Mar-2021

Brent Coal & CO2 Outlook

Osservatorio energia

REF4E

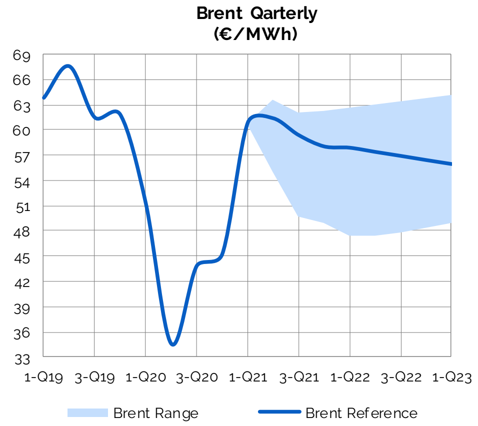
Saudi Arabia leadership role in the oil market regained strength since last year COVID-19 related demand shock and the oil market consequently becomes short-term supply driven. **A progressive move towards a structural rebalancing** of the market is expected over the coming years though.

Global coal demand structurally resumes, following the economic recovery and Prices move higher accordingly.

Investments funds buying activity seen as the key factor underlying the recent CO2 upward acceleration adding to a strong regulatory commitment in supporting the market. A short-term price stabilisation near the current levels would avoid the risk of excessively inflating the electricity prices though.

SUPPLY DRIVES OIL PRICES IN THE SHORT-TERM

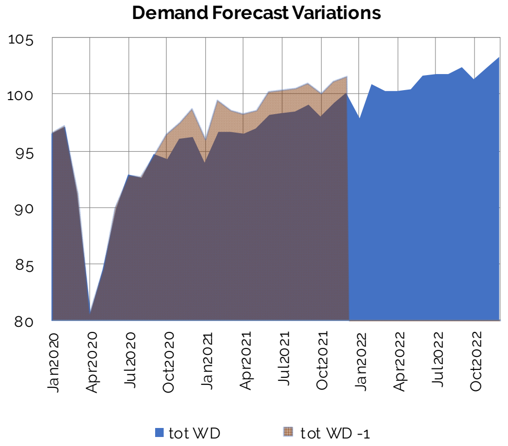
Saudi Arabia leadership role in the oil market regained strength since last year COVID-19 related demand shock, with the latest OPEC Plus unexpected and contrasted decision to maintain most of the supply curbs being just a final seal. **The oil market consequently becomes short-term supply driven, which implies an upward revision of our short -term price projections.**



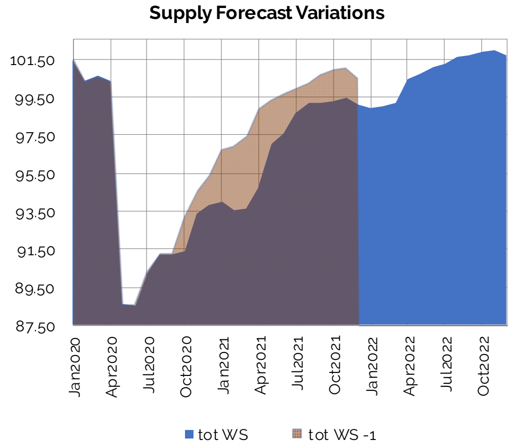
Source: REF-E Elaborations

The *Reference* 2021 Brent average nears 60 $/bbl, supported by the Q1 sharp up-move, while year 2022 settles more than 2 $/bbl lower, above 57 $/bbl, with the OPEC Plus phasing out cuts and the market gradually regaining balance. The *Low* scenario materializes in the event of an OPEC Plus fracture and/or an economic recovery failure, while the *High* one is driven by a quicker than expected demand recovery.

Compared to our 2020 last market update, both demand and supply projections were revised lower. A subdued worldwide economic recovery, with COVID-19 spread still hard to be contained and high degree of uncertainty on people movements resumption timing, 2021 demand is seen on average 1.9 million barrels per day (mbpd) lower.



Source: EIA - REF-E elaborations

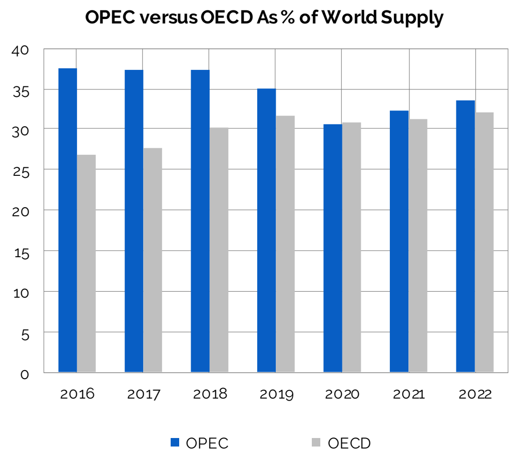


Source: EIA - REF-E elaborations

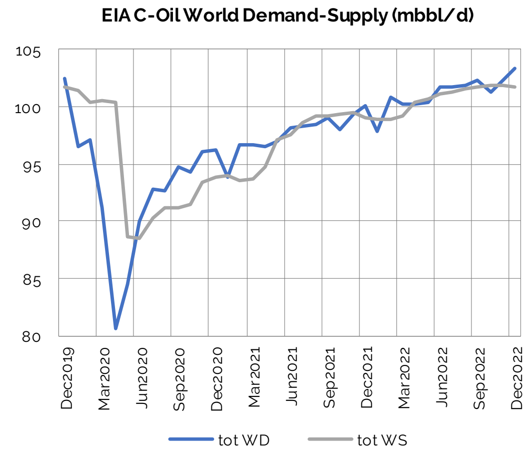
The persistent uncertainty linked to the pandemic. encouraged the OPEC Plus to maintain most of oil output cuts into April and possibly longer though, which brings to an even more significant downward revision of the overall short-term supply growth expectations. The Opec Plus decided in fact against a collective 0.5 mbpd increase in supplies. A small production raise of 0.15 mbpd allowed to Russia and Kazakhstan has very little impact an overall 2.2 mbpd downward revision for this year supply growth projections, with Saudi Arabia willing to maintain its voluntary 1 mbpd production extra cut and a decision on when to gradually phase it out still to be taken.

The OPEC Plus market intervention is not seen as sustainable in the middle term tough, with both Saudi Arabia and Russia facing fiscal sustainability issues encouraging production rump ups to gain market shares whenever prices move higher.

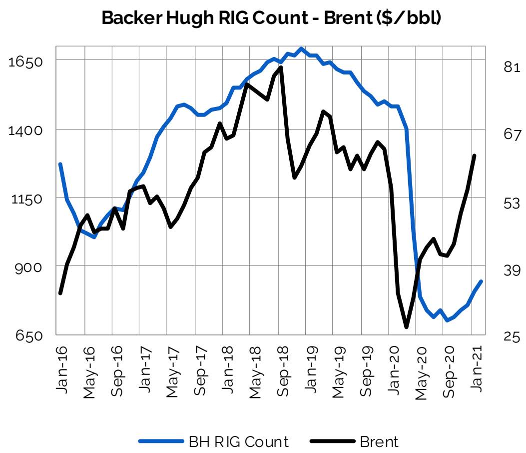
A progressive move towards a structural rebalancing of the market is therefore expected over the coming years, with rising prices also favouring a come back of the OECD production and record levels of both crude and refined products stocks weighing.



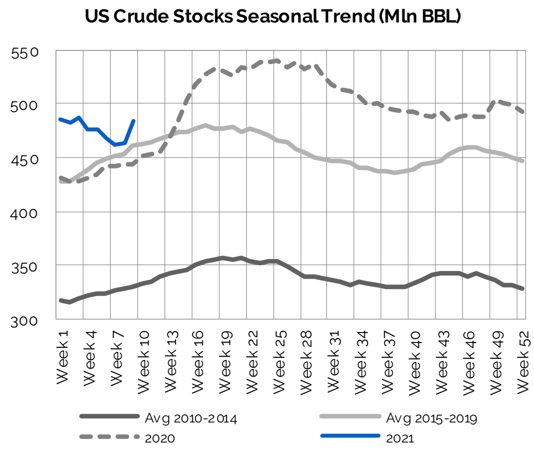
Source: EIA - REF-E elaborations



Source: EIA - REF-E elaborations



Source: Reuters - REF-E elaborations



Source: EIA - REF-E elaborations

Biden green policy impact on shale oil output growth is controversial, with the President ability to gain the rest of the administration support on curbing production in doubt and most likely being a long-term shot rather than a short-term realistically reachable target.

Last January, Biden signed an executive order to the Department of Interior to pause approving new oil and gas leases on federal lands and waters. The next steps range from the leasing moratorium expiring in a few months, which would imply permitting being back and picking up shortly, to defining a more stringent well permitting process, which would slow the output growth path, or the application of higher royalty rates, disincentivising fracking.

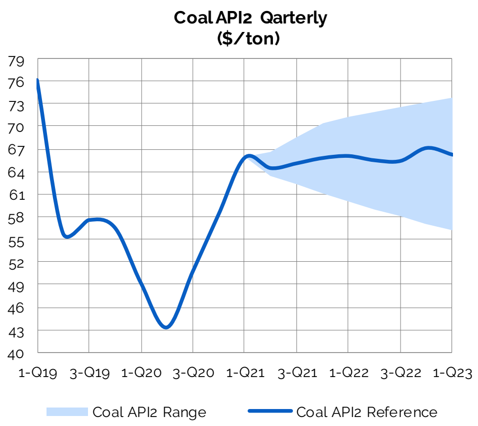
However, chances of permanent fracking ban on federal lands hardly hitting the oil and gas US industry are seen as quite low for now.

The US Chamber of Commerce and a significant quote of the Republican party condemned the ban, pointing to the risk of increasing dependence on foreign sources and harming American workers and consumers, and Biden itself is, in fact, expected to attentively ponder the shale production economic and foreign policy advantages.

The US oil production is now 2 mbpd lower than its peak in February 2020, but higher prices and the expected ban easing will lead to an output resurgence over the coming months, which is expected to rebalance the market and limit WTI and Brent upside potential.

WORLD COAL DEMAND RECOVERY SUPPERTS PRICES

After last year COVID-19 related sharp decline, over the last few months demand was boosted by colder than usual weather across much of north Asia, and the limited availability of spot cargoes of liquefied natural gas, which crimped gas-fired generation. **Global coal demand structurally resumes**, **following the economic recovery** and Prices move higher accordingly.

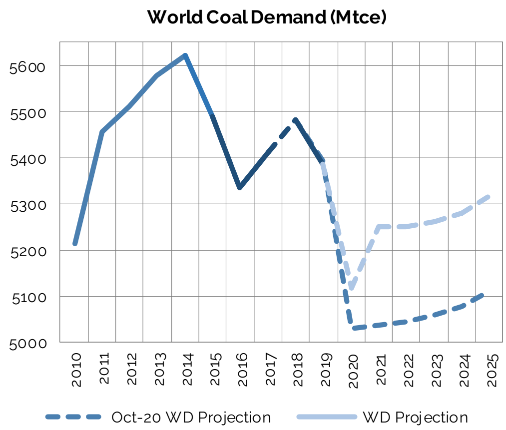


Source: REF-E Elaborations

The *Reference* 2021 API2 Coal reference recovers almost 30% from the 50.3 $/ton 2020 average, moving back above 65 $/ton, supported by the Q1 strength. 2022 reference remains stable just above the previous year reference. The *Low* scenario materializes in the event of an economic recovery failure, which would weigh on the commodities market overall, while the *High* one is driven by a quicker than expected demand recovery and/or renewed commercial tensions, which may cause temporary supply shortages.

The global Coal Market was highly oversupplied in year 2020, following the overall COVID-19 related economic recession, which led to a sharp decline in electricity demand and gas prices, Demand projections for the short-term point to a firmer than expected recovery though, with an upward revision to the growth expectations having recently been released by the IEA, driven by higher electricity demand and industrial output.

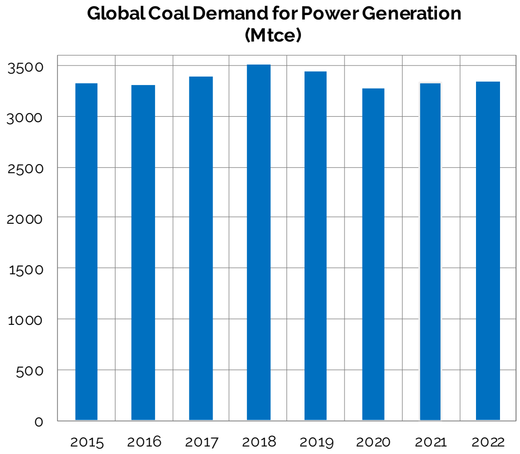
China leads the recovery, followed by India (together accounting for 65% of global coal demand). With the recent environmental protection policies going to restrict coal production in China and logistic costs for domestic coal higher than the imported one (mostly entering China by sea), other **coal producing countries are encouraged to expand their capacity**.



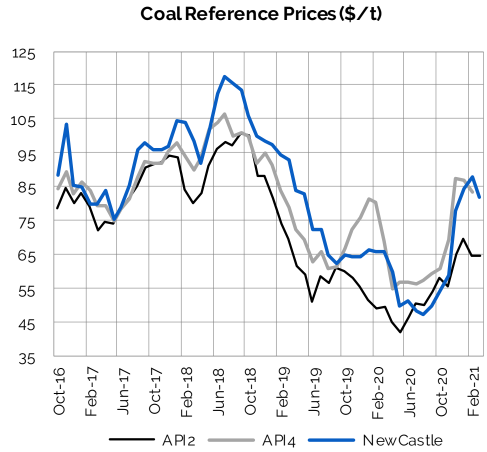
Source: IEA, World Energy Outlook 2020

REF-E Elaborations and Update

The 2021 2.6% expected rebound in world coal demand is driven by the Chinese, Indian and overall Asian rebound in electricity demand and industrial output, more than compensating the ongoing decline of the American and European demand.



Source: IEA - REF Updates and Elaboration

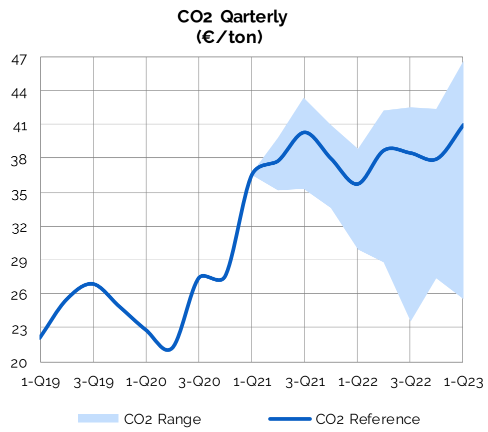


Source: Reuters, REF-E Elaborations

After this year expected rebound the short-term world coal demand for power generation is in fact stable, which limits the API2 European reference price upside potential. Since the European price maintains a high correlation degree with the other references (such as the Australian, strongly correlated to the Chinese, and the South African API4), in our *Reference* scenario the possibility for prices to move significantly lower is limited too.

CO_2: EU CLIMATE POLICY CREDIBILITY ATTRACTS INVESTMENT FUNDS

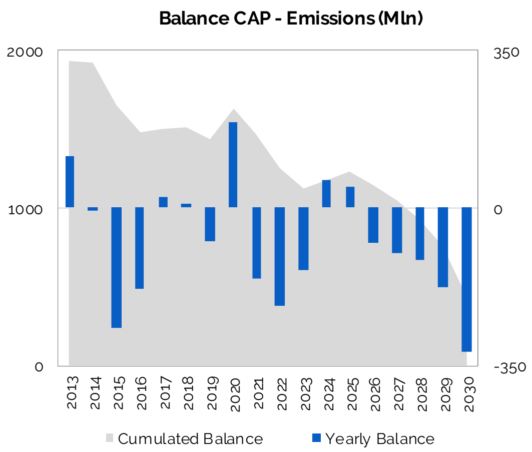
The CO_2 price is moving firmly higher, with the ETS Phase 4 (covering the 2021 to 2030 period) **chick off in January having fueled further upside acceleration**, following through last September release by the EU Commission Plan for Energy and Climate, including the ambitious revision of the emission reduction target (as of year 1990) to 55% by 2050 from the previous 40% and a clear confirmation of the EU ETS System as a key instrument for reaching the above objective.



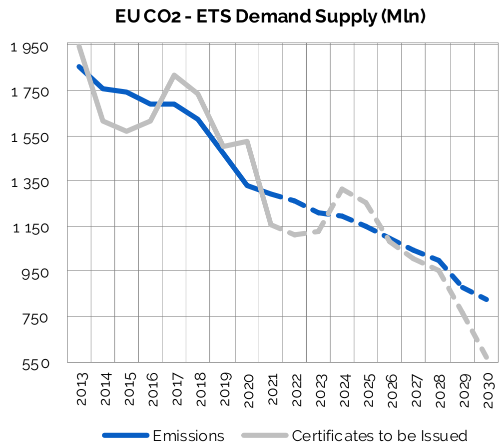
Source: REF-E Elaborations

Both the *Reference* 2021 and 2022 CO_2 average lie just below 40 €/ton, almost 55% higher than the 2020 average price. The EU Commission commitment to reaching the 2050 55% emission reduction target supports the market, with investment funds long positioning playing a key role in feeding the short-term move. The High-Low range is characterized by a wider downward variability, depending on the actual *Reference* projections discounting a financial premium on the CO_2 fair price, which may be quickly eroded should market confidence fade.

The CO2 up-trend is in force since the beginning of last year, with the negative impact of the COVID-19 containment measures on demand having been overcome more quickly than by any other commodity. The ETS gained more than 60% over the last three months and a new high tested above 40 €/ton. **Investments funds buying activity is seen as the key factor underlying the recent upward acceleration** (net long positions on the futures market are reported to have almost doubled over the first weeks of February).

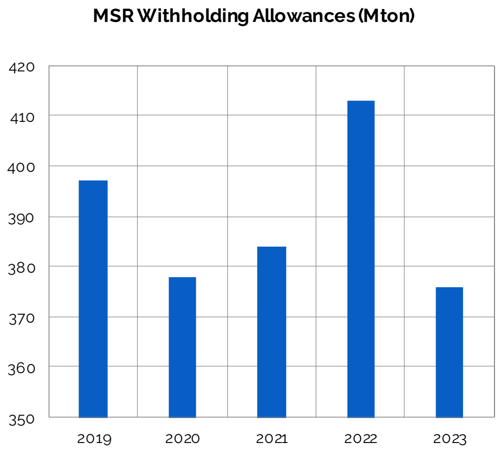


Source: Reuters REF-E Elaborations



Source: Reuters REF-E Elaborations

Fundamentals wise, **under the ETS Phase 4 the linear reduction factor** (determining the amount by which the emission cap will decrease each year) **is increased from 1,74 % to 2,2 %** in 2021. The number of allowances being issued will be consequently lowered, maintaining the CO2 price supported.



Source: Reuters REF-E Elaborations

The **MSR** (Market Stability Reserve) mechanism, withdrawing allowances in the event of the number of allowances in circulation exceeding 833 million tons also limits the downside risk, with the intake rate (currently 24%, until 31 Dec 2023), seen as **a possible area of intervention** should the EU Commission decide to strengthen the ETS system. A higher intake rate would reinforce the market further by lowering the number of allowances in circulation

Despite a clear regulatory commitment by the EU Commission in supporting the CO2 ETS price, some market adjustment cannot be ruled out and a short-term price stabilisation near the current levels may avoid the risk of excessively inflating the electricity prices. In our *Reference* Coal, Gas and EUR-USD scenario, **the coal to gas switching** for average efficiency power plants **is in fact guaranteed by an average CO2 price of 30 €/ton both in year 2021 and 2022.**

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