

OIL MARKET FORECAST – MAY 2020

SURVIVE TODAY, THRIVE TOMORROW

Summary

This paper presents an oil market forecast updated for May 2020 and analyses the impact on US land activity and production.

The oil demand picture in May 2020 looks like April, although the demand trough doesn't look as deep and rebound doesn't look as sharp. The supply reaction, both from formalized production cuts and the impact of low prices, has been more pronounced than seemed likely a month ago. The net outcome is that the market finds balance in June, a couple of months earlier than previously predicted. Other items to note:

- Oil inventories will continue to build through June 2020 but will not overwhelm OECD storage globally.
- Average US land oil rig counts fall to 275 in 2020, average US oil production falls to 14.3 MMbbl/day in 2020.
- OECD crude oil inventories fall to their five-year average in at the end of 2020.
- The underlying decline rate of legacy US Shale production emerges is one of the key uncertainties in the forecast of oil market balance in the medium term.
- Average US oil production falls to 12.4 MMbbl/day in 2021; the land oil rig count rebounds.
- Increased US onshore oil activity is unable to meet increased demand in the medium term.
- The oil supply gap reaches 1 MMbbl/day in 2021 and continues to expand in 2022.

This forecast sees a strong rebound in 2021 and beyond as surplus inventory is worked off and supply falls short of demand. US onshore production growth would be unable to keep pace triggering the start of the industry's next investment cycle. Those companies that can weather the storm and survive into 2021 should be well positioned to capture this upswing.

Oil Supply and Demand

The latest IEA report is slightly more bullish on second quarter oil demand than the April edition, but slightly more pessimistic on the demand picture for 2020 as a wholeⁱ. The IEA now predicts second quarter oil demand at 79.3 MMbbl/day, down from 99.2 MMbbl/day for the same period in 2019. The IEA predicts average oil demand in 2020 of 91.3 MMbbl/day, against 99.8 MMbbl/day in 2019. The EIA forecasts are in line with this, with a demand estimate of 92.6 MMbbl/day in 2020ⁱⁱ.

While demand has been stronger than expected a month ago, supply cuts have been steeper. Oil supply fell approximately 20 MMbbl/day between April and May, to 88MMbbl/day. While this combination of OPEC+ and other production cuts was still not enough to balance the market, it should reach equilibrium in June as demand returns.

Oil Market Balance and Storage

The net result of this historic decline in demand and curb in supply is that inventories will build until June this year, at which point recovering demand should start to deplete them. This switch from surplus to shortfall is now predicted to occur in June, a couple of months earlier than in last month's forecast. A supply and demand and surplus forecast through 2023 is shown in Figure 1, below.

The key uncertainties in this forecast are the pace of global economic recovery, adherence to production cuts and the underlying decline rate of US shale production.

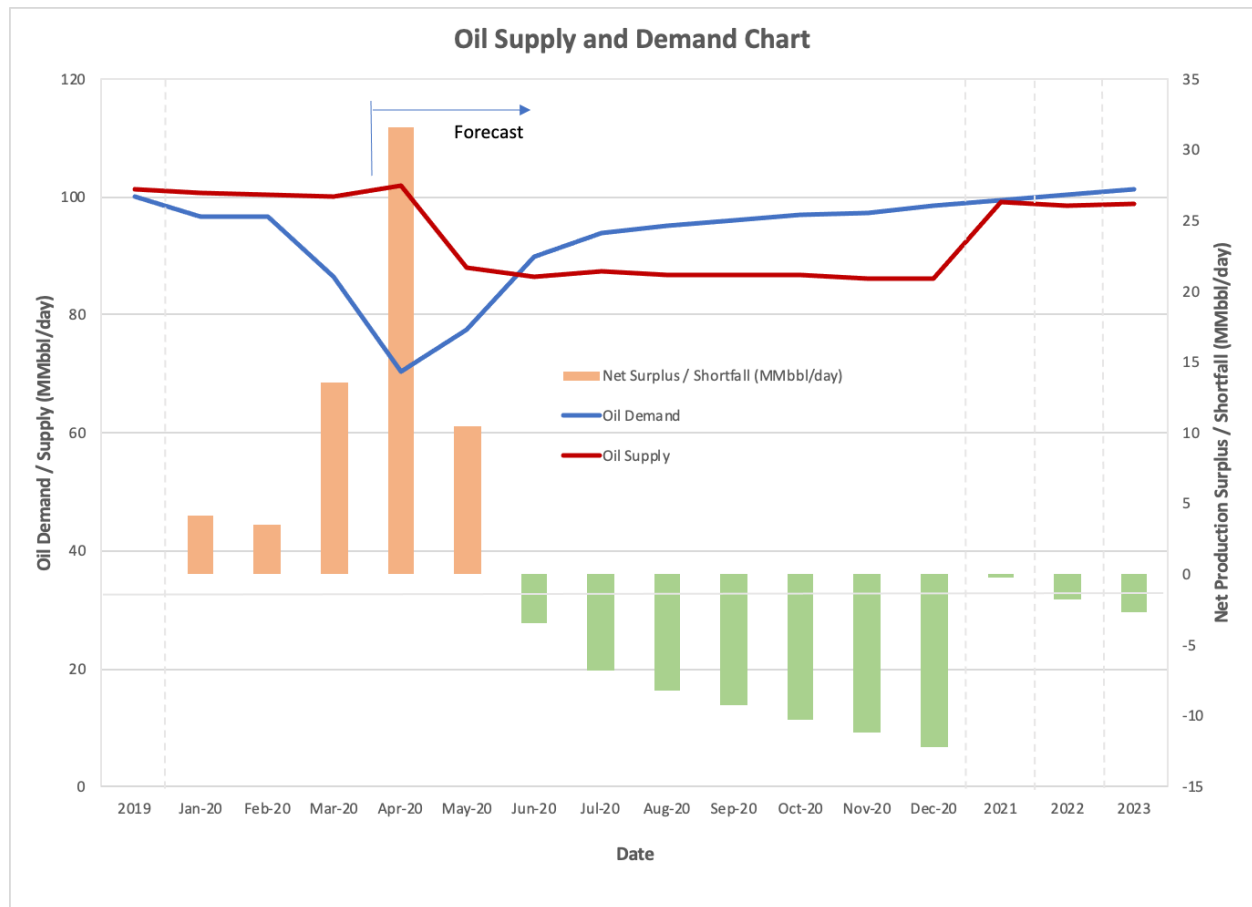


Figure 1 - Supply and Demand and Surplus Forecast

April and May crude surpluses are estimated at 32 MMbbl/day and 11 MMbbl/day respectively, which would result in 1401 MMbbl being added to storage over the two-month period. The May production cuts, together with better than expected demand have slowed the build in crude inventories, with crude oil inventories now unlikely to reach capacity this year.

The overall impact of higher demand and lower supply is that OECD crude storage should fall back to its 5-year average around the end of 2020, rather than in 2021 as in last month's forecast. Supply and demand are predicted to balance in 2021 as the OPEC+ supply curbs are lifted, but demand is predicted to outstrip supply in 2022 and 2023. This is shown in Figure 2, below.

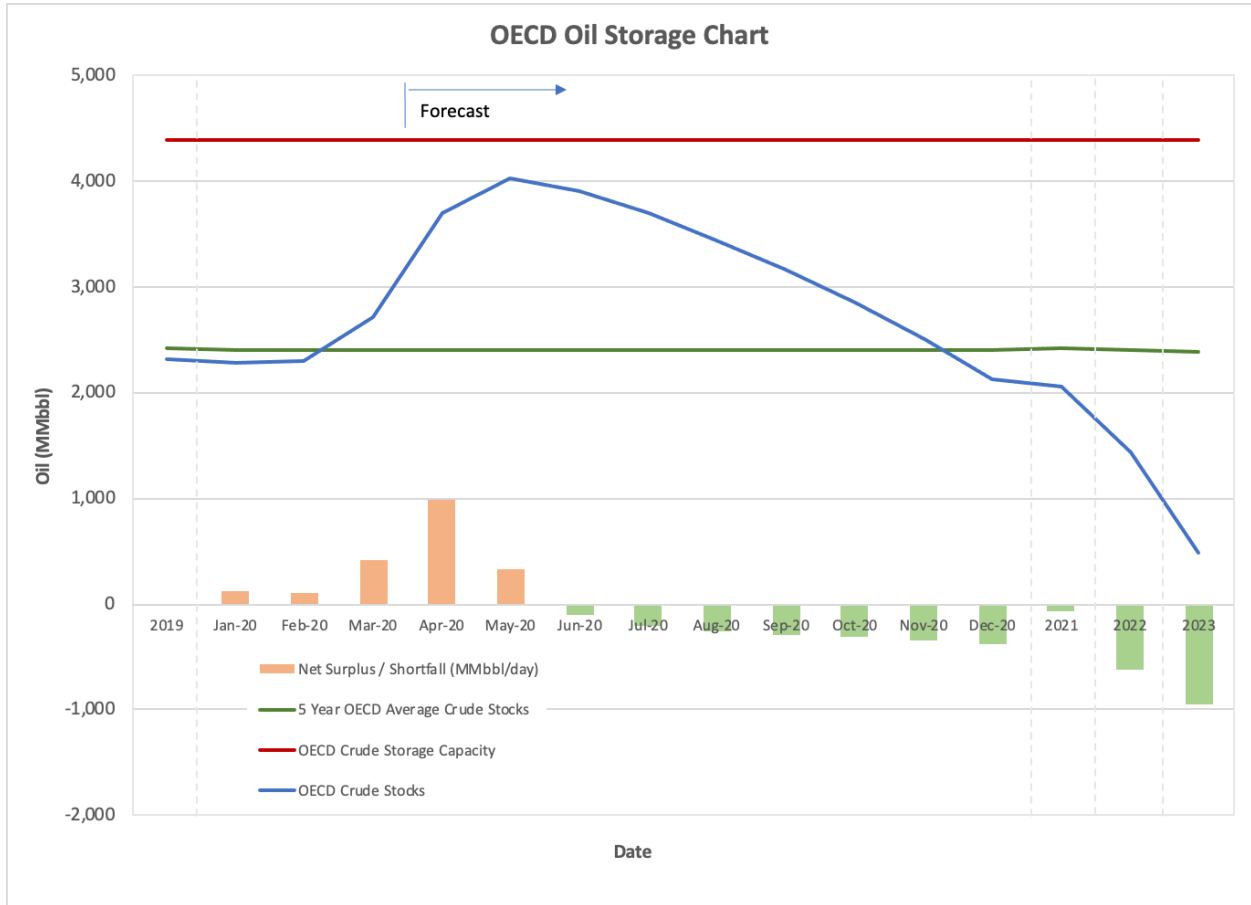


Figure 2 - OECD Oil Storage Chart

One of the key uncertainties governing the pace of an oil market rebound is the underlying rate of decline of US legacy shale production. The base forecast, as presented in Figures 1 and 2, assumes a legacy US shale production decline of 3.9 MMbbl/day in 2020 and 1.7 MMbbl/day in 2021. To put these numbers in context, US shale production in 2019 was 10.3 MMbbl/day, under a definition that includes both crude oil and natural gas liquids. A more gradual decline, of 2.8 MMbbl/day in 2020 and 1.7 MMbbl/day in 2021 would still bring the market near balance at year end but would delay the emergence of a substantial supply deficit until 2023. Oil storage under this scenario is shown in Figure 3, below.

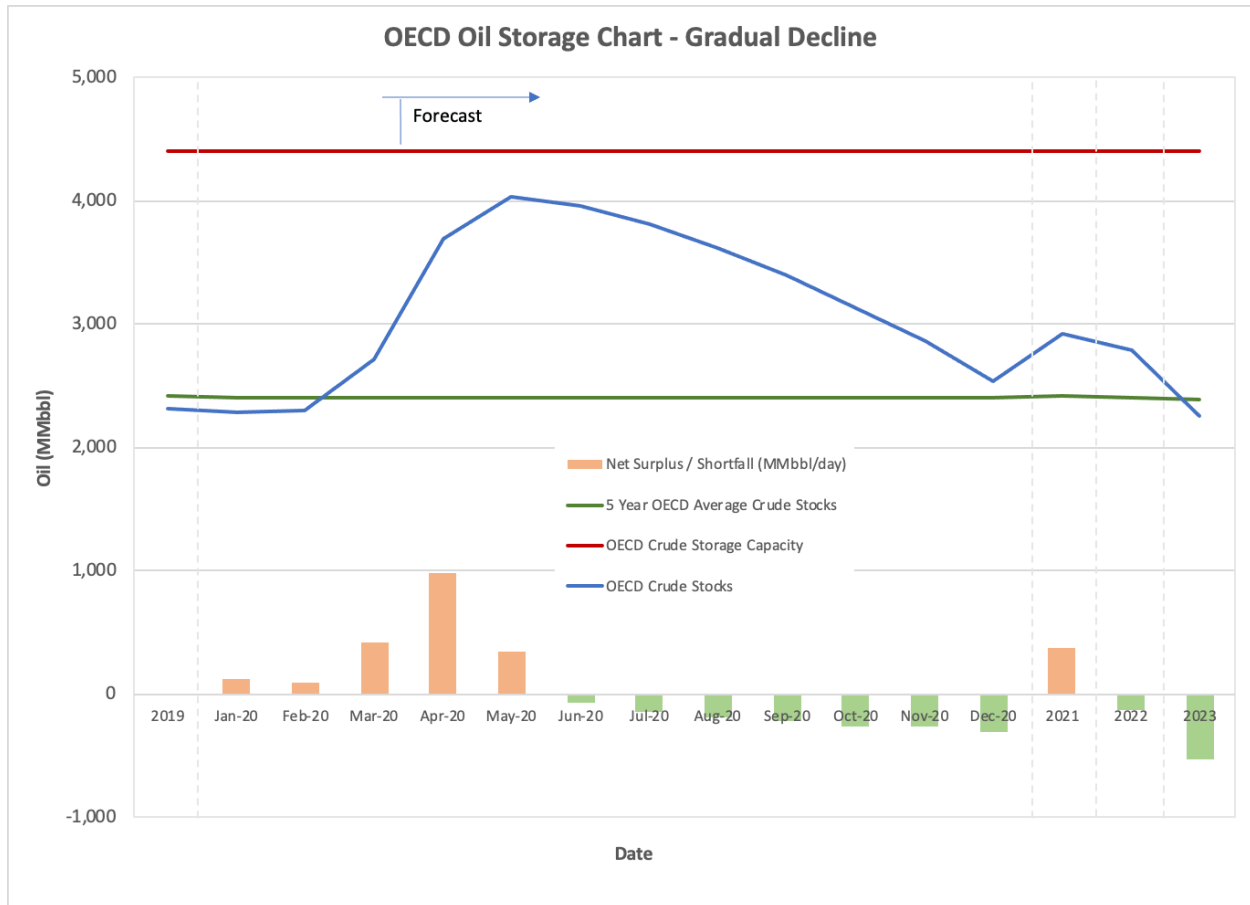


Figure 3 - OECD Oil Storage Chart Gradual Decline Case

Impact on US Investment and Oil Production

The forecast sees average annual US oil rig counts falling to 275 in 2020, and 200 in 2021 before recovering. The 2020 rig count estimate is essentially the same as last month’s forecast, but the 2021 rig count is lower, based on recent estimate of 2021 US shale oil drilling activityⁱⁱⁱ.

The US land oil rig count has already shown a dramatic decline through the course of the year, from 648 at the beginning of the year to 277 by the 8th of May. This decline is set to continue, with an estimate of only 50 rigs in operation by year end, as shown in Figure 4. If gas rig counts remain flat for the remainder of the year, the total land rig count at year end would be about 150. A moderate rebound in rig activity is forecast for 2020, with an average US land oil rig count of 200 for the year, which implies 350 US land oil rigs active at the end of 2021.

US annual oil production is forecast to fall from a record 17.2 MMbbl/day in 2019 to 14.3 MMbbl/day in 2020 bottoming out at 12.4 MMbbl/day in 2021 before returning to growth. US oil production is shown in Figure 5, below.

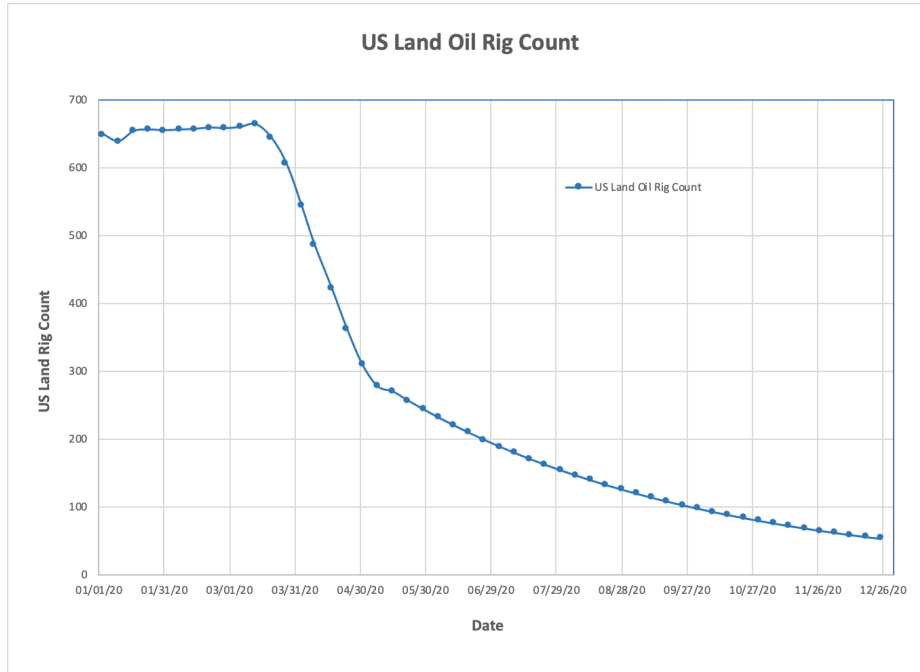


Figure 4 - US Land Oil Rig Count

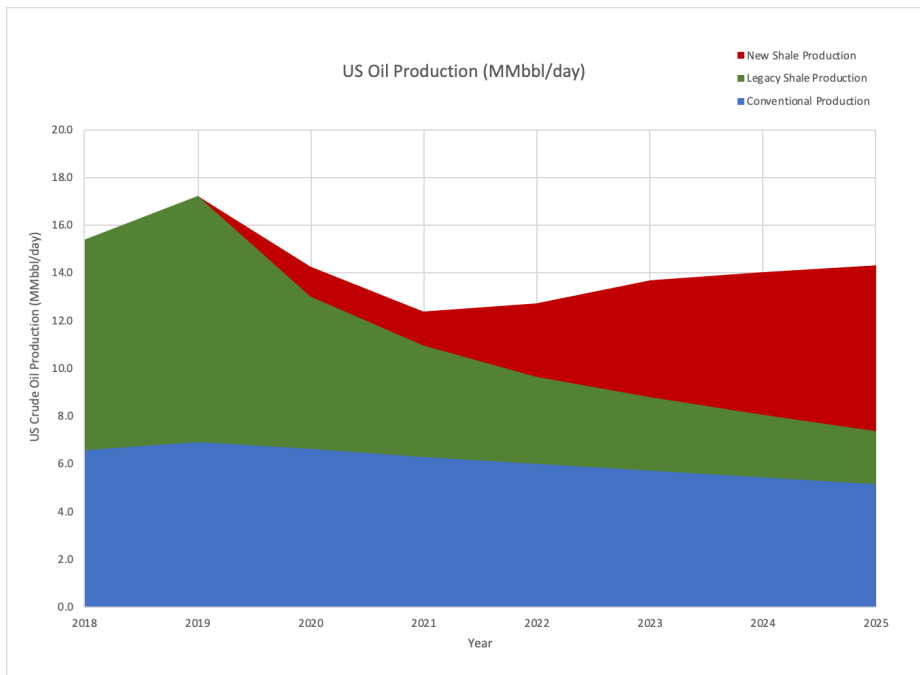


Figure 5 - US Oil Production Forecast

ⁱ IEA (2020), Oil Market Report - May 2020, IEA, Paris <https://www.iea.org/reports/oil-market-report-may-2020>

ⁱⁱ Short Term Energy Outlook (STEO), May 2020, U.S. Energy Information Administration.

ⁱⁱⁱ Executive Briefing US Land Oilfield Services, Q2 2020, Spears & Associates