urals Med Suezmax	Dated	+0.65	46.96	47.02	-0.30
Siberian Light	Dated	+0.60	46.91	46.97	-0.30
CPC Blend	Dated	-1.20	45.11	45.17	-0.15
Tengiz	Dated	-1.10	45.21	45.27	-0.15
BTC	Dated	+1.20	47.51	47.57	-0.30
Azeri Light	Dated	+1.05	47.36	47.42	-0.30
<b>Netbacks</b>					
Urals fob Primorsk	Dated	-0.74	45.57	45.63	-0.59
Urals fob Ust-Luga	Dated	-0.74	45.57	45.63	-0.59
Urals fob Novo (Aframax)	Dated	+0.00	46.31	46.37	-0.33
Urals fob Novo (Suezmax)	Dated	-0.02	46.29	46.35	-0.30
Urals cif Black Sea	Dated	+0.45	46.76	46.82	-0.31
CPC fob terminal	Dated	-1.80	44.51	44.57	-0.15
BTC fob Ceyhan	Dated	+0.59	46.90	46.96	-0.33
Azeri Light fob Supsa	Dated	+0.17	46.48	46.54	-0.33
<b>Retrospective netbacks</b>					
Urals fob Primorsk	Dated	-0.34	45.97	46.03	-0.29
Urals fob Ust-Luga	Dated	-0.34	45.97	46.03	-0.29
Urals fob Novo (Aframax)	Dated	-0.22	46.09	46.15	-0.30
CPC Blend fob	Dated	-1.66	44.65	44.71	-0.27
<b>Turkish straits demurrage</b>					
Delay days					6
Aframax demurrage rate \$/d					19,500
Suezmax demurrage rate \$/d					25,000

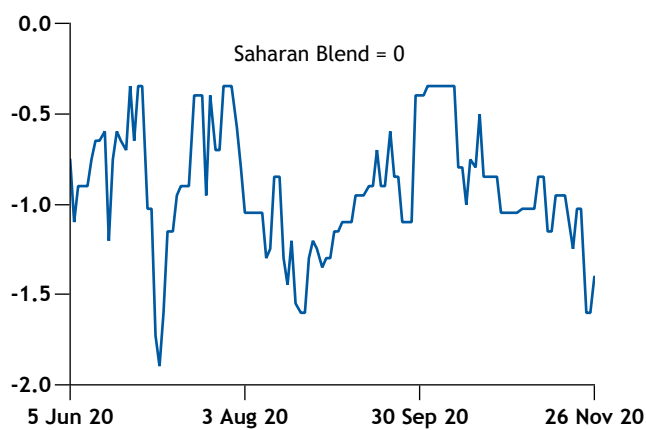
Bonny Light vs Azeri Light

\$/bl



CPC Blend vs Saharan Blend

\$/bl



**RUSSIA-CASPIAN**

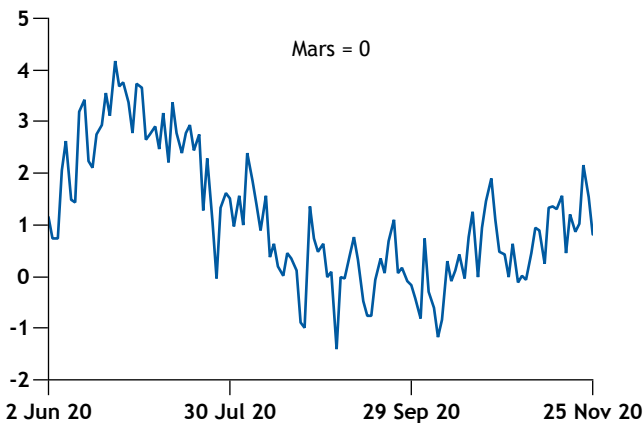
at least three are headed to India in the first half of the month alone.

Just five cargoes of the grade have so far been delivered to Indian buyers since the start of the second-half of the year, with a sixth cargo currently en route to Mumbai with an early-November cargo, according to Vortexa data.

No activity on Urals or CPC Blend was confirmed.

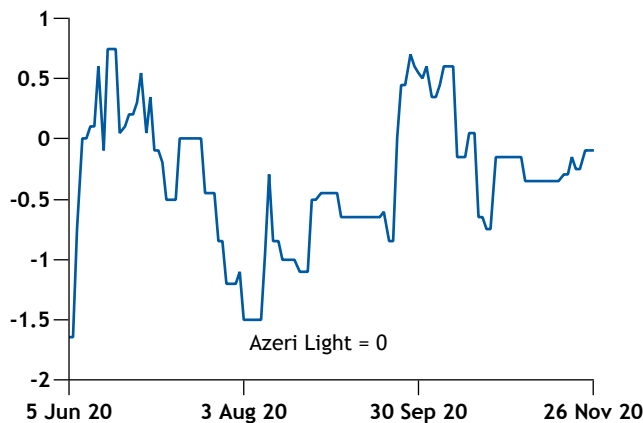
Druzhba pipeline – Urals (monthly prices) \$/bl					
	Basis	Diff low	Diff high	Low	High
<b>Slovakia</b>					
Oct	Monthly avg of Dated	-0.93	-0.43	39.08	39.58
Sep	Monthly avg of Dated	-1.10	-0.60	39.48	39.98
Aug	Monthly avg of Dated	-1.42	-0.92	43.36	43.86
<b>Hungary</b>					
Oct	Monthly avg of Dated	-0.93	-0.43	39.08	39.58
Sep	Monthly avg of Dated	-1.10	-0.60	39.48	39.98
Aug	Monthly avg of Dated	-1.42	-0.92	43.36	43.86
<b>Poland</b>					
Oct	Monthly avg of Dated	-1.98	-0.52	38.03	39.49
Sep	Monthly avg of Dated	-2.15	-0.85	38.43	39.73
Aug	Monthly avg of Dated	-2.43	-1.08	42.35	43.70
<b>Germany</b>					
Oct	Monthly avg of Dated	-1.50	-0.65	38.51	39.36
Sep	Monthly avg of Dated	-1.80	-0.98	38.78	39.60
Aug	Monthly avg of Dated	-1.70	-1.22	43.08	43.56

Urals NWE vs Mars \$/bl

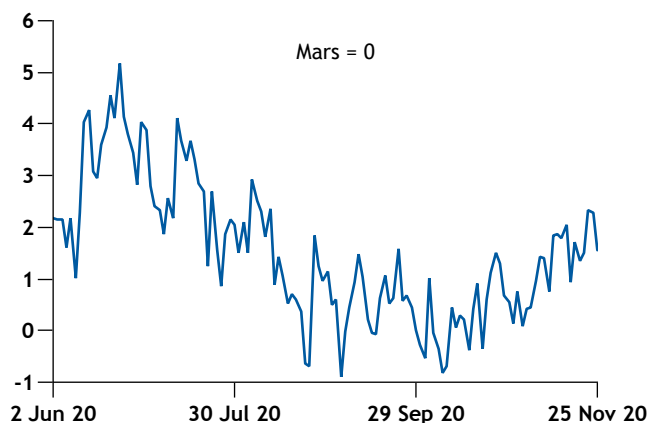


North Sea Dated month average \$/bl	
Oct	40.01
Sep	40.58
Aug	44.78

Urals Med vs Azeri Light \$/bl



Urals Med vs Mars \$/bl





## MEDITERRANEAN

Libya's flagship crude Es Sider gained ground against benchmark North Sea Dated, while Algeria's state-run Sonatrach raised its official December price for Saharan Blend.

Two market participants viewed Es Sider at somewhere close to Dated -0.20. A third trader pegged the grade as high as Dated flat, though others suggested it had yet to reach such levels. Firm regional demand was supporting values, according to market sources, with Turkish refiner Tupras said to have picked up three cargoes of Es Sider across two tenders dating back to mid-November. Results were not confirmed.

Market participants otherwise suggested that the quality of recent Es Sider crude supplies has been fluctuating. Some pegged it near the 37°API mark – close to previous typical gravity levels just under that threshold, and to state-owned NOC's roughly 37°API specification for the grade. But others noted recent °API Es Sider levels well in excess of 38°API, suggesting a lightening of the grade that could imperil its spot sale competitiveness against similar-quality Russian crudes. NOC has not conducted a full marketing assay for Es Sider since 2008, according to a Libyan source.

Trade levels for Libya's light sweet Esharara crude were meanwhile heard coming at premiums between 50¢/bl and 80¢/bl over the grade's yet-unpublished December official formula price, though this was not confirmed.

Libya's state-owned NOC is expected to release its official prices for December in the coming sessions, with market participants suggesting the firm is unlikely to raise them above November levels.

Elsewhere, Algeria's Sonatrach raised its official price for December-loading Saharan Blend by 20¢/bl on the month, setting it at a 25¢/bl premium to Dated. Saharan Blend's spot value was otherwise discussed slightly lower, at around Dated +0.20, with values likely under pressure from the ongoing return of rival export volumes out of Libya.

On sours, Iraq's state-owned Somo extended the deadline for its tender issued earlier this week offering 4mn bl of monthly Basrah crude over the January 2021 - December 2025 period. The tender's original deadline of 4pm Baghdad time on 27 November was revised to the same time on 4 December.

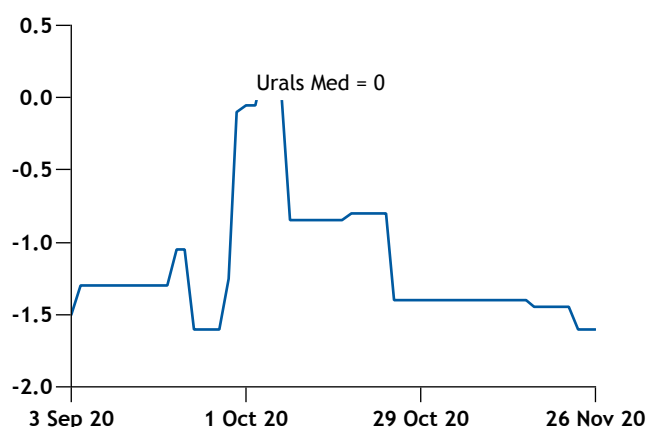
Some 48mn bl loading over 1 July 2021 - 30 June 2022 are available to tender participants under a prepayment agreement. Offers need be made against Somo's official Basrah prices for each month of the loading period. These prepaid volumes particularly appeal to clients because they alone are free-destination and resellable.

Mediterranean					\$/bl
	Basis	Diff	Bid	Ask	±
Saharan Blend	Dated	+0.20	46.51	46.57	-0.35
Zarzaitine	Dated	+0.20	46.51	46.57	-0.35
Es Sider	Dated	-0.20	46.11	46.17	+0.80
Kirkuk	Dated	-3.50	42.81	42.87	-0.30
Basrah Light cif Augusta	Dated	-0.65	45.66	45.72	-0.30
Basrah Light fob Sidi Kerir	Dated	-0.50	45.81	45.87	-0.30
Basrah Heavy cif Augusta	Dated	-3.00	43.31	43.37	-0.30
Iranian Light fob Sidi Kerir	Dated	-0.62	45.69	45.75	-0.30
Iranian Heavy fob Sidi Kerir	Dated	-3.42	42.89	42.95	-0.30
Suez Blend	Dated	-0.75	45.56	45.62	-0.30

Official formula prices					\$/bl
Basis					
<b>Algeria</b>			<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
Saharan Blend	Dated		-0.25	+0.05	+0.25
<b>Syria</b>			<b>Aug</b>	<b>Sep</b>	<b>Oct</b>
Syrian Light	Dated		na	na	na
Souedie	Dated		na	na	na
<b>Libya</b>			<b>Sep</b>	<b>Oct</b>	<b>Nov</b>
Al-Jurf	Urals Med		-0.95	-1.35	-1.50
Amna	Dated		-1.30	-2.20	-2.20
Bouri	Urals Med		-2.70	-3.10	-3.20
Brega	Dated		-1.30	-2.20	-1.85
Bu Atiffel	Dated		+0.25	-1.25	-1.15
Es Sider	Dated		-1.40	-2.30	-2.30
Esharara	Dated		-0.60	-1.50	-1.20
Mellitah	Dated		-1.55	-2.45	-2.45
Mesla	Dated		-2.00	-2.90	-2.60
Mesla ex Ras Lanuf	Dated		na	na	na
Sarir	Dated		-3.95	-4.85	-4.55
Sirtica	Dated		-1.75	-2.65	-2.65
Zueitina	Dated		-1.25	-2.20	-1.90

Basrah Light cif Augusta vs Urals Med

\$/bl



## WEST AFRICA

India's state-run IOC purchased Nigerian crude in its most recent tenders, while Angola's January-loading schedule was revised upwards.

India's state-controlled IOC purchased Nigerian Agbami from Chevron as it closed two tenders seeking crude supplies loading on 27 December - 5 January and 1-10 January, traders said. Chevron was expected to supply its 26-27 December cargo. Traders had assessed the very light sweet grade at North Sea Dated -1.30 in the previous session.

The tender results were not confirmed and it remained unclear if IOC had purchased any further west African supplies.

Export loadings of Angolan crude for January are 1.18mn b/d in the final schedule, up from 1.15mn b/d in the preliminary schedule and in line with December. The total is below Angola's Opec+ production quota.

One additional Girassol cargo is now on the schedule, pushing total exports of the grade up by 32,000 b/d from the preliminary programme. This extra cargo will load on 25-26 January and be marketed by ExxonMobil. The two other planned Girassol cargoes will now load earlier, on 4-5 and 14-15 January respectively. Total exports of the medium-sweet grade now stand at 97,000 b/d in January, unchanged from December.

In Congo (Brazzaville), crude loadings will remain at 238,000 b/d in January, unchanged from the volumes planned in December, according to the country's loading schedules. Seven cargoes of Congo's flagship medium sweet Djeno are expected in January for a total of 208,000 b/d. Exports of light sweet N'Kossa are also unchanged on the month, with just one cargo scheduled for 31,000 b/d. The cargo is expected to load on 20-21 January.

Congo's Opec+ production quota is scheduled to increase to 281,000 b/d in January from 266,000 b/d in December. But it is still unclear whether Opec+ will extend current production caps.

Elsewhere, Cameroon has set at \$43.80/bl the oil price for its 2021 budget, which sits above the \$41/bl set in the 2020 budget revision of June, but well below the \$54/bl initially forecast for this year. The country's 2021 budget is 4.86 trillion central African franc (CFA) (\$8.82bn), above the CFAfr4.40 trillion in the revised 2020 budget but below the CFAfr4.95 trillion originally planned for 2020.

The 2020 budget is based on an average production of around 73,000 b/d. The budget also proposes a \$454mn rehabilitation of the 42,000 b/d state-owned Sonara refinery that has been shut since a fire in May 2019.

West Africa					\$/bl
	Basis	Diff	Bid	Ask	±
Agbami	Dated	-1.30	45.01	45.07	-0.30
Amenam	Dated	-0.70	45.61	45.67	-0.30
Bonga	Dated	+0.35	46.66	46.72	-0.30
Bonny Light	Dated	+0.35	46.66	46.72	-0.30
Brass River	Dated	+0.25	46.56	46.62	-0.30
Egina	Dated	+1.50	47.81	47.87	-0.30
Erha	Dated	+0.50	46.81	46.87	-0.30
Escravos	Dated	+0.60	46.91	46.97	-0.30
Forcados	Dated	+0.50	46.81	46.87	-0.30
Qua Iboe	Dated	+0.35	46.66	46.72	-0.30
Usan	Dated	+0.10	46.41	46.47	-0.30
Cabinda	Dated	+1.70	48.01	48.07	-0.30
Dalia	Dated	+1.80	48.11	48.17	-0.30
Girassol	Dated	+2.05	48.36	48.42	-0.30
Hungo	Dated	+1.40	47.71	47.77	-0.30
Kissanje	Dated	+1.55	47.86	47.92	-0.30
Mostarda	Dated	+0.75	47.06	47.12	-0.30
Nemba	Dated	+1.15	47.46	47.52	-0.30
Zafiro	Dated	+1.10	47.41	47.47	-0.30
Jubilee	Dated	+0.80	47.11	47.17	-0.30
Doba	Dated	+0.10	46.41	46.47	-0.30
Djeno	Dated	+0.30	46.61	46.67	-0.30

Nigerian official formula prices					\$/bl
	Basis	Oct	Nov	Dec	
Abo	Dated	-0.34	-0.62	+0.15	
Agbami	Dated	-1.59	-1.78	-1.31	
Ajapa	Dated	-0.17	-0.29	+0.20	
Aje	Dated	-0.37	-0.63	-0.15	
Akpo	Dated	-2.41	-2.05	-1.23	
Amenam	Dated	-0.78	-0.98	-0.34	
Antan	Dated	-0.32	-0.62	+0.53	
Asaramatoru	Dated	-0.44	-0.84	+0.00	
Bonga	Dated	-0.27	-0.41	+0.10	
Bonny Light	Dated	-0.37	-0.63	-0.15	
Brass River	Dated	-0.60	-0.72	-0.27	
EA	Dated	+0.42	-0.15	+0.91	
Ebok	Dated	+0.14	+0.01	+0.78	
Egina	Dated	+0.23	+0.19	+0.68	
Eremor	Dated	-1.85	-1.83	-0.45	
Erha	Dated	+0.21	-0.27	+0.13	
Escravos	Dated	-0.17	-0.29	+0.20	
Forcados	Dated	-0.31	-0.41	+0.09	
Ima	Dated	-1.44	-1.53	-1.02	
Jones Creek	Dated	-0.31	-0.41	+0.09	
Obe	Dated	-0.79	-1.05	-0.13	
Okono	Dated	-0.67	-1.01	-0.31	
Okoro	Dated	+0.62	+0.27	+0.16	
Okwori	Dated	-0.24	-0.71	+0.34	
Okwuibome formula	Dated	-0.56	-0.66	-0.10	
Otakikpo	Dated	-0.37	-0.63	-0.15	
Oyo	Dated	+0.30	-0.22	+0.69	
Pennington	Dated	-0.51	-0.83	-0.05	
Qua Iboe	Dated	-0.56	-0.66	-0.10	
Ukpokiti	Dated	-0.56	-1.00	-0.17	
Usan	Dated	-0.86	-0.78	-0.19	
Yoho	Dated	-0.86	-0.66	-0.15	
Zafiro*	Dated	+0.20	+0.22	+0.47	
Premium for advanced pricing	Dated	+0.07	+0.07	+0.07	
Premium for deferred pricing	Dated	+0.07	+0.07	+0.07	

\*Equatorial Guinea, priced by NNPC

MIDEAST GULF

Spot differentials held steady pending the awards of tenders by Chinese and Indian refiners.

Chinese private-sector refiner Rongsheng has closed a spot tender to buy 0.5-2mn bl of crude for January-loading or delivery to Zhoushan in February. The tender listed Mid-east Gulf grades as well as North Sea and US crudes.

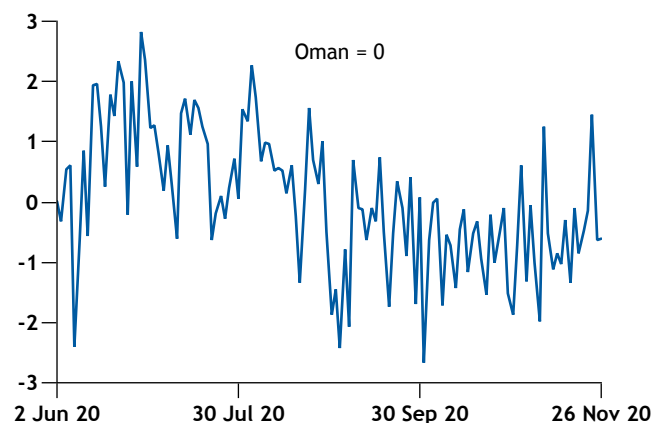
The backwardation in benchmark Dubai crude, or the premium of front-month Dubai to third month prices, widened to 46¢/bl, from a premium of 26¢/bl in the previous session.

Medium sour Oman was also firm ahead of the results of Rongsheng's term tender seeking Oman or Abu Dhabi Upper Zakum crude for February to December 2021 delivery. The tender will close on 27 November.

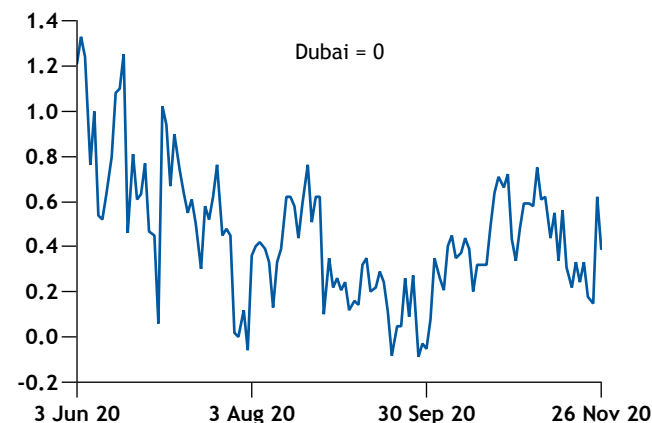
The front-month January Oman futures contract on the DME was at a premium of 85¢/bl to January Dubai swaps, inching lower from a four-month wide premium of 88¢/bl in the previous session.

The January Brent-Dubai EFS, or the spread between Ice

Urals vs Oman \$/bl



Oman vs Dubai \$/bl



Mideast Gulf					\$/bl	
	Month	Basis	Diff	Bid	Ask	±
Dubai	Jan			47.45	47.55	-0.11
Oman	Jan	Jan*	+0.85	47.84	47.94	-0.34
Murban	Jan	Adnoc	+0.27	47.01	47.11	-0.31
Das	Jan	Adnoc	+0.25	46.64	46.74	-0.31
Upper Zakum	Jan	Adnoc	+0.40	46.94	47.04	-0.31
Qatar Land	Jan	QP	+0.20	46.87	46.97	-0.32
Qatar Marine	Jan	QP	+0.35	47.12	47.22	-0.32
Qatar Al-Shaheen	Jan	Jan*	+0.75	47.74	47.84	-0.31
Banoco Arab Medium	Jan	Aramco	+0.05	47.27	47.37	-0.32
Basrah Light fob Iraq†	Jan	Somo	+1.60	49.47	49.57	-0.32
Basrah Heavy fob Iraq†	Jan	Somo	+1.50	47.97	48.07	-0.32
DFC fob Qatar	Jan	Jan*	-1.05	45.94	46.04	-0.61
LSC fob Qatar	Jan	Jan*	-1.35	45.64	45.74	-0.56

\*basis is Dubai swaps †Asia-Pacific destination-restricted cargoes

Differentials to DME Oman futures, 4:30pm Singapore				\$/bl	
	Month	Basis	Diff		±
Murban	Jan	Jan DME	-0.83		+0.03
Upper Zakum	Jan	Jan DME	-0.90		+0.03
Das	Jan	Jan DME	-1.20		+0.03
Dubai	Jan	Jan DME	-0.40		+0.20
Basrah Light fob Iraq†	Jan	Jan DME	+1.63		+0.02
Basrah Heavy fob Iraq†	Jan	Jan DME	+0.13		+0.02
Qatar Land	Jan	Jan DME	-0.97		+0.02
Qatar Marine	Jan	Jan DME	-0.72		+0.02
Qatar Al-Shaheen	Jan	Jan DME	-0.10		+0.03
Banoco Arab Medium	Jan	Jan DME	-0.57		+0.02

†Asia-Pacific destination-restricted cargoes

Methodology			\$/bl	
<b>Dubai forward month calculator</b>				
Ice Brent month 1	Jan			47.86
Dubai EFS month 1	Jan		-	0.82
Dubai swap month 2*	Jan		=	47.04
Dubai forward month 3*	Mar		=	47.04
Dubai intermonth	Feb/Mar		+	0.19
Dubai forward month 2	Feb		=	47.23
Dubai intermonth	Jan/Feb		+	0.27
Dubai forward month 1	Jan		=	47.50

\*Dubai swap month 2 = Dubai forward month 3

Oman forward month calculator					
	MOG formula	Dubai-Oman spread	Diff to Dubai swaps	Dubai swaps outright	Oman forward midpoint
Jan	+0.00	+0.85	+0.85	47.04	47.89
Feb	+0.00	+0.85	+0.85	46.99	47.84
Mar	+0.00	+0.59	+0.59	47.00	47.59

MIDEAST GULF

Brent futures and Dubai swaps, fell to an 82¢/bl premium from a 97¢/bl premium in the previous session.

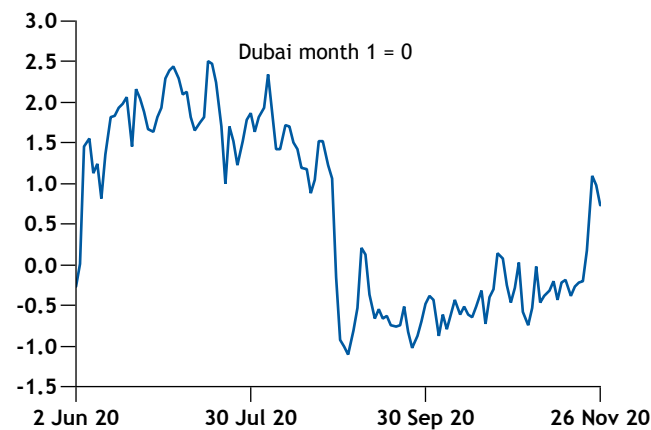
January Dubai partials were heard traded at \$47.46/bl.

**Change to Basrah Light and Heavy Asia-Pacific prices**

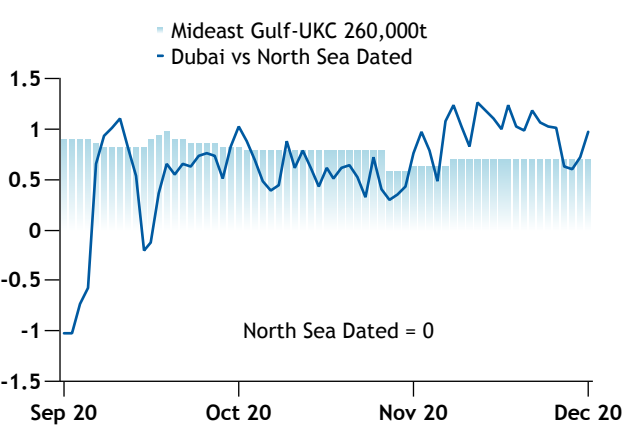
Following consultation, from 1 December 2020 Argus will adjust its Asia-Pacific destination Basrah Light and Basrah Heavy assessments to price cargoes loading one month from the month of publication, to be more aligned with the spot market for the grades. To discuss this change, please contact the Asia-Pacific crude editor Azlin Ahmad at azlin.ahmad@argusmedia.com.

Mideast Gulf		\$/bl			
	Bid	Ask	±		
<b>Dubai forward, 4:30pm Singapore</b>					
Jan	47.45	47.55	-0.11		
Feb	47.18	47.28	-0.32		
Mar	46.99	47.09	-0.31		
Apr	46.94	47.04	-0.28		
<b>Dubai forward, 4:30pm London</b>					
Jan	47.27	47.35	-0.05		
Feb	46.99	47.09	-0.26		
Mar	46.80	46.90	-0.25		
Apr	46.75	46.85	-0.22		
<b>Dubai intermonths, 4:30pm Singapore</b>					
Jan/Feb		+0.27	+0.21		
Feb/Mar		+0.19	-0.01		
Mar/Apr		+0.05	-0.03		
<b>Dubai swaps, 4:30pm Singapore</b>					
Dec	47.18	47.28	-0.32		
Jan	46.99	47.09	-0.31		
Feb	46.94	47.04	-0.28		
Mar	46.95	47.05	-0.25		
<i>Dubai swaps months are pricing months</i>					
<b>Dubai EFS, 4:30pm Singapore</b>					
Jan		+0.82	-0.15		
Feb		+0.79	-0.15		
Mar		+0.84	-0.10		
<b>Ice Brent, 4:30pm Singapore</b>					
Jan	+47.86		-0.46		
Feb	+47.78		-0.43		
Mar	+47.84		-0.35		
Apr	+47.89		-0.31		
<b>Oman forward, 4:30pm Singapore</b>					
	Diff	Dubai swaps	Bid	Ask	±
Jan	+0.85	Jan	47.84	47.94	-0.34
Feb	+0.85	Feb	47.79	47.89	-0.41
Mar	+0.59	Mar	47.54	47.64	-0.41

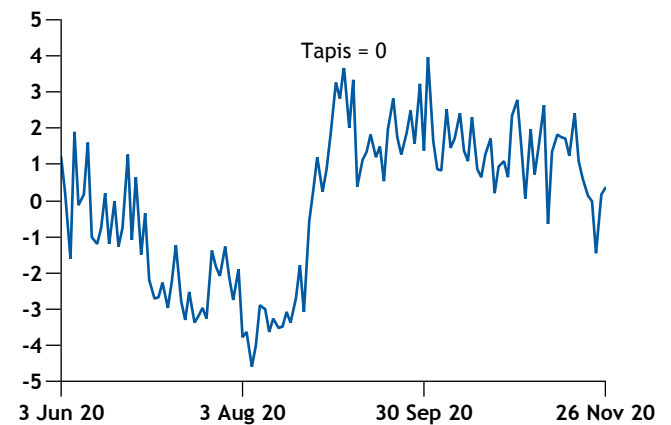
Cabinda vs Dubai month 1 \$/bl



Dubai vs North Sea Dated, MEG freight \$/bl



Dubai vs Tapis \$/bl



## ASIA-PACIFIC

January-loading Asia-Pacific crude cargoes continued to trade at firm premiums.

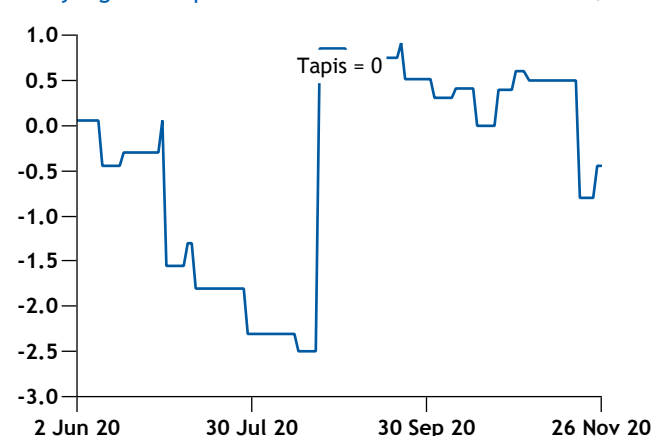
Malaysia's state-owned Petronas sold a cargo of Bunga Orkid loading in January to a trading firm at a premium of about \$2/bl to North Sea Dated. In October, Vietnam's state-owned PVOil sold December-loading Bunga Orkid at a small premium to Dated.

PVOil awarded its tender to sell 300,000 bl of medium sweet Bunga Kekwa loading on 18-24 January to Unipet at a premium to Dated but more details had yet to emerge. December-loading Bunga Kekwa cargoes had been sold between a small discount and a 50¢/bl premium to Dated.

Petronas sold 300,000 bl of Muda condensate for 1-7 January loading in a tender at a small premium to Dated to Thai Buyer. It also sold 300,000 bl of Cakerawala condensate to load on 10-19 January at a small premium to Dated, traders said. Petronas last sold a Muda cargo for November-loading at a discount wider than \$2/bl to Dated. Cakerawala was sold for December-loading at a discount of about 50¢/bl to Dated.

Qatar's state-owned QP awarded its tender to sell January-loading Deodorized Field Condensate (DFC) to a South Korean buyer at a discount slightly wider than \$1/bl to front-month Dubai assessments. QP awarded its January-loading Low Sulphur Condensate (LSC) tender to a trader at a discount smaller than \$1.50/bl to Dubai. QP sold December-loading LSC at a discount of \$1.00-1.20/bl to Dubai assessments but did not sell any December-loading DFC.

Bonny Light vs Tapis



Asia-Pacific					\$/bl
	Basis	Diff	Bid	Ask	±
Minas	ICP	+1.00	45.61	45.71	-0.46
Duri	ICP	+1.00	42.11	42.21	-0.46
Cinta	ICP	+0.30	44.61	44.71	-0.46
Widuri	ICP	+0.30	44.81	44.91	-0.46
Senipah	ICP	+2.00	43.61	43.71	-0.46
Attaka	ICP	+1.50	48.61	48.71	-0.46
Ardjuna	ICP	+0.00	42.86	42.96	-0.46
Belida	ICP	+1.00	44.56	44.66	-0.46
Sutu Den	Dated*	+2.00	48.29	48.39	-0.30
Bach Ho	Dated*	+2.00	48.29	48.39	-0.30
Tapis	Dated*	+0.80	47.09	47.19	-0.30
Kikeh	Dated*	+2.10	48.39	48.49	-0.30
Kimanis	Dated*	+2.20	48.49	48.59	-0.30
Labuan	Dated*	+2.50	48.79	48.89	-0.30
Miri Light	Dated*	+2.10	48.39	48.49	-0.30
Kutubu Light	Dated*	-0.30	45.99	46.09	-0.30
Cossack	Dated*	-0.50	45.79	45.89	-0.30
North West Shelf	Dated*	-0.50	45.79	45.89	-0.30
Ichthys	Dated*	+0.00	46.29	46.39	-0.30
Vincent	Dated*	+9.00	55.29	55.39	-0.30
Pyrenees	Dated*	+8.50	54.79	54.89	-0.30
Van Gogh	Dated*	+9.00	55.29	55.39	-0.30
Sudan					
	Basis	Diff	Bid	Ask	±
Nile Blend	Dated*	+0.10	46.39	46.49	-0.30
Dar Blend	Dated*	-0.15	46.14	46.24	-0.30

\*when North Sea Dated is unavailable owing to a UK holiday, Substitute Dated will be used

## Benchmarks

North Sea Dated	46.34
Substitute Dated	46.42
Tapis Singapore close	47.22

## Argus Condensate Index (ACI)

	\$/bl
ACI, Qatar DFC	46.45
Qatar DFC cfr Singapore	46.45
Australia North West Shelf (NWS) cfr Singapore	47.36
DFC cfr differential to NWS cfr	-0.91
	\$/t
VLCC Qatar-Singapore freight	3.83
Aframax northwest Australia-Singapore freight	5.68

## Argus Japanese Crude Cocktail Index

	May	Jun	Jul	Aug	Sep
Argus JCC (fixed)	24.9602	24.5550	32.7846	43.4527	
Argus JCC (preliminary)					46.1993

ASIA-PACIFIC

Delivered China

Limited trade kept spot premiums for key grades stable on a delivered ex-ship (des) Shandong basis.

February-delivery Tupi was at a \$2.50/bl premium to April Ice Brent. Some spot offers for February-delivery Tupi and Sapinhoa rose \$3.20-3.40/bl premiums to April Ice Brent. For Brazilian grades to be delivered in March, Tupi, Sapinhoa, Iracema and Bauna were offered around \$3.00-3.60/bl premiums to May Ice Brent for payment terms 10 days after notice of readiness (NOR).

Djeno premiums for February-delivery cargoes were stable at a \$2.10/bl premium to April Ice Brent, with offers above \$2.50/bl premiums. West African Dalia, Cabinda and Plutonio for delivery in February were offered at premiums of \$3.00-3.40/bl to April Ice Brent. Some deals were done for west African grades.

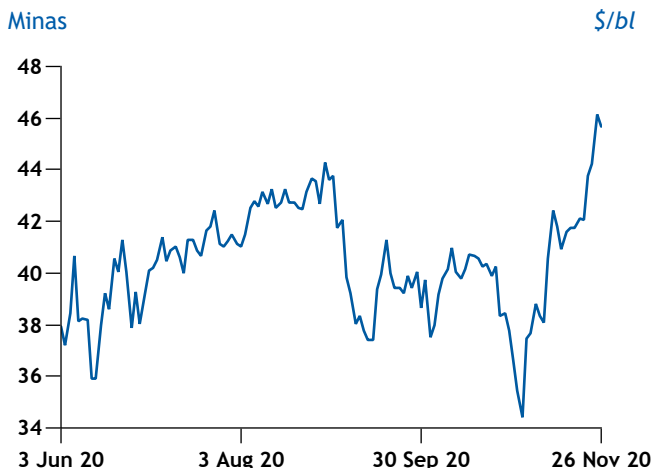
February-delivery Johan Sverdrup was steady at a \$2.30/bl premium to April Ice Brent. Some Johan Sverdrup cargoes for delivery in March were heard offered at \$2.50-2.70/bl premium to May Ice Brent.

January-delivery ESPO Blend was steady at a \$2.75/bl premium to March Ice Brent.

Delivered Northeast Asia						\$/bl
Month	Basis	Diff	Bid	Ask	±	
WTI del NE Asia	Feb	Jan Dubai	+1.50	48.49	48.59	-0.3100

Delivered ex-ship Shandong prices							\$/bl
Grade	Timing	Basis	Diff Mid	Low	High	Price	±
ESPO Blend	Jan	Mar Ice Brent	+2.75	50.44	50.74	50.59	-0.35
Djeno	Feb	Apr Ice Brent	+2.10	49.89	50.09	49.99	-0.31
Tupi	Feb	Apr Ice Brent	+2.50	50.29	50.49	50.39	-0.31
Johan Sverdrup	Feb	Apr Ice Brent	+2.30	49.99	50.39	50.19	-0.31
Oman	Feb	Apr Ice Brent	+1.30	49.09	49.29	49.19	-0.31

Mideast Gulf and Atlantic basin crude cfr Asia (fob plus freight)					
Month	Singapore		China		
	\$/bl	±	\$/bl	±	
<b>Mideast Gulf</b>					
Dubai	Jan	48.07	-0.11	48.34	-0.11
Oman	Jan	48.45	-0.34	48.72	-0.34
Murban	Jan	47.60	-0.31	47.86	-0.31
Upper Zakum	Jan	47.55	-0.31	47.82	-0.31
Qatar Marine	Jan	47.72	-0.32	47.99	-0.32
Al-Shaheen	Jan	48.36	-0.31	48.63	-0.31
Basrah Light	Jan	50.09	-0.32	50.37	-0.32
Basrah Heavy	Jan	48.61	-0.32	48.90	-0.32
<b>West Africa</b>					
Cabinda	Dtd	49.33	-0.79	49.58	-0.79
Girassol	Dtd	49.69	-0.79	49.95	-0.79
Bonny Light	Dtd	47.96	-0.44	48.21	-0.44
Qua Iboe	Dtd	47.95	-0.54	48.20	-0.54
Escravos	Dtd	48.22	-0.49	48.47	-0.49
<b>North Sea</b>					
Forties	Dtd			48.23	-0.64
<b>US Gulf coast</b>					
WTI		48.16	-0.25	48.66	-0.25
Mars	Dec	48.04	-0.19	48.56	-0.19
WCS	Dec	45.67	-0.34	46.21	-0.34



**RUSSIA ASIA-PACIFIC**

The market continued to wait for the release of the January Kozmino loading programme, as most cargoes have already been sold.

Some cargoes remain unsold while volumes sold earlier are expected to head to Chinese independent refiners, traders said.

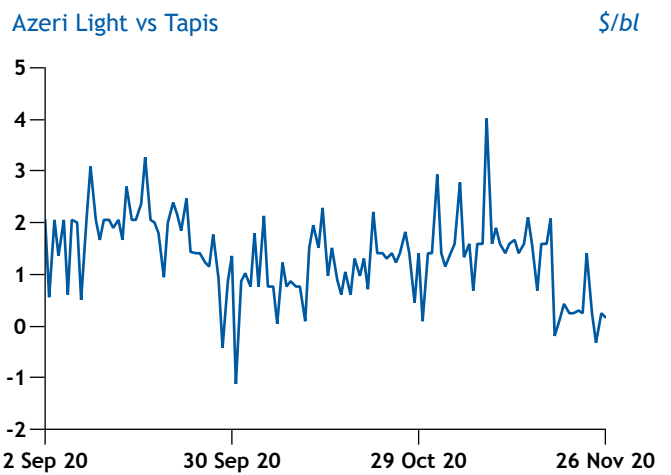
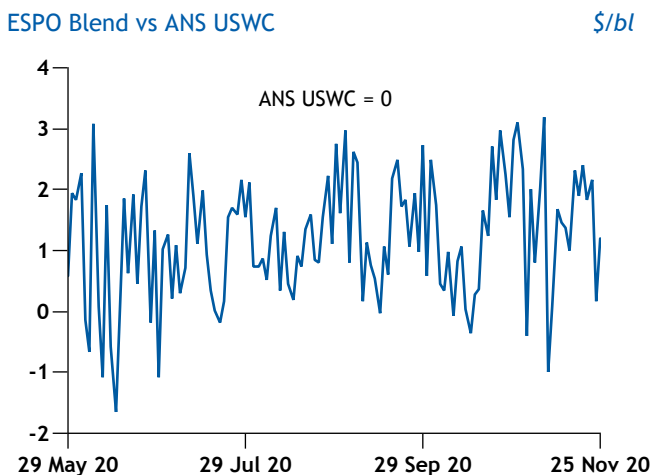
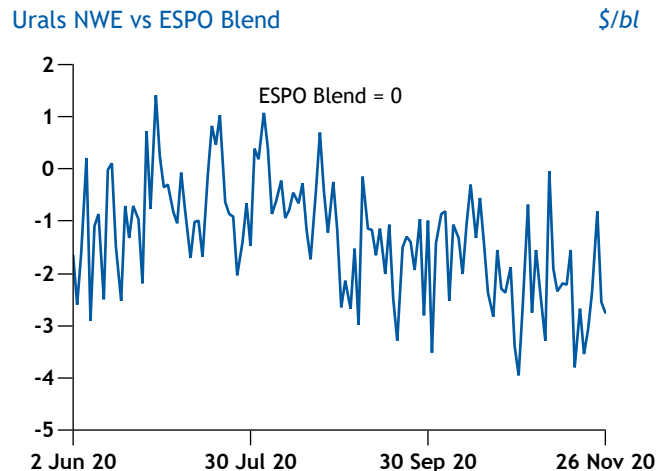
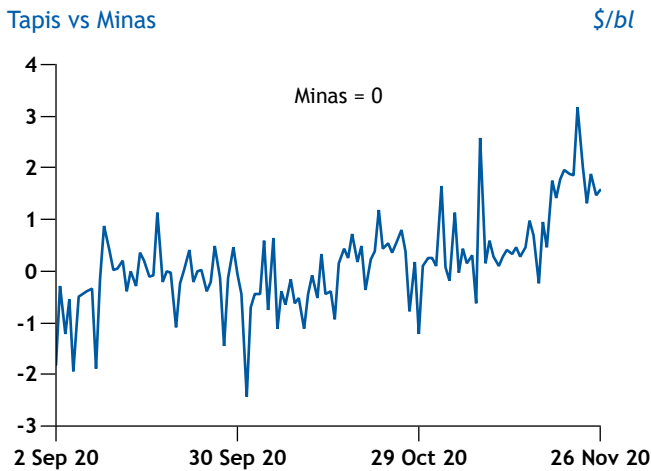
Mercuria will lift an ESPO Blend cargo from Kozmino on 8-9 December while Gunvor’s shipping arm Clearlake will lift one cargo on 10-11 December, with both cargoes destined for north China.

**Assessment rationale**

ESPO Blend fob Kozmino (PA0007196) is assessed on the basis of transactions, as and when these are identified in the market commentary, in accordance with the methodology.

Russia Asia-Pacific						\$/bl
	Basis		Diff	Bid	Ask	±
ESPO Blend	Jan	Dubai swaps	+2.04	49.03	49.13	-0.31
ESPO Blend*	Jan	Ice Brent	+1.22	49.03	49.13	-0.31
Sokol	Jan	Dubai swaps	+1.60	48.59	48.69	-0.31
Sakhalin Blend	Jan	Dubai swaps	+1.20	48.19	48.29	-0.31
*Jan-loading cargoes						
Russia-Caspian crude cif basis Singapore						
				Bid	Ask	±
BTC Blend				49.17	49.23	-0.33
Urals (Black Sea)				48.65	48.71	-0.30

Dirty freight rates from Kozmino (ESPO) 100,000t		\$/bl
		Rate
To Yosu		0.43
To north China		0.54
To Chiba		0.54
To Singapore		0.56



## OFFICIAL PRICES

Official formula prices		\$/bl		
Basis				
<b>Saudi Arabia</b>		Oct	Nov	Dec
<b>Saudi Arabia to US: fob Ras Tanura</b>				
Berri (Extra Light)	ASCI	+1.50	+1.40	+1.20
Arab Light	ASCI	+1.05	+1.05	+0.85
Arab Medium	ASCI	+0.35	+0.35	+0.15
Arab Heavy	ASCI	+0.00	+0.00	-0.20
<b>Saudi Arabia to US: delivered US Gulf</b>				
Berri (Extra Light)	ASCI	+2.80	+2.70	+2.50
Arab Light	ASCI	+2.35	+2.35	+2.15
Arab Medium	ASCI	+1.65	+1.65	+1.45
Arab Heavy	ASCI	+1.30	+1.30	+1.10
<b>Saudi Arabia to NW Europe: fob Ras Tanura*</b>				
Berri (Extra Light)	Ice Brent Settlement	-1.90	-1.90	-1.30
Arab Light	Ice Brent Settlement	-2.00	-2.00	-1.40
Arab Medium	Ice Brent Settlement	-1.90	-2.00	-1.30
Arab Heavy	Ice Brent Settlement	-2.00	-2.30	-1.30
<b>Saudi Arabia to Mediterranean: fob Sidi Kerir*</b>				
Berri (Extra Light)	Ice Brent Settlement	-0.60	-0.90	-0.45
Arab Light	Ice Brent Settlement	-1.00	-1.30	-0.55
Arab Medium	Ice Brent Settlement	-1.00	-1.50	-0.65
Arab Heavy	Ice Brent Settlement	-1.20	-1.50	-0.55
<b>Saudi Arabia to Mediterranean: fob Ras Tanura*</b>				
Berri (Extra Light)	Ice Brent Settlement	-1.20	-1.50	-1.10
Arab Light	Ice Brent Settlement	-1.60	-1.90	-1.20
Arab Medium	Ice Brent Settlement	-1.60	-2.10	-1.30
Arab Heavy	Ice Brent Settlement	-1.80	-2.10	-1.20
<b>Saudi Arabia to Asia-Pacific: fob Ras Tanura</b>				
Arab (Super Light)	Oman/Dubai avg	+0.55	+0.85	+0.65
Berri (Extra Light)	Oman/Dubai avg	-0.80	-0.60	-0.70
Arab Light	Oman/Dubai avg	-0.50	-0.40	-0.50
Arab Medium	Oman/Dubai avg	-0.30	-0.30	-0.20
Arab Heavy	Oman/Dubai avg	-0.30	-0.30	-0.30
<b>Iran</b>		Oct	Nov	Dec
<b>Iran to Mediterranean: fob Sidi Kerir</b>				
Iranian Light	Ice Bwave	na	na	na
Iranian Heavy	Ice Bwave	na	na	na
Foroozan Blend	Ice Bwave	na	na	na
<b>Iran to Mediterranean: fob Kharg Island</b>				
Iranian Light	Ice Bwave	-2.10	-2.35	-1.75
Iranian Heavy	Ice Bwave	-2.80	-3.15	-2.45
Foroozan Blend	Ice Bwave	-2.75	-3.20	-2.50
Soroush	Ice Bwave	-6.25	-6.55	-5.70
Nowruz	Ice Bwave	-6.25	-6.55	-5.70
<b>Iran to NW Europe: fob Kharg Island</b>				
Iranian Light	Ice Bwave	-2.10	-2.10	-1.55
Iranian Heavy	Ice Bwave	-2.85	-2.95	-2.30
Foroozan Blend	Ice Bwave	-2.90	-2.95	-2.35
<b>Iran to Asia-Pacific: fob Kharg Island</b>				
Iranian Light	Oman/Dubai avg	-0.45	-0.35	-0.45
Iranian Heavy	Oman/Dubai avg	-0.50	-0.50	-0.55
Foroozan Blend	Oman/Dubai avg	-0.50	-0.50	-0.55
Soroush	Oman/Dubai avg	-3.60	-3.60	-3.60
Nowruz	Oman/Dubai avg	-3.60	-3.60	-3.60
<b>Kuwait</b>		Oct	Nov	Dec
<b>Kuwait to Asia-Pacific</b>				
Kuwait	Oman/Dubai avg	-0.50	-0.50	-0.40
<b>Kuwait to US</b>				
Kuwait	ASCI	+0.85	+0.85	+0.40
Kuwait	Arab Medium	+0.50	+0.50	+0.25
<b>Kuwait to Mediterranean</b>				
fob Kuwait	Dated	-0.70	-0.70	-0.10
fob Sidi Kerir	Dated	-0.10	-0.10	+0.55
<b>Kuwait to northwest Europe</b>				
fob Kuwait	Dated	-1.75	-1.75	-0.85

Official formula prices (continued)		\$/bl		
Basis				
<b>Dubai</b>		Dec	Jan	Feb
Dubai fob	Oman MOG OSP	-0.20	-0.40	-0.40
<b>Yemen fob Salif/Ash Shihir</b>				
Marib Light	Dated	na	na	na
Masila	Dated	na	na	na
<b>Iraq</b>		Oct	Nov	Dec
<b>Iraq to Europe</b>				
Kirkuk (fob Ceyhan)	Dated	+0.30	+0.05	+0.65
Basrah Light	Dated	-0.70	-0.95	-0.20
Basrah Heavy	Dated	-2.65	-2.80	-1.85
<b>Iraq to US</b>				
Kirkuk (fob Ceyhan)	ASCI	+1.35	+1.45	+1.30
Basrah Light	ASCI	+0.40	+0.50	+0.40
Basrah Heavy	ASCI	-0.75	-0.65	-0.80
<b>Iraq to Asia-Pacific</b>				
Basrah Light	Oman/Dubai avg	+0.30	+0.30	+0.45
Basrah Heavy	Oman/Dubai avg	-1.00	-1.05	-0.95

\*months prior to July were priced against Ice Bwave

Official selling prices		\$/bl		
<b>Abu Dhabi</b>		Oct	Nov	Dec
Murban premium to Dubai		-0.50	-0.35	-0.25
Das premium to Murban		-0.35	-0.35	-0.35
Umm Lulu premium to Murban		+0.00	+0.00	-0.05
Upper Zakum premium to Murban		-0.20	-0.20	-0.20
<b>Qatar</b>		Oct	Nov	Dec
Dukhan/Land premium to Oman/Dubai avg		-0.90	-0.75	-0.75
Marine premium to Oman/Dubai avg		-0.75	-0.60	-0.65
<b>Oman</b>		Oct	Nov	Dec
Oman		44.32	41.60	41.11
<b>Indonesia</b>		Aug	Sep	Oct
Minas		43.22	39.11	39.64
Duri		48.05	45.61	44.23
Widuri		42.06	37.95	38.48
Belida		40.98	36.03	37.21
Attaka		41.40	35.84	37.01
Ardjuna		41.81	32.95	32.84
Cinta		41.51	37.40	37.93
Senipah		41.22	39.13	40.86
<b>Malaysia</b>		Aug	Sep	Oct
Tapis		46.97	42.81	39.05
MCO Alpha Premium		+3.55	+3.40	+0.30
Labuan		48.37	44.21	40.45
Miri		48.37	44.21	40.45
Kikeh		48.37	44.21	40.45
Bintulu		46.17	42.01	38.25
Dulang		48.17	44.01	40.25
<b>Brunei</b>		Jul	Aug	Sep
Seria Light		43.93	46.97	42.81
Champion		43.98	47.02	42.86

Reference prices		\$/bl		
<b>Opec reference basket monthly avg</b>		Aug	Sep	Oct
Opec		45.19	41.54	40.08
<b>Argus Japanese Crude Cocktail Index</b>		Jun	Jul	Aug
Argus JCC		24.56	32.78	43.45

The Argus Japanese Crude Cocktail Index is created by Argus based on data published by the Customs and Tariff Bureau of Japan's Ministry of Finance.



DEALS DONE

Global crude deals											\$/bl
Region	Grade	Deal date	Delivery period	Volume bl	Price	Diff timing	Diff basis	Diff price	Loading from	Loading to	
Northwest Europe	North Sea	26 Nov 20	Jan	400,000	47.70						
Northwest Europe	North Sea	26 Nov 20	Jan	100,000	47.73						
Northwest Europe	North Sea	26 Nov 20	Jan	100,000	47.82						
Northwest Europe	North Sea	26 Nov 20	Jan	700,000		Feb	North Sea	+0.00			
Northwest Europe	North Sea	26 Nov 20	Jan	100,000		Feb	North Sea	+0.00			
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		300,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 1.05	30 Nov 20	4 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.90	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.90	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.90	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.85	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.85	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		200,000		Feb	North Sea	- 0.85	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.85	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.85	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.85	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.85	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.85	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.86	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.86	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		200,000		Feb	North Sea	- 0.73	14 Dec 20	18 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		100,000		Feb	North Sea	- 0.72	14 Dec 20	18 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		300,000			CFD	- 0.13	7 Dec 20	11 Dec 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		200,000			CFD	+0.00	31 Dec 20	7 Jan 21	
Northwest Europe	North Sea Dated CFD	26 Nov 20		300,000			CFD	+0.00	31 Dec 20	7 Jan 21	
Northwest Europe	North Sea Dated CFD	26 Nov 20		500,000			CFD	+0.02	4 Jan 20	8 Jan 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		300,000			CFD	+0.02	4 Jan 20	8 Jan 20	
Northwest Europe	North Sea Dated CFD	26 Nov 20		475,000			CFD	+0.02	6 Jan 20	12 Jan 20	

## DAILY NETBACKS

Northwest Europe (26 Nov)									\$/bl
	Complex				Simple				
	Yield	Freight	Netback	± 25 Nov	Yield	Freight	Netback	± 25 Nov	
Arab Light	46.82	0.68	46.14	-0.25	46.75	0.68	46.07	-0.26	
Arab Heavy	44.81	0.71	44.10	-0.34	44.47	0.71	43.76	-0.49	
Azeri	49.06	0.68	48.38	-0.15	49.06	0.68	48.38	-0.15	
Basrah Light	44.56	0.70	43.86	-0.47	44.46	0.70	43.76	-0.48	
Bonny Light	49.63	0.95	48.68	-0.15	49.61	0.95	48.66	-0.12	
Brass River	48.79	0.92	47.87	-0.13	48.76	0.92	47.84	-0.16	
Brent	47.91	0.65	47.26	-0.20	47.80	0.65	47.15	-0.27	
Es Sider	47.92	0.68	47.24	-0.17	47.88	0.68	47.20	-0.19	
Forties	47.14	0.64	46.50	-0.20	46.98	0.64	46.34	-0.29	
Iranian Light	46.67	0.68	45.99	-0.22	46.58	0.68	45.90	-0.27	
Kirkuk	45.85	0.68	45.17	-0.29	45.81	0.68	45.13	-0.33	
Kuwait	45.19	0.70	44.49	-0.34	45.03	0.70	44.33	-0.43	
Murban	47.37	0.65	46.72	-0.09	47.20	0.65	46.55	-0.17	
Saharan Blend	47.43	0.64	46.79	-0.15	47.41	0.64	46.77	-0.15	
Urals	47.05	0.00	47.05	-0.20	46.94	0.00	46.94	-0.28	
Zueitina	48.03	0.67	47.36	-0.02	47.64	0.67	46.97	-0.11	

Singapore (26 Nov)									\$/bl
	Complex				Simple				
	Yield	Freight	Netback	± 25 Nov	Yield	Freight	Netback	± 25 Nov	
Arab Light	49.79	0.89	48.90	-0.26	47.01	0.89	46.12	-0.21	
Arab Heavy	49.21	0.93	48.28	-0.24	45.88	0.93	44.95	-0.18	
Basrah Light	49.14	0.92	48.22	-0.24	46.36	0.92	45.44	-0.22	
Dubai	49.94	0.91	49.03	-0.27	46.58	0.91	45.67	-0.33	
ESPO Blend	50.10	0.56	49.54	-0.20	46.35	0.56	45.79	-0.14	
Iranian Heavy	49.54	0.92	48.62	-0.25	45.90	0.92	44.98	-0.19	
Minas	49.86	1.09	48.77	-0.21	45.53	1.09	44.44	-0.07	
Murban	49.72	0.85	48.87	-0.28	46.76	0.85	45.91	-0.25	
Oman	49.61	0.91	48.70	-0.24	45.85	0.91	44.94	-0.18	

## INDUSTRY NEWS

### Algeria raises official December price

Algeria's state-owned Sonatrach raised its official formula price for December-loading Saharan Blend, the second consecutive increase.

The firm implemented a month-on-month increase of 20¢/bl, setting its flagship crude at a 25¢/bl premium to benchmark North Sea Dated next month.

This comes as Libyan crude production reached 1.25mn b/d just last week following a landmark ceasefire agreement to lift eight-month blockades.

Saharan Blend competes directly with Libya's light sweet Esharara crude, with production at the El Sharara field most recently pegged at around 220,000-230,000 b/d. But concerns over the reliability of recovering Libyan exports persist.

Firm buying interest from east-of-Suez buyers has otherwise supported Saharan Blend in recent sessions.

Algerian flows to Asia-Pacific destinations have averaged 171,000 b/d so far in November, compared with roughly 87,000 b/d over the entirety of last month, according to Argus tracking.

Argus most recently assessed Saharan Blend at a 25¢/bl premium to Dated. Libya's state-owned NOC is also expected to release its official formula prices for December sometime this week.

By Felix Todd

### Angola's January exports revised higher

Planned loadings of Angolan crude in January have been revised up to 1.18mn b/d, up from 1.15mn b/d in the preliminary schedule and in line with December.

The total is below Angola's Opec+ production quota.

One additional Girassol cargo is now on the schedule, pushing total exports of the grade up by 32,000 b/d from the preliminary programme. This extra cargo will load on 25-26 January and be marketed by ExxonMobil. The two other planned Girassol cargoes will now load earlier, on 4-5 and 14-15 January. Total exports of the medium-sweet grade now stand at 97,000 b/d in January, unchanged from December.

Exports of Clov were brought forward, with the three shipments now loading on 1-2, 12-13 and 24-25 January. The only Hungo cargo planned will now load four days earlier, on 17-18 January. It had been purchased by Chinese trading firm Unipac following a tender by state-run Sonangol.

## ANNOUNCEMENT

### Argus Sour Crude Index ("ASCI")

#### Proportional assessment

Following the end of the second trading quarter of 2020 and in accordance with the ASCI price methodology, Argus has revised the proportionality assigned to Mars, Poseidon and SGC to be used in the event that the combined volume minimum of 6,000 b/d is not met in any given trade day. The latest proportional assessment values are based on the volume of trade over the last six trade months and will be applicable for the next three trade months starting 26 May 2020 and ending 25 August 2020. Each grade has been assigned the following percentage values:

- Mars: 72pc
- Poseidon: 14pc
- SGC: 14pc

A table containing a history of the proportional assessment values can be found in the ASCI price methodology, which is available at <http://www.argusmedia.com/asci>. If you have any questions or would like to comment on these changes, please contact Gustavo Vasquez at [gustavo.vasquez@argusmedia.com](mailto:gustavo.vasquez@argusmedia.com) and (713) 968-0014, or Amanda Smith at [amanda.smith@argusmedia.com](mailto:amanda.smith@argusmedia.com) and (713) 968-0013.

## ANNOUNCEMENT

### Argus successfully completes annual losco assurance review

Argus has completed the ninth external assurance review of its price benchmarks covering crude oil, products, LPG, petrochemicals, biofuels, thermal coal, coking coal, iron ore, steel, natural gas and biomass benchmarks. The review was carried out by professional services firm PwC. Annual independent, external reviews of oil benchmarks are required by international regulatory group losco's Principles for Oil Price Reporting Agencies, and losco encourages extension of the reviews to non-oil benchmarks.

For more information and to download the review visit our website <https://www.argusmedia.com/en/about-us/governance-compliance>

## INDUSTRY NEWS

Both January-loading Plutonio cargoes have been pushed back, to 9-10 and 25-26 January.

Sonangol has placed all 17 cargoes it will market in January. It sold three in a tender, a rare move by the firm to capitalise on higher demand. Sonangol placed one cargo each of Saturno and Dalia with Norway's state-owned Equinor on the spot market, and trading firm Vitol purchased one cargo each of Cabinda and Girassol. Songangol allocated the other 10 cargoes to term buyers.

*By Andy Devine*

### Congo's exports unchanged in January

Loadings of crude from Congo (Brazzaville) will remain at 238,000 b/d in January, unchanged from December, according to the country's loading schedules.

A total of seven cargoes of Congo's flagship medium sweet Djeno are expected in January for a total of 208,000 b/d.

Exports of light sweet Nkossa are also unchanged on the month, with just one cargo scheduled for 31,000 b/d. The cargo is expected to load on 20-21 January and will be marketed by Russian firm Lukoil.

Congo's Opec+ production quota is scheduled to increase to 281,000 b/d in January from 266,000 b/d in December. But it is still unclear whether Opec+ will be extending current production caps. Some delegates have suggested that the group is considering a three-month extension of the current target at the start of 2021. The full Opec+ meeting is scheduled to be held on 1 December.

*By Andy Devine*

### Quality of Libya's Es Sider crude fluctuating

The quality of Libya's flagship Es Sider crude has been fluctuating in a 1-1.5°API range in recent weeks, according to traders.

Two sources say recently-loaded cargoes have been near the 37°API mark. This is close to state-owned NOC's specification for the grade, although the company has not conducted a full marketing assay for Es Sider since 2008, according to a Libyan source.

Other traders say recent Es Sider shipments have been well in excess of 38°API, which could reduce its competitiveness in the spot market among buyers who see it as a viable alternative to Russian crudes.

While many refiners opt for Es Sider as an alternative to light sweet Azeri BTC Blend, some – including Turkish refiner Tupras, which recently increased its spot purchases of the Libyan grade via tender – resort to Es Sider to displace volumes of Russian Urals and Siberian Light.

Es Sider's current quality fluctuations could regulate shortly, and might be the result of NOC subsidiary Waha Oil restarting the various fields that feed into the grade at different times, according to some traders.

The blockades that halted Libyan onshore crude production for much of this year began to be lifted in mid-September, but Waha Oil's fields have only gradually resumed output over the past four weeks. NOC removed force majeure restrictions at the Es Sider and Ras Lanuf export terminals on 23 October following the withdrawal of mercenary forces. Waha Oil delayed field restarts until some of the Es Sider crude that was being kept in storage had been shipped out.

*By Ruxandra Iordache*

### Rosneft sees 600,000 b/d from Vostok by 2024

Russian state-controlled Rosneft will be able to deliver 30mn t/yr (600,000 b/d) of crude from its planned arctic Vostok Oil project for export along the Northern Sea Route (NSR) by 2024, according to chief executive Igor Sechin.

The crude will probably be provided from already-producing fields or fields that are near commercial production in the Vankor province and be the result of redirection rather than of new development.

Sechin told Russia's President Vladimir Putin that provision of tax breaks has allowed for practical implementation of the project that will unite the producing Vankor, Suzun and Tagul fields, the under-development Lodochnoye field and undeveloped fields on the Taimyr peninsula. The government has offered tax concessions for Vankor conditional on creation of infrastructure to tie the field into the Vostok Oil project and on oil prices being over \$25/bl.

Rosneft already moves crude from Vankor, Suzun and Tagul to the Transneft pipeline system through its 500,000 b/d Vankor-Purpe pipeline. Once it builds a planned 770km pipeline to move crude from Vostok Oil fields to the planned Sever export terminal on Taimyr, it will probably abandon the Vankor-Purpe line because it has no other assets in the region.

Rosneft has placed Vostok Oil's crude and condensate reserves at 36.5bn bl. It earlier said that it was targeting output of 500,000 b/d in 2024, 1mn b/d by 2027 and 2.3mn b/d from 2030.

Last week Rosneft said that trading company Trafigura agreed to take a 10pc stake in the project. It did not say how much Trafigura will pay or whether it will receive off-take rights for future output.

The trading firm is a key buyer of Rosneft's crude, taking 70pc of its seaborne exports in November under a long-term

## INDUSTRY NEWS

pre-export financing contract.

By *Oksana Yablokova*

### Zarubezhneft offers Urals in Primorsk

Russian state-owned Zarubezhneft is offering 100,000 t/month of Urals crude from the Baltic port of Primorsk in the first quarter of 2021.

Tender results will be announced on 10 December following a two-stage auction through the Torg-i electronic platform of the St Petersburg International Commodity Exchange. The price will be based on a formula including the average Urals cif Rotterdam price, taking into account the 10

days of the month in which the cargo is supplied.

Cargoes will be formed using 56,700-68,200 t/month of crude supplied from Zarubezhneft-Dobycha Kharyaga, which is developing the Kharyaga field in Timan-Pechora, and 31,800-43,300 t/month from Rusvietpetro, a joint venture between Zarubezhneft and Vietnam's state-run PetroVietnam. Zarubezhneft reserves the right to increase or decrease the monthly supply volume by 10pc.

Trading company Gunvor won Zarubezhneft's tender for the sale of 100,000 t/month of Urals from Primorsk in the fourth quarter.

### Genel starts Sarta field in Iraq

Iraq-focused independent Genel Energy said production has started at the Sarta oil field in the semi-autonomous Kurdistan region of northern Iraq.

The first phase of the Sarta field involves tying two wells back to a 20,000 b/d early-production facility. The first well – Sarta 3 – is now producing oil. The second – Sarta 2 – is due on stream in January. Genel has not disclosed current output but said a stable level of production will be reached in the first quarter of 2021.

"The addition of Sarta further diversifies our production and cash flows", Genel chief executive Bill Higgs said.

The firm acquired a 30pc stake in Sarta from Chevron, the field's operator, in January 2019, along with a 40pc interest in the Qara Dagh block. It had targeted first oil at Sarta in the third quarter of this year, but the start-up was delayed by Covid-19 related operational challenges including the closure of borders and the slow movement of people and equipment.

The pandemic has also caused delays to appraisal drilling at Qara Dagh, with Genel declaring force majeure in May. The firm lifted the force majeure just over three weeks ago, and plans to begin drilling the QD-2 well in the first quarter of 2021, almost a year later than initially expected.

By *Beatrice O'Kelly*

### North Sea Vorlich oil field begins production

BP has begun production at the 20,000 b/d of oil equivalent (boe/d) Vorlich field, only the second crude field to come online in the UK North Sea this year.

Independent Ithaca Energy has a 34pc stake and has taken over operation of the field now it is on stream.

BP and Ithaca invested £230mn (\$307mn) to develop the 30mn bl field, which was discovered in 2014 and received approval for development in 2018. The past two years have been dedicated to bringing Vorlich online "against a highly

### Change to Urals Mediterranean assessments

Following consultation, on 1 June 2020 Argus will change its Urals Mediterranean 80,000t and 140,000t crude assessments to expand the range of allowable cargo sizes and to include supplies of Baltic Urals in the reporting of delivered Mediterranean prices.

Under this proposal:

- The Urals Med 80,000t assessment will be renamed Urals Med Aframax, and will include cargoes in an 80,000-100,000t range. The location and timing of the assessment remain unchanged – cargoes will be assessed on a cif Augusta, Italy, basis for loading 10-25 days ahead. Pre-loaded cargoes will continue to be considered for inclusion in the assessment, if they are accepted by buyers as meeting their requested loading dates. For the avoidance of doubt, the proposed change will effectively allow deliveries of Baltic Sea Urals to contribute towards the Urals Mediterranean Aframax assessment.
- The Urals Med 140,000t assessment will be renamed Urals Med Suezmax. The basis, timing and cargo size of the assessment will not change.
- The Siberian Light assessment will include cargoes in an 80,000-85,000t range. The basis and timing of the assessment will not change.
- The Urals fob Novorossiysk 80,000t netback will be renamed Urals fob Novorossiysk Aframax, and will be the netback value of 80,000-100,000t cargoes.
- The Urals fob Novorossiysk 140,000t netback will be renamed Urals fob Novorossiysk Suezmax, and will be the netback value of 140,000t cargoes.

## INDUSTRY NEWS

challenged backdrop", BP's senior vice president for North Sea operations Emeka Emembolu said.

First production from Vorlich was planned for September, but lockdowns, travel and work restrictions and low oil prices that accompanied the Covid-19 pandemic caused delays in development. Ithaca warned of Vorlich's delayed start-up in June, when it said it made a loss of \$489mn in the first quarter of this year. It pushed the start-up date back to the fourth quarter.

Vorlich is the latest in BP's programme of subsea tie-backs, which aims to generate quick cashflow through high-return projects. It follows the start-up of Alligin, in the west of Shetland region, the only other UK North Sea oil field start up this year. Vorlich ties back to the Ithaca-operated Greater Stella Area production hub.

By Beatrice O'Kelly

### Sinopec's Maoming refinery takes US crude

Chinese state-controlled Sinopec's Maoming refinery in south Guangdong province has taken US crude this month, although crude trade between the US and China remains volatile.

Sinopec's largest plant, the 470,000 b/d Maoming refinery, processed a cargo of US Southern Green Canyon (SGC) this month, Sinopec said.

Two cargoes totalling over 500,000 bl of medium sour SGC discharged at Maoming's Shuidong terminal this month, data from oil analytics firm Vortexa indicate. Another 200,000 bl cargo of US medium sour Mars also discharged this month at the terminal.

The Maoming refinery, which is one of the company's more versatile plants, has also processed medium sour including Guyana's Liza and Qatar's Al-Shaheen this year. The refinery also processes condensate on a regular basis and has replaced this with US crude in the past.

China's crude imports from the US remained volatile, falling to 384,400 b/d in October after hitting a record high of 952,000 b/d in September.

Sinopec aims to build a new 10.1mn bl commercial storage facility at Beishanling, Maoming by next year that will supplement the refinery's crude storage needs. Maoming, which partly relies on Zhanjiang port to import crude, has faced demurrage problems at the port this year because of congestion. Crude from Zhanjiang port is shipped via a 120km pipeline to the Maoming plant.

The refinery is also one of 10 Sinopec plants designated to produce very-low sulphur fuel oil (VLSFO). Maoming's VLSFO output rose to a monthly record high of 17,000 b/d in

October and averaged just under 10,000 b/d from January-October, Sinopec said.

By Karen Teo

### Cameroon 2021 budget oil price at \$44/bl

Cameroon has assumed a \$43.80/bl oil price for its 2021 budget, which proposes rehabilitation of the state-owned Sonara refinery that has been shut since a fire in May 2019.

The budgeted oil price is above the \$41/bl set in the 2020 budget revision of June, but well below the \$54/bl initially forecast for this year.

The country's 2021 budget is 4.86 trillion central African franc (CFA) (\$8.82bn), above the CFAfr4.40 trillion in the revised 2020 budget but below the CFAfr4.95 trillion originally planned for 2020.

The 2020 budget is based on an average production of around 73,000 b/d. No revisions to this are in the revised 2020 budget or in the 2021 proposal.

Yaounde aims to launch a \$454mn rehabilitation of the 42,000 b/d Sonara refinery in Limbe. Immediately after the closure, the government set in place a mechanism to ensure provision of oil products to the domestic market.

"Since the new mechanism went operational, a volume of 916,000m<sup>3</sup> [5.76mn bl] of all products combined has been supplied to Cameroon", said a note in the budget proposal.

By Nicola De Sanctis

### UN can inspect decaying tanker offshore Yemen

The UN said it has received permission to inspect a decaying 46-year-old tanker floating offshore Yemen, which is threatening to spill 1.14mn bl of crude in the Red Sea.

Ship tracking show that the tanker *Safer*, which has been operated as a floating storage unit off Yemen since 1988, is moored off the Yemeni port of Hodeidah. Clashes between forces allied with the Saudi-backed government and the Houthi militia group have recently resumed in the area despite a ceasefire first agreed in December 2018. The ownership of the ship has been contested since the start of the civil war in 2015.

The UN said earlier this year that a leak that flooded the tanker's engine room in May threatened the stability of the crude stored on board. A spill would close the Yemeni port of Hodeidah for up to six months, would wash up in other countries that meet the Red Sea, including Saudi Arabia, and would affect shipping heading to and from the Suez Canal, it said.

Saudi Arabia's UN ambassador Abdallah al-Mouallimi wrote to the UN Security Council in September saying that

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an oil spot has been “observed 50 kilometres west of the [Safer] inside the transit area of merchant ships.”

UN spokesperson Stephane Dujarric confirmed that the de facto Houthi authorities on 21 November approved plans for a UN-led export team to examine the tanker. “The objective of the UN-led expert mission is to assess the vessel and undertake initial light maintenance, as well as to formulate recommendations on what further action is required to neutralize the risk of an oil spill,” he said.

The UN hopes the mission will start by late January or early February, but Dujarric said that the organisation must still “work out the exact deployment timeline”. This will depend on the market availability of relevant staff and equipment, some of which must be shipped by sea, he said.

Similar negotiations to grant the UN access to the *Safer* have been conducted in the past without resulting in immediate action.

The UN’s announcement of the Houthi concession comes after the group confirmed on 23 November it had carried out an attack against an oil distribution facility in Saudi port Jeddah, according to the Houthi-controlled Saba news agency.

*By Ruxandra Iordache*

### Petrobras plans leaner, greener spending

Brazil’s state-controlled Petrobras has slashed capital spending and reduced medium-term oil production growth targets in its \$55bn 2021-25 business plan that was released earlier than expected late yesterday.

The plan envisages around \$46.2bn in upstream spending over the next five years, of which around 70pc or \$32bn is earmarked for pre-salt assets. The company’s previous \$75.7bn 2020-24 plan had allocated 84pc or around \$64bn of capital spending to its upstream operations, including around \$38bn for pre-salt.

Under the new plan, spending will peak at around \$10.5bn in 2023, when Petrobras is expected to accelerate contracting for the Buzios pre-salt field, its crown jewel. Buzios is forecast to produce around 2mn b/d of 28°API crude through 12 production platforms by 2030, from a current 600,000 b/d.

Petrobras has set a \$35/bl breakeven baseline for all new upstream spending, a threshold that could sideline some costlier post-salt projects. Excluding pre-salt, the \$14bn in planned upstream spending is around 24pc below the allotment of the previous plan.

Petrobras expects to bring 13 deepwater production systems on stream through 2025. The previous plan targeted

12 units through 2024, when the company’s domestic oil production was expected to reach 2.9mn b/d.

The company is now targeting a more modest 2.6mn b/d of domestic oil production by 2024 and 2.7mn b/d by 2025. Crude flows are expected to reach around 2.2mn b/d this year and remain there in 2021 as a result of the Covid-19 pandemic and planned divestments of mainly shallow-water assets. The company’s output is expected to climb gradually to 2.3mn b/d in 2022 and 2.5mn b/d in 2023, though flows could be lower depending on the timing of its divestments of around 600,000 b/d of oil equivalent (boe/d) in assets over the next five years.

Total production including natural gas is slated to climb to 3.3mn boe/d in 2025 from 2.75mn boe/d in 2021.

In May, Petrobras revised its mid-term crude price assumptions to reflect the fallout from the ongoing pandemic and the Saudi-Russian price war earlier this year. The company expects crude prices to average just \$25/bl this year and climb to \$50/bl by 2024.

Petrobras did not disclose details of divestment revenue targets in the coming years, but said its portfolio covers 50 assets. The previous plan envisaged the sale of around \$20bn-\$30bn in non-core assets. The firm is currently [selling around half of its 2.2mn b/d of domestic refining capacity.

Asset sales and reduced capital spending are part of Petrobras’ strategy to bring its debt level to \$60bn by 2022. The company ended the third quarter with around \$71.2bn in net debt.

Notably, Petrobras did not provide a breakdown of spending outside of its core upstream segment, but it indicated that downstream spending will continue to diminish over the five-year period.

Petrobras has set new more aggressive emissions targets just weeks after establishing a climate change division tasked with leading the company in lowering emissions, boosting energy efficiency and monitoring climate. The firm is targeting a reduction of its total operational absolute emissions by 25pc by 2030.

In the upstream segment, Petrobras envisages zero routine flaring by 2030, increased CO<sub>2</sub> re-injection, a 30pc reduction in methane emissions, and a 32pc reduction in upstream carbon intensity by 2025. Downstream, the company plans to reduce carbon intensity by 16pc by 2025 and by 30pc in 2030, and is also targeting a 50pc reduction in water collection by 2030.

The company had been expected to release the new plan at the end of November to coincide with investor day.

*By Nathan Walters*

## INDUSTRY NEWS

### UK's Ithaca sticks to 2020 output guidance

UK North Sea-focused firm Ithaca Energy has reiterated its full-year production forecast although output fell in the third quarter of this year.

Ithaca, which is owned by Israeli firm Delek, still expects its 2020 output at the top end of its 63,000-68,000 b/d of oil equivalent (boe/d) guidance range, after production averaged 68,000 boe/d in January-September. In the first half of the year, output averaged 72,800 boe/d.

Before the Covid-19 pandemic, Ithaca had forecast production of 70,000-75,000 boe/d in 2020.

Delek said in September it was in talks with unnamed third parties about a possible merger of Ithaca.

By Konstantin Rozhnov

### India ups UAE imports, cuts Iraq, Saudi imports

India's crude imports from its usual two largest suppliers Iraq and Saudi Arabia fell by 20pc and 19pc, respectively, in September from a year earlier as refining runs remained below pre-Covid-19 levels.

The UAE became India's second-biggest crude supplier in September, overtaking Saudi Arabia by 1,000 b/d.

India imported 714,000 b/d from Iraq and 551,000 b/d from Saudi Arabia in September compared with 892,000 b/d and 679,000 b/d, respectively, a year earlier, customs data show. This was also lower than August purchases of 928,000 b/d from Iraq and 689,000 b/d from Saudi Arabia.

Imports from the US declined by 19pc to 95,000 b/d from 118,000 b/d a year earlier. The country's US purchases rose by 40pc on the year to 292,000 b/d in August, but surprisingly fell in September.

Venezuela exported 129,000 b/d of crude to India in September compared with 284,000 b/d a year earlier. India resumed imports from Venezuela in August after halting purchases since June, although they were down by 62pc on the year at 102,000 b/d. Private-sector Reliance Industries and Russia's Rosneft-owned Nayara Energy stopped Venezuelan imports in June and July because of US sanctions.

India's crude imports from the UAE surged by 33pc to 552,000 b/d in September compared with 414,000 b/d a year earlier. It was unclear if the UAE, which has booked capacity at India's strategic petroleum reserve and trades its crude, was replenishing stocks. Its August sales to India reached 384,000 b/d.

India did not take any cargoes from Russia in September compared with purchases of 62,000 b/d in August and 34,000 b/d a year earlier. Imports from Nigeria, a supplier of sweet grades, fell by 44pc on the year to 244,000 b/d. Total crude

imports of 3.17mn b/d in September fell by 17pc from a year earlier, according to customs data. This was lower by around 50,000 b/d from September, according to crude import data released by the oil ministry. The ministry's data usually differ from figures released by India's customs, although it is unclear why.

Crude runs fell to 4.33mn b/d in September from 4.74mn b/d a year earlier and a targeted 5.07mn b/d, according to preliminary oil ministry data. India depends on imported crude to meet around 86pc of its needs.

India's Covid-19 case count is rebounding at over 40,000 daily infections following a lull, prompting the federal government to ask states to impose night curfews. Cases have exceeded 9.2mn.

By S Dinakar

### Dutch liquids production declines in September

Crude and condensate output in the Netherlands was 15,100 b/d in September, down by 10pc from August.

Production was 2pc below the average for the same month last year and 32pc below the average for the past five years. The country's output is in long-term decline.

Crude accounted for 88pc of September's output, or 13,300 b/d, which was 9pc lower than in August. The drop was likely driven by maintenance as at least three fields including the country's large offshore Amstel field were offline in September. Declines were observed at other smaller fields.

Output at Schoonebeek Olie – one of the Netherlands' larger onshore fields – averaged 7,100 b/d in September, up from 5,700 b/d in August. Another offshore field, Charlie North has likely started production at 1,000 b/d.

By Riyan Zerrouki

### Repsol to cut upstream spend in 2021-2025

Spain's integrated Repsol is planning sharp cuts to investments in its core upstream business in 2021-2025 while maintaining production, to focus on low-carbon spending.

The firm plans to invest around €1.6bn/yr (\$1.9bn/yr) in its upstream business in 2021-2025, compared with €2.4bn in 2019 and the €2.6bn/yr announced in its previous 2018-2020 strategic update.

Total spending in upstream over the period will account for €8bn, or around 44pc, of total budgeted investment of €18.3bn, while investments in the low carbon business – including renewables and biofuels – will amount to €5.5bn, or 30pc of the total.

Repsol plans to produce about 650,000 b/d of oil equivalent



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lent (boe/d) over the plan, in line with its current target for 2020 output, although it said that it will cut back on exploration. It will also continue to sell upstream assets where it has little geographical presence, after already exiting exploration in Papua New Guinea and Vietnam, and its production business in Ecuador in 2020.

The firm said it plans to become a global low-carbon generation operator, with a capacity of 7.5GW by 2025 and 15GW by 2030. "Repsol's seven large industrial sites in Spain, Portugal, and Peru will continue their transformation to become multi-energy hubs," the firm said.

Repsol also said that it will cut its dividend initially by a third to €0.60/share in 2021 from 2020, partly to finance its new plan.

The strategy is based on a scenario that has Dated Brent at \$50/bl and Henry Hub gas prices at \$2.5/mbtu.

*By Jonathan Gleave*

### Abu Dhabi expands seismic survey

Abu Dhabi's state-owned Adnoc has awarded a \$519mn contract to BGP, a subsidiary of China's state-owned CNPC, to expand an ongoing seismic survey as it looks to unlock new

oil and gas resources.

The deal expands the scope of a \$1.6bn 3D seismic survey contract signed with BGP in 2018, which covers 30,000km<sup>2</sup> offshore and 23,000km<sup>2</sup> onshore, Adnoc said. The area to be covered is now 85,000km<sup>2</sup>, including coastal areas, islands and shallow waters.

The seismic acquisition will capture high-resolution 3D images of the subsurface structure at ultra-deep locations and help to pinpoint potential hydrocarbons. The first contract is 60pc complete and the entire survey, including the added coastal scope, will be completed in 2024.

The data acquired are already being used by the winners of Adnoc's first exploration licensing round, that is held last year. They will also be used by the winners of the second round, results of which are likely from the country's Supreme Petroleum Council (SPC) by the end of this year.

The SPC said on 22 November that Abu Dhabi has added 24bn bl of oil reserves, taking its total to more than 129bn bl. Adnoc aims to use discoveries made at the new licenses to help sustain its long-term production capacity target of 5mn b/d by 2030. The country can currently produce as much as 4mn b/d.

*By Adal Mirza*

## ANNOUNCEMENTS

### Changing USGC-Europe Aframax methodology

Argus is changing the discharge area and adjusting the underlying basket of flat rates for its USGC-Europe 70,000t assessment (PA0023001) effective 9 December.

Effective 9 December, Argus is limiting the assessment to discharges between Gibraltar to Hamburg, including the UK and North Sea ports and adjusting the underlying basket of flat rates to normalize the corresponding \$/t assessment (PA0022999) to Rotterdam discharge.

Argus is also renaming the assessment to "USGC-UKC 70,000t" from "USGC-Europe 70,000t".

For further details, please contact Nicholas Watt at [nicholas.watt@argusmedia.com](mailto:nicholas.watt@argusmedia.com) or +1 646 376 6132.

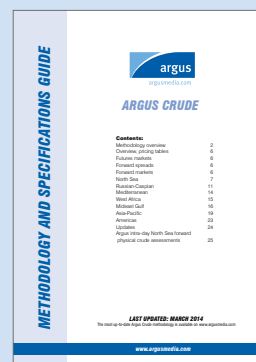
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#### Registered office

Lacon House, 84 Theobald's Road, London, WC1X 8NL  
Tel: +44 20 7780 4200

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**Global SVP editorial**  
Neil Fleming

**Editor in chief**  
Jim Washer

**Managing editor**  
Jim Kennett

**Editor**  
Michael Carolan  
Tel: +44 20 7780 4305  
[crude@argusmedia.com](mailto:crude@argusmedia.com)

**Customer support and sales:**  
[support@argusmedia.com](mailto:support@argusmedia.com)  
[sales@argusmedia.com](mailto:sales@argusmedia.com)

**London, UK**  
Tel: +44 20 7780 4200

**Astana, Kazakhstan**  
Tel: +7 7172 72 92 94

**Beijing, China** Tel: + 86 10 6598 2000

**Dubai** Tel: +971 4434 5112

**Moscow, Russia** Tel: +7 495 933 7571

**Sao Paulo, Brazil**  
Tel: +55 11 3235 2700

**Singapore** Tel: +65 6496 9966

**Tokyo, Japan** Tel: +81 3 3561 1805

**Argus Media Inc, Houston, US**  
Tel: +1 713 968 0000

**Argus Media Inc, New York, US**  
Tel: +1 646 376 6130

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