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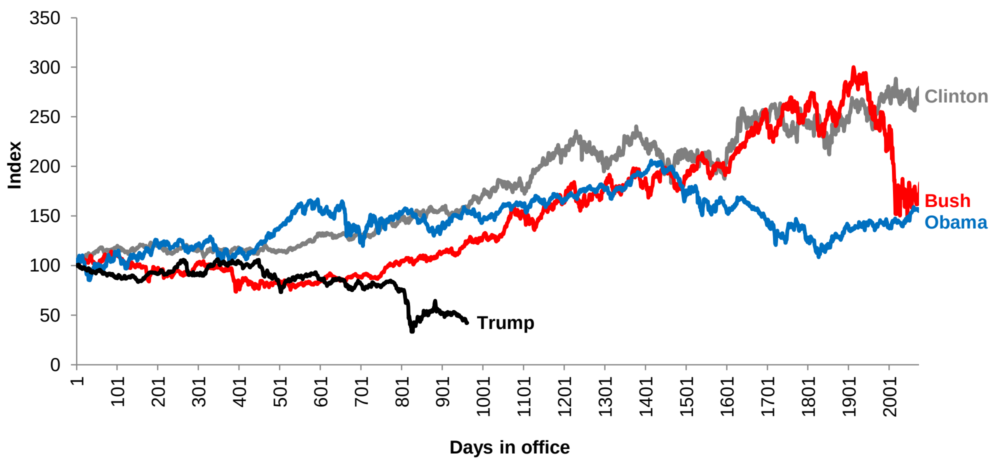
08 October 2020

A November to remember

- US elections will mark a critical turning point for global oil markets. With starkly differing views on energy and the climate, the outcome of the US elections on 3 November will be pivotal. A second term for President Trump signals a continuation and perhaps a further loosening of policies that aims to unleash the US's full oil and gas energy productive capacity. In contrast, if Biden is elected, this status-quo "energy dominance" policy under Trump would give way to a significantly more "middle-of-the-ground" strategy anchored between a reengagement in US global leadership towards sustainable energy targets, weighed against US energy dominance policy strategy.
- Energy transition is here to stay, but the pace of evolution could pivot on the US elections. Markets have been surprised by the pace of the sentiment shift towards energy transition in 2020. Critically this is not due to the pandemic per se but rather factors such as, increasing efficiency and the electrification of road transportation, which have been at play long before COVID-19 – the virus has merely accelerated this eventuality. We believe that the US elections will be pivotal in determining the next chapter in the energy transition.
- Oil price implications. At face value, a Biden presidency would likely have a greater immediate impact on the back-end of forward curves, since his green policy changes are conditional on largescale buy-in, which will take time. We see markets trading this as a more bullish back-end of the curve price development given he is likely to drive some magnitude of a slowdown in future US oil production. At the current juncture, such an outcome remains underpriced and underappreciated, in our view. On the other end of the spectrum, there are large uncertainties on the front-end of the price curve, which are largely bearish – primarily related to the return of Iranian crude to global oil markets. Whatever the outcome on 3 November, trading oil will require new ways to assess, quantify and hedge risk.

ENERGY SECTOR PERFORMANCE HAS BEEN BLEAK UNDER TRUMP, LEAVING MARKETS LESS CONCERNED ABOUT A BIDEN VICTORY

S&P 500 ENERGY PERFORMANCE UNDER VARIOUS PRESIDENTS (REBASED 100 = INAUGURATION)



Source: Bloomberg, MUFG MENA Research

A November to remember

US elections will mark a critical turning point for global oil markets

With the US presidential election on 3 November drawing closer, we see this as a critical turning point for global oil markets. Trump and Biden have starkly differing views on energy and the climate. The consequences of the result might have significant ramifications on energy demand going forward. A second term for President Trump signals a continuation and perhaps a further loosening of policies that aims to unleash the US's full oil and gas energy productive capacity. In contrast, if Biden is elected, this status-quo "energy dominance" policy under Trump would give way to a significantly more "middle-of-the-ground" strategy anchored between a reengagement in US global leadership towards sustainable energy targets, weighed against US energy dominance policy strategy.

"US energy dominance" has been front and centre of US energy policy under President Trump

Over the past decade, and particularly under the Trump administration, new technologies that allowed greater exploitation of shale oil and gas, as well as deep water resources, plus new infrastructure (pipelines and refineries), has played a tremendous role in ramping up US hydrocarbon production, refining, and exports of energy abroad. It has also allowed the US greater freedom in other areas, including unilaterally using financial and other sanctions against other countries and against third parties. A second term for President Trump likely means a continuation and further loosening of these current status-quo policies.

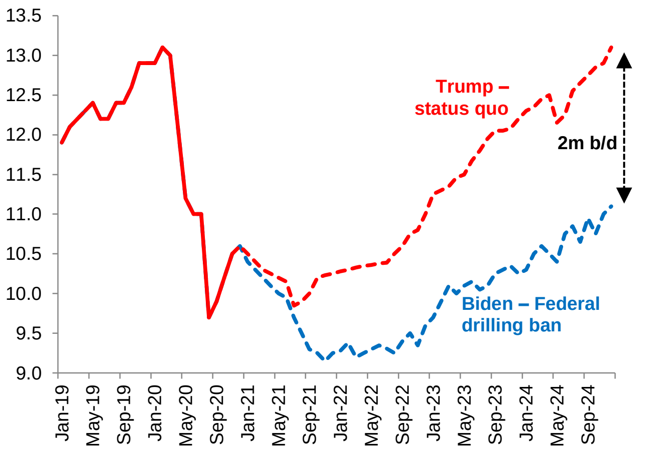
President Trump has aimed to unleash the US's full oil and gas energy productive capacity

Specifically, the Trump Administration has been pursuing an energy policy that aims to unleash the US's full coal, oil and gas energy productive capacity to buttress other US objectives. President Trump has stated "the golden era of US energy is now underway". The Trump administration's actions regarding energy dominance include:

- withdrawing from the Paris Climate Agreement
- Repealing many Obama Administration-era regulations on coal
- Opening up the Alaska National Wildlife Refuge and other federal lands for hydrocarbon energy exploration
- Increasing oil and gas leases on federal lands
- Approving and expediting the approval of new oil and gas pipelines
- Reducing barriers to obtaining permits for pipelines and export terminals
- US oil, natural gas, and coal exports have increased further during the Trump Administration's tenure, although these trends were already well

FEDERAL DRILLING BAD COULD CUT US PRODUCTION BY 2M B/D UNDER BIDEN …

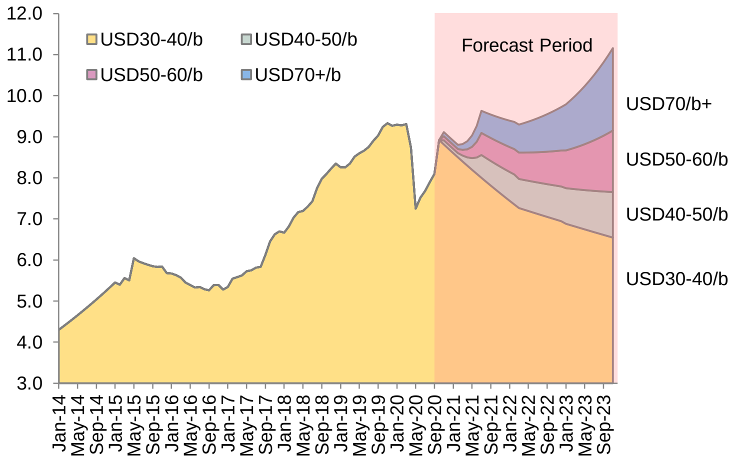
US OIL PRODUCTION (M B/D)



Source: Bloomberg, EIA, S&P Platts, MUFG MENA Research

… WITH THE US SHALE INDUSTRY LIKELY TO BE SIGNFICANTLY IMPACTED

US SHALE PRODUCTION UNDER WTI PRICE SCENARIOS (USD/B)



Source: Bloomberg, EIA, IEA, MUFG Research underway before Trump took office

Biden plans to take the US green

Biden's aims around energy are centre on proposals seeking to green the US, while taking a measured approach to phasing out fossil fuels production. Biden's "Clean Energy Revolution and Environmental Justice" attempts to strike a balance between addressing climate change without extending as far as the Green New Deal's "keeping it in the ground" philosophy regarding fossil fuels. Still Biden does reject Trump's unleashing "US energy dominance" tact. Three domestic themes of the Biden platform include (i) clean energy production; (ii) infrastructure and technological investment; and (iii) environmental justice. Biden supports a 100% clean energy economy, with net zero emissions economy-wide by 2050 (by 2035 in the electricity sector).

Limits but no outright ban on fossil fuels production

Biden's aims around energy are centre on proposals seeking to green the US, while taking a measured approach to phasing out fossil fuels production. Biden's "Clean Energy Revolution and Environmental Justice" attempts to strike a balance between addressing climate change without extending as far as the Green New Deal's "keeping it in the ground" philosophy regarding fossil fuels. Still Biden does reject Trump's unleashing "US energy dominance" tact. Three domestic themes of the Biden platform include (i) clean energy production; (ii) infrastructure and technological investment; and (iii) environmental justice. Biden supports a 100% clean energy economy, with net zero emissions economy-wide by 2050 (by 2035 in the electricity sector).

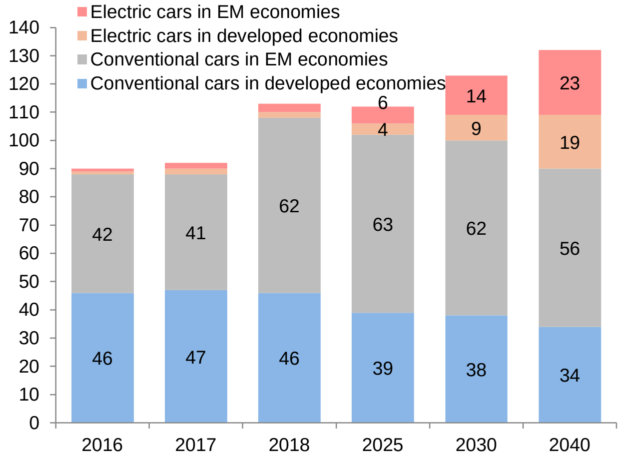
Limits but no outright ban on fossil fuels production

The Biden climate strategy, and the House and Senate climate plans, emphasise US climate leadership, with climate considerations becoming central, informing all government agencies, including domestic and foreign policies, national security, and humanitarian aid. Domestically, Biden intends to limit new fossil fuel production projects, impede further development on federal lands and waters, and advocates for the development and production of alternative energy products. However, he is careful not to ban all fossil fuels production, recognising the sizable contribution to jobs and the economy from the sector. Policy outcomes potentially include the following which could slow future oil and natural gas exports:

- a 100% clean energy economy, with net zero emissions economy-wide by 2050, but by an earlier 2035 in the electricity sector.

EV'S WILL RECEIVE A SIGNFICANT BOOST UNDER A BIDEN PRESIDENCY …

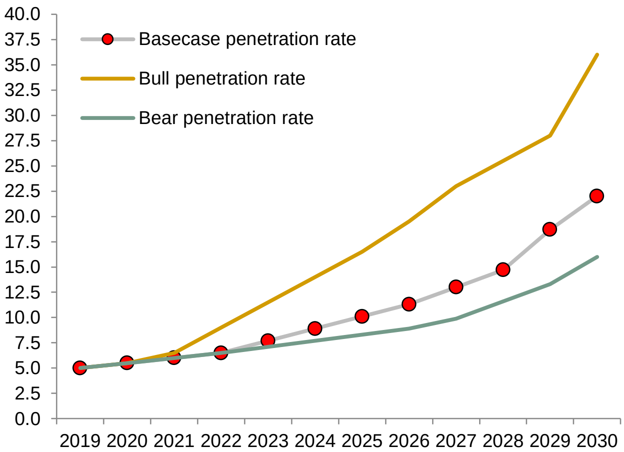
PASSENGER VEHICLE SALES VOLUME – IMPACT ON GLOBAL OIL DEMAND, 2019-40 (M B/D)



Source: Bloomberg, IEA, MUFG MENA Research

… WITH OUR BASE CASE THAT EV'S WILL MAKE UP MORE THAN 20% OF TOTAL VEHICLES BY 2030

GLOBAL ELECTRIC VEHICLES (EV) PENETRATION RATES (% OF TOTAL VEHICLES)*



*Source: Bloomberg, IEA, MUFG MENA Research; * the increasing uptake of EV will demand a rising requirement for batteries and battery chemistry – copper, cobalt, nickel and lithium requirements will materially rise in this decade*

- limits but no outright ban on all fossil fuels production, given its contribution to jobs and the economy
- more stringent environmental reviews for pipeline and for export infrastructure

Energy transition is here to stay, but pace of shift could pivot on the US election

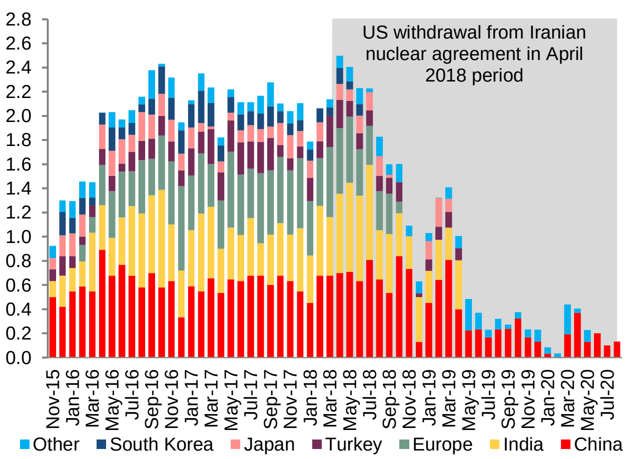
Markets have been surprised by the pace of the sentiment shift towards energy transition in 2020. Critically this is not due to the pandemic per se but rather factors such as, increasing efficiency and the electrification of road transportation, which have been at play long before COVID-19 altered the contours of the global economy – the virus has merely accelerated this eventuality. We believe that the US elections will be pivotal in determining the next chapter in the energy transition. Biden's plan to achieve a 100% clean energy economy and net-zero emissions by 2050 would present another driver for the transition, particularly if he has the backing of Democratic alignment within the House and Senate. BP has been one of the first movers among energy producers touting its net-zero carbon goal (see here). We view that other producers will continue to shy away from large, greenfield upstream capex in favour of lower carbon alternatives, creating another secular headwind for traditional service companies, as E&Ps are already tight for spending. A Biden presidency will de-emphasise fossil fuels immediately and would attempt to accelerate the shift to alternative energy, but will also require significant policy implementation with full democratic control of the government (vis-à-vis just executive orders to issue a ban on new federal permits). Implementation will thus be far from clear-cut but a Biden presidency will mark the moment when the world's biggest oil and gas producer officially re-joins the global energy transition.

Demand-side plans make intuitive sense

On the demand-side, Biden's energy policies make intuitive sense, even if they are not fully met. On transportation, Biden's objective is to drive towards 100% clean energy and zero-emissions vehicles, by 2050. This is to be achieved through the fast-tracking the development of US electric vehicles (EVs) manufacturing and promoting the deployment of EV charging stations. Moreover, clean hydrogen usage for long haul trucks will likely play a key role in the decarbonisation of heavy goods and services transport. Biden's plan calls for green hydrogen which is produced through electrolysis and powered by renewable electricity, to reach cost parity withgrey hydrogen from shale gas (currently green hydrogen is around 4x the cost of grey hydrogen using natural gas). Such actions, would inevitably weigh on US oil demand over the long-term. More generally, global oil demand for light duty vehicles could peak in the mid to end of the current decade, depending on the pace of

IRANIAN OIL EXPORTS ARE LIKELY TO RISE UNDER EITHER A TRUMP OR BIDEN PRESIDENCY …

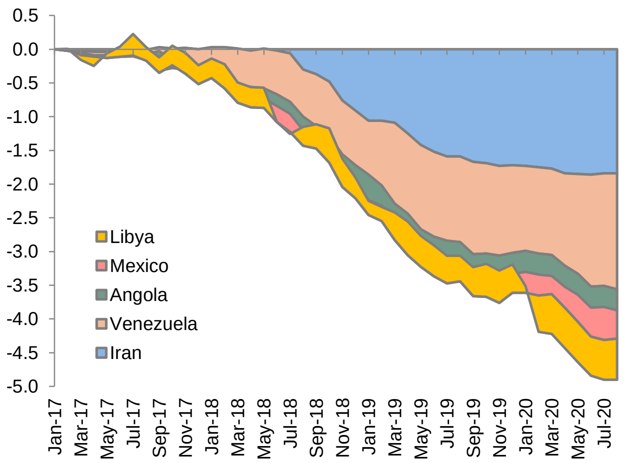
IRAN OIL EXPORTS BY DESTINATION (M B/D)



Source: Bloomberg, OPEC, MUFG MENA Research

… ADDING ~2-2.5M B/D OF OIL ONTO GLOBAL MARKETS, ALTHOUGH THE PACE AND MAGNITUDE IS UNCERTAIN

LOSS OF OIL PRODUCTION SINCE JANUARY 2017 – FRAGILE FIVE COUNTRIES (M B/D)



Source: Bloomberg, EIA, IEA, MUFG Research penetration of EV sales and the rate of improvement in conventional engine efficiency. In parallel, how the contour of the recovery in global oil demand is formed post-virus as well as broader long-term consumer and corporate behavioural amendments brought about by the virus, such as working from home, air travel and the use of public transportation, will be just as vital.

Fate of Iranian sanctions will linger

Following a Trump victory, the incumbent would likely maintain sanctions on Iran, which have contributed to lower global oil production and (relatively) supportive crude prices. On the other hand, a Biden victory could lead to those sanctions being reduced or eliminated if the former Vice President returns to the Obama administration's policy on Iran. Reductions in sanctions would potentially give way to higher global oil production and thus pressure on global prices, leading to incremental headwinds for both producers and service companies. Along with lower prices, the increase in supply would likely limit the need for long-cycle producers to fill any gap left by US production if a federal permit moratorium or legislation hindering fracking is implemented. That said, administrations must prioritise, and if Iranian relations fall lower on the priority list, sanction relief could come later in a Biden presidency, reducing the impact on oil prices (particularly if he's effective at hamstringing US output).

Oil price implications

At face value, a Biden presidency would likely have a greater immediate impact on the back-end of forward curves, since his green policy changes are conditional on largescale buy-in, which will take time. Whilst oil markets will inevitably trade the election outcome, inauguration will not happen until 20 January 2021. Biden's proposed supply-side policies such as, drilling bans, financing restrictions, pipeline cancellations and production of alternative energy products, are the most ambitious of any presidential candidate in history. Such policy changes will require patience. We see markets trading this as a more bullish back-end of the curve price development given he is likely to drive some magnitude of a slowdown in future US oil production. At the current juncture, such an outcome remains underpriced and underappreciated, in our view. On the other end of the spectrum, there are large uncertainties on the front-end of the price curve, which are largely bearish. First, under Biden, prospects of a (likely front-loaded, and early in his presidency) US rapprochement with Iran are almost certain. This has the prospect of the return of ~2-2.5m b/d of Iranian crude onto global oil markets – in some scale, scope and timeline as to not disturb the fragile state of affairs with the world dealing with a pandemic and not destressing the US's own shale industry. Second, a Trump victory could be just as bearish on the front-end as it could lead to increased flexibility on the part of Iran for a negotiated agreement with the US (Iran has been reluctant to take steps before the election so that it can likely garner strategic leverage to re-enter negotiations with the US). Given the acute pain that sanctions have inflicted on the Iranian economy, a Trump victory could well be seen as a last hope in negotiating a (likely frontloaded) deal while preserving the government's position at home. Whatever the outcome on 3 November, trading oil will require new ways to assess, quantify and hedge risk.

Ranges and outlook for the week ahead

BRENT – BULLISH BIAS – (37.00-46.00)

WTI – BULLISH BIAS – (35.00-44.00)

Quarter End	Spot close 07.10.20	Q4 2020	Q1 2021	Q2 2021	Q3 2021
Brent	42.08	48.40	49.20	54.60	57.80
NYMEX	39.97	44.70	45.20	50.30	53.60
		Range	Range	Range	Range
Brent		33.90-59.10	41.70-64.20	43.10-66.10	45.30-66.30
NYMEX		31.20-55.60	38.60-61.80	40.80-63.80	42.10-64.10

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