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Argus Methanol Outlook

Formerly Argus JJ&A Methanol Outlook

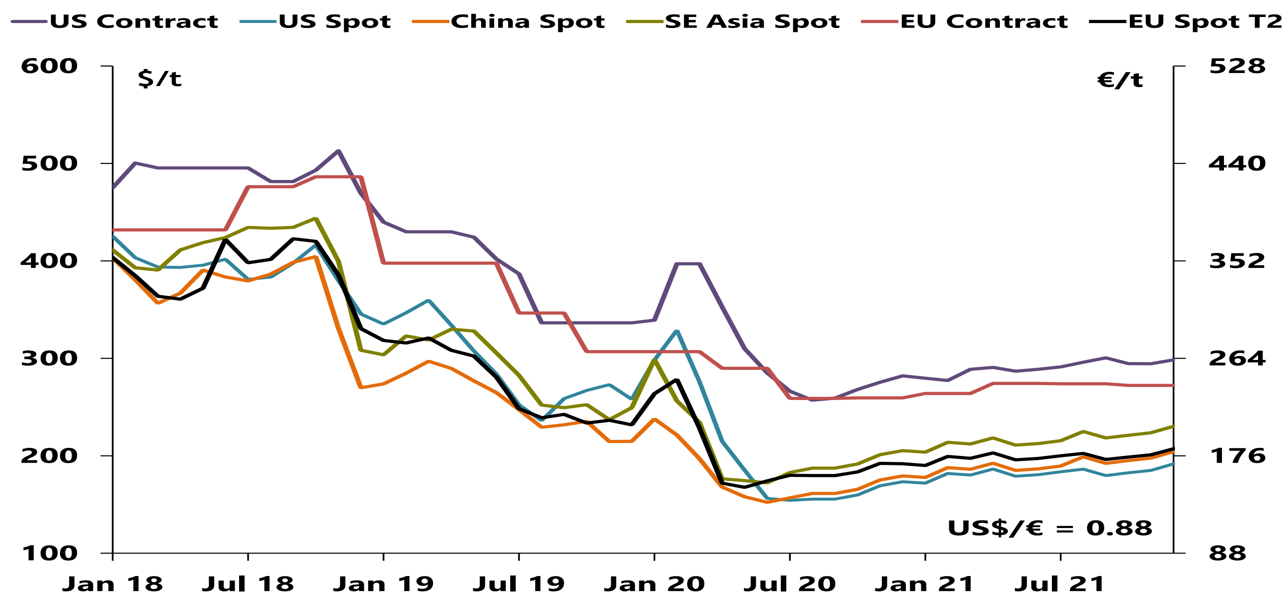
Near-term outlook

The worldwide coronavirus pandemic continues to impact global economies and methanol demand. Methanol supplies still outpace demand , keeping prices weak. Few planned outages are seen on the horizon, ensuring ample supply to cover current low and slowly improving demand. We have seen some regions reduce operating rates or idle capacity, but recent expansions serve to offset. Methanex and Southern Chemical reduced June postings by 4¢ and 7¢/USG, dropping to 83¢/USG and 78¢/USG, which may be the lows for the year. The European quaterly benchmark price for Q3 was settled at €225/t, down €30/t from Q2 and also may be the low for the year.

Longer-term outlook

The outlook for 2020 remains gloomy, underpinned by methanol demand loss from the shutdown of global economies. The methanol industry remains in oversupply into 2H'20, through 2021 and probably into 2024, even with announced delays for a few planned units. MTO economics will see challenge for several years, but methanol demand is likely sustained, corralled by the global oversupply of olefins and derivatives depressing pricing and squeezing MTO margins.

Global methanol pricing forecast



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Price forecast

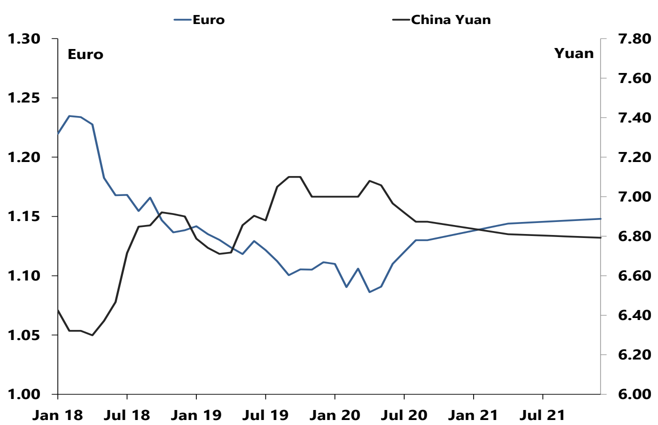
US Gulf coast fob													
	Jun 20	**Jul 20**	**Aug 20**	**Sep 20**	**Oct 20**	**Nov 20**	**Dec 20**	**Jan 21**	**Feb 21**	**Mar 21**	**Apr 21**	**May 21**	**Jun 21**
WTI crude oil *$/bl*	37.1	38.1	39.3	40.8	41.3	43.3	44.8	45.6	47.5	48.5	48.5	47.5	47.5
Natural gas Henry Hub $/mnBtu	1.83	1.88	1.92	1.86	2.15	2.28	2.46	2.68	2.51	2.42	2.07	1.97	1.92
Methanol - contract index *¢/USG*	86	80	77	78	81	83	85	84	83	87	87	86	87
Methanol - contract index *$/t*	285	266	257	259	268	275	282	280	277	289	291	287	289
Methanol - spot *¢/USG*	47	46	47	47	48	51	52	52	55	54	56	54	54
Methanol - spot *$/t*	156	154	155	155	160	169	173	172	182	180	186	179	181

Western Europe fob T2													
	Jun 20	**Jul 20**	**Aug 20**	**Sep 20**	**Oct 20**	**Nov 20**	**Dec 20**	**Jan 21**	**Feb 21**	**Mar 21**	**Apr 21**	**May 21**	**Jun 21**
North Sea Dated *$/bl*	39.4	40.1	41.8	43.3	43.8	45.8	47.3	48.1	50.0	51.0	51.0	50.0	50.0
Euro per US dollar	1.11	1.12	1.13	1.13	1.13	1.13	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Methanol - benchmark *€/t*	255	228	228	228	228	228	228	232	232	232	241	241	241
Methanol - benchmark *$/t*	283	255	257	257	258	259	259	264	265	265	276	276	276
Methanol - benchmark *¢/USG*	85	77	77	77	78	78	78	80	80	80	83	83	83
Methanol - spot T-2 *€/t*	153	158	158	158	161	169	169	167	175	174	179	172	174
Methanol - spot T-2 *$/t*	170	177	179	179	183	192	192	190	200	198	204	197	199
Methanol - spot T-2 *¢/USG*	51	53	54	54	55	58	58	57	60	60	61	59	60

Asia-Pacific cfr													
	Jun 20	**Jul 20**	**Aug 20**	**Sep 20**	**Oct 20**	**Nov 20**	**Dec 20**	**Jan 21**	**Feb 21**	**Mar 21**	**Apr 21**	**May 21**	**Jun 21**
Dubai crude oil *$/bl*	40.7	40.9	42.0	42.3	43.6	45.9	47.2	46.7	49.5	49.0	50.6	48.3	48.8
Yuan per US dollar	6.97	6.92	6.87	6.87	6.86	6.86	6.85	6.84	6.83	6.82	6.81	6.81	6.81
Methanol - China spot *$/t*	152	157	161	161	166	175	179	178	188	186	192	185	186
Methanol - China spot *¢/USG*	46	47	49	49	50	53	54	53	56	56	58	56	56
Methanol - South Korea spot *$/t*	182	187	191	191	196	205	209	208	218	216	222	215	216
Methanol - South Korea spot *¢/USG*	55	56	58	58	59	62	63	62	66	65	67	65	65
Methanol - Taiwan spot *$/t*	181	175	179	179	184	193	197	196	206	204	210	203	204
Methanol - Taiwan spot *¢/USG*	54	53	54	54	55	58	59	59	62	61	63	61	62
Methanol - SE Asia spot *$/t*	172	183	187	187	192	201	205	204	214	212	218	211	212
Methanol - SE Asia spot *¢/USG*	52	55	56	56	58	60	62	61	64	64	66	63	64
Methanol - India spot *$/t*	178	169	164	154	153	157	161	160	170	168	174	167	168

Argus Direct subscribers can download these price tables, the extended price forecast, and additional charts here.

Euro, Yuan to US dollar exchange forecast



Current vs prior forecast price change			**±%**
Months	**1-3**	**4-6**	**7-12**
US			
Contract	-3%	0%	6%
Spot	-14%	-9%	-1%
Europe			
Contract	5%	4%	4%
Spot	7%	6%	8%
Asia-Pacific			
China	-2%	4%	11%
South Korea	-1%	3%	9%
Taiwan	1%	4%	10%
India	-2%	3%	9%

Global energy and economy

Crude oil

The global Covid-19 pandemic continues to progress around the world, affecting South America and Russia severely, while western economies begin to reopen. However, "damage" has been done and further damage lies ahead. Global economies are expected to take years to recover from this pandemic, even if an effective vaccine is developed in the next 6-12 months. For the crude oil markets, it is highly probable new (historical) records will be set, and depending on your perspective, the records could be good or bad.

In its June report, the International Energy Agency (IEA) predicts global crude oil demand will decline an average of 8mn b/d for 2020, an all-time record for a calendar year. After falling more than 16mn b/d in late March and early April, global demand has begun to recover. For 2021, the IEA forecasts another record of old to fall, with year-over-year crude demand rising by more than 5mn b/d. However, with the airline industry crippled, the forecast may be optimistic.

The *Argus* price forecast for the next 24 months reflects a stronger market view, despite some of the fundamental elements in place which could still pressure prices lower. US commercial crude inventories hit record levels (more than 539mn bl) in the past two weeks, despite falling US production and slowly increasing refinery runs. The disparity between Brent/North Sea Dated (NSD) prices and Ice Brent futures, which reached well over $7/bl in May, has returned to more typical levels of less than $1/bl. Our view is Brent/NSD will approach $50/bl in early 2021, predicated on discipline by crude producers and recovering demand.

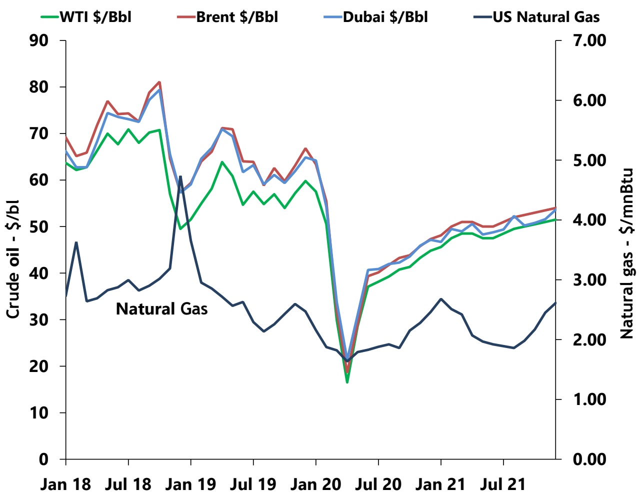
The Opec+ group did agree to extend its production cuts for at least another month (through July) at its June meeting, and further extensions may be needed to stabilize oil prices in the current range of $35-40/bl. There are reports that some US producers are restarting oil wells now that prices have recovered. Prices are not high enough to incentivize new drilling, which typically lags behind any rise in crude markets. The latest US Energy Information Administration (EIA) data published on 17 June showed crude oil production at 10.5mn b/d, down by 600,000 b/d from the prior week and approximately 2.5mn b/d down from the February 2020 peak. With the decline of domestic production, the price of West Texas Intermediate (WTI) approached $40/bl in the past several weeks, only to pull back and stabilize in the $36-39/bl range. Gasoline demand continues to recover, but jet demand remains in the doldrums.

Economy

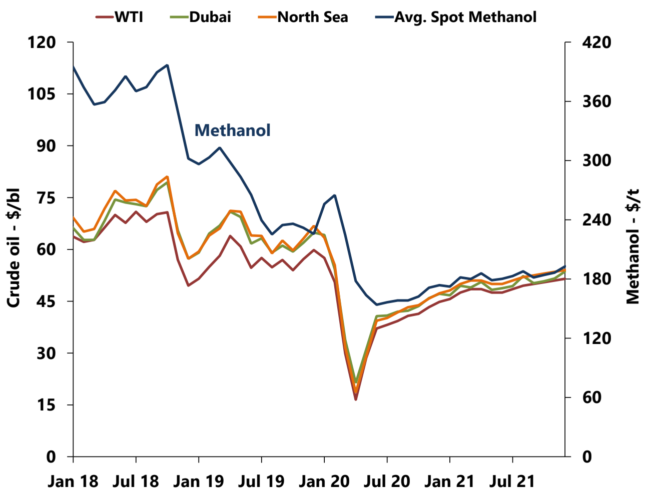
There are now more than 8mn cases of Covid-19 around the globe, with the US having the most reported cases of any country at more than 2.1mn infections. The death toll continues to rise, with more than 430,000 fatalities globally because of the virus.

Governments are considering further measures to provide assistance to citizens and stimulate economies. A second

Crude oil and natural gas price history/forecast



Crude oil vs methanol pricing - energy equivalence



Global energy and economy

round of stimulus is probable in the US, but what form it will take continues to be debated. The latest forecast from Oxford Economics predicts that the US economy will contract by 7.4pc in 2020, but will see growth in the second half of the year. The future economic recovery is less likely to look like a "V" and probably more like an "L" going forward. Pharma companies are furiously working on a vaccine, and a successful treatment/immunization program will speed up any recovery. The stock markets seem to be hanging on every report of progress and traders are pushing stock prices to new highs in recent weeks, but volatility remains high with daily market moves ranging from minus 1,800 points to plus 1,000 points.

The May employment figures from the US Department of Labor showed a surprising gain of more than 2.5mn jobs, mainly because some states are slowly starting to reopen. The unemployment rate is 16.3pc, up from less than 4pc in December 2019. While the overall May results were very positive, reports of the US weekly jobless claims remain troubling. These claims soared above 3mn per week in April and early May, but have come off record highs while remaining solidly above the 1mn per week level.

Natural gas

Henry Hub natural gas prices for July delivery month-to-date have been weaker as the summer is off to a mild start and liquefied natural gas (LNG) loadings at US ports have been delayed or cancelled because of poor economics. Even with supply falling, slower economic activity has reduced demand from power generation and manufacturing, expanding inventories. For the latest reporting week, gas injections were pegged at 93 Bcf going into inventory. This placed domestic inventories for the week ending 5 June at 2.807 Tcf, above the five-year average by 421 Bcf, and higher by 748 Bcf versus year-ago levels. Current US natural gas prices are now trading in the $1.60-1.70/mmBtu range for July contracts. If crude production does recover, then natural gas supply may begin to increase as associated gas production rises

Global supply and demand

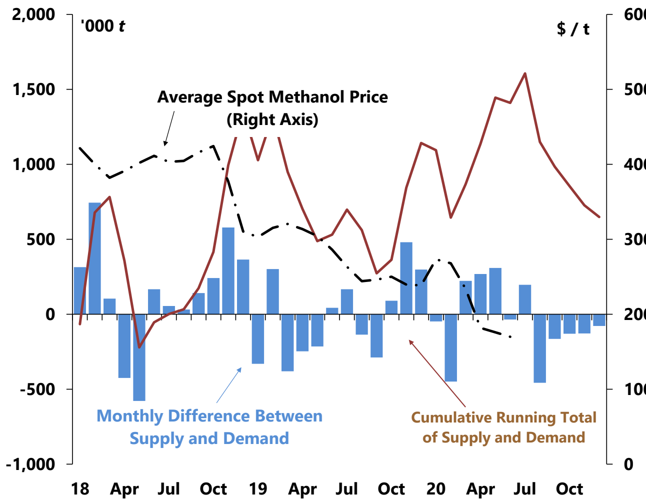
2020 - Regional Methanol Operating Performance													*lost volume, '000t*
Region	**Capacity**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
North America	10,325	142	197	101	186	104	21	0	0	0	82	39	20
South America	12,150	125	138	257	366	386	381	393	326	219	229	197	195
Europe/Central Europe	3,927	70	55	61	39	141	63	41	41	39	41	39	41
Russia/CIS	6,175	54	49	54	99	103	52	54	241	102	54	52	54
ME/Africa	26,509	616	593	489	331	354	315	393	342	302	382	370	382
SEA/Oceania	6,340	287	161	114	79	81	106	81	81	79	81	142	113
India	495	8	7	8	8	8	8	8	8	8	8	8	8
China	97,215	3,425	2,501	3,393	3,326	3,408	2,954	3,397	3,504	3,479	3,389	2,954	3,082
Total capacity - Wld	163,136	12,879	11,809	13,244	12,817	13,244	12,817	13,551	13,551	13,196	13,636	13,196	13,636
Lost production - Wld	50,922	4,728	3,701	4,476	4,434	4,585	3,900	4,367	4,543	4,227	4,266	3,801	3,894
Eff. capacity - Wld	112,214	8,151	8,108	8,768	8,383	8,659	8,917	9,184	9,009	8,970	9,371	9,395	9,742
Op rates - Wld	69%	63%	69%	66%	65%	65%	70%	68%	66%	68%	69%	71%	71%
Eff. capacity - w/o China	53,811	4,296	3,857	4,516	4,310	4,422	4,472	4,628	4,560	4,670	4,723	4,571	4,786
Op rates - w/o China	82%	77%	76%	81%	80%	79%	83%	83%	81%	86%	84%	84%	85%

The methanol industry landscape sees little change from May, as the Covid-19 pandemic could underpin the loss of as much as 4mn t of methanol consumption in 2020 versus 2019. The brunt of demand losses have occurred in April/May, but recovery will be slow as countries are just beginning to reduce lockdowns and/or social distancing programs. Unfortunately, Covid-19 cases are spiking in some countries, with fears the return to more stringent lockdowns will again be put into place.

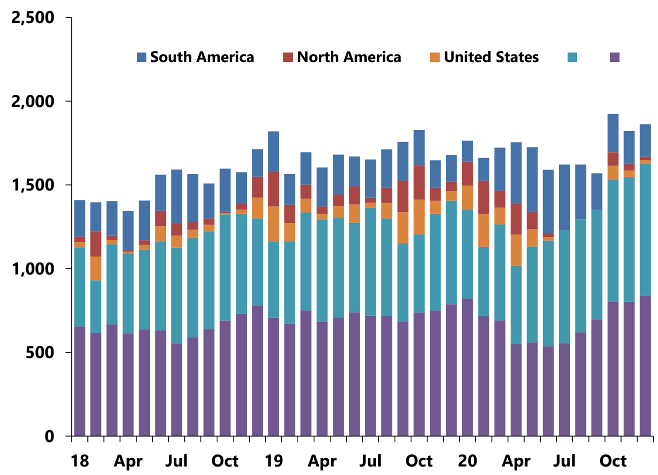
Staying with last month's assessment, supply continues to outpace demand. Despite a handful of methanol units being idled (and/or reduced production), this has done little to shrink the supply/demand imbalance. Some 3mn t/yr of production has either been idled or reduced. However, through the course of June, it appears two new Iran methanol units—Bushehr and Kimiya Pars, both @ 1.8mn t/yr capacity—have commissioned and a new 2.2mn t/yr methanol unit in China has done the same.

The two new Iran units, for the most part, must target the China market and this will keep pressure on prices in that

Global supply vs demand vs price



Global outages



Global supply and demand

country—which in turn does have influence on pricing elsewhere.

Other new capacity is still expected in 2020 as well. The industry awaits the planned start-up of the new CGCL unit in Trinidad (1mn t/yr), which was supposed to commission circa the May/June timeframe. The coronavirus pandemic has obviously delayed progress, with some speculation start-up may be pushed into 2021. The YCI Methanol One unit in the US (1.6mn t/yr @ capacity) was last expected to start-up in Q4'20, but like CGCL, this could see further slippage as well.

The delay in production from these two units likely prevent the industry in becoming further oversupplied this year. In fact, at current assumptions for supply and demand, we won't be surprised to see more massive production curtailments in the back-half of the year.

Again, unchanged from last month's thinking, with reduced demand and several (mostly Atlantic basin) methanol units idled or reduced, any new capacity this year keeps supply pressures on the industry and as a result, prices remained depressed.

Global pricing outlook

The methanol industry continues to see spot prices at decade-low levels (China particularly) and other major regions nearer 4-year lows. Reduced demand, ample supplies, now $40/bl oil prices continue to offer little upside on price levels.

Maybe a surprise, but likely the best news the industry has right now, is that China's MTO sector essentially operates full-out. Despite near record low ethylene prices in April/May, prices have now doubled (since), but to put that into perspective remain at only 50pc levels as compared to early 2018. Now, while olefins show near term strength, this looks to be more underpinned by Asia "cracker turnaround season" and supplies have shrunk versus demand uptick. We see this as a short-lived scenario (1-2 months) and olefins again go long, and prices weaken. However, MTO rates may see little change, but methanol affordability again is unlikely to allow methanol prices to see much upside.

In *Argus*' view, it remains likely China prices will be more driven by (delivered) cash cost of production in the near term, rather than the more traditional energy equivalence or MTO methanol affordability, which have been the more common "price influencers" the last many years.

For the industry, how China goes, so does the rest of the world. However, while China spot methanol prices have flirted with 12-year lows, it is now appearing there is limited further downside and maybe the industry has seen the "worst". But again, we also see little opportunity for upside in this Covid-19 stunted environment.

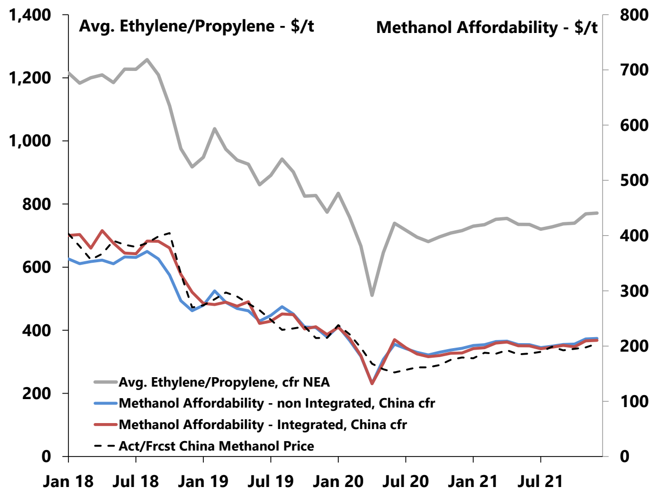
Prices in other major regions of the world see spot (and contract) price levels continuing to converge toward China levels, although through June it has seemed the US and Europe fight to see who is the lowest or highest (from spot basis).

With July days away, US and Europe posted prices are finalized, with levels lower than June for both regions. This month's forecast differs little from recent publications. With a slow recovery in demand and more than ample supply, prices are likely to continues to move more sideways, but as we put in print often, if supply sees serious issues, prices will rise and rise rapidly, the only question will be for how long.

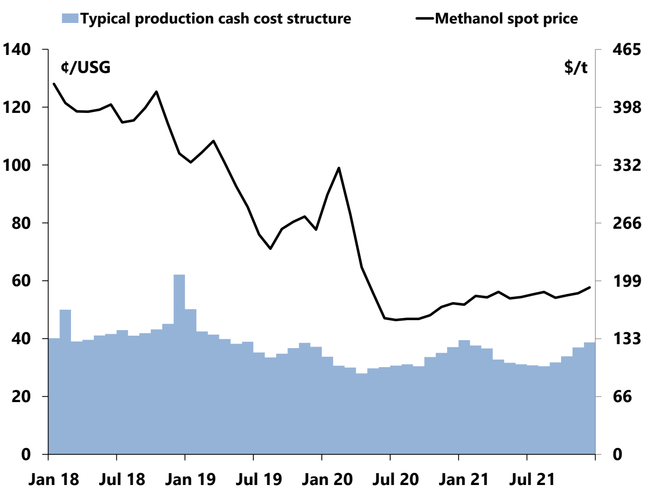
North America

The Q1'20 atmosphere, when tighter supplies and a yet collapsing economy was supporting spot prices above 100¢/USG levels, is obviously long gone. March sees a rapid decline in spot prices as supplies improved with the return of two gulf coast producers. By March's end, US spot prices had fallen to high-60's¢/USG levels. April saw less of a decline, with spot prices averaging just near 65¢/USG through the month. May saw prices slip further, into the mid-50's¢/USG range, and June saw spot prices likely bottoming out at 43¢/

Methanol affordability into MTO



US methanol production cost/margin



Global pricing outlook

USG. Maybe there is nowhere else to go but to rebound, but the rebound looks likely to be minimal unless there are further supply side issues or planned curtailments.

The same for all regions, the forward look sees supplies remaining ample and anybody's guess what demand recovery will look like.

While crude oil prices are moving into the low-$40's/bl range as June end, we expect ongoing weak demand to limit further support through the summer, if not through year's end in terms of higher oil prices.

Without expectations of improving energy and/or methanol prices in other major regions, we expect the US to move mostly sideways through the remainder of the year—based on July price expectations, we look for minimal price downside, but that's not to say for brief periods of time, "distress" sales could drive values lower.

However, noted earlier, we also believe global producers have now fast approached (or have already decided) make versus buy decisions. Further softness in methanol values will likely prompt producers to move more aggressively into spot arenas, which undoubtedly with offer some price strength.

For July, Methanex has posted their benchmark at 83¢/USG, down 4¢ from June. Southern Chemical has posted 78¢/USG for July, down 6¢. For all of 2020, including the strength seen in Q1 and a much more sideways (looking ahead) crude oil average of just $39/bl ($57/bl in 2019), we expect spot and contract pricing to average 68¢/USG and 92.5¢/USG, a slightly higher spot average but mostly unchanged posted number, maintaining the spread between spot and contract at recent levels. For 2021, with crude oil prices only improving to almost $50/bl levels, spot and contract methanol pricing is forecast to average 55¢/USG (down 2¢) while posted prices average 87¢/USG (up 3¢), again reflecting a sustained wider spread between spot and contract.

Late in the year, we still show the start-up of the new YCI Methanol One unit (1.6mn t/yr), while we now believe the small US MeOH Liberty One unit (200,000 t/yr) in the northeast US slips into 1H'21. However, in the current restricted environment, timing could just as easily slip for the YCI unit as well. The CGCL, in Trinidad, was planning on their new methanol unit (1mn t/yr) to be operational in Q2, but this will slip to late in the year, if not into next year.

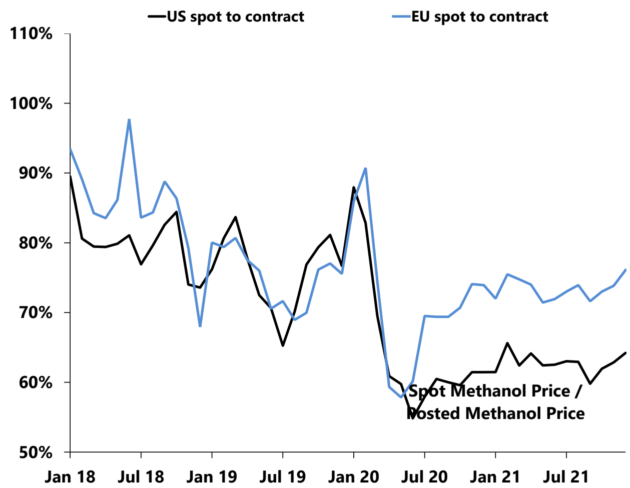
Europe

With Europe's quarterly price mechanism, the benchmark price for Q2 was agreed to at €255/t (nominal $275/t, 83¢/USG), down just €15/t from Q1 and has remained in place through June. With spot prices falling to either side of €150/t this path month, the posted price was going to have to see decrease for Q3. Methanex has posted €335/t for its European benchmark (down €20), while the rest of the market (and the official benchmark) has been agreed to at a lower €225/t marker as July begins (down €30/t).

Like other markets, Europe had moved to the "well supplied" side of the equation in April and particularly May, at the brunt of demand turndown. While a small Netherlands complex has been idled for more than a month now, this has done little to notably tighten supply versus demand.

With supply length and opportunities to ship methanol to the higher priced US market in Q1, spot prices spiked to €260/t levels, helping underpin a Q2 benchmark at €255/t. Since, methanol spot prices have steadily fallen, and at this point in time, have little opportunity to improve through year's end.

US and EU spot-to-contract price relationship



Global pricing outlook

Contract benchmark pricing averaged €319/t ($357/t, 107¢/USG) in 2019. June's 2020 outlook calls for benchmark pricing dipping to €245/t, ($273/t, 82¢/USG), up €6/t from last month's forecast. North Sea Dated crude averaged $64/bl last year, while forecast to average $42/bl and $51/bl in 2020 and 2021, respectively, now up $10/bl from last month's thinking.

Spot methanol pricing averaged €240/t ($269, 81¢/USG) last year and is now forecast to average a €175/t ($195/t, 58¢/USG) for 2020 and 2021, staying on a sideways trend consistent with other major regions.

Asia-Pacific

China was first to experience the head-on impact of the coronavirus-driven demand recession and at least for a while looks to be the first in recovery. However, the path of improving methanol demand is likely to be slow as a resurgence in virus cases is seen globally.

As such, China methanol price decline led the race to the bottom and China will likely lead recovery and improved prices, to whatever those levels may be. At this time, ongoing oversupply issues within the country and via increased imports suggest no significant near-term price strength will be seen for months.

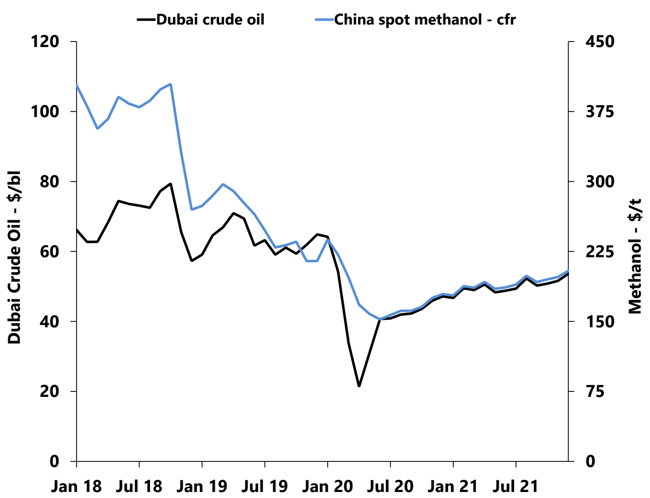
With average spot pricing beginning the year at $270/t levels, current spot prices are now moving towards average $160/t levels (and at least up from $155/t levels in mid-June). We believe China prices may have touched bottom 2-week's back. We finally begin to see some China domestic production "finally" succumbing to no/negative margins and begin to reduce rates. However, at this time, these reduced volumes are minimal and hardly moving the supply dial. Thus, we don't believe there will be significant price improvement from current levels, as there are just no drivers at this time to pull prices higher.

MTO demand remains amazingly robust—basically running full out. Ethylene prices reached decade-low levels in early May, but have now rebounded as olefins supply has tightened. This has pushed all MTO producers into positive-margin territory and by comfortable levels. However, this higher priced ethylene environment is expected to run its course over July (and maybe into August) as Asia "cracker turnaround" season is in full swing. The CTO sector is also in an unusual heavy block of necessary turnarounds, with current operating rates near 60pc levels. Without question, with CTO's and crackers return to production, olefin prices will quickly retreat and MTO producers will see far smaller margins. Not to say they don't continue to operate at high rates, but methanol price upside from MTO demand and/or methanol affordability does not appear to be there.

From the supply side, the flurry of Q1 unexpected outages in southeast Asia are long past, just are the winter-related issues impacting Iran production. In April/May, regional methanol production was strong. In June, we understand Iran's Bushehr methanol unit is now producing methanol, with one ship already on the water headed to China. Iran's Kimiya Pars unit is also understood to have just commissioned and operating—albeit at reduced rates. Adding further to China supplies, CTO producer Ningxia Baofeng recently started-up its new 2.2mn t/yr methanol unit to feed its olefin complex that started-up last year. Now, Baofeng will no longer source methanol from the merchant market, but sell its excess into the market—a swing of up to 2.2mn t/yr at capacity.

Just these examples, alone, are likely to only exacerbate Asia/Pacific methanol length and again underpin low prices for months, if not through next year as well.

Dubai crude oil vs China spot methanol price



Global pricing outlook

The June forecast calls for China spot methanol prices to average $178/t (up $2/t) for 2020. 2021 spot pricing is expected to improve some, averaging $191/t, up $16 from last month's thinking.

Southeast Asia prices were stronger in Q1 as a result of supply-side upsets, but the environment quickly changes as Q2 proceeded. Spot prices have quickly converged towards China levels (with more typical deltas) and are expected to parallel China values through the year. As such, 2020 and 2021 spot methanol prices are expected to average $203/t and $217/t, respectively, up $2 and $15/t.

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