

CREDIT ESG STRATEGY

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European Oil & Gas: Carbon, do we have a problem?

- The European Oil and Gas (O&G) sector is coming under increasing investor and regulatory scrutiny as climate change considerations intensify.
- O&G bonds currently are not incorporating any significant carbon premium in the Senior space. This is in line with evidence that investors are not materially underweighting the sector. Hybrid bonds, on the other hand, trade relatively wide to comparables, although this also reflects heavy supply.
- We expect O&G senior credit spreads to start embedding a higher carbon premium of around 10-15bp in the medium term to reflect new EU regulations, more intense investor scrutiny and disclosure.
- Differentiation between credits will intensify to reward companies on track with transition.
- Sustainability-linked bonds (SLBs) are likely to become the funding instrument of choice and trade tighter than traditional O&G bonds, reflecting positive reception from investors and the fact that the ECB should continue to buy SLBs within its QE programmes.
- We do however see value in O&G hybrids, in particular the longer dated calls issued by Total and BP as these are already trading with a premium that reflects recent new issuance more than sector specific risks.

The Oil & Gas sector is facing increasing challenges, especially in Europe, where the drive for decarbonisation is more advanced than the US, for instance, and where governments, investors and non-governmental organizations (NGOs) are pushing for an acceleration of the decarbonisation trend. The recent events surrounding Shell, ExxonMobil and Chevron highlight, as Moody's describes it, "a substantial shift in the landscape for oil companies...Climate-driven risks such as carbon transition represent the greatest ESG related threat the energy sector faces."

In this note we analyse what the future holds for the O&G sector and whether current spreads fairly represent the increased focus on climate change. Our key findings are:

- The current spread premium for O&G bonds is too low, particularly in Senior bonds, especially in light of tighter EU regulations regarding ESG and climate change.
- Based on several comparisons, including the case of the Tobacco sector, we expect the fair value premium in Senior O&G bonds to gradually increase to 10-15bp. Equally, the differentiation between O&G issuers will become apparent to reflect successful transition strategies.

Carbon premium lacking in O&G Senior bonds

Senior O&G bonds have significantly outperformed their Hybrid equivalent bonds, with the O&G 'Hybrid to Senior' spread ratio trading at 4.5x compared to 3.1x in Utilities and 4.3x in Non-Financials.

We quantify the current carbon premium in Senior O&G bonds by comparing the sector's senior spreads (AA-/A) to:

- AA-/A rated Corporates (Chart 1), given that most O&G issuers are rated within these rating categories; and
- BBB Utilities, given that these are the closest comparable in terms of size and business, while the Utilities are much more advanced in terms of energy transition (Chart 2).

In both instances, there is evidence of a carbon premium building since 2019 but there is little indication that this premium has increased recently. These conclusions are reinforced by our O&G fair value model which explains Senior Oil & Gas spreads using Non-Financial spreads and the Oil price. It currently displays a premium of 9bp (vs. 1-year average of 2.5bp, Chart 3).

The lack of premium in O&G senior bonds is even more surprising given the dramatic increase in carbon prices (see M01 emission future on Bloomberg), which will affect O&G issuers significantly more than Utilities, for example, given their longer transition trajectory.

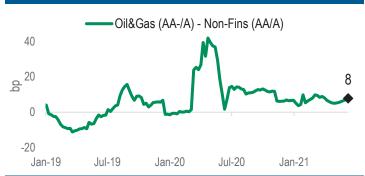
We think that the limited carbon premium is explained by:

- (1) Shifting investor attitude the fact that attitudes to ESG are changing but only gradually. The introduction of the Sustainable Finance Disclosure Regulation (SFDR) and the relevant disclosures will, in our view, accelerate the shift.
- (2) ECB buying The ECB has been purchasing Oil & Gas bonds within its Corporate QE programme. Data released by the ECB at the end of 1Q21, showed that the ECB CSPP/PEPP portfolio is holding 8% of Energy and Basic Resources, in line with the ECB's eligible universe and is therefore not suggesting any negative selection from the ECB at the moment.

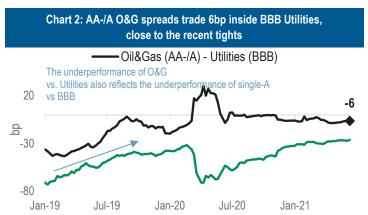
The strategy review of the ECB should reveal whether buying in O&G will be subject to change going forward, as the ECB addresses climate change. O&G SLBs should be treated more favourably by the ECB, further encouraging supply.

(3) Subdued Oil & Gas Senior issuance – Year-to-date Senior issuance in Oil & Gas has been light, with only ENIM, AKERBP and PKNPW coming to the market for a total of €2.25bn.

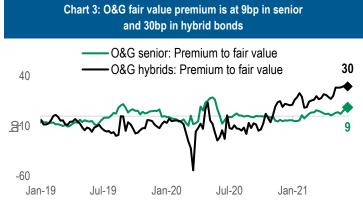




Source: BNP Paribas, Bloomberg Rating based on Bloomberg Composite. Spreads represent OAS spreads.



Source: BNP Paribas, Bloomberg, Markit Ratings reflect Bloomberg Composite Rating. Spreads represent OAS spreads.



Source: BNP Paribas, Bloomberg

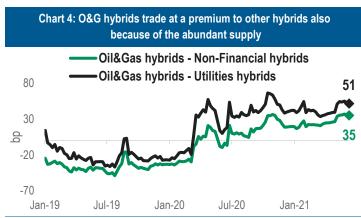
O&G hybrids trade wide to comparables

In the Hybrid space, there is a significant premium in O&G but we think it doesn't represent only carbon. This premium has been increasing since the March 2020 sell-off and is evident when comparing Oil & Gas hybrids to:

- all Non-Financial hybrids, where the differential is now 50bp (Chart 4);
- Utilities hybrids, where the premium is now 35bp (Chart 5).
- A fair value model for Oil & Gas hybrids which uses Non-Financials hybrids, the oil price and equity performance as variables also points to a current premium of 30bp (Chart 3).

O&G hybrids have always traded with a cyclical premium, which is not so evident in Senior, and we think that heavy recent supply has also weighed on Hybrid spreads. O&G companies were the biggest issuers of Hybrids in 2020 (€17bn, with multi tranche new deals from BP and ENI). There has also been €6.5bn so far in 2021 (€5bn in IG or 22% of the current Oil & Gas IG Hybrid universe). This spike came after very subdued issuance from the sector between 2017-2019 and was a response to the pandemic, weaker oil prices and to help fund transition. While we do not rule out more Hybrid funding to help fund energy transition, from a Credit perspective the sector's need for equity type funding is significantly reduced by the higher oil price. Increased shareholder returns including share buybacks are now on the agenda, which tends to contrast with the need to raise Hybrid capital.

While the Utilities sector has also seen similar Hybrid issuance this year, they are consistently one of the biggest issuers of hybrids which may help to explain why the Hybrid to Senior ratio is significantly smaller than in Oil & Gas as shown in Chart 5.



Source: BNP Paribas, Bloomberg

Chart 5: O&G has seen heavy hybrid issuance in EUR



Source: BNP Paribas

Increased focus on climate change headwind

Potentially the biggest impact on Energy bonds will be the behavior of investors, including Central Banks, which can change their investment choices much more quickly than companies can transform themselves.

ECB stance on climate change is key

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Like other Central Banks, the ECB is looking to adapt its operations to actively address climate change. More details should be released in the ECB strategy review, possibly in September. Initially, the ECB could simply require the disclosure of climate risks for the assets on its balance sheet, but over time, the ECB stance to climate change is bound to become stricter, especially for Corporate bonds where the Central Bank might afford to deviate, to some extent, from the 'traditional central bank interpretation of market neutrality' (as mentioned in Adapting central bank operations to a hotter world, Network for Greening the Financial System, March 2021).

Two main approaches are currently being discussed to adapt asset purchases to climate change - tilting and negative screening. We summarise their main key features in Appendix 1, highlighting also what it could mean for sectors, such as Oil & Gas, that are responsible for a large share of emissions.

Our conclusion is that tilting would be the least disruptive option for valuations in Oil & Gas bonds, as it should ultimately result in more favourable access to funding - both in terms of resources and costs - while still promoting best-in-class behaviour.

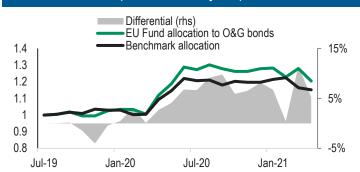
Investor positioning to tilt away from O&G

The methodology and criteria adopted by the ECB will set an important benchmark for other market participants in the future and is therefore critical for the sector's future valuations.

So far there is mixed evidence to suggest that investors have disinvested from the Oil & Gas sector. Allocation to Oil & Gas in Euro Credit funds remains broadly in line with the benchmark, as shown Chart 6, although the recent volatility in the series should be monitored closely, especially as the transition to SFDR Article 8 and 9 funds continues in Fixed Income through fresh inflows and repurposed assets. Fixed Income is still catching up with Sustainable Equity funds, which represent more than 60% of €1.1trn of Sustainable Funds vs. 20% in Fixed Income (based on Morningstar data).

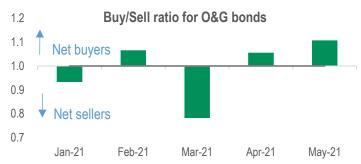
Evidence of any dramatic changes so far, is further corroborated by data from the Primary market, where in O&G the ratio of 'order book/issue size' and the tightening from IPT to pricing is still broadly consistent with Utilities both in the Senior and Hybrid space. In the Secondary market, our analysis shows that investors' Buy/Sell' ratio remains broadly positive, showing no sign of investors underweighting the sector (Chart 7).

Chart 6: EU investor positioning in Oil & Gas relative to the benchmark (rebased to 1 in July 2019)



Source: BNP Paribas, Bloomberg, IPREO

Chart 7: Our analysis of investors' buy/sell ratio shows no clear trend that investors are underweighing the sector



Source: BNP Paribas

However, we expect the introduction of the Sustainable Finance Disclosure Regulation (SFDR) to gradually reduce demand for O&G bonds in the months to come.

Since March, Credit funds marketed as ESG funds under the EU's (SFDR) need to disclose whether they are Article 8 (promote environmental and social practices) or Article 9 compliant (have a sustainable investment objective). From June 2022, asset managers also need to report on the principal adverse impacts of companies in their portfolios, including mandatory aspects such as exposure to

fossil fuel and carbon emissions. Furthermore, with Scope 3 emissions being potentially the largest group of emissions for O&G, greater disclosure requirements could make it more challenging to include O&G companies in Article 9 funds, without significant changes to their present business activities.

Aside from these regulations, several asset managers have pledged to support action in favour of climate policy, with some of the biggest asset managers calling for more action to stop climate change or committing to a net zero goal (Net Zero asset managers managing \$37trn assets and The Investor Initiative managing \$41trn assets, for example).

Investors are unlikely to take a uniform approach to how they choose to treat O&G companies and ESG analysis is still relatively new and evolving. Many will look at how much the energy companies can change and reduce emissions, rather than focussing on today's starting point. There is also a good argument that you can influence corporate behaviour much more by being invested than by selling out of an investment. However, investment mandates can change much more quickly than large scale Oil majors can change their business mix and as Article 8/9 compliant funds become more widespread, we think there is a very real risk that this could lead to selling of traditional O&G bonds especially within Article 8 and 9 funds, and particularly from O&G companies that are slow to transition.

What are the O&G companies doing to make the transition happen?

Energy transition represents an existential problem for the O&G companies as they all plan to gradually reduce exposure to Hydrocarbon Exploration and Production (E&P) which is their natural area of expertise and principal source of cash flow. In the past year the European Oil majors have all announced energy transition strategies and these are being accelerated incrementally (Equinor has just brought forward its renewables targets by 5 years, Shell has said it will accelerate its carbon-emission cuts following the Dutch court ruling last month that their climate plans weren't sufficient).

The key is to use funds provided by E&P to invest in energy transition technologies. The sector is investing in renewable power, EV charging, carbon capture & storage and hydrogen, all of which should be taxonomy eligible. However, we estimate that this is only about 10-15% of total capex (even less as a percentage of earnings) and the sector is still a long way behind the Utilities in terms of scale and expertise.

All the major European O&G companies have plans to reduce greenhouse gas emissions (GHG) significantly, although there is little consistency in how this is reported and they tend to focus on reducing carbon intensity rather than absolute emissions. All European O&G companies aim to be scope 1 and 2 carbon neutral by 2050 (emissions in their own right) while some such as ENI, Equinor and Repsol aim for scope 3 neutrality by 2050 (scope 3 includes all of the emissions associated with the production or products a company sells).

Moody's said in their report Several climate-related actions signal rising threat to oil companies, 27 May 2021, that they believe that the industry will have to decarbonize much more quickly than companies are currently planning and by moving away for oil production, debt capacity will be reduced just when the sector needs to spend more on renewables and decarbonisation.

We also think it is inevitable that Oil & Gas sector's credit ratings will decline, in a way similar to the Utilities sector in 2010-15 when the rating agencies re-evaluated their exposure to thermal generation and the Utilities embarked on their own transition process. Even after downgrades, though, we still expect the European Energy sector to be one of the higher rated Corporate sectors.

We think the O&G companies will use Sustainability-Linked Bonds as the primary means of funding themselves. SLBs are bonds that are linked to environmental KPIs and have the benefit of applying to a company's entire corporate strategy which makes them a more meaningful way of promoting energy transition than simply issuing

Green Bonds for those few projects that qualify as Green. Total said at the beginning of the year that it will from now on only fund itself through SLBs, ENI recently issued an SLB linked to targets around renewable capacity by 2024 and reducing carbon emissions by 2025, while Repsol has just announced its sustainable financing framework that will involve SLBs, Transition and Green bonds.

We would expect the ECB to be able to buy SLBs issued by the O&G sector and over time we would expect SLBs to trade inside Vanilla bonds. We note that in the Utilities sector, where Green bonds are well established, they tend to trade in a range of 2-11bp tighter than non-Green bonds

Assessing the 'fair' carbon premium

To help us frame the spread impact of forced selling on the O&G sector, we consider pairs of bonds:

- within the O&G sector, where issuers are more or less in transition; and
- within the Utilities sector, for issuers that have a coal exposure.
- We also consider what happened in Tobacco bonds.

These comparisons are summarised in Table 1.

Carbon premium in O&G

One way to assess the premium in O&G is to use the ECB's eligibility requirement and its impact on spreads when a big buyer, such as the ECB, is absent. We therefore consider the spread between ECB eligible and non-eligible bonds, especially given that the ECB has to date bought c.19% of Non-Financial corporate bonds outstanding, making it the largest single buyer of corporate bonds. It is hard to quantify the impact the ECB bid on eligible bonds and broader compression also distorts the picture, but we calculate that since June 2016, ECB eligible bonds have traded on average 7bp tighter than non-eligible bonds.

Looking more specifically within the O&G sector we flag that BP has one eligible bond in euros issued last year out of a new entity BP Capital Markets BV, that trades c.10bp tight to the rest of its curve which is ineligible.

A more extreme example is a comparison between Shell and Exxon's € denominated bonds. Both have similar AA ratings but the US Oil majors such as Exxon are less focussed on energy transition while Shell does at least have a transition story. Shell and Exxon's \$ bonds trade broadly in line with each other, but Shell trades 20-35bp inside Exxon in €. ECB eligibility will also have an impact but we think this spread differential primarily reflects the perception amongst European investors of Exxon's weaker transition story.

Bonds already trading with an ESG premium

Within the Utilities sector some market participants will not buy CEZ due to its coal exposure. It is also perceived as having EM exposure as well but trades 10-50bp wide of other part state owned Utilities with similar ratings such as EDF and Enel which are also perceived as being leaders in low carbon generation.

The extreme example of Tobacco bonds

Chart 8 shows the performance of Tobacco vs. Non-Financial Corporates (excluding Oil & Gas). The premium is currently at 40bp both for single-A and BBB Tobacco names, having consistently widened in the past decade, stabilising at around 45bp in the last two years. Equally, single name O&G BBB pairs against the Beverage sector reflect a larger differential that has built up over time (see Table 1).

Could the O&G sector go the way of coal and become uninvestable? We don't think so given the importance of oil to the global economy and the role it plays in everyday lives. Oil and gas is different to tobacco. It is fundamentally less discretionary, without the same direct health issues, while the European oil companies are genuine about energy transition. However, O&G is a much bigger sector than Tobacco, representing 8% of the index compared to 2%

for Tobacco, so potentially forced selling would be harder for the market to absorb. Furthermore, its high credit ratings to remain a positive factor for the sector.

Table 1: Estimating the carbon premium

Sample bond pairs to estimate 'fair' carbon premium Differential (bp)				
ECB eligible		ECB Non eligible		23
BP 0.93% 40	89	BP 1.104% 34	77/100e*	11
RDSALN 0.875% 39	76	XOM 1.408% 39	110	34
vs. comparable \$ bonds				
RDSALN 6.375% \$ 38	118	XOM 2.995% \$ 39	113	-5
Clean utility		Coal exposed utility	1	34
EDF 4.625 30	45	CEZ 3% 28	75	30
Enel 5.625 27	38	CEZ 3% 28	75	37
Tobacco bonds				40
Single-A Non-Fins [^]	31	Single-A Tobacco	72	41
BBB Non-Fins	52	BBB Tobacco	91	39
BBB Beverages		BBB Tobacco		83
ABIBB 1.5% 30	48	BATSLN 2.25% 30	139	91
RIFP 0.5% 27	24	IMBLN 2.125% 28	98	74

Source: BNP Paribas, * The 0.93% 40 is BP's longest € bond, but we would add c.25bp to a 2034 bond for an extra 6 years of curve.

Chart 8: Premium in Tobacco bonds stands at 40bp



Source: BNP Paribas, Bloomberg No-Financials are ex-Oil&Gas. Ratings reflect Bloomberg Composite Rating.

Apr-17

Apr-19

Apr-21

So what is a fair carbon premium?

Apr-15

65

40

නු5

-10

-35

-60

Apr-13

This is the €109bn question given the universe of O&G bonds outstanding but very hard to quantify since it will be largely technically driven. As we outlined above, we do not think O&G will go the same way as coal, but we do think Senior bonds will underperform further, potentially exacerbated by future issuance being dominated by SLBs as asset managers, including Central Banks become more constrained on what they can buy. We quantify the carbon premium at 10-15bp in Senior, but think this will take time to materialize. O&G hybrids are already trading with a premium of c.30-50bp but think that this could compress over time.

Relative Value appeals in O&G hybrids

We struggle to see any value in O&G Senior bonds. They have been squeezed by the ECB, we do expect some ESG driven selling at the margins and as SLB in particular become the primary vehicles for future O&G issuance, outstanding bonds without some sort of 'green' handle will look increasingly unappealing. The one technical in their favour is that we expect Senior issuance to remain very low as higher oil prices improve the sector's cash flow equation.

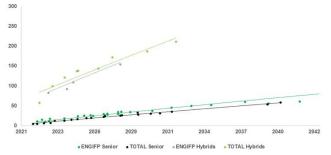
Valuations look more appealing for O&G hybrids. They have always traded with a cyclical premium that may have morphed into a carbon premium, but this is not evident in Senior and there are a number of reasons to be constructive. Portfolios that own Hybrids may have more risk tolerance than those which are limited to Senior, ratings

are still largely IG and where investors find themselves constrained by how much O&G exposure they can tolerate, they may well choose to keep their higher yielding Hybrids. In contrast to Senior, O&G hybrids will not become impacted by potential SLB issuance since SLBs are not possible in Hybrid form. The sector has yet to issue Green hybrids and we do not expect that to be the case going forward. (Note that Total's €3bn of hybrids issued in January were not Green bonds even though they were funding a renewables acquisition).

The supply dynamic is a big imponderable here, but we do not expect meaningful additional Hybrid issuance from the sector this year. O&G hybrid curves are relatively steep and the spread over Senior for O&G hybrids is wider than all other sectors with the exception of Real Estate, despite being the highest rated sector. We also think that as the sector becomes more established and builds up a track record of calling and replacing bonds, the longer dated Hybrids will outperform. Charts 8-12 compares utilities with the closest rated O&G companies from a similar country/region. In many cases the O&G bonds trade tighter than their utility counterparts in Senior, while the O&G hybrids trade wider.

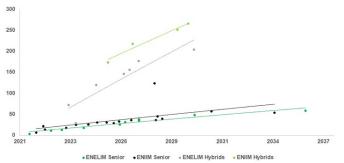
We therefore recommend buying the longer dated calls issued by Total and BP and hedging with Senior bonds, as these hybrids are already trading with a premium that reflects recent new issuance more than sector specific risks. We also maintain our *Sell Enel 5yr CDS*, *Buy Repsol and ENI 5yr CDS* recommendation from 3 March 2021.

Chart 9: Engie vs Total, Senior and Hybrid curves



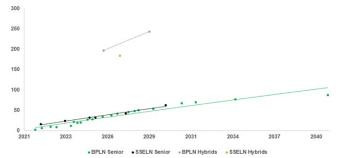
Source: BNP Paribas

Chart 10: Enel vs. ENI, Senior and Hybrid curves



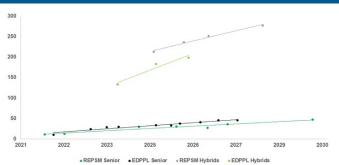
Source: BNP Paribas

Chart 11: SSE vs. BP, Senior and Hybrid curves



Source: BNP Paribas

Chart 12: EDP vs. REPSM, Senior and Hybrid curves



Source: BNP Paribas

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Appendix 1: Framing the carbon premium				
	Tilting	Negative screening		
Method involves:	Corporate bond purchases are tilted towards better performing issuers, based on climate change criteria.	Climate-risk related criteria are used to screen and exclude specific issuers/sectors.		
Positives	Would potentially allow to take into account individual companies performance and future decarbonisation plans.	More direct and larger impact than tilting on climate change.		
Negatives	Operationally complex.	Loss of eligibility impact other sources of financing and could negatively influence transition efforts.		
Impact	Unlikely to exclude large set of issuers systematically due to adverse impact on financial markets.	Screening rules critical for both monetary policy and climate- change achievements.		
	Gradual shift towards lower carbon sectors			
For Oil & Gas	Negative impact more contained, especially for best in class. Gradual shift.	Highly dependent on criteria, but could be very negative for Oil & Gas in the case of blank exclusion.		

Source: BNP Paribas, Network for Greening the Financial System

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