

6 July 2020

Energy & Petrochemicals | Regional Oil & Gas

Regional Oil & Gas

Buy/Neutral/Sell

Cautious Optimism

- We are **OVERWEIGHT** on Thailand and Singapore while we are **NEUTRAL** on Malaysia. **Top Picks: PTT Exploration & Production (PTTEP), MISC and Keppel (KEP)**. We enter 2H20F with cautious optimism and, as we ease out of the global lockdown, commodities demand should recover. We are not overly bullish on the oil market at this point but do believe there could be some positive momentum in 2H20F. The oil market is on its path to recovery, with high compliance among OPEC participating members (109%) and Russia (102%) for June. We also highlight Saudi Aramco's CEO interview.
- In this report, we highlight a recent interview with Saudi Aramco's CEO Amin H. Nasser at [CERAWEEK](#), which we found quite interesting. He expects the worst is behind us, oil demand is already recovering and shows optimism for 2H20F. He believes that most countries are now better prepared for a potential second wave of COVID-19 and opened up on how supply chains helped Saudi Aramco bounce back after attacks on its critical facilities in Sep 2019.
- Preliminary production numbers indicate that OPEC participating members were 109% compliant in June. This is a result of over compliance by Algeria (106%), Kuwait (106%), Saudi Arabia (143%) and UAE (105%). Iraq and Nigeria have started to cut production, but fell short of compliance. With regards to Iraq, Saudi Arabia is now looking to provide financial assistance as well as possible investments in the oil & gas sector in the country as it works towards full compliance and compensation. We estimate Russia's crude oil production at 8.5m bpd, implying it was 102% compliant.
- We expect demand to exceed supply in 3Q20-4Q20 by 6.7mbpd and 9.2mbpd respectively. However, there was a build-up of 734m bbls to 1bn bbls of excess oil inventories accumulated in 2Q20 that would have to be cleared. With production restraints in place and demand returning, we expect global (commercial) inventories to fall to 2.2bn bbls by 4Q20F (4Q19: 2.9bn bbls) from c.3.6bn bbls in 2Q20. This should result in a much stronger oil market as we enter 2021F.
- 2Q20 crude oil price (Brent) averaged USD31.4 per bbl vs our expected USD31.0 per bbl so the crude oil market is moving in line with our expectations. YTD crude oil price averaged USD41.0 per bbl vs our FY20F forecast of USD43.0 per bbl. We are looking at a 2H20F crude oil price of USD45 per bbl, with OPEC+ implementing its agreement on the basis of comply and compensate.
- We maintain our crude oil price forecasts at USD45 per bbl for 2H20 and USD43 per bbl for 2020F. For 2021F-2022F our crude oil price is USD55 per bbl, while our long-term crude oil price is USD60 per bbl. We are OVERWEIGHT on Thailand and Singapore while we are NEUTRAL on Malaysia and our Top Picks are PTTEP, MISC and KEP.

Thailand (Overweight):	4/3/0
Malaysia (Neutral):	5/1/3
Singapore (Overweight):	3/0/0

Top Picks

PTT Exploration & Production - BUY	THB108.00
MISC - BUY	MYR9.28
Keppel Corp - BUY	SGD7.30

Target Price

THB108.00
MYR9.28
SGD7.30

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Saudi Aramco's CEO, Amin H. Nasser: "The worst is behind us."



Source: Arabnews.com

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Company Name	Rating	Target Price	% Upside (Downside)	P/E (x) Dec-20F	P/B (x) Dec-20F	Yield (%) Dec-20F
Keppel Corp	BUY	SGD7.30	19.9	16.0	1.0	2.9
MISC	BUY	MYR9.28	18.7	16.9	1.0	3.8
PTT Exploration & Production	BUY	THB108.00	13.4	13.9	1.0	2.9
PTT Global Chemical	BUY	THB52.00	6.1	na	0.8	1.9
Serba Dinamik	BUY	MYR2.55	45.9	11.7	1.8	2.6
Star Petroleum Refining	BUY	THB8.40	18.3	na	0.9	1.8
Thai Oil	BUY	THB54.00	16.1	na	0.9	3.1

Source: Company data, RHB

Recommendations

Thailand (OVERWEIGHT; 4/3/0)

We maintain OVERWEIGHT on the Thai oil & gas sector, but we are not overly bullish at the moment. There is some c.10% upside to our BUY recommendations (PTTEP, PTTGC, TOP and SPRC). However, as we enter 2Q20F reporting season, we expect to see subdued results, as commodity demand, prices and spreads were under severe pressure as the world's population went into a global lockdown.

That said, we are cautiously optimistic that the global population will return to normality, or as near to normal as possible. When this happens, demand, along with prices and spreads for oil and its derivatives, should recover. This is the basis of our 2H20 recovery assumptions. Whether or not a second COVID-19 wave occurs, its severity or rate of infection will depend on how each country and its population respond. The second wave could provide another bear market which is a risk that we cannot rule out.

Malaysia (NEUTRAL; 5/1/3)

We maintain NEUTRAL on the Malaysian oil & gas sector as visibility of work flow remains uncertain amidst Petronas slashing its capex and opex in FY20. We expect delays in contract awards and activities within the upstream space, while margin compression is forthcoming alongside rate renegotiations. We take a more cautious stance as there is a possibility of share price retracement if recovery comes in weaker than expected. Our Top Picks are Dialog (DLG MK, BUY, TP: MYR4.20) and Serba Dinamik (SDH MK, BUY, TP: MYR2.55).

We continue to like Dialog, as a defensive name within the sector, as it is an integrated player across the value chain with a recurring income business model. Its phase 3 capacity expansion, with good quality clientele ie national oil companies and oil majors, remains a key catalyst in the longer run to strengthen its recurring business model.

Serba Dinamik's share price has been weak and we believe this could partially be due to market concerns over its acquisition of Teluk Ramunia's yard. The downside risk of this deal, in our view, is fairly manageable while it may take a while before the company can establish a track record and the upstream fabrication segment would contribute meaningfully. Valuation remains undemanding below 10x FY21 P/E and we like the stock for its decent earnings growth and ability to win contracts

Singapore (OVERWEIGHT; 3/0/0)

Maintain OVERWEIGHT on Singapore's offshore and marine sector. While we expect weak P&L financials for 2Q20, a lot of the negatives have already been priced in.

Keppel (KEP SP, BUY, TP: SGD7.30) recently provided highlights of its Vision 2030 initiative, which incorporates the "OneKeppel" strategy and a target ROE of 15%.

Sembcorp Marine (SMM SP, BUY, TP: SGD1.13) and Sembcorp Industries (SCI SP, BUY, TP: SGD2.11) have announced a plan to recapitalise SMM and demerge SMM from SCI, which we view positively. Upon the completion of the exercise, SMM's gearing would fall and SCI will no longer be exposed to the marine offshore business.

A key catalyst to the sector's share price performance would be Temasek obtaining the requisite approvals for the partial offer for KEP, a first step to corporate restructuring. The plunge in share prices over the past few months offers investors significant upside when the economic slowdown from COVID-19 reverses. Top Pick for the sector is KEP.

Saudi Aramco: Oil Demand Set To Return

We highlight here a recent interview with Saudi Aramco's CEO Amin H. Nasser at CERAWEEK – which we found quite interesting. He expects that the worst is behind us, the oil demand is already recovering and he is very optimistic for 2H20. He believes that countries are now better prepared for a second wave of COVID-19 if and when it occurs. He also opened up on how supply chains helped Saudi Aramco bounce back after the attacks on its critical facilities in September 2019.

Figure 1: Saudi Aramco CEO, Amin Nasser: Supply chains were at optimal levels at the time of the drone attack and Saudi Aramco was well prepared going into this pandemic



Source: Aljazeera

Below are key highlights of the interview, from Bloomberg.

On oil demand:

In April, global oil demand was 75-80mbpd with significant supply and currently Mr Nasser envisions a demand of c. 90mbpd. Both gasoline and diesel demand have started to pick up, while jet fuel is still lagging as there is less air travel. As countries start to open up, this should be reflected in an increase in crude oil demand.

There is a range of forecasts for demand at 95-97mbpd by year-end which depend on whether there will be a second wave of COVID-19 or not. All countries and their medical establishments are currently much better prepared. Therefore, the second wave is not much of a concern now, as countries have already learned a lot from the first wave.

On managing the pandemic:

On Saudi Aramco's preparedness for COVID-19, Mr. Nasser said that the company started working with Johns Hopkins since February and had all the necessary supplies before the panic struck in March/April. All the oil fields were running smoothly with high reliability during the pandemic. More than 50% of office workers worked remotely. But for oil field, everybody was working. Precautions were put in place to maintain their safety and health.

On oil production flexibility: How is Saudi Aramco able to ramp up from 9.7mbpd to 12mbpd in 20 days and then slow down to 7.5mbpd?

Mr. Nasser stated it is important an upfront assessment of the three components ie the subsurface, the surface facilities and the export infrastructure, while making sure they are reliable and tested. When Saudi Aramco tested the whole system in 20 days in order to bring up its production from 9.7mbpd to 12mbpd, the focus was on making sure the pump compressor system, including the export facilities were working smoothly. During the testing, all workforce was used, under a full-time schedule, making sure the highest reliability (over 99%) was maintained.

It is more difficult to increase production than decrease it. The process is not as intensive decreasing production as one deals with such issues as lower gas, lower heating, lower products. More work is required when increasing the production and making sure all of the facilities are in operation with the highest reliability possible.

On impact of supply chains during the pandemic:

A lot of plants, factories and suppliers that support Saudi Aramco in Europe and China and other places had to shutdown during the lockdown which impacted the company for a while. However, since Saudi Aramco had an optimum level of inventory and because local content was 56% it helped during the crisis. This also helped the company during the attacks on Khurais and Abqaiq. COVID-19 pandemic has further confirmed the importance of having a supply chain closer by. Globalisation, when it comes to supply chains, has been successful. Nevertheless, having a closer supply chain is paramount to withstand such incidents as the one at Abqaiq and Khurais or the lockdown that happened during COVID-19.

On the quick bounce back post-Abqaiq and Khurais:

Saudi Aramco was able to bring these facilities on in days instead of months successfully, reliably and no supplies to its international customers were interrupted, even during the attacks. This was a result of having an optimum supply chain, with all the needed spare parts and equipment at hand in order to put the facilities back on. The company had the right trained and experienced workforce that knew what needed to be done during a crisis. Saudi Aramco's partners in the Kingdom and around the world helped also to restore these facilities.

Figure 2: Saudi Aramco's Shaybah oilfield

Source: Ahmed Jadallah, Reuters

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Compliance In June

Preliminary production numbers indicate that OPEC participating members were 109% compliant in June, with total production at 22.6mbpd. This was a result of over compliance by Algeria (106%), Kuwait (106%), Saudi Arabia (143%) and UAE (105%). This is within the additional voluntary adjustments for June offered by Saudi Arabia (1mbpd), UAE (100kbpd), Kuwait (80ktpbd) and Oman (10-15kbpd). Other OPEC+ participating members' performance was as follows:

- i. OPEC participating members that cut but fell short of compliance were: Angola (85%), Congo (35%), Iraq (72%) and Nigeria (79%);
- ii. Equatorial Guinea and Gabon increased production in the month of June by 3kbpd and 33kbpd respectively.

Overall, total OPEC production was 22.6mbpd, which includes Iran, Libya and Venezuela where these countries are exempt from the production cut agreement. This is because Venezuela and Iran are under US sanctions, while Libya is still under political unrest.

We estimate Russia's crude oil production at 8.5mbpd, implying it was 102% compliant. We note that Russia reports its crude oil production in tonnes, which also includes condensate. The Russian Energy Ministry reported Russia's crude oil and condensate production at 38,158ktonnes for June.

We note that Saudi Arabia's Energy Minister is now pushing hard for all members to conform to the production cut agreement and implemented compensation for those that do not comply. With this, plans have been submitted by several participating members in order to comply and compensate.

Figure 3: OPEC participating members were 109% compliant

(kbpd)	OPEC+ Declaration of Cooperation				Production	Jun-20 Cut from baseline	Compl.	Production May onwards	Cut from baseline	Compl. May 2020 onwards	YTD production
	Oct 18 baseline production (Revised)	Adjust	Adjust (%)	Voluntary production							
OPEC 10, participating members											
Algeria	1,057	-234	-22%	823	810	-247	106%	815	-243	104%	948
Angola	1,528	-338	-22%	1,190	1,240	-288	85%	1,260	-268	79%	1,333
Congo	325	-72	-22%	253	300	-25	35%	286	-39	54%	293
Eq. Guinea	127	-28	-22%	99	130	3	-11%	112	-16	55%	119
Gabon	187	-41	-22%	146	220	33	-80%	205	18	-42%	199
Iraq	4,653	-1,029	-22%	3,624	3,910	-743	72%	4,038	-616	60%	4,376
Kuwait	2,809	-621	-22%	2,188	2,150	-659	106%	2,174	-635	102%	2,613
Nigeria	1,829	-405	-22%	1,424	1,510	-319	79%	1,551	-278	69%	1,713
Saudi Arabia	11,000	-2,433	-22%	8,567	7,530	-3,470	143%	8,006	-2,994	123%	9,506
UAE	3,168	-701	-22%	2,467	2,430	-738	105%	2,454	-715	102%	3,058
OPEC 10	26,683	-5,902	-22%	20,781	20,230	-6,453	109%	20,899	-5,785	98%	24,156
Non-participating OPEC members											
Iran	3,296			3,296	1,940	-1,356		1,959	-1,337		2,011
Libya	1,114			1,114	110	-1,004		96	-1,018		208
Venezuela	1,171			1,171	340	-831		455	-716		618
OPEC 3	5,581			5,581	2,390	-3,191		2,510	-3,071		2,837
Total OPEC	32,264	-5,902	-18.3%	26,362	22,620	-9,644	163%	23,409	-8,856	150%	26,993
Russia	11,000	-2,433	-22%	8,567	8,523	-2,477	102%	8,560	-2,440	100%	9,863

Source: OPEC, Bloomberg, RHB

Note: Production data for other non-OPEC participating members is not readily available.

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Compensation: The carrot and stick approach

The Joint Technical Committee (JTC) noted that for the month of May, the overall conformity was 87%. It also noted the importance for all members to achieve 100% conformity, and make up for any monthly shortfalls during the months of May and June in the months of July, August and Sept. Iraq and Kazakhstan have already submitted their compensation schedules.

S&P Global Platts reported that both Saudi Arabia and the US have stepped up financial sweeteners and diplomatic pressure for Iraq to comply with the agreed-upon output cuts. The Prime Minister of Iraq has ordered drastic reductions in crude exports and agreed to compensate for the months of overproduction.

There has been an offer of financial assistance from Riyadh to help Iraq with USD500m loan, along with a promises of investments in the oil and gas sector. The loan will be repaid when oil prices recover. The US has increased diplomatic efforts to get Iraq comply with the OPEC cuts as well. As a result, Iraq has started to slash its output and submitted an OPEC-approved plan to make up for the excess production in May, with extra cuts in the July-September period, which would diminish its output to a five year low.

The US has granted 120 days extension of sanction waivers for Iraq to continue importing Iranian energy (up from a typical 30 days). In April, the Assistant Secretary of State Francis Fannon stated the US will continue to work with its partners around the world in order to reduce the market volatility during the COVID-19 environment. No doubt, the recovery of the oil markets is in the best interest of producers around the world.

In terms of compensation, according to our calculations, total compensation from OPEC participating members will be c.1406kbpd for one month. If this was spread out for three months, then this would be c.474kbpd of extra cuts for the period July-September.

Figure 4: OPEC+ production cuts for May 2020 through Apr 2022, with 9.7mbpd extended to July

(kbpd)	Oct 18 baseline production	1 May-30 July 2020			1 Aug -31 Dec 2020			1 Jan 2021-30 Apr 2022		
		Adjust.	Adjust (%)	Voluntary production	Adjust.	Adjust (%)	Voluntary production	Adjust	Adjust (%)	Voluntary production
OPEC 10, participating members										
Algeria	1,057	-234	-22%	823	-186	-18%	871	-140	-13%	917
Angola	1,528	-338	-22%	1,190	-268	-18%	1,260	-202	-13%	1,326
Congo	325	-72	-22%	253	-57	-18%	268	-43	-13%	282
Eq. Guinea	127	-28	-22%	99	-22	-18%	105	-17	-13%	110
Gabon	187	-41	-22%	146	-33	-18%	154	-25	-13%	162
Iraq	4,653	-1029	-22%	3,624	-817	-18%	3,836	-615	-13%	4,038
Kuwait	2,809	-621	-22%	2,188	-493	-18%	2,316	-372	-13%	2,437
Nigeria	1,829	-405	-22%	1,424	-321	-18%	1,508	-242	-13%	1,587
Saudi Arabia	11,000	-2433	-22%	8,567	-1931	-18%	9,069	-1455	-13%	9,545
UAE	3,168	-701	-22%	2,467	-556	-18%	2,612	-419	-13%	2,749
OPEC 10	26,683	-5902	-22%	20,781	-4685	-18%	21,998	-3529	-13%	23,154
Non-OPEC participating members										
Azerbaijan	718	-159	-22%	559	-126	-18%	592	-95	-13%	623
Bahrain	205	-45	-22%	160	-36	-18%	169	-27	-13%	178
Brunei	102	-23	-22%	79	-18	-18%	84	-13	-13%	89
Kazakhstan	1,709	-378	-22%	1,331	-300	-18%	1,409	-226	-13%	1,483
Malaysia	595	-132	-22%	463	-104	-18%	491	-79	-13%	516
Mexico	1,753	-388	-22%	1,365	-308	-18%	1,445	-232	-13%	1,521
Oman	883	-195	-22%	688	-155	-18%	728	-117	-13%	766
Russia	11,000	-2433	-22%	8,567	-1931	-18%	9,069	-1455	-13%	9,545
Sudan	75	-17	-22%	58	-13	-18%	62	-10	-13%	65
South Sudan	130	-29	-22%	101	-23	-18%	107	-17	-13%	113
Total Non-OPEC alliance	17,170	-3798	-22%	13,372	-3015	-18%	14,155	-2271	-13%	14,899
OPEC 10	26,683	-5,902	-22%	20,781	-4,685	-18%	21,998	-3,529	-13%	23,154
Non-OPEC	17,170	-3,798	-22%	13,372	-3,015	-18%	14,155	-2,271	-13%	14,899
OPEC+	43,853	-9,700	-22%	34,153	-7,700	-18%	36,153	-5,800	-13%	38,053

Source: OPEC, RHB

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Crude Oil Price Outlook

In 2Q20 crude oil price averaged USD31.4/bbl vs our expected USD31.0/bbl. We see the crude oil market is moving in line with our expectations. YTD crude oil price average is USD41/bbl vs our FY20 forecast of USD43.0/bbl and we believe our FY20 crude oil price forecast will be attainable. We are looking at a 2H20F crude oil price of USD45/bbl, with OPEC+ implementing its agreement on the basis of comply and compensate. We believe as compliance rates amongst its members improve, the market will regain confidence in the implementation of this historic agreement.

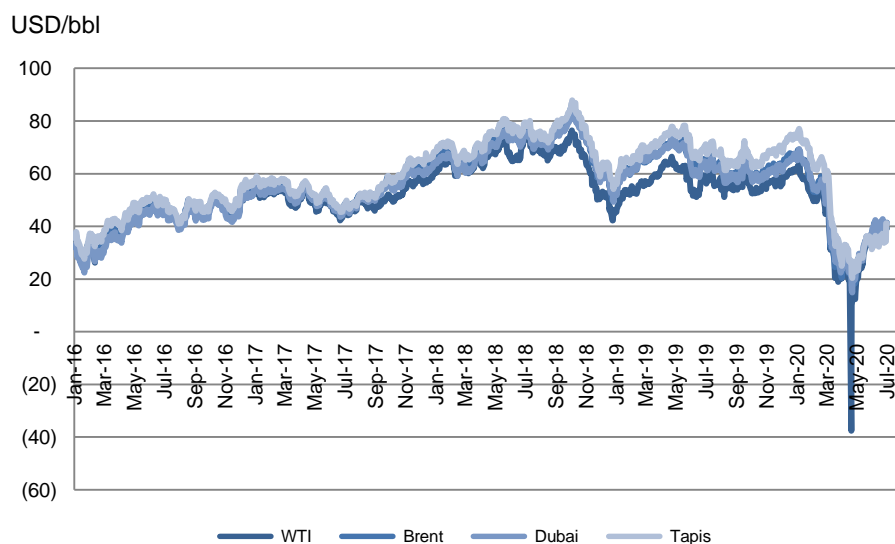
We maintain our crude oil price forecasts at USD45/bbl for 2H20 and USD43/bbl for 2020. For 2021F-2022F we estimate a crude oil price of USD55/bbl, while our long-term crude oil price is at USD60/bbl.

Figure 5: Spot crude oil price

(USD/bbl, spot)	2Q19		1Q20		2Q20		YTD20	
	End	Ave	End	Ave	End	Ave	End	Ave
WTI	58.5	59.9	20.5	46.1	39.3	28.0	39.3	37.0
Brent	64.4	68.5	21.5	50.6	40.9	31.4	41.4	41.0
Dubai	64.8	67.3	23.3	50.7	40.5	31.6	41.2	41.2
Tapis	70.2	72.7	27.2	58.7	41.2	31.1	41.2	44.8

Source: Bloomberg, RHB

Figure 6: Crude oil prices on a roller coaster ride in 1H20



Source: Bloomberg, RHB

Our crude oil price outlook

Demand is expected to fall by c.9mbpd YoY to 90.6mbpd for 2020. This is a result of 40% of global population being under lockdown during April and May. As the world eases out of lockdown, we expect ground transportation to resume, while air travel will remain limited as countries remain cautious in opening borders to the world. We envision possible negotiated travel between countries could happen before global travel can resume back to normal, possibly when a vaccine becomes available for the world population.

Supply is expected to be curtailed as a result of the OPEC+ agreement as well as higher cost producers shutting down wells that are uneconomical at the current price range. Oversupply is expected at 8.2mbpd in 2Q20 while a shortfall of 6.7mbpd and 9.2mbpd is expected for 3Q20 and 4Q20 respectively. In all, we expect a balanced market for 2020F, with oversupply in 1H20 and a deficit in 2H20F.

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We assume the following:

- Demand for 1Q20 was at 92.4mbpd (-6.4mbpd YoY), while 2Q20 demand is expected at 81.3mbpd (-17.3mbpd YoY). For 2H20F: Demand should slowly recover to 92.3mbpd (-8.2mbpd YoY) in 3Q20, then improve further to 96.3mbpd (-4.5mbpd YoY) in 4Q20. Full-year demand is expected at 90.6mbpd (-9.1mbpd YoY);
- For 2020F, non-OPEC production is expected to decline by 3.23mbpd YoY to 61.8mbpd, as higher-cost producers curtail production;
- We assumed the OPEC+ production cut to be 9.7mbpd for May-Jul, while Aug-Dec production cut is expected at 7.7mbpd. We assumed 100% compliance by its members.

We note here the OPEC+ production cuts as stated in the agreement do not start at the beginning of each quarter (Figure 4). The first phase of the agreement starts in May and ends in July, which implies 9.7mbpd production cut for 2 months in 2Q20 and one month in 3Q20 before the second phase of the agreement (7.7mbpd production cut) is implemented. Therefore, the largest production cuts, as per agreement, will be in 3Q20F at 8.8mbpd.

As such, OPEC+ production cuts on a quarterly basis will be as follows:

Figure 7: OPEC+ quarterly production cuts

(kbpd)	OPEC participating members	Non-OPEC participating members	Total OPEC+
2Q20	(3,935)	(2,532)	(6,467)
3Q20F	(5,565)	(3,276)	(8,841)
4Q20F	(4,685)	(3,015)	(7,700)

Source: RHB

We expect demand to exceed supply in 3Q20 and 4Q20 by 6.7mbpd and 9.2mbpd respectively. However, there was a build-up of 734m bbls to 1bn bbls of excess oil inventories accumulated in 2Q20 that will have to be cleared. With production restraints in place and demand returning, we expect global (commercial) inventories to fall to 2.2bn bbls by 4Q20F (4Q19: 2.9bn bbls) from about 3.6bn bbls in 2Q20. This should result in a much stronger oil market as we enter 2021F.

Figure 8: Demand/supply and crude oil prices/forecasts

	2017	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20F	4Q20F	2020F
Crude oil price (USD/bbl)												
Brent, revised	54.4	71.2	63.1	68.5	61.9	62.5	64.0	50.6	31.0	45.0	45.0	42.9
Brent, old	54.4	71.2	63.1	68.5	61.9	62.5	64.0	50.6	31.0	45.0	45.0	42.9
Change (USD/bbl)										-	-	-
World demand and supply (mbpd)												
Total Demand	97.4	98.8	98.8	98.6	100.5	100.8	99.7	92.4	81.3	92.3	96.3	90.6
YoY growth							0.8	(6.4)	(17.3)	(8.2)	(4.5)	(9.1)
Supply												
Non-OPEC	60.0	63.0	64.4	64.4	64.9	66.4	65.0	66.5	61.4	59.3	60.0	61.8
OPEC NGLs	5.2	5.3	5.2	5.3	5.2	5.3	5.3	5.4	5.3	5.2	5.1	5.2
Total non-OPEC	65.2	68.3	69.6	69.7	70.1	71.7	70.3	71.9	66.7	64.5	65.1	67.0
YoY growth							2.0	2.3	(3.0)	(5.6)	(6.6)	(3.3)
OPEC production	31.5	31.3	30.0	29.4	28.9	29.1	29.3	28.3	*22.7	*21.1	*22.0	*23.5
Total supply	96.7	99.7	99.5	99.2	98.9	100.8	99.6	100.2	89.5	85.6	87.1	90.6
YoY growth							(0.03)	0.6	(9.7)	(13.3)	(13.7)	(9.1)
Balance	(0.7)	0.8	0.8	0.6	(1.6)	0.0	(0.0)	7.8	8.2	(6.7)	(9.2)	(0.0)
OECD closing stock levels, mbbbl												
Commercial	2,860	2,873	2,878	2,938	2,948	2,908	2,908	2,961	3,695	3,094	2,265	2,265
Additional barrels									734	(602)	(828)	(3)
SPR	1,569	1,552	1,557	1,549	1,544	1,535	1,535	1,539	1,535	1,535	1,535	1,535
Total	4,428	4,425	4,435	4,487	4,492	4,443	4,443	4,500	5,231	4,629	3,801	3,801

*Note all numbers presented are from OPEC;

The OPEC-forecasted production numbers, the resulting crude oil balance and commercial stock inventories are RHB estimates

Source: OPEC, RHB

6 July 2020

Energy & Petrochemicals | Regional Oil & Gas

Global Crude Oil Production Data

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

Figure 9: US crude oil production set to fall YoY on lower crude oil prices

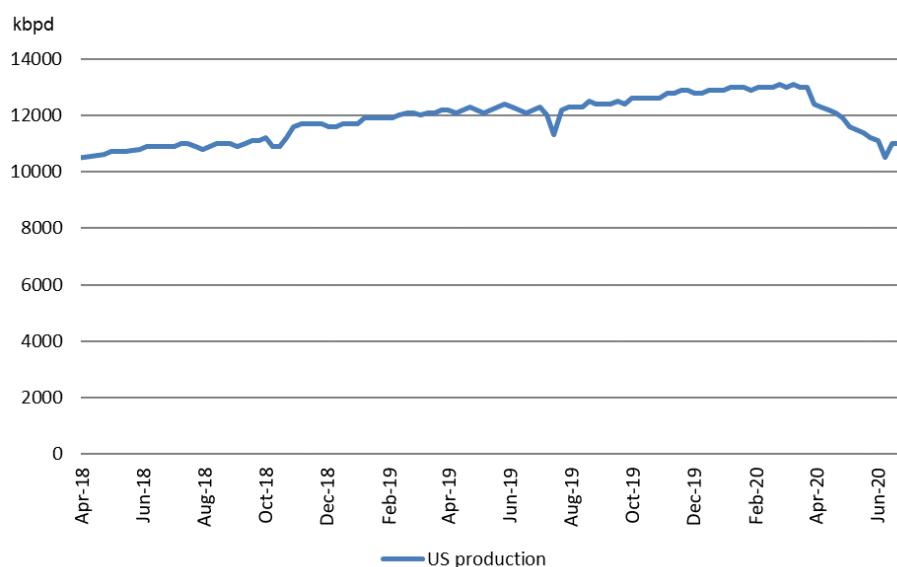
	2017	2018	2019	2020	2021
WTI spot average (USD/bbl)	50.8	65.1	57	35.14	43.88
USD/bbl change MoM	-	-	-	5.84	2.78
Brent spot average	54.2	71.2	64.4	38.02	47.88
USD/bbl change MoM	-	-	-	5.02	2.28
US crude oil production (mbpd)	9.4	11	12.2	11.56	10.84
Change MoM (mbpd)	-0.1	-	-	-0.24	-0.16

◆ The Energy Information Administration (EIA) increased its crude oil price forecasts by c.USD6 per bbl from its May report. WTI and Brent now stand at USD35.14 and USD38.02 per bbl for 2020

◆ The EIA now expects US crude oil production at 11.56mbpd (-0.64mbpd YoY, 0.24mbpd lower than its May estimate)

Source: EIA (STEO, June 2020), RHB

Figure 10: US crude oil production has started to tumble from peak production

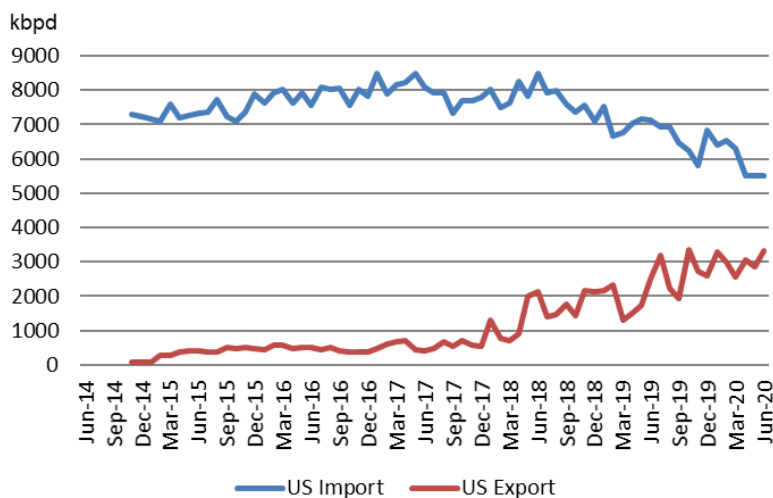


◆ June US crude oil production average fell to 10.9mbpd (-620kbpd MoM, -1.3mbpd YoY) in the week of 26 June. This is down 2.2mbpd from a peak of 13.1mbpd in the week of 13 Mar.

◆ YTD US crude oil production averaged 12.2mbpd (+177kbpd YoY)

Source: EIA, RHB

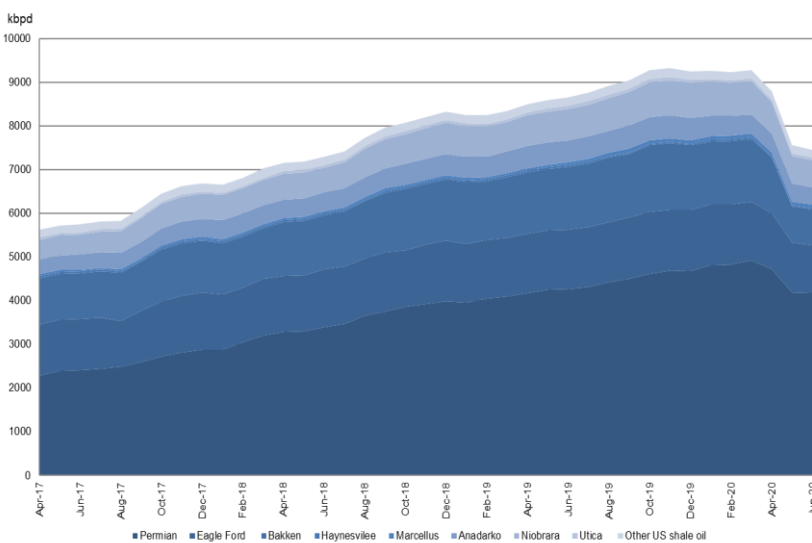
Figure 11: US crude oil exports grew to 3.3mbpd; imports were stable at 5.5mbpd



- ◆ June crude oil exports averaged 3.3mbpd (+460kbpd MoM, +842kbpd YoY), while the US crude oil imports averaged 5.5mbpd (+0kbpd MoM, -1.6mbpd YoY)
- ◆ The YTD export was 3.0mbpd (+1.0mbpd YoY), while import average was 5.9mbpd (-1.7mbpd YoY).

Source: Bloomberg, RHB

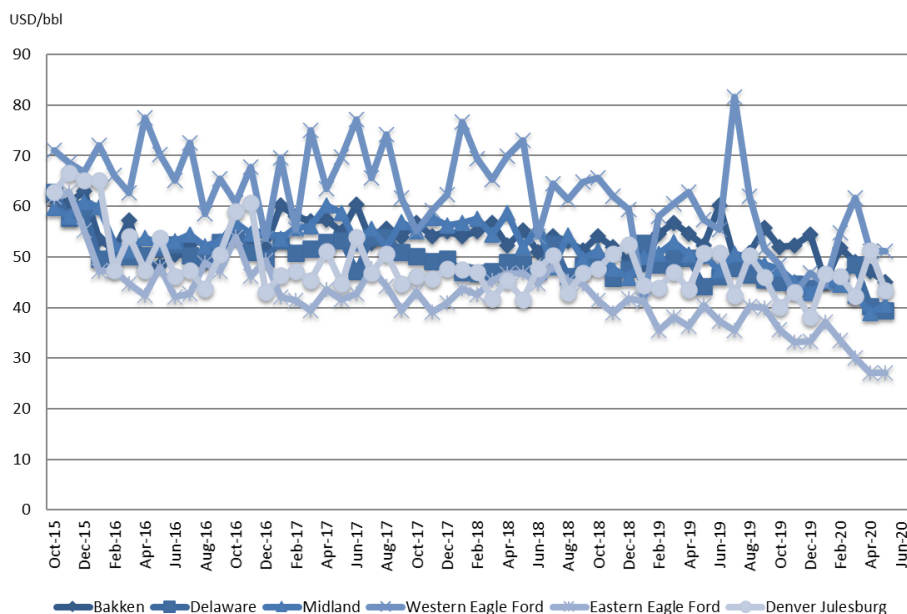
Figure 12: US shale oil production now stands at 7.5mbpd, off from its peak of 9.3mbpd



- ◆ For June, shale oil average production was 7.5mbpd (-1036kbpd MoM, -1.1mbpd YoY)
- ◆ US shale oil production in June fell 1.7mbpd from a peak of 9.3mbpd in March 2020. The largest fall came from the Bakken basin, with production now at 822kbpd, down 530kbpd or -37% from its peak production of 1.4mbpd in March. The Permian basin saw production fall to 4.1mbpd, down 731kbpd or -15% decline from its peak production at 4.9mbpd in March.
- ◆ The latest weekly US shale oil production shows that there has been a slight uptick in production in four of the eight basins, namely the Permian, Bakken, Marcellus and Niobrara.
- ◆ YTD shale oil production averaged 8.5mbpd (+168kbpd YoY)

Source: Bloomberg, RHB

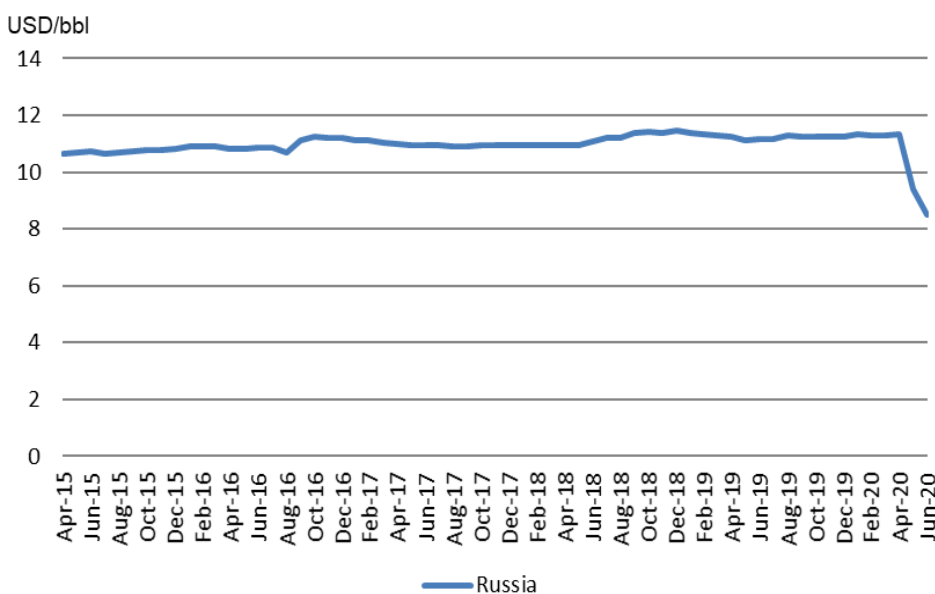
Figure 13: US shale oil producers' costs averaged USD41.13 per bbl for May 2020



Source: Bloomberg, RHB

- ◆ For May, the US average shale breakeven point was USD41.13 per bbl (-USD1.55 per bbl MoM, -USD8.12 per bbl YoY)
- ◆ The Bakken Formation breakeven cost has declined to USD44.96 per bbl, down from USD51.77 per bbl in February this year. Eastern Eagle Ford remains one of the lowest cost amongst the shale oil basins, at USD27.10 per bbl.

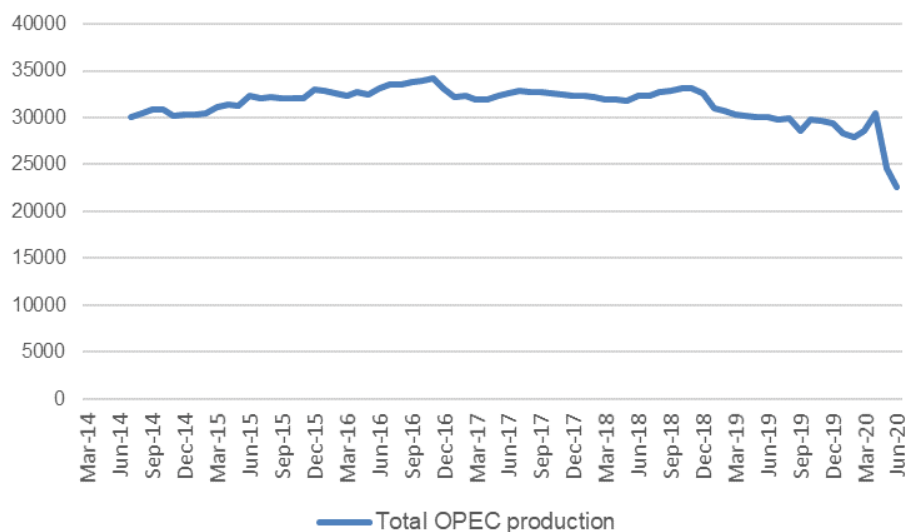
Figure 14: Russia's crude oil production was 8.52mbpd (102% compliant)



Source: Bloomberg, RHB

- ◆ For June, Russia's crude oil and condensate production was 38.1m tonnes, or 9.3mbpd. Assuming gas condensate accounts for c.800kbpd, Russia's oil production is estimated at 8.52mbpd. This is 102% compliant;
- ◆ We note that with Russia launching new gas fields in the Arctic and 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;
- ◆ We note that Russia reports its crude oil and gas condensate in tonnes. It does not separate gas condensate from its reported number.

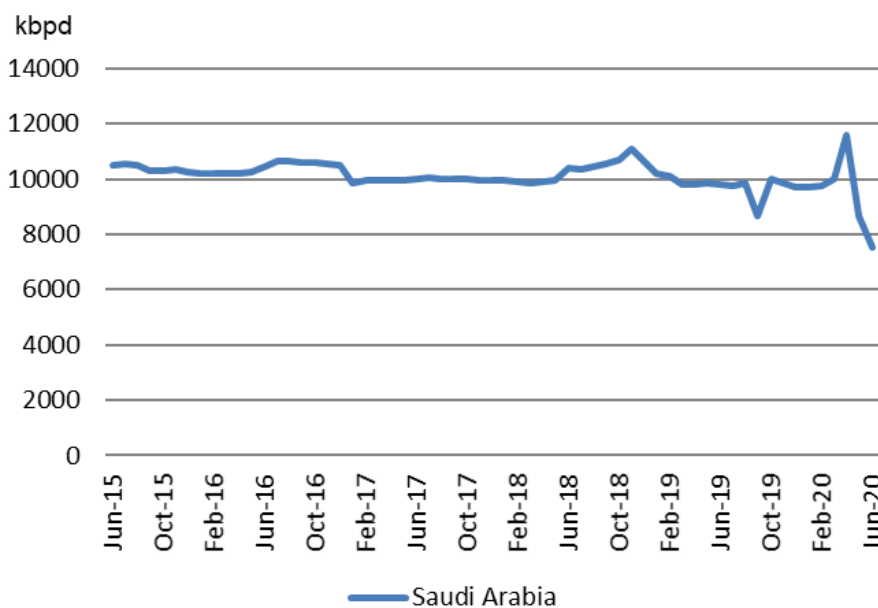
Figure 15: OPEC production fell sharply by 1.9mbpd MoM to average 22.6mbpd



- ◆ For June, OPEC’s total production averaged 22.6mbpd (-1.9mbpd MoM, -7.4mbpd YoY).
- ◆ OPEC participating members were 109% compliant with production at 20.2mbpd.

Source: Bloomberg, RHB

Figure 16: Saudi Arabia’s production plummeted to 7.5mbpd (-1.13mbpd MoM)



- ◆ For June, Saudi Arabia’s production averaged 7.5mbpd (-1.13mbpd MoM, -2.3mbpd YoY). It is 143% compliant;
- ◆ For April, production jumped to 11.59mbpd (+1.6mbpd MoM, +1.8mbpd YoY). The increase in production is the result of the collapse of the OPEC+ agreement on 6 Mar and Saudi Arabia starting its price war;
- ◆ 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

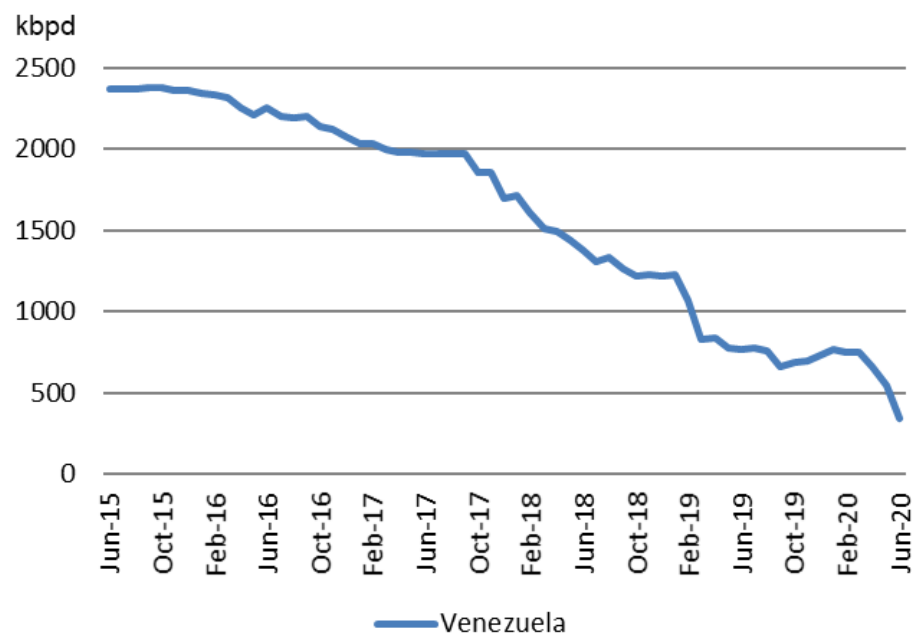
Figure 17: Iran's crude oil production was relatively stable at 1.94mbpd



- ◆ Iran's average crude oil production stood at 1.94mbpd (-10kbpd MoM, -340kbpd YoY). The country's oil production plummeted as the US imposed sanctions on the country's exports. The country is exempt from OPEC+ agreement.
- ◆ Iran's exports averaged 133.3kbpd as of June, with 66.66kbpd of exports to China

Source: Bloomberg, RHB

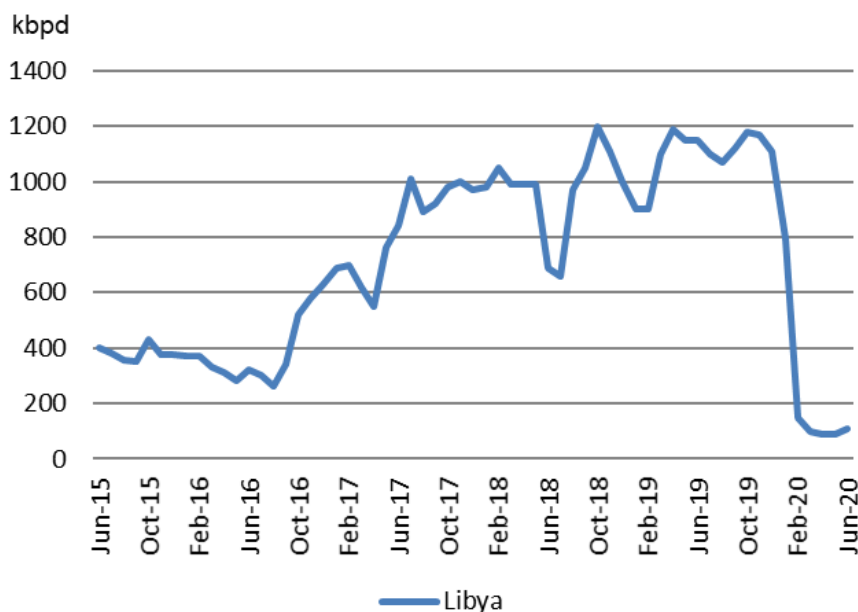
Figure 18: Venezuela's oil production fell further to 340kbpd



- ◆ Venezuela's production was at 340kbpd (-210kbpd MoM, -430kbpd YoY). The country's oil production plummeted as the US imposed sanctions on President Nicolas Maduro's administration since 2019. The country is exempt from the OPEC+ agreement.

Source: Bloomberg, RHB

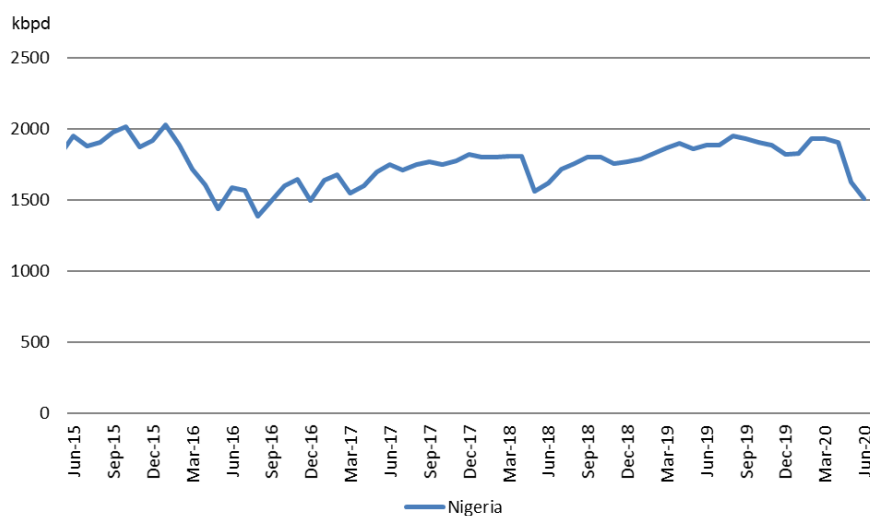
Figure 19: Libya's oil production dived due to unrest, now at 110kbpd in June



- ◆ Libya's production plunged to 110kbpd (+20kbpd MoM, -1mbpd YoY). The decline in production is a result of political unrest. The country is exempt from OPEC+ agreement.
- ◆ Regarding the unrest in Libya: General Khalifa Haftar launched an offensive in Apr 2019 to take control of Tripoli, killing 2,000 people in the process. The crisis escalated in Jan 2020 after a blockade of ports and oil fields when Libya declared *force majeure* on oil supplies. The country has no crude oil storage facilities, so the export market has been halted. Negotiations are ongoing to restart crude oil production.
- ◆ Crude oil production reached a peak of 1.2mbpd – the highest level in six years – before the current decline

Source: Bloomberg, RHB

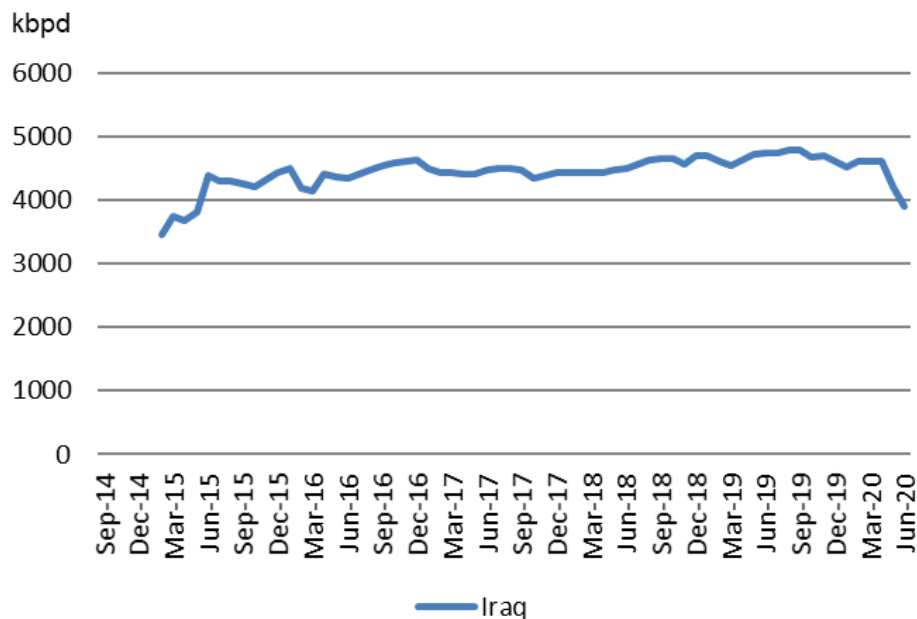
Figure 20: Nigeria's oil production fell to 1.51mbpd (79% compliant)



- ◆ For June, Nigeria's crude oil production averaged 1.51mbpd (-120kbpd MoM, -380kbpd YoY). It was 79% compliant.

Source: Bloomberg, RHB

Figure 21: Iraq's oil production fell to 3.91mbpd (72% compliant)



- ◆ Iraq's crude oil production averaged 3.91mbpd (-300kbpd MoM, -840kbpd YoY). It was 72% compliant.
- ◆ Iraq has rarely complied with the production cut agreements. In its defence, the central government has limited influence over c.500kbpd of production from the semi-autonomous Kurdish region. We note that Baghdad has argued for exemptions from cutbacks since OPEC+ partnership began in 2016.

Source: Bloomberg, RHB

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ช่วงคะแนน Score	สัญลักษณ์ Rang Number of Logo	ความหมาย	Description
90 - 100		ดีเลิศ	Excellent
80 - 89		ดีมาก	Very Good
70 - 79		ดี	Good
60 - 69		ดีพอใช้	Satisfactory
50 - 59		ผ่าน	Pass
ต่ำกว่า 50	No logo give	N/A	N/A

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ผลสำรวจการกำกับดูแลกิจการบริษัทจดทะเบียนที่แสดงไว้นี้ เป็นผลที่ได้จากการสำรวจและประเมินข้อมูลของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทย และตลาดหลักทรัพย์ เอ็ม เอ ไอ (“บริษัทจดทะเบียน”) เปิดเผยต่อสาธารณะและเป็นข้อมูลให้ผู้ลงทุนทั่วไปสามารถเข้าถึงได้ ผลสำรวจดังกล่าวจึงเป็นการนำเสนอข้อมูลในมุมมองของบุคคลภายนอกต่อมาตรฐานการกำกับดูแลกิจการของบริษัทจดทะเบียน โดยไม่ได้เป็นการประเมินผลการปฏิบัติงานหรือการดำเนินการของบริษัทจดทะเบียนอื่นทั้งมิได้ใช้ข้อมูลภายในของบริษัทจดทะเบียนในการประเมิน ดังนั้นผลสำรวจที่แสดงนี้จึงไม่ได้เป็นการรับรองถึงผลการปฏิบัติงานหรือการดำเนินการของบริษัทจดทะเบียนและไม่ถือเป็นการให้คำแนะนำในการลงทุนในหลักทรัพย์ของบริษัทจดทะเบียนหรือคำแนะนำใดๆ ผู้ใช้ข้อมูลจึงควรใช้วิจารณญาณของตนเองในการวิเคราะห์และตัดสินใจในการใช้ข้อมูลใดๆ ที่เกี่ยวกับบริษัทจดทะเบียนที่แสดงในผลสำรวจนี้

ทั้งนี้บริษัทหลักทรัพย์ อาร์เอชบี (ประเทศไทย) จำกัด (มหาชน) มิได้ยืนยันหรือรับรองถึงความครบถ้วนและถูกต้องของผลสำรวจดังกล่าวแต่อย่างใด

ข้อมูล Anti-Corruption Progress Indicator 2560

ประกาศเจตนาธรรม CAC

A	ASK	CHG	FC	GREEN	JUTHA	MATCH	NINE	PIMO	RWI	SPPT	TFI	TU	VNT
AI	AU	CHOTI	FER	GSTEL	KASET	MATI	NMG	PK	SANKO	SPRC	THE	TVD	WAVE
AIE	BCH	CHOW	FPI	GUNKUL	KBS	MBAX	NNCL	PL	SAUCE	SR	TICON	TVO	WHA
AIRA	BJC	CIG	FSMART	HARN	KCAR	MC	NTV	PLANB	SC	SRICHA	TIP	TVT	WICE
AJ	BJCHI	COL	GEL	IFS	KTECH	MFEC	NUSA	POST	SCCC	SST	TKN	TWPC	WIJK
ALUCON	BLAND	COM7	GFPT	ILINK	KWC	MIDA	NWR	PRINC	SCN	STA	TLUXE	U	TRUE
AMATAV	BR	CPALL	GGC	INET	KYE	MILL	OGC	PRO	SEAOIL	SUPER	TMILL	UPA	
AOT	BROCK	CPF	GIFT	IRC	L&E	ML	PACE	PSTC	SE-ED	SUSCO	TMT	UREKA	
APCO	BRR	CPR	GJS	J	LEE	MTLS	PAF	PYLON	SENA	SWC	TNP	UWC	
AQUA	CEN	CSC	GLOBAL	JMART	LIT	NBC	PAP	QTC	SIRI	SYMC	TPA	VGI	
ARROW	CGH	EKH	GOLD	JMT	LVT	NCL	PATO	ROH	SMART	TAKUNI	TSE	VIBHA	
ASIA	CHEWA	EPCO	GPSC	JUBILE	MAKRO	NEP	PCSGH	ROJNA	SPACK	TBSP	TTI	VIH	

ได้รับการรับรอง CAC

ADVANC	BKI	CPN	FE	INTUCH	LANNA	MSC	PLAT	PTT	SAT	SNP	TCMC	TMD	UOBKH
AKP	BLA	CSL	FNS	IRPC	LHBANK	MTI	PM	PTTEP	SCB	SORKON	TFG	TNITY	WACOAL
AMANAH	BROOK	DCC	FSS	IVL	LHK	NKI	PPP	PTTGC	SCC	SPC	TGCI	TNL	
AP	BTS	DEMCO	GBX	K	LPN	NSI	PPS	Q-CON	SCG	SPI	THANI	TOG	
ASP	BWG	DIMET	GCAP	KBANK	MBK	OCC	PRANDA	QH	SGP	SSF	THCOM	TOP	
AYUD	CENTEL	DRT	GLOW	KCE	MBKET	OCEAN	PREB	QLT	SINGER	SSI	THRE	TPCORP	
BAFS	CFRESH	DTAC	HANA	KGI	MCOT	PB	PRG	RATCH	SIS	SSSC	THREL	TRU	
BANPU	CIMBT	DTC	HMPRO	KKP	MFC	PDI	PSH	RML	SITHAI	SVI	TIPCO	TSC	
BAY	CM	EASTW	HTC	KSL	MINT	PE	PSL	ROBINS	SMIT	SYNTEC	TISCO	TSSTH	
BBL	CNS	ECL	ICC	KTB	MONO	PG	PT	S & J	SMPC	TAE	TKT	TTCL	
BCP	CPI	EGCO	IFEC	KTC	MOONG	PHOL	PTG	SABINA	SNC	TCAP	TMB	TVI	

N/A

2S	ARIP	BSM	CSS	FMT	INOX	LTX	NPK	RCL	SFP	SUC	TITLE	TSR	VPO
AAV	AS	BTC	CTW	FN	INSURE	M	NPP	RICH	SGF	SUN	TIW	TSTE	VTE
ABICO	ASAP	BTNC	CWT	FOCUS	IRCP	MACO	NVD	RICHY	SHANG	SUTHA	TK	TTA	WG
ACAP	ASEFA	BTW	D	FORTH	IT	MAJOR	NYT	RJH	SIAM	SVH	TKS	TTL	WHAUP
ACC	ASIAN	BUI	DCON	FTE	ITD	MALEE	OHTL	ROCK	SIMAT	SVOA	TM	TTTM	WIN
ADAM	ASIMAR	CBG	DCORP	FVC	ITEL	MANRIN	OISHI	RP	SKE	SYNEX	TMC	TTW	WINNER
ADB	ASN	CCET	DDD	GC	JAS	MAX	ORI	RPC	SKN	T	TMI	TUCC	WORK
AEC	ATP30	CCP	DELTA	GENCO	JCT	M-CHAI	OTO	RPH	SKR	TACC	TMW	TWP	WORLD
AEONTS	AUCT	CGD	DIGI	GL	JKN	MCS	PAE	RS	SKY	TAPAC	TNDT	TWZ	WP
AF	BA	CHARAN	DNA	GLAND	JSP	MDX	PDG	RSP	SLP	TASCO	TNH	TYCN	WPH
AFC	BAT-3K	CHO	DTCI	GPI	JTS	MEGA	PERM	S	SMK	TC	TNPC	UAC	WR
AGE	BCPG	CHUO	EA	GRAMMY	JWD	METCO	PF	S11	SMM	TCB	TNR	UBIS	XO
AH	BDMS	CI	EARTH	GRAND	KAMART	MGT	PICO	SAFARI	SMT	TCC	TOA	UEC	YCI
AHC	BEAUTY	CITY	EASON	GTB	KC	MJD	PJW	SALEE	SOLAR	TCCC	TOPP	UKEM	YNP
AIT	BEC	CK	ECF	GULF	KCM	MK	PLANET	SAM	SPA	TCJ	TPAC	UMI	YUASA
AJA	BEM	CKP	EE	GYT	KDH	MM	PLE	SAMART	SPALI	TCOAT	TPBI	UMS	ZIGA
AKR	BFIT	CMO	EFORL	HFT	KIAT	MODERN	PMTA	SAMCO	SPCG	TEAM	TPCH	UNIQU	ZMICO
ALLA	BGRIM	CMR	EIC	HOTPOT	KKC	MPG	POLAR	SAMTEL	SPG	TFD	TIPL	UP	
ALT	BGT	CNT	EMC	HPT	KOOL	MPIC	POMPUI	SAPPE	SPORT	TFMAMA	TIPIP	UPF	
AMA	BH	COLOR	EPG	HTECH	KTIS	NC	PORT	SAWAD	SPVI	TGPRO	TPOLY	UPOIC	
AMARIN	BIG	COMAN	ERW	HUMAN	KWG	NCH	PPM	SAWANG	SQ	TH	TPP	UT	
AMATA	BIZ	CPH	ESSO	HYDRO	LALIN	NDR	PRAKIT	SCI	SSC	THAI	TR	UTP	
AMC	BKD	CPL	ESTAR	ICHI	LDC	NETBAY	PRECHA	SCP	SSP	THANA	TRC	UV	
ANAN	BLISS	CPT	ETE	ICN	LH	NEW	PRIN	SDC	STANLY	THG	TRITN	UVAN	
APCS	BM	CRANE	EVER	IEC	LOXLEY	NEWS	PRM	SE	STAR	THIP	TRT	VARO	
APEX	BOL	CRD	F&D	IHL	LPH	NFC	PTL	SEAFCO	STEC	THL	TRUBB	VCOM	
APURE	BPP	CSP	FANCY	III	LRH	NOBLE	RAM	SELIC	STHAI	THMUI	TSF	VI	
AQ	BSBM	CSR	FLOYD	INGRS	LST	NOK	RCI	SF	STPI	TIC	TSI	VNG	

Source: Thai Institute of Directors

ข้อมูลบริษัทที่เข้าร่วมโครงการแนวร่วมปฏิบัติของภาคเอกชนไทยในการต่อต้านทุจริต (Thai CAC) ของสมาคมส่งเสริมสถาบันกรรมการบริษัทไทย (ข้อมูล ณ วันที่ 17 ต.ค.)

- ได้ประกาศเจตนาธรรมนี้เข้าร่วม CAC
- ได้รับการรับรอง CAC

การเปิดเผยการประเมินดัชนีชี้วัดความคืบหน้าการป้องกันกรมีส่วนเกี่ยวข้องกับการทุจริตคอร์รัปชัน (Anti-Corruption Progress Indicators) ของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทยที่จัดทำโดยสถาบันที่เกี่ยวข้องซึ่งมีการเปิดเผยโดยสำนักงานคณะกรรมการกำกับหลักทรัพย์และตลาดหลักทรัพย์นี้เป็นการดำเนินการตามนโยบายและตามแผนพัฒนาความยั่งยืนสำหรับบริษัทจดทะเบียนโดยผลการประเมินดังกล่าว สถาบันที่เกี่ยวข้องอาศัยข้อมูลที่ได้รับจากบริษัทจดทะเบียนตามที่บริษัทจดทะเบียนได้ระบุในแบบแสดงข้อมูลเพื่อการประเมิน Anti-Corruption ซึ่งอ้างอิงข้อมูลมาจากแบบแสดงรายงานข้อมูลประจำปี แบบ (56-1) รายงานประจำปีแบบ (56-2) หรือในเอกสารหรือรายงานอื่นที่เกี่ยวข้องซึ่งเป็นบุคคลภายนอก โดยมีได้เป็นการประเมินการปฏิบัติของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทยและมิได้ใช้ข้อมูลภายในเพื่อการประเมิน เนื่องจากผลการประเมินดังกล่าวเป็นเพียงผลการประเมิน ณ วันที่ ปรากฏในผลการประเมินเท่านั้น ดังนั้นผลการประเมินจึงอาจเปลี่ยนแปลงได้ภายหลังวันดังกล่าว หรือรับรองความถูกต้องครบถ้วนของผลประเมินดังกล่าวได้อย่างใด