

Regional Sector Update

9 March 2020

Energy | Regional Oil & Gas

Regional Oil & Gas

Overweight (Maintained)

No Deal For OPEC+, Price War Begins

Stocks Covered 12/8/1 Ratings (Buy/Neutral/Sell): Last 12m Earnings Revision Trend: Negative

Maintain OVERWEIGHT; Top Picks include PTTGC, Keppel and Yinson. The recent OPEC+ meeting ended without an agreement. A compromise may come in the future, but there are no such signs for now. Russia said that members can now produce what they like from 1 Apr onwards. Saudi Arabia did not waste time and started an all-out price war by slashing its official selling price by the most in 20 years on Saturday. We pare down our 2020 crude oil price assumption to USD47.00/bbl from USD62.30/bbl.

Top Picks Target Price PTT Global Chemical THB59.00 (PTTGC TB) - BUY Keppel Corp (KEP SP) - BUY SGD7.80 Yinson (YNS MK) - BUY MYR8.22

 OPEC+ has no deal. OPEC and its alliance met on 6 Mar, and ended without reaching an agreement of any sort. We believe OPEC+ will continue to hold talks - the next official meeting will be held on 9-10 Jun. Due to extreme uncertainty on the current situation, Russia has been unwilling to go along with this emergency production cut. Russia was willing to extend the current production cuts out to June, but there was a harder push for OPEC+ to agree on the 1.5mbpd extra cut. Under this proposal, the alliance would shoulder an additional 500kbpd cut, and OPEC, the extra 1mbpd decrease.

• Saudi Arabia has already started an all-out oil price war. Russia walked out on the deal, indicating that it wants more time to assess the impact of the COVID-19 outbreak on demand. Russian Energy Minister Alexander Novak

said that members could now pump what they like from 1 Apr onwards. Saudi

Arabia wasted no time and commenced an all-out oil price war on Saturday,



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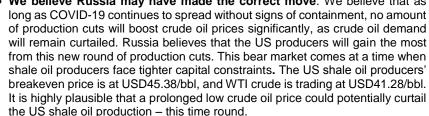


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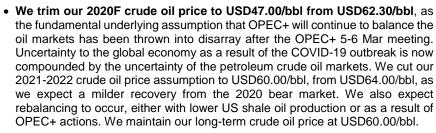


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according to Bloomberg, by slashing the official selling price of its flagship crude Arab Light by the most in 20 years, in an effort to push as many barrels into the market as possible. We believe Russia may have made the correct move. We believe that as long as COVID-19 continues to spread without signs of containment, no amount of production cuts will boost crude oil prices significantly, as crude oil demand



the US shale oil production - this time round.



• OVERWEIGHT. All stocks under our coverage should be under pressure, due to the uncertainty of both the COVID-19 impact and oil market being in disarray. We are NEUTRAL on the Thai oil & gas sector, while our ratings on the Singapore and Malaysia sector are still OVERWEIGHT. Top Picks are PTT Global Chemical, Keppel, Serba Dinamik, and Yinson.

Russia walked out of the OPEC+ meeting on implementing emergency cuts



Source: dw.com, AP

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OPEC+ No Deal The Worst-Case Scenario Is Here Crude Oil Price Outlook Global Production Data

Company	Rating	TP	% Upside (Downside)	P/E (x) Dec-20F	P/BV (x) Dec-20F	Yield (%) Dec-20F	
PTTGC	BUY	THB59.10	39.88	13.50	0.66	5.66	
Yinson	BUY	MYR8.22	17.43	19.72	1.99	0.57	
Serba Dinamik	BUY	MYR2.82	24.23	11.95	2.47	2.64	
Keppel	BUY	SGD7.80	25.40	10.91	0.96	4.50	



OPEC+ No Deal

OPEC+ has no deal. OPEC and its alliance meeting on 6 Mar ended without reaching an agreement of any sort. Due to extreme uncertainty on the current situation, Russia has been unwilling to go along with this emergency cut. It was willing to extend the current production cuts out to June, but there was a harder push for OPEC+ to agree on the 1.5mbpd extra cut. Under this proposal, the alliance would shoulder an additional 500kbpd cut, while OPEC would bear the extra 1mbpd cut.

Figure 1: Russian Energy Minister Alexander Novak walked out the OPEC+ emergency cut.



Source: russiart

Russia walked out on the deal, indicating that it wants more time to assess the impact of the COVID-19 outbreak, on demand. Russian Energy Minister Alexander Novak said that members could now pump what they like from 1st Apr onwards. When asked about Saudi Arabia's decision, Prince Abdulaziz bin Salman said, "I will keep you wondering".

Saudi Arabia has already started an all-out oil price war on Saturday, according to Bloomberg, by slashing the official selling price of its flagship crude Arab Light by the most in 20 years, to push as many barrels into the market as possible. Saudi Aramco lowered its pricing for crude oil sales to Asia by USD4.00-6.00/bbl and by USD7.00/bbl to the US. Saudi Aramco cut its price on Arab Light to a discount of USD3.10/bbl below the Middle East benchmark. The drop in its oil pricing is an indication of how Saudi Aramco will respond to the failure of the OPEC+ meeting.

We believe OPEC+ will continue to hold talks. The next official meetings will be held on 9-10 Jun for OPEC and the non-OPEC alliance.

We believe that Russia may made the correct move this round:

- i. We do not expect that crude oil prices will see any significant rebound for a prolonged period of time, even with any material extra cuts. This is mainly due to the fear of travel and mass gatherings as a result of the covid-19 outbreak. The impact on the global economy both social and economic and ultimately the impact of global oil demand still remains highly uncertain;
- ii. Russia believes that the US producers would gain the most from the new efforts to prop up crude oil prices this time round, according to the Financial Times. Keep in mind that Russia has been riled by the US sanctions on the trading arm of Rosneft and Nord Stream 2, the proposed new gas pipeline between Russia and Europe;

The US shale oil producers' breakeven price was at USD45.38/bbl as of January. A steeper fall in crude oil price will result in widespread pain for the US oil shale industry. This comes at a time when shale producers face tighter capital constraints to keep up with its production. A price war now could potentially push US shale oil companies already at risk of bankruptcy over the edge, according to the Financial Times.



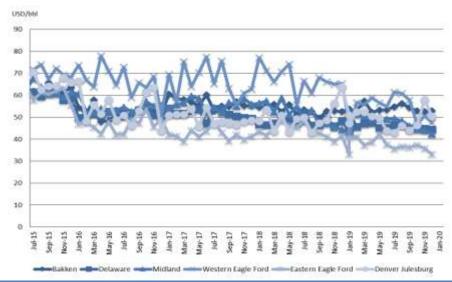
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Of note, Saudi Arabia is the world's lowest-cost producer, but requires about the price to be at USD83.00/bbl to balance the state budget, while Russia requires USD42.40/bbl.

With WTI currently trading at USD41.28/bbl, we believe that it is possible that a sustained low crude oil price level will result in much lower US shale oil production and, as such, a lower US crude oil output for the year.

- i. The highest-cost basins are the Bakken Formation (USD53.74/bbl) and Denver Julesburg (USD50.00/bbl). The Bakken Formation produces 1.4mbpd and Denver Julesburg produces 814kbpd;
- ii. The largest producing basin is the Permian basin, at 5.3mbpd its average breakeven cost is c. USD43.50-43.80/bbl;
- iii. The lowest-cost producers are in the Eastern Eagle Ford basin, with a breakeven cost of USD33.14/bbl. The Eagle Ford basin currently produces 1.4mbpd of shale oil.

Figure 2: US shale oil producers' costs averaged USD45.38/bbl as of Jan 2020



- As of Jan 2020, the average breakeven cost for US shale oil producers was USD45.38/bbl
- The Bakken Formation and Denver Julesburg basin's breakeven points are among the highest, at more than USD50.00/bbl, while the Eastern Eagle Ford Basin has one of the lowest: c.USD33.14.00/bbl
- The Permian basin's average breakeven points is at c.USD43.50-44.00/bbl

The Worst-Case Scenario Is Here

We had expected the worst-case scenario of USD40.00/bbl (Brent, average) to enter sometime this year as the global economy slows, crude oil sees demand destruction as a result of the COVID-19 outbreak, and this will eventually send crude oil prices to the USD40.00/bbl mark. However, this scenario may happen sooner, ie most likely this week. This is because the OPEC+ meeting failed to result in any sort of deal. OPEC and its alliance are under no obligation to restrain production

OPEC has a total spare capacity of 3.36mpbd, where it can increase production within 90 days. Saudi Arabia alone has the capacity to increase production by c.2.2mbpd, while Russia has been restraining c.100kbpd-200kbpd for the duration of the production cut agreement. We think the period of oversupply and low crude oil prices will be around for quite some time, until the producers can come to another agreement of sorts.

Our worst-case scenario is here. We assume that this will happen for the duration of the COVID-19 outbreak being still widespread, and that governments worldwide cannot contain the virus from spreading globally. We assume that normalcy would return by 2021, as a vaccine should be found and distributed globally by then. We performed the worst-case scenario analysis in our 2 Mar report, and we believe these downsides are still quite valid (please see our 2 Mar report titled *The Price Of Uncertainty* for more details).

Figure 3: Worst-case scenario: USD40/bbl (Brent)

J	()	Base case Target	Worst case Target	(%) Downside from base case	
Company	Rating	(THB)	(THB)		
Thailand: NEUTRAL (THB/share)					
Upstream Exploration & Production					
PTTEP	BUY	147.00	92.00	-37%	
Refineries and petrochemicals					
BCP	NEUTRAL	30.00	17.08	-43%	
IRPC	SELL	2.50	1.64	-34%	
PTTGC	BUY	59.10	32.70	-45%	
TOP	NEUTRAL	48.70	30.40	-38%	
SPRC	BUY	10.70	5.34	-50%	
Integrated Oil & Gas					
PTT	NEUTRAL	43.30	27.30	-37%	
Malaysia: OVERWEIGHT (MYR/share)					
Upstream FPSO					
Bumi Armada	BUY	0.57	0.35	-39%	
Yinson	BUY	8.22	8.00	-3%	
Upstream Services					
MMHE	NEUTRAL	0.83	0.61	-27%	
Muhibah Engineering	BUY	1.63	1.48	-9%	
Sapura Energy	NEUTRAL	0.29	0.15	-48%	
Serba Dinamik	BUY	2.82	2.54	-10%	
Midstream					
MISC	BUY	9.14	7.20	-21%	
Downstream					
Petron Malaysia	BUY	5.43	4.08	-25%	
Petronas Chemicals	NEUTRAL	6.20	4.96	-20%	
Petronas Dagangan	NEUTRAL	22.59	21.46	-5%	
Integrated Oil & Gas					
Dialog	BUY	4.00	3.60	-10%	
Singapore: OVERWEIGHT (SGD/share)					
Keppel Corp	BUY	7.80	7.30	-6%	
Sembcorp Industries	BUY	2.33	2.02	-13%	
Sembcorp Marine	BUY	1.45	1.19	-18%	

Source RHB



Crude Oil Price Outlook

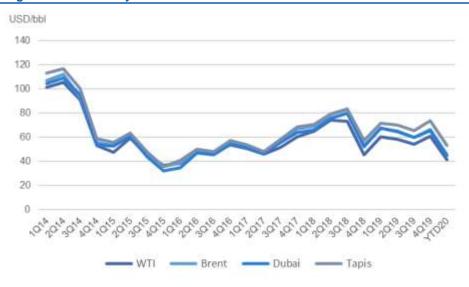
YTD crude oil price (Brent) averaged USD58.60/bbl vs our expected USD59.00/bbl for 1Q20F. However, we believe that crude oil prices will test a new floor this week as the OPEC+ meeting failed to produce any deal, and oil producers (OPEC+) will not have any production quotas from 1 Apr onwards.

Figure 4: Spot crude oil price

(USD/bbl,spot)	40	4Q18		3Q19		4Q19		YTD20	
	End	Ave	End	Ave	End	Ave	End	Ave	
WTI	45.4	59.0	54.1	56.4	61.1	56.9	41.3	53.5	
Brent	53.2	67.7	59.9	61.9	66.4	62.5	45.3	58.6	
Dubai	52.4	67.2	59.9	60.8	65.4	61.3	45.1	58.5	
Tapis	57.1	70.6	65.7	66.6	73.9	68.1	53.3	66.6	

Source: Bloomberg, RHB

Figure 5: Lowest daily close was USD26.39/bbl in Jan 2016



Source: Bloomberg, RHB

We revise down our 2020F crude oil price to USD47.00/bbl from USD62.30/bbl, as the fundamental underlying assumption that OPEC+ will continue to balance the oil markets has been thrown in disarray after the 5-6 Mar meeting. Uncertainty to the global economy as a result of the COVID-19 outbreak is now compounded with the uncertainty of the petroleum crude oil markets.

- i. 1Q20F to average USD53.00/bbl: We expect crude oil price to average USD40.00/bbl for the rest of this quarter. This will bring average for 1Q20F to USD53.70/bbl. This is with the average crude oil prices for Jan/Feb/Mar being at USD63.60/55.00/42.50 per barrel respectively.
- ii. 2Q20F to test new lows, average USD40.00/bbl: Assuming that OPEC+ producers produce at will, with non-OPEC production supply peaking (additional supply expected at 2.5mbpd YoY) and demand further weakens, 2Q20 will most likely test new lows. We assume a USD40.00/bbl average for the quarter, while we will most likely see volatility in both the upside and downside.
- iii. 3Q20F-4Q20F expected to see oil being traded at USD40.00-55.00/bbl range: With OPEC+ producers producing at will, non-OPEC production at its peak (additional supply of 2.6mbpd YoY), demand should slowly pick up. We expect the commodity to trade in a wider range of USD40.00-55.00/bbl, and average USD47.50/bbl.

We revise down our 2021-2022 crude oil price to USD60.00/bbl, from USD64.00/bbl as we expect a milder recovery from the 2020 bear market. We also expect rebalancing to occur, either with lower US shale oil production or as a result of OPEC+ actions. We maintain our long-term crude oil price at USD60.00/bbl.



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Figure 6: OPEC demand/supply and crude oil prices/forecasts

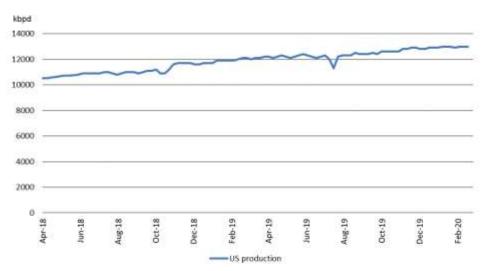
(mbpd)	2016	2017	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020
Crude oil price (USD/bbl)													
Brent (USD/bbl, ave) -Revised	44.1	54.4	71.2	63.1	68.5	61.9	62.5	64	53.0	40.0	47.5	47.5	47.0
Brent (USD/bbl, ave) -Old	44.1	54.4	71.2	63.1	68.5	61.9	62.5	64	59.0	60.0	64.0	66.0	62.3
Change (USD/bbl)									(6.0)	(20.0)	(16.5)	(18.5)	(15.3)
(a) Total world demand	95.7	97.4	98.8	98.8	98.6	100.6	101.1	99.7	97.8	97.6	99.6	100.1	98.7
World demand growth (YoY)								0.9	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)
Total non-OPEC	58.7	59.5	62.5	63.8	63.8	64.2	65.7	64.4	65.8	66.2	66.8	67.7	66.6
Non-OPEC growth (YoY)								1.9	2.0	2.5	2.6	2.0	2.2
OPEC NGLs +	4.6	4.6	4.8	4.8	4.8	4.7	4.9	4.8	4.8	4.8	4.8	4.8	4.8
(b) Total non-OPEC+OPEC NGLs	63.3	64.1	67.2	68.6	68.6	68.9	70.5	69.2	70.6	71.1	71.6	72.5	71.4
(c) OPEC crude oil production	32.2	32.0	31.9	30.5	30.0	29.4	29.6	29.9	29.4	29.4	29.4	29.4	29.4
Total supply	95.5	96.1	99.1	99.1	98.6	98.3	100.1	99.0					
Balance	(0.2)	(1.3)	0.3	0.3	(0.0)	(2.3)	(1.0)	(0.7)					
(d) Call on OPEC (a-b)	32.4	33.3	31.6	30.2	30.0	31.7	30.5	30.6	27.2	26.5	28.0	27.6	27.3
Oversupply/shortfall (c-d)	(0.2)	(1.3)	0.3	0.3	(0.0)	(2.3)	(1.0)	(0.7)	2.2	2.9	1.4	1.8	2.1

Source OPEC, Bloomberg, RHB

Global Crude Oil Production Data

The charts below depict the latest preliminary production data from Bloomberg, unless otherwise stated. Official production numbers will be provided by OPEC in the middle of every month.

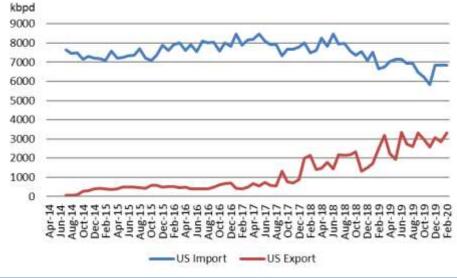
Figure 7: US crude oil production increased by 40kbpd MoM to 13.0mbpd



- For Feb 2020, US crude oil production averaged 13.0mbpd (+40kbpd MoM, +2.7mbpd YoY
- YTD US crude oil production averaged 12.9mbpd (+1.0mbpd)

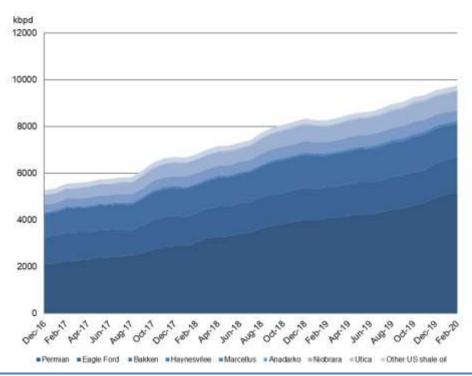
Source: US Energy Information Administration (EIA), RHB

Figure 8: US crude oil exports grew 3.3mbpd, imports were stable at 6.8mbpd



- February crude oil exports averaged 3.3mbpd (+842kbpd YoY, +460kbpd MoM)
- February US crude oil imports averaged 6.8mbpd (+179kbpd YoY, 0mbpd MoM)

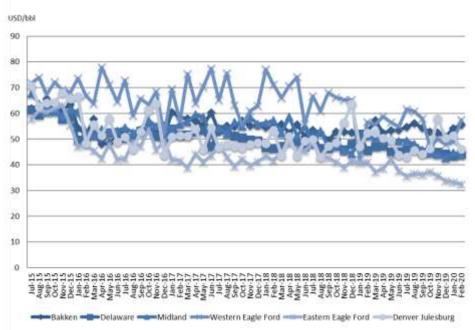
Figure 9: US shale production was relatively stable MoM



- ◆ February shale oil production averaged 9.7mbpd (+99.7kbpd MoM, +1.5mbpd YoY)
- US shale production growth is toning down, as producers may be reaching a limit on accelerating output and minimising costs. Shale oil producers remain focused on cash flow and capital discipline

Source: Bloomberg, RHB

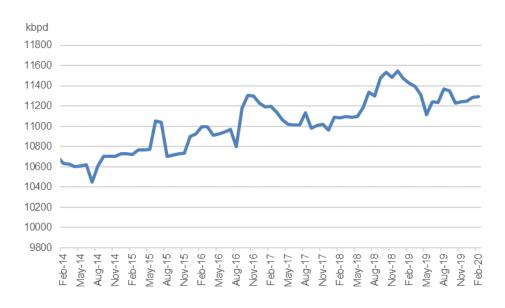
Figure 10: US shale oil producers costs averaged USD46.63 per bbl for Feb 2020



- For February, the US average shale breakeven point was USD46.63 per bbl (USD+0.64/bbl MoM,USD-3.36/bbl YoY)
- The Bakken Formation breakeven cost is USD55.54/bbl, while the Eastern Eagle Ford's breakeven cost is the lowest, at USD32.44/bbl



Figure 11: Russia's crude oil and condensate was stable MoM at 11.29mbpd

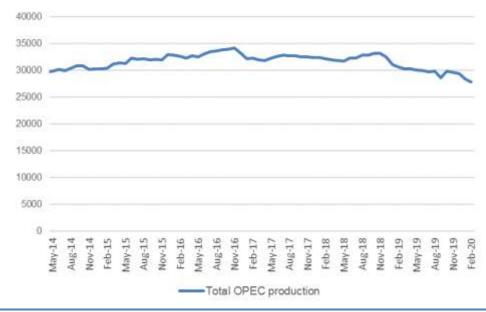


- Russia's crude oil and condensate was flat MoM at 11.29mbpd (+0.01mbpd MoM). However, no information has been released by Russia about the breakdown in crude oil production vs condensate. Its agreed crude oil production quota stands at 10.33mbpd, excluding gas condensate
- With Russia launching new gas fields in the Arctic, East Siberia and new pipelines to China, gas condensate production will be on the rise in 2020
- 2020 oil and condensate production is expected to be in the range of 555-565m tonnes, or c.11.12-11.32mbpd (conversion rate of 7.33bbl per tonne of oil). 2019 oil and condensate output stood at 560.2m tonnes.

Source: Bloomberg, CNBC, RHB

According to CNBC, Russian President Vladimir Putin met oil companies to exchange views over the COVID-19 impact on global oil prices. President Putin indicated that he favoured joint action, but underlined that the current oil price level was acceptable to Moscow – implying that Russia's additional cuts may be limited.

Figure 12: OPEC production declined further to 27.91mbpd



◆ OPEC's total production averaged 27.91mbpd (-480kbpd MoM, -2.77mbpd YoY). OPEC-10 production stood at 24.96mbpd, or 1.265mbpd lower than the Oct 2018's baseline – or 108%-compliant

Figure 13: Saudi Arabia's production stabilised at 9.7mbpd



- Saudi Arabia's production stabilised at 9.7mbpd (+10kbpd MoM, -360kbpd YoY). It was 183%-compliant, with the production cut at 893kbpd from the Oct 2018 baseline
- There was a dip in production in Sep 2019 due to the drone attacks on the kingdom's critical oil facilities, where its crude oil production fell to 8.65mbpd

Source: Bloomberg, RHB

Figure 14: Iran's crude oil production was relatively stable at 2.05mbpd



- ◆ Iran's average crude oil production stood at 2.05mbpd (-20kbpd MoM, -690kbpd YoY) – the decline in production was the result of US sanctions. Its production was 1.24mbpd lower than the Oct 2018 baseline. Iran was exempted from the voluntary production cuts
- Iran's exports averaged 34kbpd as at Feb 2020, with no exports to China, India, and the EU. For 2019, exports averaged 598kbpd (-1.2mbpd YoY)

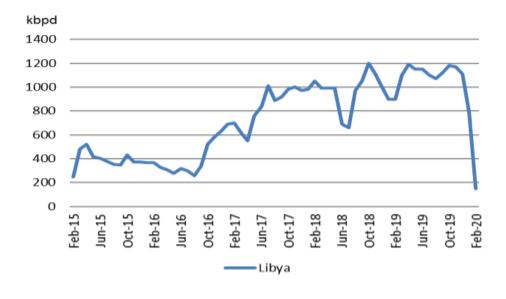
Figure 15: Venezuela's oil production trended down slightly to 750kbpd



Venezuela's production was at 750kbpd (-20kbpd MoM, -320kbpd YoY), as the US imposed sanctions on President Nicolas Maduro's government. It was 421kbpd lower than the Oct 2018 baseline. Venezuela is exempted from the voluntary production cut agreement

Source: Bloomberg, RHB

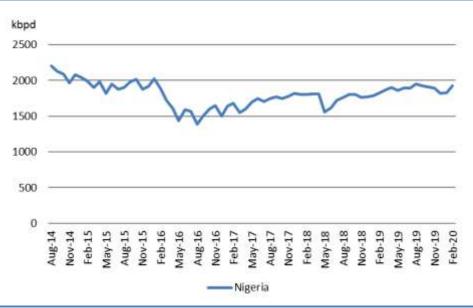
Figure 16: Libya's oil production dived due to unrest to 150kbpd in February



- Libya's production plunged to 150kbpd (-640kbpd MoM, -750kbpd YoY). This was a result of political unrest, with pipeline blockades in the east and west of the country, which hindered oil production
- It was 964bpd lower than Oct 2018's production numbers. The country is exempt from production cuts
- ◆ The unrest in Libya: General Khalifa Haftar in Apr 2019 launched an offensive to take control of Tripoli, killing 2000 people in the process. The crisis escalated in Jan 2020, after blockades of ports and oil fields, it has declared force majeure on oil supplies. The country has no crude oil storage facilities, so the export market has been halted. The national oil company has since been told that it will not receive a budget to expand oil production
- Crude oil production reached a peak of 1.2mbpd – highest level in six years – before the current decline



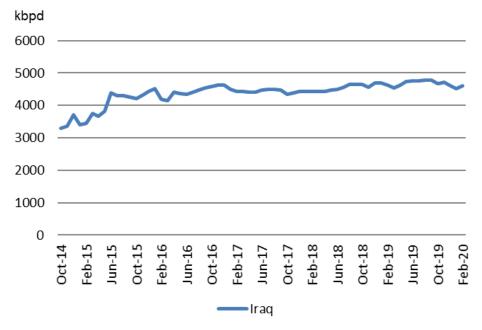
Figure 17: Nigeria's oil production averaged 1.8mbpd (+10kbpd MoM)



◆ For Feb 2020, Nigeria's crude oil production averaged 1,930kbpd (+100kbpd MoM, +100kbpd YoY). It increased production by 192kbpd from the Oct 2018 baseline

Source: Bloomberg, RHB

Figure 18: Iraq's oil production was up slightly at 4.61mbpd



 Feb 2020's crude oil production averaged 4,610kbpd (+90kbpd MoM, -10kbpd YoY). Iraq cut production by 43kbpd from the Oct 2018 baseline – it was 23%-compliant

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Buy: Share price may exceed 10% over the next 12 months

Trading Buy: Share price may exceed 15% over the next 3 months, however longer-

term outlook remains uncertain

Neutral: Share price may fall within the range of +/- 10% over the next

12 months

Take Profit: Target price has been attained. Look to accumulate at lower levels Sell: Share price may fall by more than 10% over the next 12 months

Not Rated: Stock is not within regular research coverage

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