Energy monitor

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Oil and gas demand continue to recover

- **Both OPEC and IEA raised their oil demand expectations for 2021**
- **Crude inventories have declined to 5 year average levels**
- **Gas demand is increasing, but the pace is different per region**
- **Gas price forecasts (both TTF and Henry Hub) are revised upwards**

Oil prices rise again

In recent weeks, the oil price fluctuated in a relatively narrow range. The upward price potential on the back of higher demand expectations (in the US and Asia) had been counteracted by a disappointing economic recovery in Europe and higher oil production by OPEC+. But earlier this week, oil prices rose on the back of continued declines in US oil reserves and hopes of further economic recovery.

Oil prices: after correction new price recovery

Source: Bloomberg

Both OPEC and the International Energy Agency (IEA) have revised upwards their expectations for oil demand in 2021. OPEC expects oil demand to rise by 5.95 million barrels per day (mb/d) to nearly 96.5 mb/d in 2021, some 6.6% higher than in 2020 and 190,000 per day higher than in the previous estimate. According to OPEC, the pick-up in demand will take place mainly in the second half of the year, when the effects of the vaccination programmes will become increasingly visible. By contrast, in recent months, OPEC had consistently lowered its expectations.

The IEA is even more optimistic and expects demand of 96.7 mv/d this year. Although the Q1 figures were somewhat disappointing, the IEA nevertheless revised its estimate upwards by 230 kv/d, based on the expected recovery of the economy later this year.

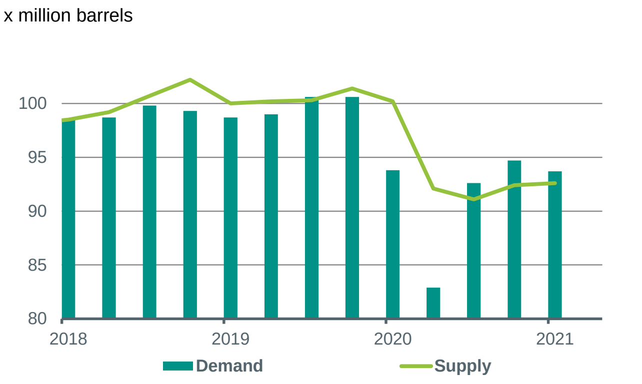
OPEC+ to raise oil production again from May

With demand for oil recovering, OPEC+ (most of the OPEC members, plus ten other oil products led by Russia) believes there is slowly but surely more room for more oil production. During the consultations in early April it was therefore decided that OPEC+ will increase production. Or rather, lower the production cuts. After all, the production reduction agreement is being phased out. In May and June, OPEC+ will increase production by 350 kv/d. In July, another 450 kv/d will be added. By the end of July, OPEC+ will therefore produce 1,150 kv/d more than at the end of April. In addition, Saudi Arabia will reverse its 1 mv/d voluntary production cut in the same three months. Still, that means that at the end of July, a total of almost 6 mv/d will still be produced less by these producers than at the beginning of 2020. With demand picking up faster in the second half of the year, more production increases by OPEC+ can be expected. For now, however, there are rumours that the OPEC+ meeting at the end of April will be downgraded from a full meeting with all ministers to 'just' a market monitoring committee meeting.

Normalising stocks

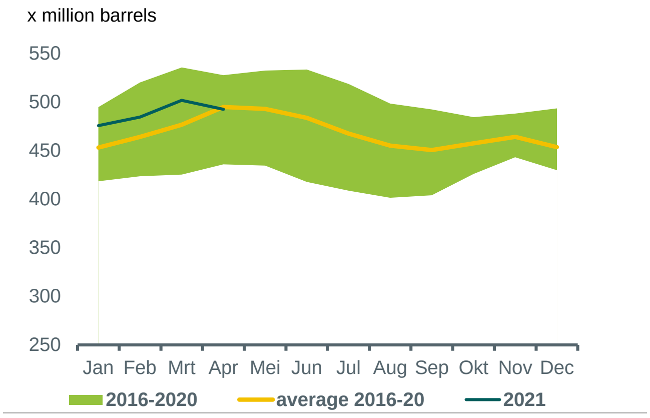
An important steering tool for OPEC+ are the OECD stocks. We also know that there is a high degree of interest among OPEC+ members in the development of US oil stocks. As can be seen in the left-hand figure below, oil demand in 2020 has fallen sharply as a result of the measures to combat covid-19. During the second half of 2020 and the first quarter of 2021, OPEC+ kept production so low that it actually ran a deficit. As a result, it had to draw on the ample oil reserves accumulated during the first half of the year. As a result, from August 2020 onwards, OECD stocks fell and are back to their 5-year average.

OPEC+ rebalanced the market



Source: IEA

US crude inventories back at average level

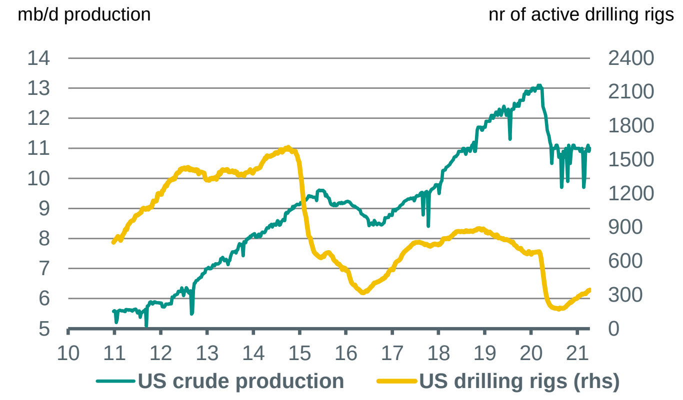


Source: US Department of Energy

A similar pattern was seen in US stocks (right graph). According to the US Department of Energy (DoE), US stocks have fallen below their 5-year average. This provides some room for further production increases in OPEC+. Russia, in particular, is keen not to wait too long before cutting production to prevent too large a market share from shifting to US (shale) oil producers.

Nevertheless, the recovery of the US oil sector hardly seems to be in the cards yet. Several factors such as the period of extreme cold earlier this year, the low oil prices of the past year, stricter regulations by the Biden administration and more difficult access to the financial market, all keep growth in check. We do see an increase in drilling activity. The number of active rigs has now risen from a low of 172 rigs in August 2020 to 337 last week (source: Baker Hughes). This doubling of the number of drilling rigs has mostly kept production steady (around 11 mv/d), but has not led to an increase in US oil production so far.

US oil production stable; higher number of drilling rigs

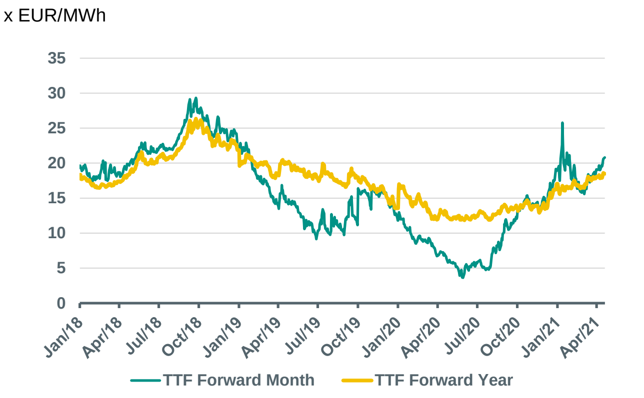


Source: Bloomberg

Gas price remains high

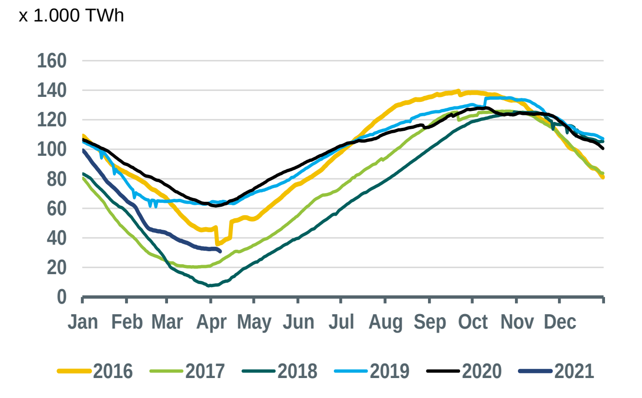
The price of gas has a high correlation with the weather patterns. This is not so strange, after all: when it is very cold we use more gas to heat our homes. In addition, we also see an increasing demand for electricity in the summer - most of which is still generated in gas power stations - to run air conditioners when it is extra hot.

TTF: month +1 contract versus year +1 contract



Source: Bloomberg

Dutch gas inventories build lack 2019 and 2020



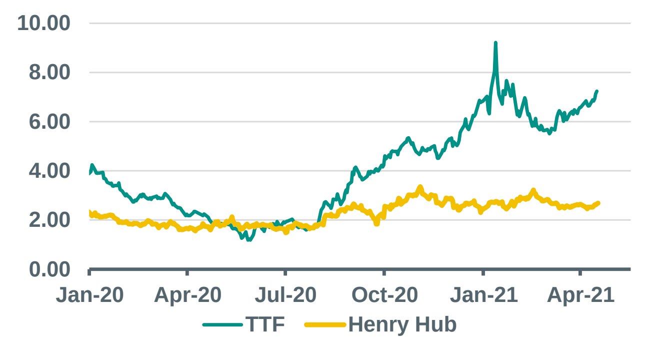
Source: Gas Infrastructure Europe

There is a difference between short-term contracts and longer-term contracts. The shorter the time horizon of the future contract, the greater the effect of the weather is. In the graph on the left, we can see the seasonal pattern nicely reflected in the monthly contracts. In the winter, the price rises due to a rising demand for natural gas, while in the spring, the prices fall again. We can also see the peak demand during the week with severe frost and snow in January.

This year, a remarkable fact, in comparison with the past two years, is that the price is still relatively high in mid-April. The cold weather in recent weeks has played a role in this, but the (lack of) building up of new stocks is also important. As the figure on the right shows, the build-up of gas stocks is lagging behind the pattern of the last two years. Demand for natural gas will therefore remain high for longer, but will ease once stocks are built up and filled for the new winter season. The IEA also points to the fragile growth outlook for the rest of this year in its recent Gas Market Report. As with the oil market, demand for natural gas is expected to pick up further as the economy continues to recover, and the impact of covid-19 continues to fade. There are significant differences between the recovery paths of sectors and between emerging and developed countries. Gas demand in industry may recover significantly faster than in electricity generation, according to the IEA.

For North America, natural gas demand growth is expected to be limited. More renewable energy and a rising gas price will limit growth by about 1% in this region. In Europe, demand for natural gas will grow faster in the coming years (IEA expects 3% growth). After all, Europe is lagging behind in the economic recovery, as a result of the corona measures. This growth will therefore come mainly from the recovery to pre-corona levels. In Asia, gas demand will grow even faster. According to the IEA, strong economic growth and the expansion of the gas infrastructure will lead to a 5% increase in demand by 2021. China accounts for more than half of this. Here too, its industry and the switch from coal to gas are the main drivers.

Gas prices rise again



Source: Bloomberg

Gas price forecasts slightly increased

As a result of the cold weather and the related higher demand for natural gas, the price recovery that we had pencilled in for the second half of the year is already a fact. Although the price may fall slightly when stocks are replenished, on average the price will still be higher in 2021 than earlier anticipated. Therefore, we have revised upwards our estimates for both the TTF gas price (calendar year +1) and Henry Hub (future for delivery next month). For TTF, we now expect an average price of EUR 17/MWh in 2021 (this was EUR 15/MWh). The estimate for the average price of Henry Hub in 2021 has been increased from USD 2.40/mmBtu to 2.60/mmBtu. See table below for all our estimates.

Oil and gas price estimates

End of period		20-Apr	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
Brent *	USD/bbl	*66.59*	64	62	60	58	60	62	65	64	63	62	65
WTI *	USD/bbl	*63.01*	61	58	57	55	56	59	61	60	58	57	60
Natural Gas (HH) *	USD/mmBtu	*2.72*	2.50	2.50	2.75	2.50	2.30	2.40	2.60	2.50	2.40	2.60	2.70
TTF *	EUR/MWh	*18.43*	17	16	17	19	17	19	20	19	18	20	22
Average		**2020**	**Q2 21**	**Q3 21**	**Q4 21**	**2021**	**Q1 22**	**Q2 22**	**Q3 22**	**Q4 22**	**2022**	**Q1 23**	**2023**
Brent	USD/bbl	43.21	64	63	61	62	59	59	61	64	61	65	64
WTI	USD/bbl	39.34	60	60	58	59	56	56	58	60	58	61	59
Natural Gas (HH)	USD/mmBtu	2.13	2.60	2.50	2.60	2.60	2.60	2.40	2.40	2.50	2.50	2.60	2.60
TTF	EUR/MWh	13.48	18	17	17	17	18	18	18	20	19	20	20

* Brent, WTI and Henry Hub: active month contract; TTF: next calendar year