



Researched by Industrial Info Resources (Sugar Land, Texas)--IIR's weekly Global Refining Report gives you the latest inside intelligence on outages, derates, shutdowns, closures, delays and more.

.. & now there is an interactive, dynamic Global Refining Capacity Dashboard available to further power your refinery capacity research ..

and IIR has recently formalized an Alliance with Refinery Calc who will play an integral role in being the engine for IIR's Global Refining MarketIntel Platform providing Intel on crude slates, crude runs, product yields, margins, utilization, etc.

-- just ask iirteam@iirenergy.com about a trial..

Market Commentary:

It's all about demand, especially as OPEC+ plans to ramp up their production here in August. And, as OilPrice [indicates](#) that demand Rystad now expects for July to average 90.2 million bpd; 90.6 million bpd in August, September, and October; 93 million bpd in November, and 94.7 million bpd in December. This compares to oil demand of more than 99 million bpd last year.

So could be a bit of a challenging stretch ahead for oil markets. More so as there was belief that China's economy would continue to rebound and churn, thereby increasing hydrocarbon consumption. However, as the Washington Post [reports](#), "after a record purchasing spree in April, when crude prices were at rock bottom, China's oil buying has eased off. The amount of oil held in storage tanks in Shandong province, home to the country's independent refiners, has risen by 28% since mid-May and is close to hitting a five-month high. And there is still a huge backlog of vessels waiting off the coast to discharge their cargoes. Some have been there for two months. Meanwhile, processing rates at China's independent refineries started to ease from record levels in mid-June. And massive floods across the country may reduce its demand for gasoline and oil by as much as 5%, according to consultants Facts Global Energy, although the disruption should be short-lived."

Therefore, there is still a lot of uncertainty at this time. Fortunately though within this Global Refining Report, IIR hopes to shed some light on what is transpiring from a Refinery Operations perspective as the Global Refining Index (working with ADUs) illustrates what is happening to crude operationally available capacity and how refineries are de-rating and operating overall in these times. The Global Refinery Maps depict the COVID-19 Impact as well as the non-COVID-19 outages. Area Charts visualize COVID-19 Impact and non-COVID-19 capacity offline in Asia, Europe and North America.

Petroleum Refining Highlights

July 24, 2020 IIR continues to monitor plant operations along the Texas Gulf Coast due to the approach of Tropical Storm Hannah. The storm is currently on a path to make landfall south of Corpus Christi, Texas. At this time facilities including Bill Greehey, Flint Hills and Citgo Corpus are expected to remain online during the event. Updates will be published if any new information becomes available.

July 24, 2020 IIR has confirmed that **Pemex TRI** continues to maintain normal operations at this time at its 270,000 b/d **Cadereyta, Mexico refinery**, located in the projected path of Tropical Storm Hanna. It is expected that the storm will make landfall in the area by this upcoming Sunday/Monday. Separately, the 65,000 b/d



FCCU 1, which was forced to go offline on July 21 due to Equipment issues, continues as such and Pemex personnel evaluates damages to determine shutdown duration. The 6,000 b/d HF Alkylation 2 and 5,000 b/d MTBE 1 under planned repairs since June 8 are still on schedule to be back into operations on August 10. The facility keeps processing at reduced rates due to inventory controls related to company finances by having the 120,000 b/d Combinada 1 (Crude 1) offline and the 150,000 b/d Combinada 2 (Crude 2) running at 125,000 b/d. IIR continues to monitor the refinery situation and will issue an update when more details become available.

July 24, 2020 IIR has learned that **Klesch Group** will not operate the 225kbd **Willemstad Isla, Curacao refinery** as previously agreed due to the current spread of COVID-19 and inability to move personnel from Europe to the Island. Authorities are to select new operator in the upcoming months. All processing units, still operated by PDVSA, remain offline due to unplanned events followed by lack of crude and financial issues, and will be kept as such until at least November 2020. Maintenance and repair works performed on major offline units are complete; only preventive work is performed.

July 24, 2020 IIR has confirmed that **Eni Spa** continues the Economic Shutdown at their 247,000 b/d **Sannazzaro Refinery, Italy**. The Unplanned Economic Shutdown of the 42,000 b/d FCC Unit, 38,500 b/d HDC1 and 28,000 HDC2 which began in early March 2020 due to COVID-19 is expected to continue until Mid-August 2020. Meanwhile, the refinery continues to operate at reduced capacity (approx. 40%) until mid-August 2020.

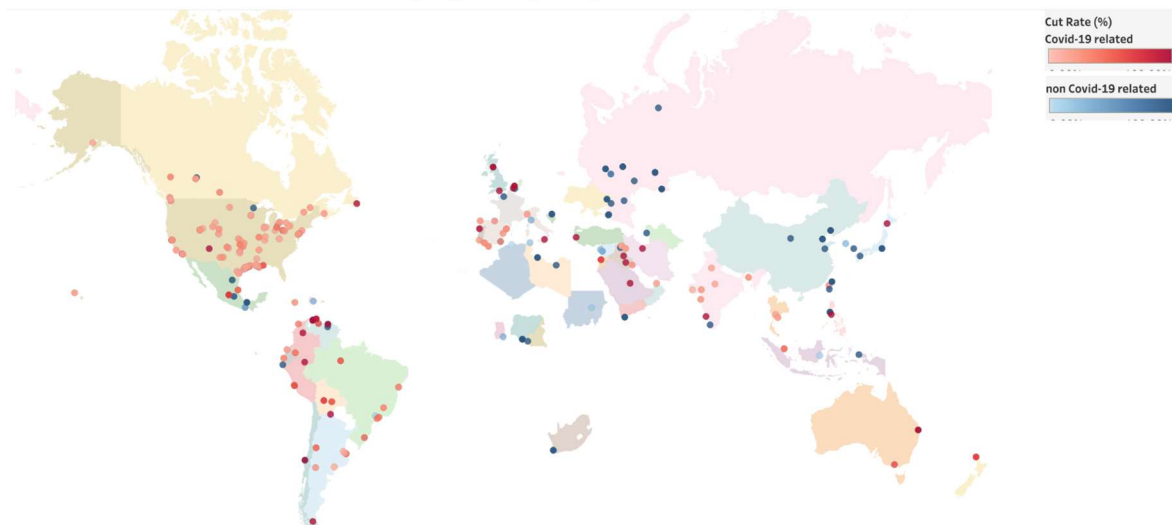
July 24, 2020 **Astron Energy** has delayed the restart of its 100,000 b/d **Cape Town Refinery, South Africa** due to a fire that occurred on a heater in the 15,850 b/d Reformer during the restart process on July 2, 2020. The Refinery is tentatively scheduled to restart by December 15, 2020 (previously reported September 15, 2020). The refinery had been under planned major maintenance shutdown since February 2, 2020. Due to the fire, the refinery wide maintenance works have been put on-hold. Major units include the 50,000 b/d Crude Distillation 1, 50,000 b/d Crude Distillation 2, 17,000 b/d FCCU 1 17,000 b/d FCCU 2, 15,850 b/d Reformer, 6,800 b/d Isomerization, 22,600 b/d Diesel Hydrotreater 1, 6,340 b/d Diesel Hydrotreater 2, 17,100 b/d Visbreaker, 6,350 b/d Kerosene Hydrotreater and 23,400 b/d Naphtha Hydrotreater Units.

July 23, 2020 **Reliance India Limited (RIL)**, on July 22, 2020 has begun a 30-day planned turnaround of the 380,000 b/d CDU 2 at its 760,000 b/d **Jamnagar SEZ Refinery, India**. Expectations are to complete repair and restart the unit by August 20, 2020.



Map of Global Refineries impacted by COVID-19/non-COVID -- OnGoing Offline Events

Ongoing Refinery Outages



Global Refining Index

Industrial Info's Global Refining Index (GRI) illustrates how much Refinery Capacity is offline versus Normal Operating Capacity. Illustrating with an Operating % at a World Region - Market Region level how healthy Refineries are.. (see graphics below).

Global Refinery Index Table--July 24, 2020

World Reg	Market Reg	U Capacity (bbl/d)	Covid Related cap off (bbl/d)	non-COVID-19 related cap off (bbl/d)	Available capacity (bbl/d)	COVID-19 Related Cut Rate (%)	non-COVID-19 Related Cut Rate (%)	Operating capacity (%)
Africa	Total	2,641,200	0	549,700	2,091,500	0%	21%	79%
	Central Asia	2,676,500	0	84,000	2,592,500	0%	3%	97%
Asia	East Asia	23,033,700	560,000	1,464,000	21,009,700	2%	6%	91%
	South Asia	5,549,900	481,480	17,000	5,051,420	9%	0%	91%
	Southeast Asia	4,860,300	128,000	224,000	4,508,300	3%	5%	93%
	Western Asia	7,497,214	417,120	238,600	6,841,494	6%	3%	91%
	Total	43,617,614	1,586,600	2,027,600	40,003,414	4%	5%	92%
	Eastern Europe	2,248,249	0	160,000	2,088,249	0%	7%	93%
Europe	Northern Europe	2,767,400	200,000	0	2,567,400	7%	0%	93%
	Russia	6,247,486	0	768,349	5,479,137	0%	12%	88%
	Southern Europe	4,295,858	835,485	53,280	3,407,093	19%	1%	79%
	Western Europe	5,580,500	358,000	515,600	4,706,900	6%	9%	84%
	Total	21,139,493	1,393,485	1,497,229	18,248,779	7%	7%	86%
Middle America	Caribbean	457,040	265,340	13,600	178,100	58%	3%	39%
	Central America	19,000	0	0	19,000	0%	0%	100%
North America	Total	476,040	265,340	13,600	197,100	56%	3%	41%
	Atlantic Canada	430,000	190,000	0	240,000	44%	0%	56%
North America	Great Lakes	2,374,000	540,600	45,000	1,788,400	23%	2%	75%
	Mexico	1,615,000	272,650	700,500	641,850	17%	43%	40%
	Mid Atlantic	23,000	6,900	0	16,100	30%	0%	70%
	Midwest	928,000	194,750	0	733,250	21%	0%	79%
	Northeast	883,500	231,000	0	652,500	26%	0%	74%
	Ontario	392,000	44,600	165,500	181,900	11%	42%	46%
	Quebec	395,000	79,000	0	316,000	20%	0%	80%
	Rocky Mountains	811,900	167,080	0	644,820	21%	0%	79%
	Southeast	700,100	188,850	0	511,250	27%	0%	73%
	Southwest	9,192,300	1,736,135	95,000	7,361,165	19%	1%	80%
	West Coast	2,898,300	874,300	0	2,024,000	30%	0%	70%
	Western Canada	848,080	141,295	22,000	684,785	17%	3%	81%
	Total	21,491,180	4,667,160	1,028,000	15,796,020	22%	5%	74%
Oceania	Oceania	619,750	140,000	135,000	344,750	23%	22%	56%
	Total	619,750	140,000	135,000	344,750	23%	22%	56%
South America	South America	5,176,450	1,355,965	707,575	3,112,910	26%	14%	60%
	Total	5,176,450	1,355,965	707,575	3,112,910	26%	14%	60%
Grand Total		95,161,727	9,408,550	5,958,704	79,794,473	10%	6%	84%

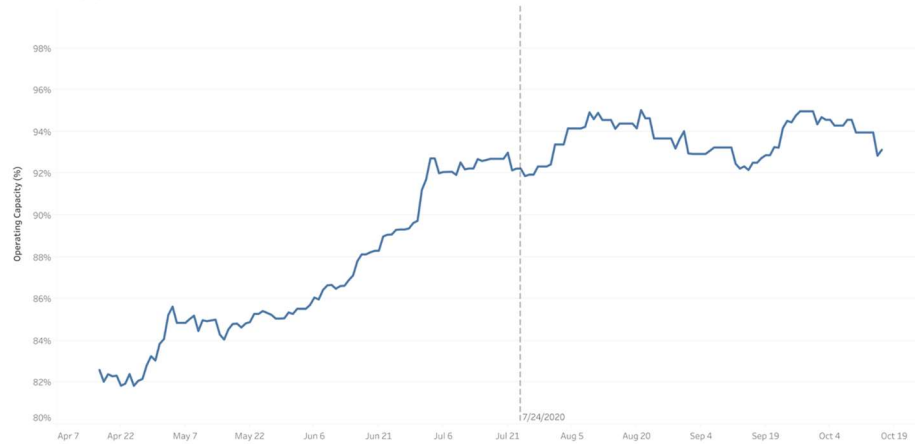
Tomorrow's news, Today

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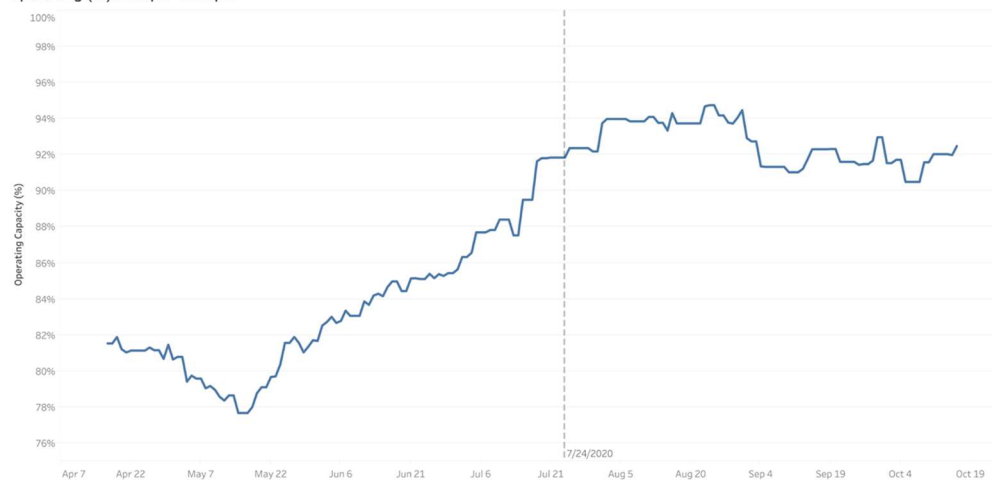
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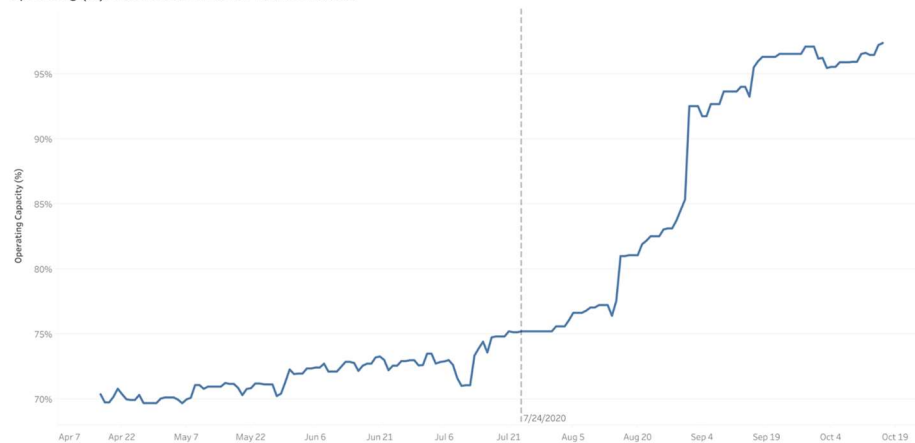
Operating (%) Chart Asia - Asia

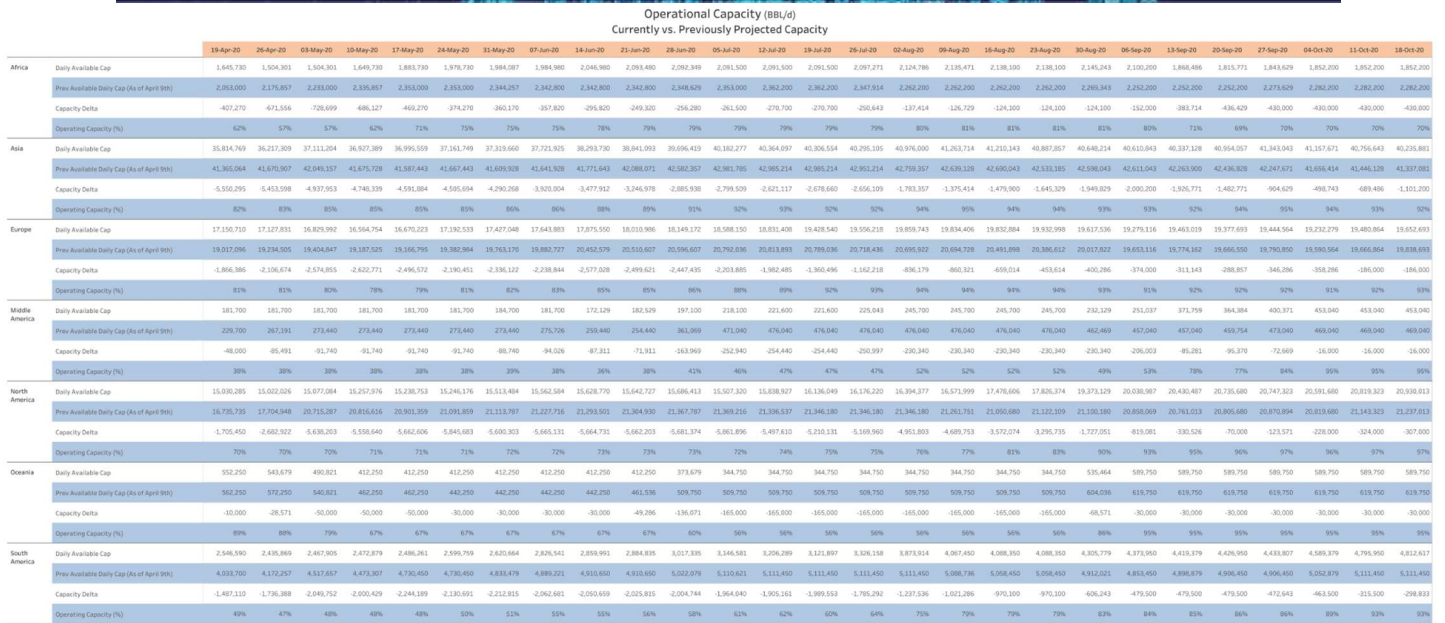


Operating (%) Europe - Europe



Operating (%) Chart North America - North America





Total Outages in Asia Operational Capacity (bb/d)

43.62M

44.00M
42.00M
40.00M
38.00M
36.00M
34.00M
32.00M
30.00M
28.00M
26.00M

Apr 7 Apr 17 Apr 27 May 7 May 17 May 27 Jun 6 Jun 16 Jun 26 Jul 6 Jul 16 Jul 26 Aug 5 Aug 15 Aug 25 Sep 4 Sep 14 Sep 24 Oct 4 Oct 14 Oct 24

Currently Projected Capacity, No Outage Reported
Currently Projected Capacity, Outage Reported
Previous Projected Capacity as of April 9th

COVID-19 Related Outages in Asia Operational Capacity (bb/d)

43.62M

44.00M
42.00M
40.00M
38.00M
36.00M
34.00M
32.00M

May 1 Jun 1 Jul 1 Aug 1 Sep 1 Oct 1

Currently Projected Capacity, No Outage Reported
Currently Projected Capacity, Outage Reported
Previous Projected Capacity as of April 9th

non-COVID-19 Related Outages in Asia Operational Capacity (bb/d)

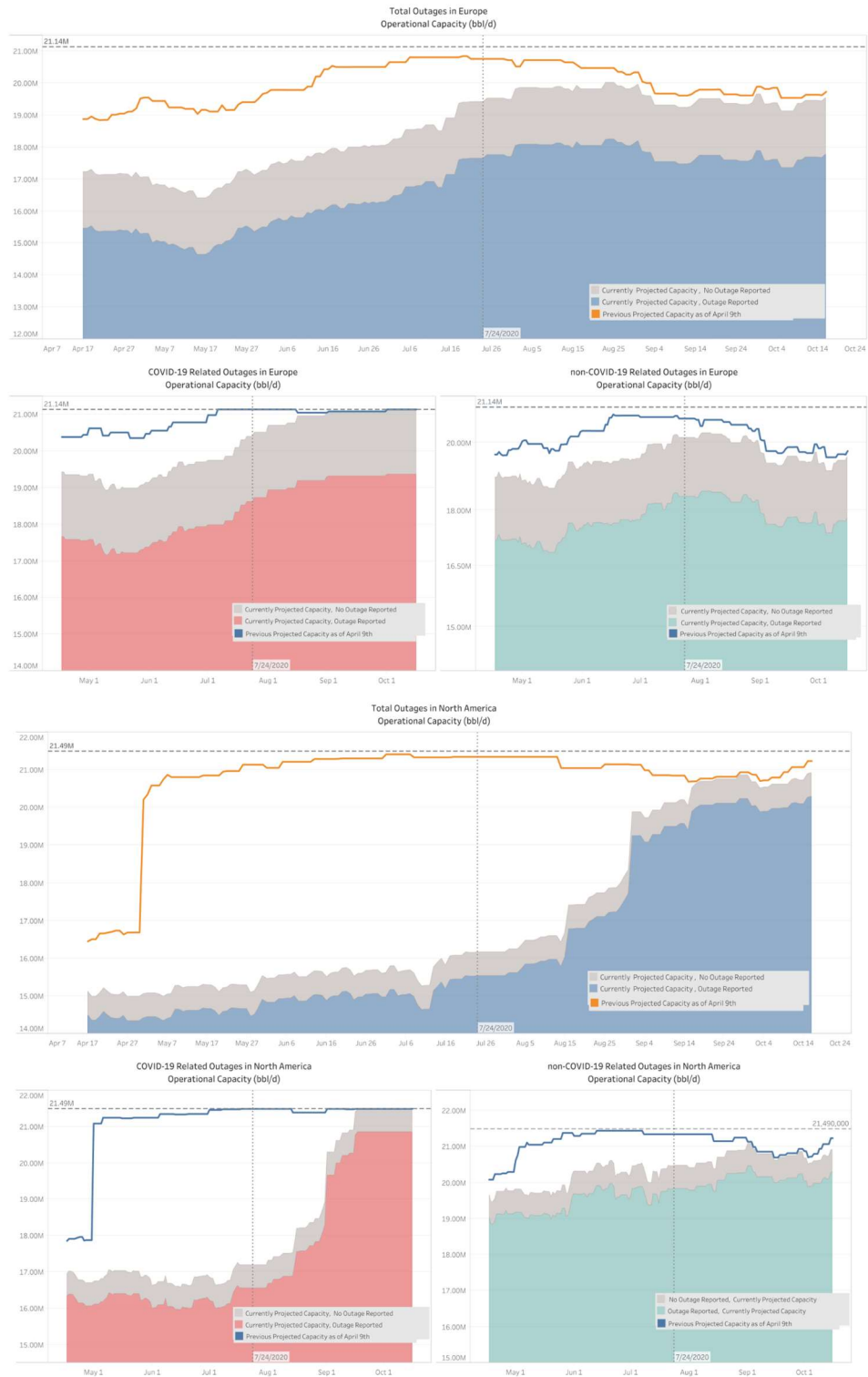
43.62M

44.00M
42.00M
40.00M
38.00M
36.00M
34.00M
32.00M

May 1 Jun 1 Jul 1 Aug 1 Sep 1 Oct 1

Currently Projected Capacity, No Outage Reported
Currently Projected Capacity, Outage Reported
Previous Projected Capacity as of April 9th

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Map of Global Refineries impacted by COVID-19/non-COVID - Future(Delayed) Offline Events

Future Refinery Outages

