

## **Energy Tidbits**

July 18, 2021

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# BlackRock's Fink Raises Risk of \$100, \$125 Oil If Govts Keep Forcing Supply Down But Can't/Don't Force Down Demand

Welcome to new Energy Tidbits memo readers. We are continuing to add new readers to our Energy Tidbits memo, energy blogs and tweets. The focus and concept for the memo was set in 1999 with input from PMs, who were looking for research (both positive and negative items) that helped them shape their investment thesis to the energy space, and not just focusing on daily trading. Our priority was and still is to not just report on events, but also try to interpret and point out implications therefrom. The best example is our review of investor days, conferences and earnings calls focusing on sector developments that are relevant to the sector and not just a specific company results. Our target is to write on 48 to 50 weekends per year and to post by noon mountain time on Sunday.

#### This week's memo highlights:

- 1. BlackRock CEO raises risk of \$100, \$125 oil if energy transition keeps forcing oil supply down but govts can't/don't force down oil demand. (Click Here)
- 2. OPEC+ deal this morning to increase production +0.4 mmb/d monthly, extend deal to Dec 2022 and revise baselines. (Click Here)
- 3. OPEC MOMR's1st look at 2022 forecasts Q4/22 demand at 102.62 mmb/d, which is +1.83 mmb/d vs Q4/19 (Click Here)
- 4. New SAF Group blog "Asian LNG Buyers Abruptly Change and Lock in Long Term Supply Validates Supply Gap, Provides Support For Brownfield LNG FIDs". (Click Here)
- 5. Energy Secretary Granholm acknowledges doesn't expect China, India, etc to have same emissions targets as US (Click Here)
- 6. Please follow us on Twitter at [LINK] for breaking news that ultimately ends up in the weekly Energy Tidbits memo that doesn't get posted until Sunday noon MT.
- 7. For new readers to our Energy Tidbits and our blogs, you will need to sign up at our blog sign up to receive future Energy Tidbits memos. The sign up is available at [LINK].

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#### Natural Gas - Natural gas injection of 55 bcf, storage now -543 bcf YoY deficit

The EIA reported a 55 bcf injection for the July 9 week, which was above the 5-yr average injection of 54 bcf, and below last year's injection of 85 bcf. Storage is 2.629 tcf as of July 9, decreasing the YoY deficit to 543 bcf from 551 bcf last week and storage is 1 bcf below the 5 year average vs 47 bcf below last week. The significant YoY deficit along with the forecasted hot summer will help support natural gas prices during the injection season. Below is the EIA's storage table from its Weekly Natural Gas Storage Report. [LINK]

Historical Comparisons

YoY storage at -543 bcf YoY deficit

Figure 1: US Natural Gas Storage

					riistorical Compansons						
		billion	Stocks cubic feet (Bcf)		ear ago 7/09/20)	5-year average (2016-20)					
Region	07/09/21	07/02/21	net change	implied flow	Bcf	% change	Bcf	% change			
East	543	521	22	22	670	-19.0	598	-9.2			
Midwest	662	638	24	24	777	-14.8	678	-2.4			
Mountain	180	177	3	3	185	-2.7	175	2.9			
Pacific	250	246	4	4	312	-19.9	290	-13.8			
South Central	995	991	4	4	1,228	-19.0	1,078	-7.7			
Salt	283	286	-3	-3	360	-21.4	305	-7.2			
Nonsalt	712	705	7	7	868	-18.0	773	-7.9			
Total	2,629	2,574	55	55	3,172	-17.1	2,818	-6.7			

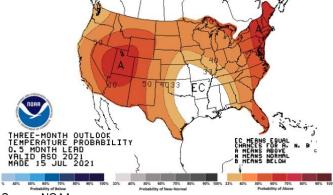
Source: EIA

#### Natural Gas - Still looking for warmer than normal end to summer Aug/Sept/Oct

We continue to see weather forecasts supportive for strong weather driven natural gas demand and support for continued strong HH prices. Note that we consider HH\$3 as strong as they provide excellent returns to US gas plays. On Thurs, NOAA released its monthly update to its seasonal temperature forecasts [LINK]. NOAA is calling for above average temperatures in ASO, but normal temps in the SE. It's early, but the long range winter forecasts for DJF are for warmer than normal winter, which would be a small negative to natural gas with above average temps in the NE and the southern half of the US but normal temps in the Midwest/Plains. Below are the new NOAA temperature probability maps for Aug/Sept/Oct and for Dec/Jan/Feb.

NOAA forecasts a hot summer/early fall

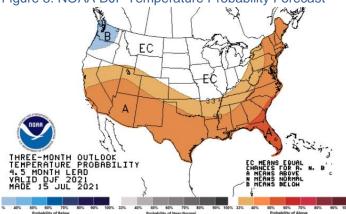




Source: NOAA







Source: NOAA

#### Natural Gas – EIA, US shale/tight natural gas shows marginal increase J/J/A

On Monday, the EIA issued its Drilling Productivity Report July 2021 [LINK], which is the EIA's forecast for oil and natural gas production from the major shale/tight oil and gas basins for the current month (in this case July) and the next month (in this case August). (i) The EIA forecasts August at 85.506 bcf/d which is +0.046 bcf/d MoM (would have been +1.205 bcf/d MoM if not for the +1.159 bcf/d revision to June) and down 1.378 bcf/d from the Nov/19 peak of 86.884 bcf/d. (ii) This month, all basins except for Haynesville and Permian showed decreases, Haynesville (+0.145 bcf/d MoM) and Permian (+0.046 bcf/d MoM), and the largest decreases came from Anadarko (-0.055 bcf/d MoM) and Bakken (-0.048 bcf/d MoM). (iv) All basins are now up YoY, except for Anadarko, Eagle Ford and Niobrara, with the most notable YoY increases being Haynesville +2.109 bcf/d YoY and Permian +0.917 bcf/d YoY. Total US shale/tight natural gas production is +2.409 bcf/d YoY for August. (v) Remember US shale/tight gas is ~90% of total US natural gas production. So whatever the trends are for shale/tight gas are the trends for US natural gas in total. Below is our running table showing the EIA DPR data for the shale/tight gas plays, and the MoM changes in major shale/tight natural gas production. Our Supplemental Documents package includes the EIA DPR.

Figure 4: Major Shale/Tight Play's Natural Gas Production

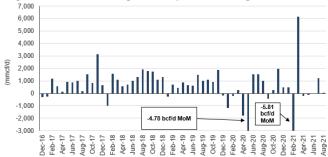
						2021									
mmcf/d	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	August	Aug YoY	Aug less Jul
Anadarko	6,022	6,293	6,272	6,627	6,598	6,411	5,257	6,163	6,082	5,992	5,919	6,129	6,074	52	-55
Appalachia	34,383	33,430	33,762	34,829	35,653	35,587	34,894	34,823	34,685	34,619	34,586	34,364	34,351	-32	-13
Bakken	2,679	2,847	2,919	2,919	2,918	2,888	2,747	2,916	2,851	2,787	2,732	2,798	2,750	71	-48
Eagle Ford	6,004	5,901	5,761	5,725	5,634	5,729	5,036	5,723	5,660	5,610	5,589	5,842	5,835	-169	-7
Haynesville	11,373	11,539	11,595	12,099	12,376	12,488	11,302	12,564	12,699	12,826	12,942	13,337	13,482	2,109	145
Niobrara	5,478	5,471	5,360	5,385	5,277	5,211	5,104	5,014	4,967	4,922	4,882	4,960	4,938	-540	-22
Permian	17,159	17,181	17,248	17,285	16,902	17,510	14,164	17,461	17,499	17,543	17,602	18,030	18,076	917	46
Total	83,097	82,664	82,918	84,868	85,358	85,824	78,503	84,664	84,444	84,300	84,252	85,460	85,506	2,409	46

Source: EIA, SAF

Shale/tight gas up thru July



Figure 5: MoM Change In Major Shale/Tight Natural Gas Production



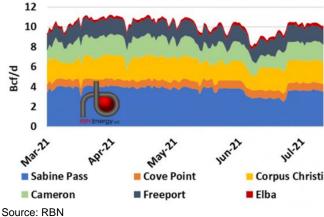
Source: EIA, SAF

#### Natural Gas - LNG exports rebounding as spring maintenance ends

There was another good RBN Energy reminder blog last Sunday "Better Days - U.S. LNG Feedgas Rebounds As Spring Maintenance Season Rolls Off" [LINK] that reminded spring maintenance for LNG export projects was ending and we should see US LNG exports ramp up in July. As usual, RBN's blogs includes a fair amount of detail that provides a step thru of maintenance schedules by LNG export project. Over the past month, US LNG feed gas deliveries have been just about 85% of full capacity due to spring pipeline maintenance, terminal maintenance and operational issues, but now have quickly bounced back above 95%, with expectations for a breakthrough summer. RBN reminded feed gas demand is poised to head even higher over the next few months from new liquefaction capacity coming online and potentially from spot market cargo production. Maintenance is typically scheduled in the shoulder months in the spring and fall to cause minimal disruption to gas consumers when domestic demand is lower. However, the US LNG market doesn't really have down times for demand, so LNG terminals felt the maintenance season more than the average residential or commercial consumer. We have included a chart from RBN which highlights the impact of maintenance and operational issues on LNG the past few months. Our Supplemental Documents package includes the RBN blog.

Spring maintenance over, LNG exports bouncing back





Updated flows to US LNG export projects

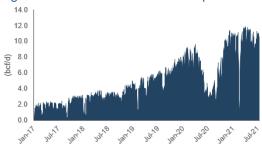
We included our below graph of Bloomberg data for natural gas flows to US LNG export projects. The big event in 2021 was the freeze in February that caused a

Flows to US LNG recovering



massive decline in natural gas flows to US LNG export terminals. Flows to the terminals fell from 10 bcf/d on Feb 10 to a low of 1.4 bcf/d on Feb 16. LNG flows had recovered rather quickly post Feb 16 and reached 11.3 bcf/d on Mar 3, just 0.2 bcf/d lower than the daily record flow of 11.5 bcf/d set on Dec 11, 2020. Since then, the Dec 11/20 record flows have been broken many times over. In fact, flows hit 11.9 bcf/d on April 18, which is now the new record. Over the month of June, average flows were 10.15 bcf/d. So far for July, flows are slightly greater, at an average of 10.3 bcf/d. Below is a chart of the Bloomberg data.

Figure 7: Net US LNG Flows to Export Terminals



Source: Bloomberg

#### Natural Gas - FID on Cheniere Corpus Christi LNG Stage 3 looks imminent

Yesterday, we tweeted [LINK] "Doesn't #Cheniere's \$TOU supply deal signal FID on Corpus Christi Stage 3 #LNG has to be any day now? 15-yr gas supply starting in <18 mths for Stage 3 that is fully permitted but yet to be FID. Fits picture #LNGSupplyGap is coming faster and sooner. #NatGas". It looks like we should see a FID on Cheniere's Corpus Christi Stage 3 very soon, perhaps even just before the upcoming Q2 results on Aug 4. Cheniere's Q2 call is on Aug 5. This is not a big expansion at 0.13 bcf/d capacity, but it is another indicator that the LNG supply gap is hitting harder and sooner than most expect. Both Tourmaline and Cheniere issued press releases on their new gas supply deal announced on Thursday. Tourmaline's release [LINK] just said "Tourmaline will supply 140,000 mmbtu per day (approximately 140 mmcfpd) to the Corpus Christi liquefaction terminal for a 15-year term commencing in January 2023." Tourmaline's release was a good reminder to look at both press releases. Cheniere's press release [LINK] included a very significant added data point saying "Tourmaline has agreed to sell 140,000 MMBtu per day of natural gas to Corpus Christi Stage III for a term of 15 years beginning in early 2023." Note Cheniere including the reference to stage 3 is a significant difference as stage 3 is the yet to be FID expansion of the Corpus Christi LNG project. Cheniere is telling markets that it is locking up supply for a yet to FID expansion. The other interesting aspect is the timing to start deliveries in January 2023. Cheniere has been noting that the "10 mtpa Stage 3 expansion project fully permitted". Cheniere is locking up 15-yr supply starting in less than 18 months for a LNG expansion project that isn't yet FID. How can FID not be coming any day now? Our Supplemental Documents package includes the Tourmaline and Cheniere release.

Cheniere stops playing stupid 2 weeks ago on strengthening LNG markets

No one should be surprised by Cheniere looking like it is about to go FID on Corpus Christi LNG Stage 3. Our July 4, 2021 Energy Tidbits highlighted that, on June 30, Cheniere stopped playing stupid and trying naïve little tricks like they did on the Q1 call on May 4 with respect to the strengthening LNG market in 2021. We just didn't get it in May and still don't think they were fooling anyone. It just seemed silly. But on

Cheniere Corpus LNG Phase 3 FID any day now?



June 4, they came out talking about how commercial discussions have picked up in 2021 and its boosted their hope for a Texas (Corpus Christi) LNG expansion. On Wednesday, Platts reported "Pickup in commercial talks boosts Cheniere's hopes on mid-scale LNG project" [LINK] Platts wrote "Cheniere Energy expects to make a "substantial dent" by the end of 2022 in building sufficient buyer support for a proposed mid-scale expansion at the site of its Texas liquefaction facility, Chief Commercial Officer Anatol Feygin said June 30 in an interview." " As a result, he said, "The commercial engagement, I think it is very fair to say, has really picked up steam, and we are quite optimistic over the coming 12-18 months to make a substantial dent in that Stage 3 commercialization." Platts also reported Cheniere noted this has been a tightening market all year (ie would have been know by the May 4 Q1 call). Platts wrote "We obviously find ourselves at the beginning of this year and throughout in a very tight market where prices today into Asia and into Europe are at levels that we frankly haven't seen in a decade-plus," Feygin said. "We've surpassed the economics that the industry saw post the Fukushima tragedy in March 2011, and that's happened in the shoulder period." The bottom line is that these were another LNG leader changing their public stance to a more bullish LNG outlook.

Figure 8: Cheniere's Corpus Christi LNG Corpus Christi Update

Source: Cheniere May Investor Presentation



Natural Gas – Asian LNG buyers abruptly pivot and lock in long term supply

On Wednesday, we posted our 8-pg blog "Asian LNG Buyers Abruptly Change and Lock in Long Term Supply — Validates Supply Gap, Provides Support For Brownfield LNG FIDs" [LINK]. The reason why we write longer blogs is that we try to provide the thesis and backup so readers don't have to do dig up the back up or sign up to get the backup. We believe it is significant that Asian LNG buyers have changed their LNG contracting strategy post the Total Mozambique LNG force majeure and are now moving to lock in long term supply. We believe this is the best validation of the LNG supply gap and also a big plus for LNG supply FIDs. Here is the summary of the blog "The last 7 days has shown there is a sea change as Asian LNG buyers have made an abrupt change in their LNG contracting and are moving to lock in long term LNG supply. This is the complete opposite of what they were doing pre-Covid when they were trying to renegotiate Qatar LNG long term deals lower and moving away from long term deals to spot/short term sales. Why? We think they did the same math we did in our April 28 blog "Multiple Brownfield LNG FIDs Now Needed To Fill New LNG Supply Gap From Mozambique Chaos? How About LNG Canada Phase 2?" and saw a much bigger and

Asian LNG buyers locking in long term supply



sooner LNG supply gap driven by the delay of 5 bcf/d of Mozambique LNG that was built into most, if not all LNG supply forecasts. Asian LNG buyers are committing real dollars to long term LNG deals, which we believe is the best validation for the LNG supply gap. Another validation, Shell, Total and others are aggressively competing to invest long term capital to partner in Qatar Petroleum's massive 4.3 bcf/d LNG expansion despite plans to reduce fossil fuels production in the 2020s. And even more importantly to LNG suppliers, the return to long term LNG contracts provides the financing capacity to commit to brownfield LNG FIDs. The abrupt change by Asian LNG buyers to long term contracts is a game changer for LNG markets and sets the stage for brownfield LNG FIDs likely as soon as before year end 2021. It has to be brownfield LNG FIDs if the gap is coming bigger and sooner. And we return to our April 28 blog point, if brownfield LNG is needed, what about Shell looking at 1.8 bcf/d brownfield LNG Canada Phase 2? LNG Canada Phase 1 at 1.8 bcf/d capacity is already a material positive for Cdn natural gas producers. A FID on LNG Canada Phase 2 would be huge, meaning 3.6 bcf/d of Cdn natural gas will be tied to Asian LNG markets and not competing in the US against Henry Hub. And with a much shorter distance to Asian LNG markets. This is why we focus on global LNG markets for our views on the future value of Canadian natural gas". Below are the headers to each of the sections in the blog. Our Supplemental Documents package includes the July 14 blog and April 28 blog.

- Sea change in Asian LNG buyers is also the best validation of the LNG supply gap and big to LNG supply FIDs
- It was always clear that the Mozambique LNG supply delay was 5.0 bcf/d, not just 1.7 bcf/d from Total Phase 1.
- One of the reasons why it went under the radar is that major LNG suppliers played stupid on the Mozambique impact
- There are other LNG supply delays/interruptions beyond Mozambique
- Cheniere stopped the game playing on June 30.
- But we still see major LNG suppliers like Australia hinting but not outright saying that LNG supply gap is coming sooner.
- Clearly Asian LNG buyers did the math, saw the new LNG supply gap and were working the phones in March/April/May trying to lock up long term supply
- A big pivot from trying to renegotiate down long term LNG deals or being happy to let long term contracts expire and replace with spot/short term LNG deals
- Asian LNG buyers moving to long term LNG deals provide financing capacity for brownfield LNG FIDs
- Four Asian buyer long term LNG deals in the last week
- More Asian buyer long term LNG deals (ie. India) will be coming.
- Supermajors are aggressively competing to commit 30+ year capital to Qatar's LNG expansion despite stated goal to reduce fossil fuels production
- Remember Qatar's has a massive expansion but India alone needs 3x the Qatar expansion LNG capacity
- Seems like many missed India's first specific LNG forecast to 2030.
- Bigger, nearer LNG supply gap + Asian buyers moving to long term LNG deals = LNG players forced to at least look at what brownfield LNG projects they could advance and move to FID
- For Canada, does the increasing LNG supply gap provide the opportunity to at least consider a LNG Canada Phase 2 FID over the next 6 months?
- A LNG Canada Phase 2 would be a big plus to Cdn natural gas



#### Natural Gas - Kuwait's Al-Zour import terminal receives first LNG shipment

On Tuesday, Hellenic Shipping News [LINK], and others similarly, reported that Kuwait's new Al-Zour import terminal has received its first LNG shipment. The terminal had originally been expected to be completed in the first quarter of 2021 but was delayed due to the pandemic. The terminal will be the largest LNG terminal in the Middle East with a capacity of 2.9 bcf/d. Kuwait has a 15 year contract with Qatar Petroleum to buy 0.39 bcf/d for Al-Zour. The terminal is owned by Kuwait Petroleum Corp and developed by Kuwait Integrated Petroleum Industries Company and will be the largest import terminal in the Middle East.

Kuwait's new import terminal the largest in the Middle East

#### Too bad Kuwait doesn't do deals with Iran

One of our first thoughts in see the reports is that its too bad Kuwait and Iran don't do deals. This could have been a perfect compressed natural gas supply situation with a short distance from Iran's South Pars gas field to Kuwait. Qatar is set up for liquefactions at its giant North Field. Iran's share of this giant natural gas field is called South Pars and is a natural gas producing operation. A compressed natural gas system would have saved a lot of capex vs a LNG delivery system.

EU sends 2 year military mission to Mozambique

#### Natural Gas – EU the latest to send in military support to Mozambique

Its only been three months since Total declaring force majeure on its Mozambique LNG Phase 1 in progress construction. But it doesn't look like much has changed in Tanzania. Rather, Mozambique continues to look for outside military support to help get the situation under control. The latest to agree to help is the EU, who has decided to set up a military training mission to support the Mozambican armed forces, with the goal of protecting the civilian population and restoring safety and security in the Cabo Delgado province. The Council of the EU released on Monday [LINK] that the mandate of the missions will initially last 2 year, but our fear is that it will still result in what happened to Total. Total stopped working after a bout of violence, let people return stability for a few months, restarted again in late March and had 3 consecutive days of attacks by the rebels which forced Total to stop again after only 3 days. It seemed as though Total and the Mozambican government were lulled into a false sense security. It makes us wonder if having all these difference foreign military groups/advisors – EU is certainly not going to be alone here – just sets up further stop and start.

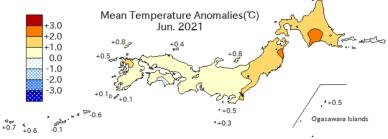
A warm sunny June in Japan

#### Natural Gas – Japan had above normal temperatures and sunshine duration in June

Its been a great summer for LNG markets and prices, and one factor has been it was hot in June in many parts of the world. The Japan Meteorological Agency posted its monthly climate anomaly recap for Japan for June [LINK]. No surprise, June was a month that saw above normal temperatures in all of Japan. It was also a month of low precipitation. Sounds like we saw in many parts of the world – hot and dry. The JMA wrote "High pressure systems covered the mainland of Japan frequently and brought sunny days there. Monthly sunshine durations were the highest record for June since 1946 on the Pacific side of northern Japan and the Sea of Japan side of northern Japan. - Monthly mean temperatures were above normal nationwide, especially that in northern Japan were significantly above normal due to warm air advection mainly in early June and higher sunshine duration." July started off below normal, but its been well above normal for the last week. Its not good for the Olympians with Tokyo being 34/35C the last couple days and anyone who has been in Tokyo in the summer knows 34/35C and humidity is stifling. Below are the JMA temperature and sunshine duration maps for June.

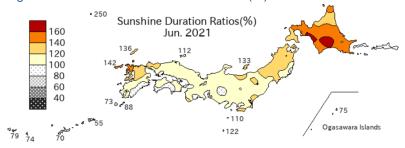


Figure 9: JMA Mean Temperature Anomalies (°C) June 2021



Source: Japan Meteorological Agency

Figure 10: JMA Sunshine Duration Ratio (%) June 2021



Source: Japan Meteorological Agency

#### Natural Gas - Japan next 30 days looks a little warmer than normal

It looks like weather in Japan will continue to be supportive of the strong summer LNG prices. Weather always changes and there is no certainty of that the forecasts will be accurate. However, the last week has seen a warmer outlook for Japan for the next 30 days. And it looks like a continuation of the regional pattern seen in June – very warm in the north, a little above normal in the centre, and then normal in the south. The Japan Meteorological Agency issued its updated month ahead weather forecast for July 17 – Aug 16 on Thursday [LINK] Below is the current JMA forecast for the remainder of May and into June.

Warmer than normal in Japan

Figure 11: JMA Temperature Probability Forecast for June 19 – June 18



Source: Japan Meteorological Agency



#### Natural Gas - High LNG prices impacting summer China LNG imports

We continue to see more reports that some China LNG buyers are curbing summer LNG imports due to the high spot prices. It's a bit of a gamble for lower LNG prices ahead during shoulder season and that Nord Stream 2 starts up in H2/21 to help relieve global gas prices. Bloomberg reported that some are waiting for at least a 10% drop in LNG prices before some buyers return to spot markets. Bloomberg reported that according to traders, if they were to purchase spot cargoes at the current prices, they would be losing money upon selling it to customers. We highlighted the same theme last week in our July 11 Tidbits, when we tweeted on June 6 [LINK] "Continued support for summer #LNG prices from China. @BloombergNEF "China Gas Monthly: More LNG Needed Despite Higher Prices". If #Nordstream2 doesn't start for Q4, there will be a mad scramble for LNG this winter. Thx @BloombergNEF Lujia Cao & Daniela Li. #NatGas". We also highlighted that clearly China, Korea and India are all banking on Nord Stream 2 coming online for winter 2021/2022. In our July 4 Tidbits, we highlighted a similar situation in Korea, where buyers were waiting until the end of summer and using existing inventories until, they hope, spot LNG prices weaken to replenish stocks in time for winter. In this past item, Bloomberg had mentioned that Korea was gambling on a mild winter, however we think the overarching trend is more the expectations that Nord Stream 2 starts up before year end. Our Supplemental Documents Package includes the Bloomberg report.

China importers balking at high LNG prices

#### Natural Gas - China June LNG imports +16.1% YoY, pipeline gas imports +37.5% YoY

Early this morning, Bloomberg @TheTerminal reported the China General Administration of Customs imports for June. As of our 7am MT news cut off, we could not see the detail on the customs English website. We are seeing the same China LNG import trends – YoY increases in LNG imports are so so because of YoY growth in gas pipeline imports from Russia and domestic natural gas production. China LNG imports in June were +16.1% and +1.49 bcf/d YoY to 10.76 bcf/d. China gas pipeline imports in June were +37.4% and +1.5 bcf/d YoY to 5.6 bcf/d. China domestic natural gas production in June was +13.1% and +2.3 bcf/d YoY to 20.25 bcf/d.

China June LNG imports

Figure 12: China LNG Imports

bcf/d	2016	2018	18/17	2019	19/18	2020	20/19	2021	21/20
Jan	3.84	8.03	50.0%	10.20	27.1%	10.31	1.1%	13.15	27.6%
Feb	3.10	6.84	66.9%	7.46	9.1%	7.26	-2.7%	9.52	31.1%
Mar	2.60	5.04	64.5%	6.28	24.8%	6.49	3.3%	8.74	34.6%
Apr	3.00	5.43	57.8%	7.27	34.0%	8.16	12.3%	10.77	32.0%
May	2.20	6.39	41.9%	6.87	7.6%	8.10	18.0%	10.89	34.4%
June	3.51	6.31	30.1%	7.25	14.9%	9.27	27.8%	10.76	16.1%
July	2.46	6.40	33.4%	7.56	18.1%	7.79	3.1%		
Aug	3.54	7.26	49.2%	8.04	10.8%	9.23	14.8%		
Sept	4.05	7.00	26.3%	8.16	16.7%	9.17	12.4%		
Oct	2.85	7.13	29.6%	6.26	-12.2%	7.78	24.3%		
Nov	4.26	9.59	47.5%	10.42	8.7%	10.58	1.6%		
Dec	5.80	9.75	25.0%	10.01	2.7%	11.76	17.5%		
Full Year Avg.	3.43	7.10	41.2%	7.98	12.5%	8.83	10.6%		
Note: Jan/Feb 2	2020 figures	are average	ed. Not app	licable for Y	oY compari	son			

Source: China General Administration of Customs, Bloomberg

#### Natural Gas - China heat wave drives power demand up to new levels in parts of China

China continues to have a heat wave in July, which is driving power demand. On Friday, Bloomberg reported "A heat wave across some of China's biggest industrial provinces has pushed local electricity consumption to unprecedented levels, sending thermal coal futures toward record highs. The power load in the eastern province of Zhejiang near Shanghai surpassed 100 million kilowatts per hour on Tuesday for the first time, the State Grid said in its newspaper. Usage has also hit records in nearby Jiangsu and the southern region of

China heat wave



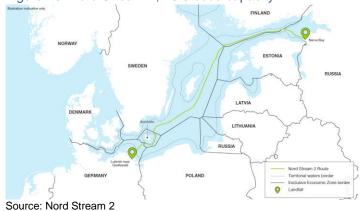
Guangdong, where temperatures have reached as high as 37 degrees Celsius (99 degrees Fahrenheit)." This heat wave should have been a big plus to China LNG imports but, as noted above, China LNG buyers are doing their best to minimize spot LNG purchases due to the high price this summer. Our Supplemental Documents package includes the Bloomberg report.

#### Natural Gas - No Merkel/Biden Nord Stream 2 deal, but still points to a deal

Merkel indicated on Monday, she didn't think "the papers will be fully finalized" on Nord Stream 2 at the Biden White House meeting on Thursday. She was right, no papers were fully finalized at the Biden meeting. We listened to the press conference and still believe Biden will sign off on the pipeline. That is, unless he is playing a delaying game until Merkel steps down in September and hoping for a new Chancellor/government that actually doesn't want Nord Stream 2. We just have trouble believing Merkel would have come to the White House if she believed that was the hidden game plan. Rather, the comments from Merkel and Biden point to the conditions upon which the Biden will sign off - ensuring Russia honors its natural gas delivery contracts to Europe via Ukraine, Russia respects the right of Ukrain as a natural gas transit country, and Germany and the EU being prepared to take action against Russia should Russia not respect this right of transit. It seemed like Merkel was outlining the principles for Biden to sign off. Merkel said "We talked about Russia and Ukraine, and in this context also about Nord Stream 2. We've come to different assessments as to what this project entails, but let me say very clearly, our idea is and remains that Ukraine remains a transit country for natural gas, that Ukraine, just as any other country in the world, has a right to territorial sovereignty, which is why we've become engaged and continue to be engaged in the Minsk process. We will being actively acting should Russia not respect this right of Ukraine, that it has as a transit country. So Nord Stream 2 is an additional project and certainly not a project to replace any kind of transit through Ukraine. Anything else would obviously create a lot of tension. And we're also talking about how we can actually make this very clear together." Our Supplemental Documents package includes the excerpts from the Biden/Merkel press conference transcript on Nord Stream 2.

No Merkel/Biden Nord Stream 2 deal yet





#### Natural Gas - Europe storage 51.90% full vs 5 year average of 67.92%

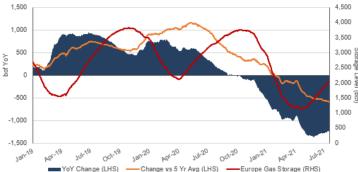
We continue to see the set up for strong summer LNG price, which should support strong US LNG exports to Europe. It was a colder spring, which delayed the refill push in Europe and this is setting up support for summer prices. Additionally, the continued significant YoY deficit in Europe gas storage indicates that there will be strong demand for European LNG imports

Europe gas storage 51.90% full



during the refill push especially since Russia, at least so far in Q2, looks like it only plans to ship contract volumes via Ukraine to Europe ie. not sending above contract levels. Plus high Asian LNG prices continue to provide the incentive for LNG cargoes to go to Asia. This is a big positive indicator for US LNG exports this summer. Europe gas storage started the winter (Nov 1) at basically full levels at 94.66% and had dropped by 65.77% to be 28.89% at Apr 1. This 65.77% decline since Nov 1 compares to the 5 yr average that would be down 53.99% in the same period or to last winter that was only down 43.29% in the same period. We are now seeing storage starting to build, but the storage build is slow for the above reasons, with storage as of June 3 being up 9.64% since April 19, which looks to be the bottom. Storage as of July 15 is 51.90%, 31.65% less than last year of 83.55% and 16.02% below the 5 yr average of 67.92%. Europe storage levels this summer will be the key item to watch for indications on LNG markets going into the winter. Below is our graph of YoY change in net LNG flows to NW Europe.

Figure 14: Europe Gas Storage Level



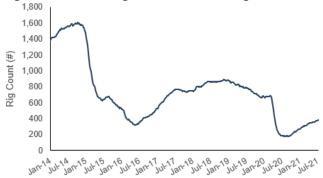
Source: Bloomberg

#### Oil - US oil +2 WoW at 378 oil rigs

Baker Hughes reported its weekly rig data on Friday. This week US oil rigs were up +2 rigs WoW at 380 rigs. Permian was flat at 237 rigs. Increases came from Others (+6), and there were decreases this week from Cana Woodford (-1), Eagle Ford (-2) and Granite Wash (-1). Oil rigs have been on a strong recovery path and are +208 off the bottom of 172 in the Aug 14/2020 week. US oil rigs hit their 2020 peak at 683 on March 13 and have since fallen by 303 to 380 oil rigs (-44.36%). Below is our graph of Baker Hughes US oil rigs.

US oil rigs +2 WoW





Source: Baker Hughes

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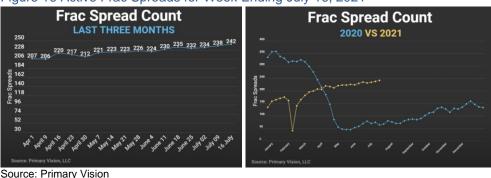


#### Oil - Frac spreads +4 to 242 for week ending July 16

Every week, Mark Rossano (C6 Capital Holdings) posts a YouTube recap of frac spreads for the week on the Primary Vision Network. [LINK] Frac spreads wee +4 this week to 242 for week ending July 16. Activations were broad: 1 in the Permian, rest were spread out in other parts like the Anadarko, Bakken. Rossano expects another 10 to 15 active spreads in Aug getting to that 250 to 255 level. From that point to add the next 20 to 30 spreads in Sept/Oct, going to need to see a pickup in orders for equipment. Biggest problem remains labor, which is why expect to see a slow, measured pace of frac spread growth. However, Rossano sees the level of frac spreads is high enough to support current production and actually helping grow to his target of 11.5 to 11.7 at the end of this year. Rossano noted that this was the first time in a long time that there have been over 200 oil spreads. He is starting to see some gas spreads come back given gas pries but doesn't expect to see a huge jump in gas spreads. Expects to see the slow steady grind of 2 to 4 per week to continue for the next 4 to 6 weeks. Any moves down are only because he looks at active spreads. Below are his two key frac spread graphs.

Frac spreads +4 to 242

Figure 16 Active Frac Spreads for Week Ending July 16, 2021

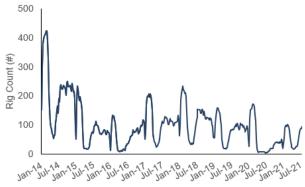


#### Oil - Total Cdn rigs +13 to 150 total rigs and up 118 YoY

Total Cdn rigs were up 13 this week to 150 total rigs. Cdn oil rigs were up 6 to 94 rigs. Cdn gas rigs were up 7 to 55 gas rigs. Total rigs are now +137 since the June 26/2020 all-time low. This week, Cdn rigs continued their ramp up through summer. Cdn drilling has recovered YoY, a year ago Cdn oil rigs were 6 and Cdn gas rigs were 26 for a total Cdn rigs of 32, meaning total Cdn rigs are +118 YoY and total rigs are up +32 vs 2019.

Cdn rigs +13 this week

Figure 17: Baker Hughes Total Canadian Oil Rigs



Source: Baker Hughes

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#### Oil - US weekly oil production up 0.1 mmb/d WoW at 11.4 mmb/d

US oil production was up 0.1 mmb/d at 11.4 mmb/d for the July 9th week, which is the highest it's been since May of 2020. Lower 48 flat +0.1 mmb/d at 11.0 mmb/d. This puts US oil production up 0.4 mmb/d YoY, and is down 1.7 mmb/d since the 2020 peak of 13.1 mmb/d on March 13. The July STEO forecast slightly raised its US crude expectations thru 2021. however it is still not returning anywhere near the Q4/19 peak of 12.78 mmb/d, with Q4/21 US crude of 11.34 mmb/d (down 1.40 mmb/d from peak). In the US oil production commentary, the EIA wrote "Higher oil price levels realized in 2021 drive increases in U.S. tight oil production in 2022. In addition, we expect more barrels from OPEC+ members to reach the market. We expect U.S. crude oil production to increase by 0.8 million b/d in 2022 and OPEC crude oil production to increase by 1.8 million b/d in 2022." Additionally, on US rig counts, the EIA wrote "The recent pace of rig deployment indicates that operators are adding rigs more slowly than during past periods when prices reached similar levels. If operators take a more cautious approach to rig deployment than we are expecting, crude oil production could be lower than in our forecast". The EIA DPR has the expectation of slight MoM increases in July/August. The EIA Form 914 April actuals were 219,000 mb/d above the weekly estimates average of 10.950 mmb/d for Apr, following a similar trend from March's +213,000 mmb/d underestimate. This means they will be increasing their forecast, at least for the near term.

US oil production up 0.1 mmb/d WoW

Figure 18: EIA's Estimated Weekly US Oil Production

Service State of the last	Week		Week		Weel		Week		Week 5		
Year-Month	End Date	Value									
2019-Jan	01/04	11,700	01/11	11,900	01/18	11,900	01/25	11,900			
2019-Feb	02/01	11,900	02/08	11,900	02/15	12,000	02/22	12,100			
2019-Mar	03/01	12,100	03/08	12,000	03/15	12,100	03/22	12,100	03/29	12,200	
2019-Apr	04/05	12,200	04/12	12,100	04/19	12,200	04/26	12,300			
2019-May	05/03	12,200	05/10	12,100	05/17	12,200	05/24	12,300	05/31	12,400	
2019-Jun	06/07	12,300	06/14	12,200	06/21	12,100	06/28	12,200			
2019-Jul	07/05	12,300	07/12	12,000	07/19	11,300	07/26	12,200			
2019-Aug	08/02	12,300	08/09	12,300	08/16	12,300	08/23	12,500	08/30	12,400	
2019-Sep	09/06	12,400	09/13	12,400	09/20	12,500	09/27	12,400			
2019-Oct	10/04	12,600	10/11	12,600	10/18	12,600	10/25	12,600			
2019-Nov	11/01	12,600	11/08	12,800	11/15	12,800	11/22	12,900	11/29	12,900	
2019-Dec	12/06	12,800	12/13	12,800	12/20	12,900	12/27	12,900			
2020-Jan	01/03	12,900	01/10	13,000	01/17	13,000	01/24	13,000	01/31	12,900	
2020-Feb	02/07	13,000	02/14	13,000	02/21	13,000	02/28	13,100			
2020-Mar	03/06	13,000	03/13	13,100	03/20	13,000	03/27	13,000			
2020-Apr	04/03	12,400	04/10	12,300	04/17	12,200	04/24	12,100			
2020-May	05/01	11,900	05/08	11,600	05/15	11,500	05/22	11,400	05/29	11,200	
2020-Jun	06/05	11.100	06/12	10,500	06/19	11,000	06/26	11,000			
2020-Jul	07/03	11.000	07/10	11,000	07/17	11,100	07/24	11,100	07/31	11,000	
2020-Aug	08/07	10,700	08/14	10,700	08/21	10,800	08/28	9,700			
2020-Sep	09/04	10,000	09/11	10,900	09/18	10,700	09/25	10,700			
2020-Oct	10/02	11.000	10/09	10,500	10/16	9,900	10/23	11,100	10/30	10,500	
2020-Nov	11/06	10,500	11/13	10,900	11/20	11,000	11/27	11,100			
2020-Dec	12/04	11,100	12/11	11,000	12/18	11,000	12/25	11,000			
2021-Jan	01/01	11,000	01/08	11.000	01/15	11,000	01/22	10,900	01/29	10,900	
2021-Feb	02/05	11,000	02/12	10,800	02/19	9,700	02/26	10,000			
2021-Mar	03/05	10,900	03/12	10,900	03/19	11,000	03/26	11,100			
2021-Apr	04/02	10,900	04/09	11,000	04/16	11,000	04/23	10,900	04/30	10,900	
2021-May	05/07	11,000	05/14	11,000	05/21	11,000	05/28	10,800			
2021-Jun	06/04	11,000	06/11	11,200	06/18	11,100	06/25	11,100			
2021-Jul	07/02	11,300	07/09	11,400							

Source: EIA

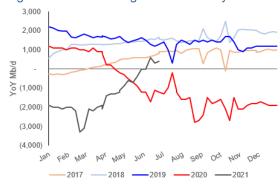


Figure 19: US Weekly Oil Production



Source: EIA, SAF

Figure 20: YoY Change in US Weekly Oil Production



Source: EIA, SAF

#### Oil - EIA DPR continues to estimate relatively flat shale/tight oil production

The EIA issued its Drilling Productivity Report July 2021 on Monday [LINK], which is the EIA's forecast for oil and natural gas production from the major shale/tight oil and gas basins for the current month (in this case July) and the next month (in this case August). (i) The takeaway for shale/tight oil is much the same as for natural gas - shale/tight oil production is expected to increase marginally over the summer. (ii) Post the recovery in March from the Feb freeze, the EIA is expecting slight production increases MoM. (iii) The EIA forecasts August at 7.907 mmb/d which is +100,000 b/d MoM (would have been +105,000 b/d MoM if not for revisions to June) and down 1.251 mmb/d from the Nov/19 peak of 9.158 mmb/d. (iv) This month, all basins are up modestly MoM, and the largest increases MoM came from Permian at +40,000 b/d. YoY most basins are down, but the Permian is still ramping up, +0.289 mmb/d YoY. Total US shale/tight oil production is now +0.065 mmb/d YoY. (v) Even before the massive capex cuts and shut-ins, the oil shale/tight production had built a narrative for 2020 that US oil production had peaked in Nov/19 at 9.158 mmb/d, expected to plateau H1/20 and then starting to decline later in 2020. (vi) Note that shale/tight oil is approx. ~70% of total US production, so whatever the trends are for shale/tight oil are the trends for US oil in total. Below is our table of running DPR estimates of shale/tight oil production and our graph of MoM changes in major shale/tight oil production.

US shale/tight oil production

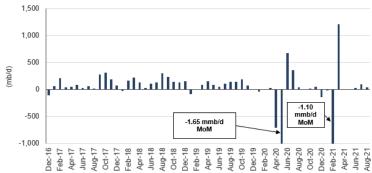


Figure 21: EIA - Major Shale/Tight Plays Oil Production

0				_	•										
						2021									
Thousand b/d	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	August	Aug YoY	Aug less Jul
Anadarko	426	421	404	444	432	423	309	386	373	361	353	354	351	-110	1
Appalachia	133	137	130	122	126	128	123	126	126	127	128	131	133	-2	3
Bakken	1,184	1,236	1,242	1,237	1,204	1,166	1,106	1,129	1,118	1,108	1,102	1,116	1,113	50	14
Eagle Ford	1,126	1,107	1,116	1,111	1,075	1,054	882	1,062	1,045	1,032	1,027	1,043	1,039	-54	16
Haynesville	33	34	34	34	35	34	28	33	33	32	32	34	34	0	2
Niobrara	649	626	594	588	574	571	556	544	534	524	516	540	537	-108	24
Permian	4,291	4,277	4,330	4,359	4,308	4,354	3,546	4,471	4,510	4,555	4,607	4,647	4,700	289	40
Total	7,842	7,836	7,850	7,896	7,752	7,729	6,549	7,751	7,739	7,738	7,765	7,865	7,907	65	100

Source: EIA, SAF

Figure 22: MoM Change – Major Shale/Tight Oil Production



Source: EIA, SAF

#### Oil - EIA DUC's worked down by 269 in June

Our biggest concern in the past on EIA's Drilling Productivity Report [LINK] estimate of Drilled UnCompleted wells was that the data had been constantly revised and sometimes significantly. However, the EIA DUC data shows a clear trend since August of a continued work down of DUCs and we expect that trend is correct. It also reinforces the need for drilling rigs to pick up to replenish the DUC inventory if the US to have strong oil growth in 2022. (i) The EIA estimates DUCs are down another 269 MoM in June, meaning a total 2,622 DUCs were worked down since the Jun/20 peak, exactly one year ago, of 8,874. The largest work downs are coming from the Permian (-1,194) and Eagle Ford (-417). With DUCs being worked down so significantly we will need to see rig counts go up to replenish DUCs in the near future. (iii) Bakken DUCs. As per the NDPA presentation on April 22, 2021, they estimate there are only 395 economic DUCs at April 30. This is 268 DUCs or ~40% lower than the EIA estimate of 663 as of April. Bakken DUCs were worked down 35 since then and in 2021 DUCs have dropped ~23 per month. This means that at this rate, the Bakken has ~16 months of economic DUC inventory. Below is our running table of the EIA Drilling Productivity Report DUCs.

Figure 23: EIA - Estimated Drilled UnCompleted Wells

									2021						
Drilled UnCompleted	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	June YoY
Anadarko	1,061	1,054	1,048	1,022	1,002	982	965	952	932	921	901	880	863	844	-210
Appalachia	706	694	688	678	661	648	645	641	623	616	603	590	598	581	-113
Bakken	882	884	876	865	832	805	786	760	731	710	688	663	656	628	-256
Eagle Ford	1,395	1,388	1,374	1,340	1,288	1,252	1,220	1,181	1,152	1,135	1,102	1,071	1012	971	-417
Haynesville	393	395	397	393	395	383	374	380	375	389	387	385	392	392	-3
Niobrara	786	790	779	783	767	713	663	621	575	530	489	448	402	361	-429
Permian	3,599	3,669	3,690	3,622	3,507	3,363	3,227	3,116	2,988	2,955	2,852	2,731	2598	2475	-1,194
Total	8,822	8,874	8,852	8,703	8,452	8,146	7,880	7,651	7,376	7,256	7,022	6,768	6,521	6,252	-2,622

Source: EIA, SAF

DUCs continue to work down



Oil - Oil & gas services adding jobs, but only recovered 18% of 102,000 lost jobs

There are much brighter prospects for employment in the oilfield services sector now relative to a year ago, however, there are still a big portion of lost jobs that have not yet returned. The Energy Workforce released its June employment report [LINK] on Monday, which highlighted that the oilfield services sector added jobs for the 4th consecutive month, representing a 1.3% MoM growth after nearly 8,002 positions were added. Due to companies' focus on reducing debt, repaying investors and investing in R&D, employment growth has been slow in 2021. Its a reminder that job growth in the oilfield services sector is related to the level of capex and not to the price of oil and natural gas. The oilfield services needs oil and gas companies to spend their cash flow not just pay down debt or increase shareholder distributions. The Energy Workforce wrote "The monthly Energy Technology & Services Employment Report, compiled and published by the Council, estimates a peak of nearly 102,000 pandemic-related job losses. Since then, the sector has restored approximately 18,600 positions, bringing total pandemic employment cuts to 83,000 jobs and more than \$9.4 billion in annualized lost wages." Our Supplemental Documents package includes the Energy Workforce release.

TMX in-service in Dec 2022

Oil – Trans Mountain says still projecting TMX in-service in Dec 2022

Last week's (July 11, 2021) Energy Tidbits memo highlighted the Trans Mountain construction update [LINK], wherein Trans Mountain said "wrote "With extreme heat and active wildfires in several BC locations, Trans Mountain is taking extra precautions at our operations and construction sites to ensure we are doing our part to mitigate fire risks this summer. Trans Mountain's first priority is the health and safety of our workforce, their families and our communities. We are constantly monitoring the active wildfires in British Columbia and assessing their impact on our existing operations and construction of the Expansion Project." It looked like a clear statement that the extreme heat and wildfires was impacting the TMX construction, which is why, on July 8, we tweeted [LINK] "#TMX understandable that extreme heat/active wildfires are having an impact. but "assessing the impact" on "construction of the Expansion Project". need to see what impact on expansion construction time & costs. #OOTT". Last week, we said we were wating to hear what is the impact on construction time and cost. Trans Mountain's posted [LINK] project over view says "Expected in-service date is December, 2022." Trans Mountain's update this week included a link to a Business in Vancouver report [LINK] that included quotes from Trans Mountain Corp. manager of communications Ali Hounsell. Hounsell's closing comment in the BIV report was ""It's such a huge project, and we've had some challenges," Hounsell said. "We had a clearing stop-work order a little while ago. COVID obviously has been a challenge in many different ways, but in some other ways we catch up. Overall, we are still projecting for completion at the end of 2022." Hounsell is clearly saying TMX is still on track for December 2022 in-service. We were surprised that anyone Trans Mountain representatives would be out there confirming this in-service data given their construction update last week, the BC wildfires are even getting worse in the last week since that update and its still only mid July for the normal wildfire season. Given what is happening in BC with wildfires, it seemed premature to be out there re-iterating the in-service date. Or at least we would have expected him to qualify his confirming the in-service date. Our Supplemental Documents package includes the BIV report and the Trans Mountain TMX project overview.

TMX in-service in Dec 2022

Oil – So far not seeing any oil sands/bitumen interruptions from Alberta wildfires

Oil and natural gas markets will need to keep an eye on Alberta wildfires for potential impact on oil sands/bitumen production. Note that we say "and natural gas markets" because any shut-in of oil sands/bitumen production will also impact natural gas demand used for production in both oil sands and SAGD operations. Early this week, there were wildfires in

Wildfires near oil sands projects



Northern Alberta that were getting close to some oil sands/bitumen production areas (ie. Suncor Firebag) but, as of our 7am news cut off, we still haven't seen any reports of oil sands/bitumen production being shut in. Fortunately so far this summer, there hasn't been anything like the massive Fort McMurray wildfires of 2016.

#### Oil - No change this week in oil sands facilities on Covid outbreaks list

There was no change this week to the number of oil sands facilities still on the Covid outbreaks list. The last Wood Buffalo Covid update is as of July 14 [LINK]. Last week, there were five facilities removed from the outbreak list – Kearl Lake, Civeo McClelland Lake, Wapasu Creek Lodge, Suncor Firebag, and CNOOC Long Lake. This more than doubles the prior three oil sands facilities that were removed from the list - Suncor Mackay River, CNRL Jackfish property and the Oilsands Industrial Lodge – Fort McKay. As of this week the outbreaks are unchanged from last week. Below, we pasted the oil sands facilities listed in June 21, 24, 29 and July 7, 14 updates.

No change in oil sands covid outbreaks

Figure 24: Oil Sands Facilities With Covid Outbreaks at June 21, 24, 29, and July 7 and 14



Source: Wood Buffalo

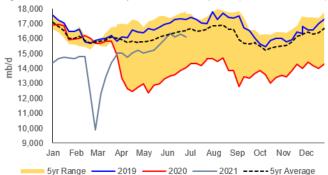
#### Oil - Refinery inputs +1.784 mmb/d YoY to 16.093 mmb/d, down 1.174 mmb/d vs 2019

Crude inputs to refineries were down but basically flat this week and were -0.022 mmb/d to 16.093 mmb/d, and are +1.784 mmb/d YoY, and are -1.174 mmb/d vs 2019. Refinery utilization was down 0.4% this week at 91.8%, which is +13.7% YoY. Total products supplied (ie. demand) decreased this week, with a 2.245 mmb/d decrease to 19.303 mmb/d, and this week motor gasoline was down big, retracing most of its big gains from last week, being -0.760 mmb/d to 9.283 mmb/d. This may be in part due to the reporting week including a day off for many Americans, July 5. Gasoline consumption in the US is expected to rise, with the EIA writing in their 2021 Summer Fuels Outlook [LINK] "We forecast that gasoline consumption in 2021 will peak in August at 9.1 million b/d, which is up from 8.5 million b/d in August 2020 but down from the 9.8 million b/d in August 2019. We forecast that 2021 summertime gasoline consumption will average almost 8.8 million b/d, a 1.0 million b/d (13%) increase from 2020 but a 0.7 million b/d (7%) decrease from summer 2019". Below is our graph of crude inputs to US refineries and our graph of US motor gasoline supplied.

Gasoline demand plummets this week

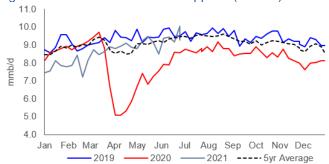


Figure 25: US Refinery Crude Oil Inputs (thousands b/d)



Source: EIA, SAF

Figure 26: US Motor Gasoline Supplied (mmb/d)



Source: EIA, SAF

#### Oil - Exxon Beaumont refinery operating at 60% capacity during lockout

Exxon's employee lockout is still showing no signs of ending and, if anything, it looks like Exxon is digging in for a longer period with the reports that it was moving to hire more temporary workers. Exxon started the lockout on May 1 of its ~550 employees at its 359,000 b/d Beaumont refinery in Texas. We have been wondering how much below capacity Beaumont was during the 4 month lockout at Coop's 130,000 b/d Regina refinery, the refinery was being able to run at ~100,000 b/d with mgmt and replacement workers. We missed a Reuters June 30 report [LINK] saying Exxon was operating the Beaumont refinery at 60% capacity with temporary workers including managers, engineers and refinery unit operators hired after the lockout.

Beaumont operating at 60% capacity

#### Oil - US "net" oil imports down 1.050 mmb/d to 2.196 mmb/d

US "NET" imports were down -1.050 mmb/d to 2.196 mmb/d for the July 9 week. US imports were up 0.347 mmb/d to 6.221 mmb/d. US exports were up, being +1.397 mmb/d to 4.025 mmb/d. The WoW decrease in US oil imports was driven by decreases in Canada and Iraq. Some items to note on the by country data. (i) Canada was down this week, and was -0.264 mmb/d to 3.480 mmb/d for the July 9 week, which is now ~0.2 mmb/d below the average levels in Jan/Feb of 2020. (ii) Saudi Arabia was up slightly by 31,000 b/d to 0.347 mmb/d this week. (iii) Colombia was basically flat again this week, +14,000 mmb/d to 0.140 mmb/d this week. (iv) Ecuador was flat at 0 b/d. (v) Iraq was up -47,000 b/d to 182,000 b/d. (v) Venezuela remained at 0 due to US sanctions. (vi) Mexico was up by 240,000 b/d to 0.648 mmb/d.

US "net" oil imports -1.050 mmb/d WoW



Figure 27: US Weekly Preliminary Oil Imports By Major Countries

	May 07/21	May 14/21	May 21/21	May 28/21	June 04/21	June 11/21	June 18/21	June 25/21	July 02/21	July 09/21	WoW
Canada	2,924	3,806	3,549	3,147	3,971	3,644	3,435	3,282	3,744	3,480	-264
Saudi Arabia	224	424	277	188	144	381	555	565	316	347	31
Venezuela	0	0	0	0	0	0	0	0	0	0	0
Mexico	434	692	661	702	423	764	878	747	408	648	240
Colombia	278	325	71	185	137	143	340	139	154	140	-14
Iraq	235	199	184	163	173	305	151	142	229	182	-47
Ecuador	257	80	229	226	122	96	29	260	0	0	0
Nigeria	157	73	29	169	264	169	183	33	142	187	45
Kuwait	0	0	0	0	0	0	0	0	0	0	0
Angola	0	0	0	0	0	0	0	0	0	0	0
Top 10	4,509	5,599	5,000	4,780	5,234	5,502	5,571	5,168	4,993	4,984	-9
Others	979	812	1,273	851	1,404	1,244	1,372	1,238	882	1,237	355
Total US	5,488	6,411	6.273	5,631	6,638	6,746	6.943	6,406	5.875	6.221	346

Source: EIA, SAF

Oil - No oil discoveries or climate change concern? Greenland to halt oil exploration

Greenland is an autonomous territory within the Kingdom of Denmark and, as such, it independently manages its oil and gas separate from Denmark. On Thursday, Greenland announced it was halting new oil exploration [LINK]. Greenland wrote "Greenlandic underground contains large unexplored deposits of oil. A recent study from The Geological Survey of Denmark and Greenland (GEUS) estimates that there are DKK 18 billion de-risked barrels of oil on the west coast of Greenland. Large deposits are also expected to hide below the seabed on the east coast of Greenland. However, the Greenlandic government believes that the price of oil extraction is too high. This is based upon economic calculations, but considerations of the impact on climate and the environment also play a central role in the decision. Against this background, Naalakkersuisut has decided to cease issuing new licenses for oil and gas exploration in Greenland. This step has been taken for the sake of our nature, for the sake of our fisheries, for the sake of our tourism industry, and to focus our business on sustainable potentials." Many will remember the big excitement about Greenland's oil potential in the early 2000's but unfortunately, no one ever made a commercial oil discovery. Its why we ask is it climate change concerns or no oil discoveries, or maybe a little of both driving the decision. Our Supplemental Documents package includes the Greenland release.

Greenland halts oil exploration

#### Oil - OPEC MOMR Q4/22 demand 102.62 mmb/d, +1.83 mmb/d vs Q4/19

OPEC released its Monthly Oil Market Report on Thursday. The 2021 growth forecast was unchanged and the overall takeaway from the July MOMR is the demand surge is happening right now, and demand to leave 2022 will be 1.83 mmb/d higher than pre-Covid. OPEC is forecasting a big ramp up in oil demand with Q2/21 +2.52 mmb/d QoQ, and then a big increase with Q3/21 +2.92 mmb/d QoQ, and then Q4/21 +1.58 mmb/d QoQ. (i) OPEC's July demand forecast vs June forecast in brackets. No change to OPEC 2021 oil demand or to the lookback at 2020, OPEC kept it at 90.62 mmb/d. No change to full year 2021 demand growth rate of +6.0 mmb/d YoY, but same concept as last few months with revising Q1 lower (-0.13 mmb/d) and increasing Q2 (+0.06 mmb/d) and Q3 (+0.06 mmmb/d). No change to Q4 of 99.82 mmb/d. OPEC gave us the first look at their call for 2022, which is forecasted at +3.28 mmb/d YoY to average 99.86 mmb/d. The 2022 average is slightly less than the pre-Covid average of 99.97 mmb/d. However, demand jumps past pre Covid levels in Q3/22 at 101.17 mmb/d and then even higher at 102.62 mmb/d in Q4/22. Note Q4/19 was 100.79 mmb/d. This 2022 demand forecast includes what looks like a strange or at least very different than normal assumption about Q1/22 demand. Typically, oil demand is always lower in Q1 than the just finished Q4 before, but OPEC's forecast for Q1/22 demand is 97.03 mmb/d, which is down 2.79 mmb/d QoQ vs 99.82 mmb/d in Q4/21. We don't recall ever seeing such a significant drop QoQ like this in normal times. For example, in prior OPEC MOMRs, they had Q1/19 down 0.86 mmb/d QoQ vs Q4/18 and Q1/18 was down 1.04 mmb/d

OPEC Q4/22 demand +1.83 mmb/d vs Q4/19



QoQ. Very strange to see as high as 2.79 mmb/d. If the QoQ drop was to be the typical seasonal amount, then this is very bullish to their already positive demand forecast that sees oil demand in 2022 jump past pre Covid levels in Q3/22. (ii) OPEC June production per "secondary sources" were in total was up 586,000 b/d to 26.034 mmb/d. As expected, June production was up due to Saudi bringing back some of their crude. Saudi +425,000 b/d MoM to 8.906 mmb/d. Iran continued to sneak out more oil and was up +33,000 b/d to 2.470 in June. (iii) Non-OPEC supply was revised down in 2021, and the first look at 2022 is +2.1 mmb/d YoY. They had an increase to the look back at 2020 and it was revised +0.05 mmb/d to 62.94 mmb/d. 2021 non-opec supply is revised down -0.03 mmb/d to 63.76 mmb/d. There were only minior revisions vs the June MOMR: Canada revised up +24,000 b/d and the US +23,000 b/d. Indonesia revised down -19,000 b/d and UK -17,000 b/d. OPEC forecasts non-OPEC supply for 2022 to be +2.1 mmb/d YOY to 65.85 mmb/d. Some of the major growth areas are the US (+0.74 mmb/d YoY), Russia (0.44 mmb/d YoY), Brazil (+0.23 mmb/d YoY), Norway (+0.15 mmb/d YoY) and Canada (+0.13 mmb/d YoY). (iv) On stocks, May OECD stocks were forecasted at 21.7 mmb below the 2015-2019 average. April stocks were revised lower, now estimated at 2.942 mmb vs June MOMR's estimation of 2.962 mmb. As such, May stocks were +8.3 mmb/d vs the revised April. Day of forward cover for May are estimated at 0.8 days below the 5-yr average and 2.4 days above the 2015-2019 average. (v) Call on OPEC crude in 2021 and 2022. Looks unchanged for 2020 at around 22.7 mmb/d. Demand for OPEC crude in 2021 in unchaged at 27.7 mmb/d and around 5.0 mmb/d higher YoY. Demand for OPEC crude in 2022 is +1.1 mmb/d YoY to 28.7 mmb/d. Our Supplemental Documents package includes excerpts from the OPEC MOMR.

#### Oil - IEA sees big demand surge in 2021, back to pre-pandemic levels late 2022

The IEA released its monthly Oil Market Report for July on Tuesday. They only release very limited public info and Bloomberg only provided tables and reporting on some items rather than their normal detailed report. (i) The IEA's main messaging point for the July OMR continues to be positive and supportive of the recent strength in oil prices. OPEC+ remains in control of the market. IEA is positive on oil demand to return to near-pre-pandemic levels by the end of 2022 and, most importantly, sees the need for OPEC+ to increase supply to meet demand. (ii) The IEA's first look at 2022 oil demand is almost back to pre-covid. IEA said "Global oil demand is expected to increase by 5.4 mb/d in 2021 and 3.0 mb/d in 2022". There was no change to the 2021 full year avg of 96.4 mmb/d from last month, but minor shifts by quarter. But the IEA is much like OPEC and sees the big oil demand surge now happening. The IEA forecasts big QoQ demand increases in 2021 with Q2 +0.5 mmb/d. Q3 +3.1 mmb/d. Q4 +0.3 mmb/d. Looking at 2022 looks suspiciously like they kept it just below pre-covid levels. For example, 2022 is +3.1 mmb/d to 99.5 mmb/d vs 99.7 mmb/d in 2019. And Q4/22 is forecast at 100.6 mmb/d vs 100.7 mmb/d in Q4/19. The IEA expects global gasoline demand to rise by 1.1 mmb/d QoQ in Q3, outpacing diesel and jet fuel's demand recoveries, which are expected to increase by 830,000 b/d and 760,000 b/d respectively in the same quarter. They noted that although the Delta variant is spreading rapidly, vaccination in the OECD is giving enough confidence to governments to reopen most activities. Note IEA finally revised down Brazil growth as their demand continues to be dampened by Covid outbreaks. (iii) Overall, the IEA's commentary was supportive of strong oil prices, even if OPEC+ does add 2 mmb/d by year end. And if they do not, there is a big supply issue coming. The IEA said "The possibility of a market share battle, even if remote, is hanging over markets". OPEC June production was 40.9 mmb/d, amid OPEC easing output cuts. The IEA predicted that OPEC supply would increase over Q3 (set to reach 42.8 mmb/d) and Q4 (set to reach 44.1 mmb/d) this year. (iv) No change to their non-OPEC supply forecasts of 66.3 mmb/d in 2021 and 65.7 mmb/d in 2022, and they are ramping up output now that they have finished maintenance. The IEA wrote "Non-OPEC countries not

IEA sees Q3/21 demand +3.1 mmb/d QoQ



part of the pact will boost output by 770 kb/d in 2021 and 1.6 mb/d in 2022." For the US oil production, there was no change to the IEA's forecasts from last month. They are still expecting it to reach 7.6 mmb/d by year end and 8.2 mmb/d by end of 2022. But Bloomberg did write that IEA is saying their forecast for US oil + condensate + NGLs is brushing up against record levels. Bloomberg wrote "Rising U.S. production as capital constraints ease should see output of crude, condensate and NGLs 'brush up against record highs by end-2022'". We don't have the splits by product, but this is an interesting statement. (v) On global refining, IEA wrote "Global refining throughput increased by 1.6 mb/d in June after stagnating in May. Runs are expected to increase by another 2.7 mb/d over July and August before a seasonal slowdown in 4Q21. The sharp increase in June was partly behind higher crude oil prices in the month that negatively affected product cracks and refinery margins." (vi) Global stocks are now below 2015-2019 levels. IEA wrote "OECD total industry stocks rose by 18.1 mb in May and stood at 2 945 mb, 75.8 mb below the 2016-2020 average and 10.8 mb below the pre-Covid 2015-19 average. Preliminary June data for the US, Europe and Japan show that industry stocks fell by a combined 21.8 mb. Crude oil held in short-term floating storage declined by 23.7 mb to 83.3 mb in June, its lowest since February 2020." (vii) IEA reportedly estimates Iran floating oil + condensate storage of 59 mmb. No split given on oil vs condensate. IEA also says Iran "oil" could quickly return to 3.8 mmb/d with sanctions come vs 2.49 mmb/d in June. (viii) Special thanks to the Bloomberg team for their IEA OMR wrap stories. Our Supplemental Documents package includes the IEA release and Bloomberg terminal IEA wrap.

Figure 28: IEA Global Demand Forecast By OMR Report Month

mmb/d	2019	2020	20-19	Q1/21	Q2/21	Q3/21	Q4/21	2021	21-20	Q1/22	Q2/22	Q3/22	Q4/22	2022	22-21
July 21	99.7	91.0	-8.7	93.6	94.7	98.1	99.4	96.4	5.4	98.2	98.7	100.3	100.6	99.5	3.1
June 21	99.7	91.0	-8.7	93.3	94.9	98.0	99.3	96.4	5.4	98.3	98.6	100.3	100.6	99.5	3.1
May 21	99.7	91.0	-8.7	93.1	94.6	98.3	99.6	96.4	5.4	-	-	-	-	-	-
Apr 21	99.7	91.0	-8.7	93.7	95.1	98.3	99.5	96.7	5.7	-	-	-	-	-	-
Mar 21	99.7	91.0	-8.7	93.9	95.0	97.8	99.2	96.5	5.5	-	-	-	-	-	-
Feb 21	99.6	91.0	-8.6	93.7	94.9	97.9	99.2	96.4	5.4	-	-	-	-	-	-
Jan 21	99.9	91.2	-8.7	94.1	95.2	98.1	99.0	96.6	5.4	-	-	-	-	-	-
Dec 20	99.9	91.2	-8.7	94.7	95.4	98.0	99.2	96.9	5.7	-	-	-	-	-	-
Nov 20	99.9	91.3	-8.6	94.9	95.8	98.4	99.1	97.1	5.8	-	-	-	-	-	-
Oct 20	99.9	91.7	-8.2	95.6	96.1	98.2	98.8	97.2	5.5	-	-	-	-	-	-
Sept 20	99.9	91.7	-8.2	95.6	95.8	98.2	98.9	97.1	5.4	-	-	-	-	-	-
Aug 20	99.9	91.9	-8.0	95.4	95.8	98.6	98.7	97.1	5.2	-	-	-	-	-	-
July 20	99.9	92.1	-7.8	95.5	96.2	99.0	98.9	97.4	5.3	-	-	-	-	-	

Source: IEA, SAF

#### Oil - OPEC+ agrees to increase production by 0.4 mmb/d monthly

The good news is that it was a short OPEC+ meeting today, not the record 30+ minute but only about an hour. We were watching for the release, which came out around 5:20am. We tweeted [LINK] "#OPEC+ deal: Production increasing +0.4 mmb/d monthly starting Aug 2021 until 5.8 mmb/d production adjustment is eliminated. Higher baselines Iraq, Kuwait, KSA, Russia, UAE. Dec 2021 assess market and OPEC+ country performance. #OOTT #Oil". The deal began to leak out yesterday. (i) OPEC+ is increasing production by 0.4 mmb/d monthly starting Aug 2021 and continuing until the 5.8 mmb/d production adjustment is eliminated. (ii) Deal is extended until Dec 2022. (iii) No surprise there were other revised baseline besides UAE. As soon as reports of the Saudi/UAE agreement, reports came out that Iraq wanted a new baseline. The OPEC+ deal has revised reference baseline production levels effective May 2022 for Iraq (+150,000 b/d to 4.803 mmb/d), Kuwait (+150,000 b/d to 2.959 mmb/d), Saudi Arabia (+500,000 b/d to 11.5 mmb/d), UAE (+332,000 b/d to 3.50 mmb/d), and Russia (+500,000 b/d to 11.5 mmb/d) for total OPEC+ baseline (+1.632 mmb/d to 45.485 mmb/d). (iv) OPEC+ kept the existing plan "in December 2021 assess market developments and Participating Countries' performance". Our news cut off is 7am MT so we haven't had a chance to see what all the ministers are saying post the deal. Below is the OPEC+ table of

OPEC+ deal this morning



revised baseline produtoin levels effective May 2022 [LINK]. Our Supplemental Documents package includes the OPEC+ release. [LINK]

Figure 29: Revised baseline oil production levels effective May 2022

	Reference Production up to end of April 2022	Reference Production effective May 2022
Algeria	1057	1057
Angola	1528	1528
Congo	325	325
Eq.Guinea	127	127
Gabon	187	187
Iraq	4653	4803
Kuwait	2809	2959
Nigeria	1829	1829
Saudi Arabia	11000	11500
UAE	3168	3500
Azerbaijan	718	718
Bahrain	205	205
Brunei	102	102
Kazakhstan	1709	1709
Malaysia	595	595
Mexico*	1753	1753
Oman	883	883
Russia	11000	11500
Sudan	75	75
South Sudan	130	130
OPEC 10	26683	27815
Non-OPEC	17170	17670
OPEC+	43853	45485

Source: OPEC

#### Oil - Kudos to Abdulaziz for getting another OPEC+ deal

We have to keep giving Saudi energy minister Abdulaziz kudos for getting another OPEC+ agreement. They say politics makes strange bedfellows, while its got to be that way for OPEC+. After seeing the deal, we tweeted [LINK] "How does he do it? Once again, #SaudiEnergyMinister Abdulaziz gets this collection of #OPEC+ countries to agree. reinforces if you could invite 3 people for dinner, he should be on everyone's list. He is on mine! #Oil companies everywhere should be thanking him again. #OOTT".

Oil – As expected, no 7<sup>th</sup> round of JCPOA negotiations until after Raisi takes over
No one should be surprised to see that there won't be any 7<sup>th</sup> round of JCPOA negotiations
until sometime after the Raisi administration takes over on August 3. There is no planned
date as of yet. (i) Yesterday Iran's Seyed Abbas Araghchi tweeted [LINK] "We're in a
transition period as a democratic transfer of power is underway in our capital. #Vienna\_talks
must thus obviously await our new administration. This is what every democracy demands.
1/2". (ii) The US State Dept Friday briefing including its continues message that they remain
committed to a mutual return to the JCPOA, but that no date has been set for the 7<sup>th</sup> round.
(iii) Our reminder continues to be that no one expects the 7<sup>th</sup> round to be the last round to get
a deal and that there will be an 8<sup>th</sup>, possibly a 9<sup>th</sup> or who knows how many more rounds. And
no one knows how long it will take to get thru these next rounds given the introduction of new
Iranian representatives. Iran will be throwing a new team into the negotiations. At a
minimum, it will take time to establish some level of trust in the discussions. Its why we
tweeted [LINK] "Reinforces return of full Iran oil is months away. 7th #JCPOA round not until

Kudos to Abdulaziz

No date yet for 7<sup>th</sup> round JCPOA



Raisi admin takes over, and no one expects 7th to be last round. Will full Iran #Oil be back before year end? #OOTT".

#### Oil - Iran starts heavy oil exports at new Jask oil terminal, south of Strait of Hormuz

Iran is starting heavy oil exports from its new Jask export oil terminal that is south of the Strait of Hormuz. The first tanker will have capacity of >700,000 bbls. The initial phase of the new Jask terminal will have loading capacity of 350,000 b/d. Yesterday, IRNA (Iran's official news agency) reported [LINK] "First oil shipment to be loaded at Jask terminal within two days: Official. The first shipment of heavy oil will be loaded and exported from Jask terminal in southern Iran within the next two days, Vahid Maleki, the operator of Jask terminal said on Saturday. In an exclusive interview with IRNA, Maleki said that the first tanker has arrived in the region and is expected to begin loading on Monday. The tanker has capacity of 100,000 tons, the official said. He said that exports of heavy and light crude oil as well as gas condensates are on the agenda of the terminal. Maleki added that the terminal has an export capacity of 350,000 b/d for the first phase." Below is a MedWave Shipping Agency Jask map.

Iran starts heavy oil exports at Jask terminal





Source: MedWave Shipping Agency [LINK]

#### Oil - China's oil imports +1.2% MoM in June to 9.78 mmb/d

China's customs data showed June imports were 9.78 mmb/d, up +1.2% MoM from 9.69 mmb/d in May. This was a YoY increase of 24.5%, and January-June import volumes are +3.0% YoY. China imports are declining overall due to the rising international crude oil price. June's imports are up despite the strong price of Brent (US\$76.94/bbl avg for the month) from May's 5-month low due to higher purchases from Rongsheng, which is preparing to fully commission the 400,000 b/d Phase 2 of its Zhejiang refinery. Bloomberg expects imports to rise to 10-10.3 mmb/d in Q3 and rise above 10.5 mmb/d in Q4. The Q4 imports will be driven by the start up of new refineries, plus inventories will need to be replenished after the recent 5-6 months of drawdowns. Our Supplemental Documents include the Bloomberg report.

#### Oil - New India oil minister will be happy with OPEC+ deal this morning

We are surprised that as of our 7am MT news cut off (dinner time in India), India's new petroleum minister Hardeep Singh Puri hasn't tweeted on the OPEC+ deal. Puri shouild be happy this morning to see the new OPEC+ deal provide the plan to increasing oil production

China oil imports

Puri asks KSA, UAE for more production



by 400,000 b/d per month effective Aug 2021. Earlier this week, Puri had separate calls with Saudi Arabia and UAE. On Thursday, he tweeted on his "friendly discussion" with Saudi energy minister Abdulaziz and "conveyed my desire to work with His Royal Highness Prince Abdulaziz to bring greater predictability and calm in the global oil markets, and also to see hydrocarbons become more affordable." On Wednesday, he spoke with the UAE, but not the energy minister, rather the UAE Minister of Industry and Advanced Technology. Puri tweeted <a href="LINK">LINK</a>] "Conveyed my desire to work closely with UAE and other friendly countries to bring a sense of calm, predictability and realism among other suppliers in the energy market to make it more affordable for consumers".

#### Oil - India's oil imports hit 9-month lows in June

Due to low consumption amid coronavirus lockdowns in April and May leading to higher inventories, refiners cut back on import purchases in June. No surprise that inventories built - in the middle of May, India's top refiner, Indian Oil Corporation had reduced its capacity utilization to 84%. Reuters reported on Friday [LINK] that India imported about 3.9 mmb/d of crude last month, which was down -7% from May, but still +22% YoY. An Indian refining official who asked not to be named commented on the slump in imports "We had enough inventory of refined fuel so there was little scope to raise crude imports". He also noted that export market was unattractive this past month, due to low profits. Our Supplemental Documents package includes the Reuters report.

India oil imports hit 9 mth lows

#### Oil - Gasoline sales in India bounce back to growth

But on the flip side, the leading indicator for a return is the gasoline sales data. India was hit hard by Covid in April and May, but gasoline sales have finally rebounded to pre-virus levels as stay at home orders have been eased. Bloomberg reported that for the first time since April, sales by the three largest fuel retailers in the first half of July were higher (+3.4%) than the same period in 2019. Gasoline has recovered, but diesel, the most widely used petroleum product in the nation, is still down 11% from 2019 but up 13% YoY. India is the word's third-largest oil consumer, so its fuel demand recovery will support refinery runs in Asia and the overall global recovery in energy consumption. Our Supplemental Documents package includes the Bloomberg report.

India's gasoline demand up from 2019 levels

#### Oil - BlackRock CEO Larry Fink on the case for \$100, \$125 oil

BlackRock CEO was on CNBC Squawk Box on Wed following the Q2 release. Everyone knows he was probably the earliest and biggest capital provider proponent for the energy transition. But, as we noted in our June 6, 2021 Energy Tidbits, he has changed his focus to now more warning that the world is behind on the energy transition and not just pushing the energy transition. No surprise in his new messaging that he warned on the case for rising oil prices. On Wednesday, we tweeted [LINK] "#BlackRock CEO Fink raises risk of \$100, \$125 #Oil, sees rising energy prices if #EnergyTransition keeps pushing to reduce oil supply but govts can't/don't reduce demand. Energy Transition is happening, but will take longer, cost more and be a bumpy ride. Thx @SquawkCNBC #OOTT". We made a transcript of Fink's comments ""And the other thing that I wanted to say and I wrote this and said this in Venice last week, if we don't focus on the demand curve in our energy transition, but only focusing on supply, we are going to see rising energy prices. And I raise the question is what does it mean if we have \$100 oil or \$120 oil. that's going to be inflationary too." We have been highlighting this theme, even if oil demand doesn't grow much, the setup is for stronger for longer oil prices. If oil demand grows at any decent, but lesser level, that sets up the Fink scenario as long as governments and capital providers effectively reduce capital investment for oil reserves and production.

BlackRock CEO on \$100, \$125 oil

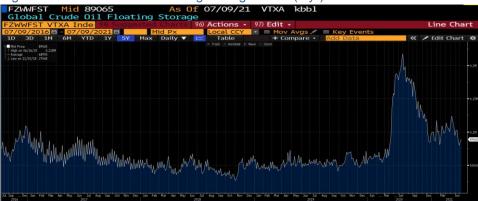


#### Oil – Vortexa floating storage +1.9% WoW, down 51% YoY

Bloomberg reported on Vortexa floating oil data that showed a WoW increase of 1.75 mmb or +1.9% WoW to 93.12 mmb on July 9 from 91.37 mmb on July 2. Note there was a significant revision to the July numbers as they were adjusted upwards from 88.01 mmb. Floating storage is down -56.9% since the June 26, 2020 peak of 216.42 mmb. While the amount of crude in floating storage has declined significantly from its peak last year, it has still not returned to normal levels. For reference, Jan 24, 2019 was 50.35 mmb, and the Q1/20 trough was at 54.11 mmb on Feb 17. The average amount of floating storage over 2019-2017 for the equivalent week is 55.2 mmb. Below is a graph of the Vortexa Global Floating Storage Level over the past 5 years and a table of the past 4 years' levels of floating storage during the same week and the price of Brent that week. Our Supplemental Documents package includes the Bloomberg Vortexa report.

Vortexa floating storage





Source: Bloomberg, Vortexa

Figure 32: Crude Oil Floating Storage & Brent Price

Date	Vortexa Crude Oil Floating Storage (million barrels)	Brent \$/b
07/09/21	89.1	\$75.55
07/10/20	198.1	\$43.24
07/08/19	53.1	\$64.11
07/09/18	46.6	\$78.07
07/10/17	66.0	\$46.88

Source: Bloomberg, Vortexa

#### Oil - Bloomberg Oil Demand Monitor, Vaccine rates split demand recovery

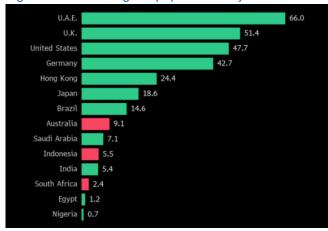
We recommend reading the weekly Bloomberg terminal Oil Demand Monitor for a good recap of key oil demand indicators around the world. Their update provides more support that oil demand is moving into the demand surge period. This week showed a dramatic split in demand recovery based on vaccination rates. While U.S. gasoline demand reached a new record high of 10.04 mmb/d and European air traffic increased by 33% in the past month, there is an entirely different story in Australia, South Africa and Southeast Asia. Airline seat capacity was down about 16% in both Australia and South Africa, and the delta variant is sweeping through Indonesia, whose population is only 6% fully vaccinated. Both countries involved in the EURO 2020 Champions had reduced Monday morning commuting, making Paris the topmost congested city in Europe, at -34% of 2019 levels. In the UK, gasoline sales were only about 7% below pre-pandemic levels. Overall, in Europe traffic volume is

Bloomberg's Oil Demand Monitor



getting closer and closer to pre-pandemic levels. In Poland, there were 3% more cars on the road than 2019, and Italy, Spain and France showed levels approaching 2019, at -3.3%, -4.6% and -11% respectively. There is a similar story in the US as their vehicle passenger miles travelled are down only 3% vs 2019. We have included a graphic that highlights the split in vaccination rates, which is influencing the demand recovery. Our Supplemental Documents package includes the Bloomberg Oil Demand Monitor.

Figure 33: Percentage of population fully vaccinated



Source: Bloomberg, Our World in Data

#### Oil - Delta Air Lines, domestic > 2019 levels, international demand recovering

There were a number of positive comments on air traffic recovery to date and looking forward from the Delta Air Lines Q2 call on Wednesday. (i) "Exited June with the demand environment that's accelerating. Domestic leisure demand and yields are above June quarter, 2019 levels and we see clear signs of business in international demand recovery heading into the fall." (ii) "We are starting to see signs of a resurgence of business in international travel". (iii) "While we know international demand recovery will be very choppy and uneven, we're seeing strong bookings to Europe when countries open their borders." (iv) "Corporate travel volumes accelerated in May and June with almost 95% of our accounts booking travel in the month of June. We're also beginning to see a return of consulting and sales related travel and higher volumes in traditionally business heavy markets like New York City and Boston. Our recent corporate survey results show that over 90% of our corporate accounts anticipate travel volumes to increase in the September quarter up from just 33% in the March guarter. In addition to the survey results, our close engagement with customers give us increased confidence of the acceleration of business travel, especially as we move towards the post Labor Day period as schools and offices continue to reopen. We expect domestic corporate volumes will recover between 55% and 60% of 2019 levels by the end of the September quarter, up from 40% at the end of the June quarter." (v) "Despite volatility in global COVID recovery trends, international travel is accelerating with capacity and load factors increasing as we head into the fall." (vi) "In Latin, it's really the tale of two markets, one is the close-in U.S. point of origin leisure market, as well as Mexico business. Both of these are actually exceeding 2019 levels. So, short whole Latin is doing quite well and we continue to expect that to be very strong as we move into the more traditional leisure season in the late fall." Thanks to Bloomberg transcripts for the Q2 call transcript.

Positive air travel update

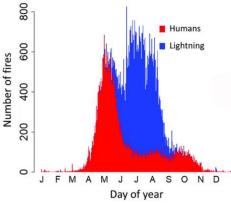


#### Oil & Natural Gas - In peak lighting season, which unfortunately means peak wildfire risk

The story in Canada and the western US is wildfires and unfortunately, we are right in the middle of peak lightning season, which means peak wildfire risk. Our June 13, 2021 Energy Tidbits said "We are about to move into the peak wildfire season, which is tends to be mostly correlated to peak lightning season. Alberta has been fortunate that the last two years have seen significantly lower than normal number of fires. 2020 saw 705 fires, 2019 saw 989 fires vs the 5-yr average of 1,340. But its been dry this year and the risk is high. And wildfire season is unpredictable. Below are two graphs that remind the big factor for wildfires is lightning. For a good way to track the wildfires, check out the AB [LINK] and BC [LINK] wildfire maps, which show any active fires as well as the stage of control they are in as well as their suspected cause. Currently in AB there are 14 active fires and 11 are under control. In BC there are 9 active fires, 8 of which are under control. The active fires in both provinces are classified as "Being Held" which means that "given current weather conditions and resources, the wildfire is not anticipated to grow past expected boundaries". Below is the Wildfire Today graph of wildfires in Canada by month [LINK] Canada Environment and Natural Resources graph showing average monthly cloud-to-ground lightning in Canada **ILINK1.**".

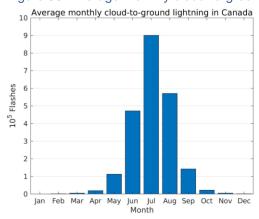
In middle of peak wildfire season

Figure 34: Canada Wildfires Distribution Over Year



Source: Wildfire Today

Figure 35: Average monthly cloud-to-ground lightning in Canada



Source: Canada Environment and Natural Resources



#### Oil & Natural Gas - Should be great Q2 oil & gas, even better in Q3

US oil and gas companies are about to start reporting Q2/21 results. Last week's (July 4, 2021) Energy Tidbits memo highlighted Shell's Q2 update. The theme for oil and gas companies will be much like seen in the Shell Q2 update – very strong cash flow, stronger balance sheets and, for many, increased shareholder returns. The difference from Shell Q2 update is that the vast majority of these companies will be saying its because there were very strong oil and gas prices, whereas Shell went out of its way to not credit prices. There isn't any doubt here. After the close on June 30, we tweeted [LINK] "Going to be a great Q2 reporting for Cdn #Oil #NatGas sector. Note June 30 closing prices WTI \$73.52, EdPar \$71,.67, WCS \$59.52, HH \$3.74, AECO \$3.43. ~>10% higher than Q2 average. Q3 should be an even better quarter. #OOTT". Even with the small pullback in prices since June 30, prices are still above Q2 averages and, as good as Q2 will be, the set up for Q3 reporting looks even better.

Very strong Q2 oil and gas prices

Figure 36: Oil & Natural Gas Average Quarterly Prices Thru Q2/21

Quarter	Brent	WTI	EdPar	wcs	HH	AECO
Q1/18	\$67.00	\$62.90	\$57.26	\$37.11	\$3.09	\$2.06
Q2/18	\$74.41	\$67.83	\$60.78	\$49.88	\$2.84	\$1.23
Q3/18	\$75.27	\$69.69	\$59.81	\$42.32	\$2.92	\$1.25
Q4/18	\$68.18	\$59.41	\$36.53	\$25.63	\$3.78	\$1.62
Q1/19	\$62.91	\$54.49	\$50.28	\$43.79	\$2.92	\$2.55
Q2/19	\$68.58	\$59.96	\$54.41	\$47.46	\$2.55	\$1.13
Q3/19	\$61.95	\$56.48	\$52.43	\$43.91	\$2.37	\$1.00
Q4/19	\$62.51	\$56.83	\$50.61	\$37.98	\$2.36	\$2.46
Q1/20	\$51.28	\$46.73	\$39.75	\$28.55	\$1.91	\$2.04
Q2/20	\$31.14	\$27.67	\$21.84	\$18.02	\$1.70	\$2.00
Q3/20	\$42.70	\$40.87	\$36.83	\$31.13	\$1.98	\$2.26
Q4/20	\$44.47	\$42.67	\$37.92	\$31.34	\$2.47	\$2.65
Q1/21	\$60.51	\$57.75	\$54.17	\$45.83	\$3.39	\$3.13
Q2/21	\$68.43	\$65.89	\$61.93	\$53.11	\$2.76	\$2.95

Source: Bloomberg

#### Oil & Natural Gas - Klotzbach forecasts above average Atlantic hurricane season

The theoretical start to hurricane season was Tues June 1. The well regarded Philip Klotzbach and team at Colorado State University issued their updated Atlantic Hurricane season forecast on last Thursday [LINK], still calling for another above-normal year. Their June forecast had called for an above-average season, and this month they increased their forecast slightly. The CSU forecasters wrote "We have increased our forecast slightly and continue to forecast an above-average 2021 Atlantic basin hurricane season. Current neutral ENSO conditions are anticipated to persist for the next several months. Sea surface temperatures averaged across most of the tropical Atlantic are now near to slightly above normal, and most of the subtropical North Atlantic remains warmer than normal. Elsa's development and intensification into a hurricane in the tropical Atlantic also typically portends an active season. We anticipate an above-normal probability for major hurricanes making landfall along the continental United States coastline and in the Caribbean." The above average forecast isn't surprising give the current El Nino forecast is for Neutral/La Nina conditions, while El Nino summers are usually associated with lower hurricane activity. Our Supplemental Documents package includes excerpts from the Klotzbach forecast.

Above average hurricane season expected



Figure 37: July 8 Klotzbach Atlantic Hurricane Forecast

#### ATLANTIC BASIN SEASONAL HURRICANE FORECAST FOR 2021

Forecast Parameter and 1991-2020	Issue Date	Issue Date	Issue Date	Observed Thru	Remainder of
Average (in parentheses)	8 April	3 June	8 July	7 July	Season
	2021	2021	2021	2021	Forecast
Named Storms (NS) (14.4)	17	18	20*	5	15
Named Storm Days (NSD) (69.4)	80	80	90	12	78
Hurricanes (H) (7.2)	8	8	9	1	8
Hurricane Days (HD) (27.0)	35	35	40	1.5	38.5
Major Hurricanes (MH) (3.2)	4	4	4	0	4
Major Hurricane Days (MHD) (7.4)	9	9	9	0	9
Accumulated Cyclone Energy (ACE) (123)	150	150	160	12	148
Net Tropical Cyclone Activity (NTC) (135%)	160	160	170	16	154

<sup>\*</sup>Total forecast includes Ana, Bill, Claudette, Danny and Elsa which have formed in the Atlantic as of July 7th.

Source: Colorado State University

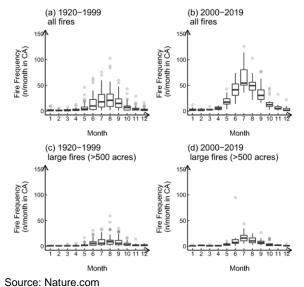
#### Electricity - And also in peak California wildfire season

The big growing story in the west US continues to be more wildfires. We are seeing wildfires in Oregon restrict power and increasing wildfires in California. We remind that peak wildfire California season has just started. And everyone knows the wildfire risk increases with the continued drought conditions. Our June 13, 2021 Energy Tidbits included the below charts from Nature.com Scientific Reports paper "Spatial and temporal pattern of wildfres in California from 2000 to 2019" [LINK] that reminds peak wildfire season is now and that wildfires have increased over the past 20 years. The charts show the seasonal wildfire activity.

Wildfire season

just started

Figure 38: California – All Fires and Large Fires 1920-1999 and 2000-2019



#### Energy Transition - Reality check? Japan nukes could get extension to >60 yr life On Friday, Nikkei news, and other Japan media, reported that Japan is considering the potential to allow nuclear reactors to have a working life of more than 60 years. The current

Japan nuclear

reactors



Japan regulators are for 40 years in principle with the potential to up to 60 years. Japan is apparently considering getting rid of the upper limit. The reports were short and did not mention energy transition considerations but, we have to believe this is a factor in this consideration. Because in the energy transition, any nuclear retirements would have to be replaced by renewables. This would have a huge impact on Japan's ability to have reliable electricity. Our Supplemental Documents package includes the Nikkei report. [LINK]

Energy Transition – US doesn't expect China, India others to do as much on emissions

We have often said one of the things we like about US Energy Secretary Granholm is that she seems to be a reasonably straight shooter. She may not answer the question directly but her answer gives a clear picture. She was asked if she expected China and India to sacrifice as much on emissions. She didn't say no, but her answer said no as she acknowledged that the US doesn't expect China, India and others to make the same emissions reductions targets as the US, they just expect them to live up to their emissions reduction commitments. It is important to remember that she is not limiting this to China and India, she included a vague "etc". So there are clearly other countries in that list. We listened to her interview on CNBC Squawk Box last week (July 8) but it was one of those items we just didn't get done in the July 11 Energy Tidbits. We made a transcript of her exchange with Joe Kernen [LINK]. At 2:40 min mark. Joe Kernen "do you expect China and India to sacrifice as much as, they're still building coal plants, they're not going to be onboard" Energy Secretary Granholm "they have got to stop, there is no doubt. What are you saying? The suggestion underlying what you are saying is that they're not stopping, we're not going to stop either. Do you know how much money we spent last year just cleaning up after these extreme weather events? \$95 billion dollars. In the 1980s, we spent about \$17 billion so we are just going to continue to escalate. So we've got to wrap ourselves and our allies around those, China, India, etc., and make sure that they live up to their commitments that they have made about reducing their greenhouse gas emissions too".

Granholm on China, India emissions targets

Granholm's prior way of saying US doesn't expect as much from China, India Granholm's comments this week are a good reminder that we always have to listen carefully about what politicians say. Her Squawk Box comments last week on China, India, etc were in line with what she said in her recent June senate testimony that they expect countries to live up to their commitments without saying that she doesn't expect all countries to do what the US commits for emissions reduction. Our June 27, 2021 Energy Tidbits highlighted her exchange with Sen Kennedy that started with China and India not committing to the same levels and ended up with Granholm acknowledgement that the Biden administration has no idea how many \$ trillions it will cost for the Energy Transition. We attached the transcript of her key testimony, which included how she then described the different commitments from China and India. The Bloomberg transcript was "KENNEDY: I know, Madam Secretary. Forgive me for interrupting, but we both know now, I'm - I'm really - want to try to probe your mind here. We both know this is going to cause major displacement. Let's don't kid each other. You're not going to turn coal miners into coders overnight, and you're not going to turn fossil fuel workers into solar experts overnight, and there not as many solar jobs as there are oil and gas, so I don't want to get off into that. And I'm not trying to be critical of the administration, but I - these are important questions. If we - if we become carbon neutral and we don't get cooperation from China and India, what have we - what have we accomplished? GRANHOLM: The goal is to get cooperation from China and India. KENNEDY: I know, but what if they don't? GRANHOLM: Well... KENNEDY: What if we go spend these tens of trillions of dollars in President Xi Jinpiang, the people of China are wonderful people, by the way.



President Xi (inaudible), we know that. The Communist Party, they're gangsters. What - what if they - what - I mean, they probably built a coal power - a coal powered power plant while we - you and I have been talking. What have we achieved? GRANHOLM: The administration has a strategy to make sure that all of our - all of the people who have signed onto this Paris agreement meet the goals that they have articulated, and that means working with allies, and that means..."

Energy Transition – BlackRock CEO Fink missed a great messaging opportunity

Our June 6 and 13, 2021 Energy Tidbits noted BlackRock CEO Larry Fink's changed messaging priority on the energy transition. As noted earlier, Fink was the earliest and strongest proponent among capital providers for the energy transition. But his messaging has changed in the last 6 weeks to warning more on the risks of the energy transition as it isn't where it needs to be. In June we wrote "And we worry companies and big investors like BlackRock made a strategic mistake in not very vocal about the energy transition aspirations being unrealistic. Rather they encouraged and pandered up to policymakers on the need to, and to be, more aggressive on climate change targets. They stoked the fire." Earlier, we noted his warning of rising oil prices if governments can't cause a drop in demand. But immediately before his oil comment, we thought Fink missed a great opportunity to continue his revised messaging focus of warning on the risks/costs to the energy transition. On Wednesday, we tweeted [LINK] "Apply #BlackRock Fink general supply chain imbalance thesis to #Electricity. Forcing #Wind #Solar is disruptive, but doesn't fit efficient electricity supply network built on #NatGas etc. Its why increased #EnergyTransition #Electricity costs & supply interruptions are inevitable." What Fink says about general supply chains really can be applied directly to what US/Canada/EU are doing with respect to forcing fossil fuels out of the electricity supply chain. Fink highlights how moving supply chains away from China changes an efficient supply chain network and creates imbalances. Then think about what US/Canada/EU are doing. They are forcing the electricity supply source away from oil, natural gas and coal. And North America spent billions and years to build an efficient fossil fuel supply chain - pipelines, power stations, etc. But now having to replace fossil fuels with renewables means your moving the source of power away from the efficiency of the electricity supply chain. Solar and wind are generally not located near the major electricity demand centers and will be requiring massive capital to expand the transmission system. Plus they are intermittent and so require massive capital to upgrade the grid and add storage and surplus capacity. So using his general supply chain thesis, he could have easily pivoted to say this is what is going to happen with the forced replacement of fossil fuels with wind/solar - it has to create an imbalance in electricity network and therefore can only lead to higher prices and supply chain interruptions. Here is the transcript we made of Fink's comments "that is going to probably lead to systematically more inflation, what we are looking at now with all the issues around the imbalances right now in supply and demand. and with back orders on so many things. I'm hearing from every CEO that they have huge price increases and they're passing them across the board here in the United States and in Europe. And much of it had to do with we had such efficient supply chains, and those supply chains are now showing what I would say the weakness around this imbalance. And then more importantly, moving supply chains away from the concentration in different parts of the world including China. And so all of this is changing our network".

Energy Transition – Lets hope there is good quality control on EV batteries

We can't help wonder about future quality control on batteries as the world is forced to switch from ICE vehicles to EVs and the need for hundreds of millions batteries to power new EVs and for replacement in existing EVs in the 2020s. In response to the incidents of Chevrolet Bolt EV batteries igniting and cause fires, the National Highway Traffic Safety Administration

Fink missed a messaging opportunity

EV batteries quality control



issued "Consumer Alert: Important Chevrolet Bolt Recall for Fire Risk: Owners should park their vehicles outside until further notice" [LINK]. The NHTSA wrote "Owners of these vehicles should park their vehicles outside away from homes and other structures immediately after charging and should not leave their vehicles charging overnight, according to General Motors. The vehicles that should be parked outside are those that were originally recalled in November 2020 for the potential of an unattended fire in the high-voltage battery pack underneath the backseat's bottom cushion. The affected vehicles' cell packs have the potential to smoke and ignite internally, which could spread to the rest of the vehicle and cause a structure fire if parked inside a garage or near a house. This recall affected 50,932 MY 2017-19 Chevrolet Bolt vehicles." Most probably aren't too surprised to see this risk as it would seem like the going on fire cell phone battery at a bigger scale. But it does make us wonder on future quality control for batteries for EVs. Our Supplemental Documents package includes the NHTSA warning.

#### Capital Markets - BlackRock's Larry Fink why he is still positive on markets

BlackRock reported Q2 on Wed and, as per his tradition, CEO Larry Fink was on CNBC Squawk Box for an extended interview. Earlier we noted his comments oil prices and energy transition. One of the reasons we like this quarterly interview is that Fink only seems to give direct clear answers. Yes, he makes sure he makes his points, but he answer all the questions directly and clearly. One of the messages he wanted to make was why he is still positive on markets. On Wed, we tweeted [LINK] "the amount of cash sitting on the sidelines has never been greater. the amount of monetary stimulus has never been greater, the amount of fiscal stimulus has never been greater" #BlackRock CEO Fink to @BeckyQuick on @SquawkCNBC right now #OOTT". That was a pretty clear statement.

BlackRock CEO Larry Fink on markets

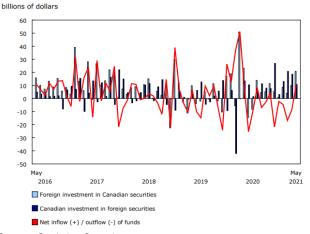
#### Capital Markets – Cdns buy US shares, Foreign investors buy Cdn gov securities

Our June 20, 2021 Energy Tidbits the trends from Statistics Canada monthly data for April for Canada's international transactions in securities - Canadians were buying up US shares, and foreign purchases of Canadian shares had plummeted to their lowest levels since October 2020. The May data was released on Friday and the same trend continues for Canadian purchases, but the trend has reversed for foreign investment in Canadian shares. Stats Canada reported that over the month of May, Canadian investors acquired \$10.7bn of foreign securities, while foreign investment in Canadian securities reached \$20.8bn [LINK]. Of Canadian investors' \$10.7bn in foreign shares, \$8.5bn (79%) were in US shares and focused on large cap technology firms. On the other hand, foreign investment in Canadian securities rose 108% MoM to \$20.8bn in May, the highest amount in a year. The foreign investment focused on Canadian government debt securities, which is the second largest investment on record after the level observed in April 2020 during the first wave of the COVID-19 pandemic. Below is a graph that shows Canada's international transactions in securities for the month of May.

Foreign investment in Cdn securities skyrockets



Figure 39: Canada's international transactions in securities (May)



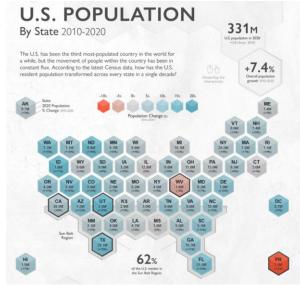
Source: Statistics Canada

#### Demographics - 62% of US resides in the southern Sun Belt Region

There was a good Visual Capitalist graphic this week "How the U.S. Population Has Changed in 10 Years, by State" [LINK] that shows the by state splits of the U.S's overall 7.4% population growth from 2010 to 2020, or + 23 mm to 331 mm in this period. Everyone has seen the movement of people to the southern states, but we didn't realize that 62% of the US now resides in the Sun Belt Region. One other item that jumped out at us was how the biggest % population decline in 2010 to 2020 was in West Virginia down 3% in this period to 1.8 mm people. Its ironic that the most powerful Senator right now is Joe Manchin from this state. Below is the key graphic.

Sun Belt has 62% of US population

Figure 40: U.S. Population by State 2010-2020



Source: Visual Capitalist



Figure 41: Sun Belt Region



Source: Wikipedia

#### Demographics - 51% of senior business leaders contemplating leaving

We have our own unofficial survey results to add to one of the key conclusions from the LifeWorks Deloitte survey "Wellbeing and resilience in senior leaders: A risk to postpandemic recovery" [LINK]. The survey included 1,158 senor leaders from large organizations in the private and public sectors, of which 66% resided in Canada. The survey said "Slightly more than half (51%) of participants had been contemplating exiting their roles; of this subset, strategies included resigning (23%), moving to a less demanding position (16%), retiring (15%), taking a leave of absence (13%), and working part-time (6%). Some considered more than one option." The survey is all about mental health for senior leaders including the causes. But over the past 15 months, we have spoken to many >55 yrs friends who are still working full time in senior well paying roles about continuing to work. We think there are a couple other key factors at work here when you compare to what happened out of the financial crisis. Yesterday, we tweeted [LINK] "#LifeWorks #Deloitte survey 51% senior mgr contemplating resigning, moving to less demanding position, retiring, taking leave of absence & working part time. No doubt Covid stress, but most higher income emerged wealthier so have financial freedom to do so". Its pretty clear that most people with wealth didn't panic when Covid hit and have emerged with more accumulated wealth coming out of Coivd. And, more importantly, haven't seen already retired friends have their accumulated wealth hit by Covid. Plus most of these friends know or know of >55 yrs people who had Covid. The survey provides the why senior leaders are experiences exhaustion indicative of burnout from Covid, but we think an important factor for senior leaders is that money/wealth gives them options and they have or should have emerged from Covid wealthier. The survey is quick flip thru but we didn't include it in the Supplemental Documents package. Our Supplemental Documents package includes the LifeWorks Deloitte survey.

Twitter - Look for our first comments on energy items on Twitter every day

For new followers to our Twitter, we are trying to tweet on breaking news or early views on energy items, most of which are followed up in detail in the Energy Tidbits memo or in separate blogs. Our Twitter handle is @Energy\_Tidbits and can be followed at [LINK]. We wanted to use Energy Tidbits in our name since I have been writing Energy Tidbits memos for over 20 consecutive years. Please take a look thru our tweets and you can see we aren't just retweeting other tweets. Rather we are trying to use Twitter for early views on energy items. Our Supplemental Documents package includes our tweets this week.

Senior business leaders and Covid

@Energy\_Tidbits
on Twitter



#### LinkedIn - Look for quick energy items from me on LinkedIn

I can also be reached on Linkedin and plan to use it as another forum to pass on energy items in addition to our weekly Energy Tidbits memo and our blogs that are posted on the SAF Energy website [LINK].

Look for energy items on LinkedIn

#### Misc Facts and Figures.

During our weekly review of items for Energy Tidbits, we come across a number of miscellaneous facts and figures that are more general in nature and often comment on sports.

#### Corey Conners T4 and Mackenzie Hughes T6 as The Open final round starts

Saturdays are my big push day to get the Energy Tidbits memo draft done just pending additions of Sunday morning news like OPEC+, China LNG imports this morning. Probably a little less productive than normal because I had The Open golf championship on until noon watching Canadians Corey Conners and Mackenzie Hughes. Or at least having the TV coverage on hoping to see coverage of them. Both played great vesterday moving up the leaderboard. It looks like the boys are going to have go really low today given the lack of wind. Bryson DeChambeau just finished at 6:15am and posted a 65 today. Conners had the low round of -4 of the leaders so ended up T4 at -8 and in the second last pairing today with Justin Spieth who is 3<sup>rd</sup> at -9. Hughes was -2 so ended up T6 at -7 and in the 4<sup>th</sup> last pairing with Dylan Frittelli. Both have a way to go with Louis Oosthuizen at -12 and Colin Morikawa at -11. But the key is that there aren't many ahead of them. Conners and Hughes aren't new to being in the hunt in the final round of majors and every time they are right there going into the final round has to make them better positioned to win their first majors. Both have PGA wins to their credit. I also want to mention two Canadians are in the hunt going into the final round for their 1st PGA win at the PGA Barbasol Championship with David Hearn at -15 T7 and Taylor Pendrith at -14 T12.

#### Hard to believe the Tokyo Olympics start on Friday

It's hard to believe that the Tokyo Olympics are still on track to start on Friday. We suspect no one can ever recall having so little media attention on the Olympics and the athletes. Normally, there is huge coverage in the build up to the Olympics, but that is not the case this year. There aren't going to be spectators but to make it even worse for TV audiences, a few of the big name professionals are having nagging injuries pop up to keep them out of the Olympics. For the amateurs, this is their Wimbledon or World Cup or Stanley Cup so they are going. We feel bad for all the athletes because they won't have the same Olympic experience as prior Olympians. We know athletes that have competed in the Olympics going back to the 70s and how the atmosphere was unbelievable at the events, at the village and in the host city. Regardless, the competition will, as usual, be great and we plan to watch and cheer on the athletes.

#### Popeyes built Strategic Chicken Reserves for its nuggets introduction

There were a number of media reports this week covering Popeyes new chicken nugget introduction that is set for July 27. Our favorite reporting was the Daily Mail (UK), but we wonder if the reporter had been Houston based with some knowledge of the oil sector would have said Popeyes had built a Strategic Chicken Reserve a la Strategic Petroleum Reserve. The Daily Mail wrote [LINK] "Fast food chain Popeyes has revealed it has been stockpiling frozen chicken for six months as it prepares to



roll out a new line of chicken nuggets amid an industrywide shortage in poultry and spiking prices. The company appears to be looking to avoid a repeat of the disastrous 2019 rollout of its chicken sandwich, which saw long lines at some locations and fist fights when stocks ran out. Whole raw chicken can be frozen for up to a year and still retain its quality, taste and texture, according to the US Department of Agriculture."

#### Suggestion for golfing Chevy Volt owners who can't park in their garage

It's The Open Championship and, as of our 7am MT news cut off, its still not clear who will win. But it brought up a thought for golfers who own Chevy Volts and can't park their Volt in their garage anymore. This can free up the garage for other uses besides throwing more junk in the garage or turning into a man cave. Covid made many stay at home items hot ticket items in 2020 including golfers trying to turn garages into practice areas. The developments and cost reductions in golf launch monitors mean golfers don't just have to hit it into a net. They can actually get the shot feedback and even play courses.





Source: GolfTechSystems

#### Alberta to vote on no more changing the clocks

The AB government released on Thursday [LINK] that on Oct 18 Albertans will be asked to vote on whether Alberta should end daylight savings. More governments across North America are moving change legislation to permanent daylight-saving time, aka summer hours. Ontario and BC have done the same, but it has not yet been enacted. Based on polling by Service Alberta in 2019, 91% of the 141,000 Albertans polled were in favor of year-round summer hours, so it is likely that Alberta moves to this change as well.