



Oil and Gas Rating Methodology

Corporates

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Call for comments

Scope welcomes market participants' comments on its proposed methodology.
Please send your comments by 11 December 2023 to consultation@scoperatings.com.

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1. Introduction

This methodology details Scope Ratings' approach to rating oil and gas companies with significant exposure to exploration and production (E&P) activities (i.e. integrated oil and gas companies (IOCs) and pure E&P players) and complements the [General Corporate Rating Methodology](#).

We define oil & gas corporates as companies that generate most of their cash flow and operating profits from the exploration, production, processing/refining and supply of crude oil, natural gas and oil products.

Scope's sector methodology covers companies with exposure to different segments, applying a combined approach while addressing segment-specific characteristics. Some oil & gas companies are partially exposed to other business segments, such as the production of (petro-)chemicals, bioenergy (e.g. biofuels and biomethane) or power generation and supply. Pure plays in these subsectors are not covered by Scope's methodology, nor are pure refiners, transportation, energy traders or retailers, as these companies are subject to different or additional drivers, which are covered by other sector-specific methodologies or can be assessed applying Scope's [General Corporate Rating Methodology](#).

The methodology describes how we assess the ratings based on the analysis of standalone credit factors. Some oil and gas companies are government-related entities that require a bottom-up rating approach as outlined in [Scope's Government Related Entities Rating Methodology](#). As such, the final issuer ratings of such government-related entities are the result of the application of all relevant rating methodologies.

These criteria are applicable globally.

The methodology will apply to new ratings and some existing ones currently rated based on the General Corporate Rating Methodology. It is expected to have limited positive impact if implemented as proposed.

2. The oil and gas industry

The oil and gas industry is a broad sector that consists of various subsectors (e.g. E&P or upstream, transportation & storage or midstream, refining, processing and marketing or downstream). These subsectors have specific drivers and can develop differently to the general oil and gas market. We reflect these different dynamics in our rating assessments by differentiating between pure E&P and IOCs.

Business models in the oil and gas industry vary greatly in terms of size, exposure to different stages in the value chain, horizontal diversification and vertical integration. The global oil and gas industry is highly fragmented and ranges from large global players displaying a high degree of vertical integration and covering multiple business segments (upstream, midstream, downstream), to small, regional or local players, with limited integration.

Oil and gas markets

Crude oil, natural gas and petroleum products are crucial sources of energy (e.g. in transportation, electricity and heat generation) as well as important feedstock for the chemicals industry. The consumption of oil and gas varies less than their price.

Oil and gas markets are inelastic by nature and large swings in prices are common and difficult to predict. The demand for oil and gas is influenced by global economic activity and vice versa: strong GDP growth usually leads to increased demand for oil and gas, while a steep increase in commodity prices can reduce economic growth. On the other hand, supply is exposed to geopolitical events (e.g. military conflicts, sanctions) and technological developments (e.g. US shale), with OPEC+ (a group of oil-producing countries) being a swing producer, i.e. having the power to steer output in order to balance the market and influence crude oil prices. The global crude oil market is liquid with main benchmark prices (such as Brent or West Texas Intermediate crude oil prices) being highly correlated to each other. Due to the commodity nature of the market and the large number of players, single producers have limited to no pricing power. Since they are price takers, producers compete for to lower their cost base, e.g. for access to easy-to-extract fields or higher operational efficiency.

The natural gas market is more fragmented than the oil market as it has various pricing mechanisms and therefore varying prices by region. This is mainly due to more complex and expensive logistics compared to crude oil. The gap between regions is expected to narrow as a result of new technologies and further growth in the global liquefied natural gas (LNG) trade. Historically, natural gas prices have been linked to oil prices. With the increasing liquidity of gas markets, gas pricing has changed and in many regions is dominated by the interaction between supply and demand. However, oil-linked prices still play an important role, for example in long-term LNG supplies.

Main segments

E&P (upstream) projects are usually operated under long-term agreements (e.g. concessions) that last from a few years to several decades. This is mainly due to the high capital intensity of the industry that requires some visibility on return on investment. The same is true of the LNG market¹, which is currently dominated by long-term contracts, even though the duration of newly signed ones is decreasing.

Depending on the extraction method, E&P projects can be divided into conventional (traditional vertical well extraction) and unconventional (including oil sands and fracking). E&P activities are characterised by a largely fixed cost base. In combination with revenue being linked to volatile market prices, this results in a strong positive relationship between oil and gas prices and cash flow. The overall economics of an E&P project depends largely on the hydrocarbon mix, the properties of the oil (e.g. light versus heavy or sweet versus sour) and gas (e.g. dry versus wet), extraction method, reservoir size, depth and structure, existing infrastructure as well as tax and royalty regimes.

Most hydrocarbon resources worldwide are controlled directly by governments or by state-owned companies, also called national oil companies. They often lack funds; advanced technologies; and project management expertise to explore and develop new difficult-to-access fields, enhance hydrocarbon recovery at existing and new production sites, and execute complex projects on time and on budget. This is why many national oil companies rely on cooperation with privately-held oil and gas companies with strong project development capabilities underpinned by a strong record of project execution. In this context, we also note another competitive advantage, i.e. the ability of some oil and gas companies to sustain deep relationships with governments, national oil companies and other independent oil and gas companies.

Oil and gas midstream activities are also usually operated under long-term agreements or are subject to strict state regulation (primarily pipelines and storage facilities) due to the importance of the infrastructure for the economy. These activities can be highly capital intensive and usually generate stable cash flow. Maritime, rail or road transportation are typically more flexible and less capital-intensive than pipelines, implying thinner and more volatile margins. The corporates with dominant exposure to midstream activities can be rated by applying our European Utilities Rating Methodology and/or General Corporate Rating Methodology.

Cash flow generated by downstream businesses (refining, petrochemicals, retail) is primarily driven by their respective margins. For example, refining margins are driven by a variety of factors, including aggregate demand and supply for crude oil slate, other feedstocks, refined products, refinery capacity, configuration and utilisation rates. The refining and petrochemicals businesses are capital intensive, however not to the extent of highly capital-intensive E&P activities. This explains relatively low and sometimes even negative margins, especially in refining. The lower down in the value chain the product is, the higher and more stable the margins tend to be. So, petrochemical margins are usually larger and more stable than refining margins. The corporates with dominant exposure to refining, petrochemicals or retail activities can be rated applying our General Corporate Rating Methodology, Chemicals Rating Methodology or [Retail and Wholesale Rating Methodology](#), respectively.

Key risks and challenges

In addition to price and volume, there are further significant risks such as technological (e.g. oil spills, cyberattacks), political (including changes in environmental regulation, royalty and tax regimes), security (including threats to employees' safety, damage or expropriation of assets as a result of military actions), and physical (extreme weather, floods).

Climate change and the energy transition are affecting oil and gas companies primarily through changing regulations, investor expectations and demand patterns. These companies are under pressure to reduce their environmental footprint and are taking steps towards general efficiency, carbon capture, utilisation and storage technologies. In E&P, specific steps include transitioning to reserves with relatively low greenhouse gas (GHG) intensity. In downstream, companies focus on the transformation of refineries and petrochemical plants towards the production of sustainable fuels and the use of sustainable feedstocks. In addition to minimising the environmental footprint of the legacy businesses, some oil and gas companies, usually IOCs, are pivoting towards higher value-added chemicals (including biofuels), consumer-oriented services (e.g. retail or mobility services), and electricity and hydrogen value chains (including gas-fired and renewable power generation and supply). While alternative businesses still account for a relatively small share of total earnings, they indicate the ability and willingness to transform

¹ Liquefaction facilities can be integrated with E&P activities or can receive feed gas from independent sources with relevant implications on project duration, capital intensity, margin profile etc.



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Corporates

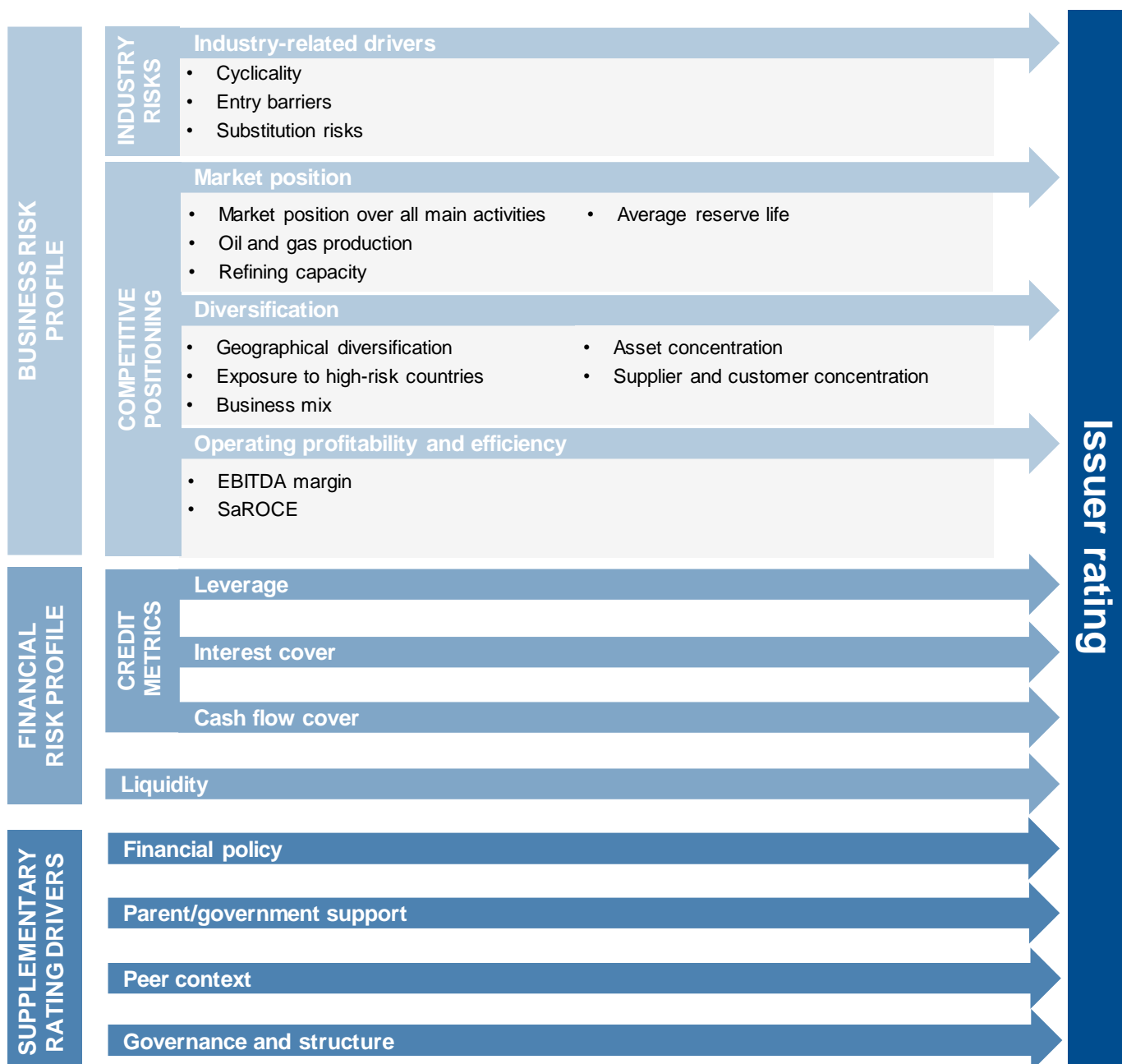
business models amid the energy transition as well as enhance overall diversification through the exposure to different commodities and markets.

The above risks and challenges can be adequately addressed by companies with a critical size, technological level, asset quality and diversity, extensive insurance policies as well as strong balance sheet and liquidity. Critical size is an indicator of achievable economies of scale, negotiating power towards suppliers, diversity, technological level, ability to sustain good relationships with governments and other industry players. Access to low-cost resources with low GHG intensity or advanced and highly efficient processing facilities enable profitable operations even in a weak commodity price environment and also reduce the risk of stranded assets. The credit profile of oil and gas companies further benefits from good asset, product and geographical diversification. A strong balance sheet and liquidity position are important to manage cyclical swings and the long lead time to developing new oil and gas fields and refining/petrochemical plants. In general, large IOCs that benefit from economies of scale, broad business diversification and strong integration along the value chain generate more stable cash flow than small E&P companies.

3. Rating drivers

Figure 1 summarises our rating approach for oil and gas corporates. The rating analysis specific to this sector addresses factors common to all industries such as management, liquidity, legal structure, governance and country risks. The business risk and financial risk indicators are non-exhaustive and may overlap; some may not apply to certain corporates. We may add issuer-specific rating factors as applicable indicators depend on a company's business model. No rating driver has a fixed weight in the assessment. See the General Corporate Rating Methodology for more detail.

Figure 1 – General rating grid on oil and gas corporates



Source: Scope Ratings

3.1 Business risk profile

3.1.1 Industry-related drivers

Three elements constitute our assessment of industry fundamentals for oil and gas corporates:

1. Cyclicity
2. Entry barriers
3. Substitution risks

IOCs typically have significant exposure to E&P and refining activities. Exposure to other businesses is reflected in the so-called blended industry risk profile assessment considering predefined sector scores (e.g. in other methodologies) and their weight in overall earnings as measured by EBIT, EBITDA or net profit. If a split by earnings is not available, we can also use revenue or asset value.

Cyclicity

E&P activities show high cyclicity because of their heightened sensitivity to fluctuations in economic growth. The transparent price setting in commodity markets leads to reduced prices in an economic downturn. Because of the inelastic nature of oil and gas markets, swings in earnings are primarily driven by volatile prices and to a lesser extent by volumes.

Refining activities are also characterised by high cyclicity since the refining margins are driven by the supply and demand for petroleum products and by oil prices.

Entry barriers

We consider entry barriers for E&P and refining activities to be medium. Companies seeking to enter these segments have to deploy substantial capital investments, including spending on exploration rights, wells, infrastructure (e.g. pipelines, processing facilities) and working capital, as well as to comply with strict safety and environmental protection requirements.

Substitution risks

Oil and gas play an important role in the global energy mix and as feedstock for various products in the chemicals industry. Oil and gas consumption may have already peaked in some countries, but not on a global scale. Even after reaching the peak, it is likely that global oil and gas consumption will remain relatively stable for many years. Demand for gas as the least polluting fossil fuel and LNG in particular is expected to peak after oil. Despite the ongoing energy transition that poses significant risks for the entire oil and gas industry, we assess the risk of substitution as medium. The same applies to refining as it can be transformed to produce more sustainable fuels and chemical feedstock.

Figure 2 – Scope’s industry risk assessment on oil and gas sub-segments

Cyclicity \ Entry barriers	Low	Medium	High
High	CCC/B	1+2 B/BB	BB/BBB
Medium	B/BB	BB/BBB	BBB/A
Low	BB/BBB	BBB/A	A/AA

Source: Scope Ratings

We assign the following industry risk levels depending on certain factors:

1. E&P: industry risk assessed at BB based on medium entry barriers, high cyclicity and medium substitution risk.
2. Refining: industry risk assessed at BB based on medium entry barriers, high cyclicity and medium substitution risk.

3.1.2 Competitive positioning

Market position

The market position of an oil and gas company is driven by its

- i) integration along the value chain including presence in growing (e.g. LNG²) or stable (e.g. retail, pipeline transportation) businesses
- ii) technological ability to develop new fields or construct and operate advanced processing facilities (e.g. proven offshore or LNG production expertise, operatorship in projects)
- iii) asset quality (e.g. easy-to-extract hydrocarbons, GHG intensity of produced hydrocarbons or processing facilities, refinery complexity)
- iv) ability to negotiate with suppliers, sustain good relationships with governments and other industry players.
- v) adaptability of the business model amid energy transition (as indicated by the development of low-carbon technologies).

While there is neither a standardised measure nor consistent reporting for most of the above-mentioned factors, they are usually positively correlated with the scale of operations of an oil and gas company.

The scale of operations in upstream is indicated by the average oil and gas production (e.g. barrels of oil equivalent per day or boe/d) and total proved reserves (or 1P reserves measured in boe), of which we consider developed and undeveloped reserves³. These metrics along with the commodity price, which a single company cannot influence, are the main drivers of current and prospective cash flow. They are also indicators for diversification, economies of scale and technological level, which usually result in more stable earnings and higher profitability.

Further important metrics are the reserve life index (ratio between the amount of proved reserves at the end of the year and total production for the year) and the share of developed reserves in total proved reserves. These ratios indicate the stability and longevity of production as well as potential capex requirements. Higher values usually indicate better credit quality.

Indicators of the scale of downstream operations include refining capacity, production capacity of petrochemicals, and the number of fuel stations. Further important considerations are the scale of individual refineries, their complexity (indicated by e.g. the Nelson complexity index⁴), and their level of integration with petrochemical sites. These factors provide for better economies of scale, feedstock and product flexibility and therefore support higher and more stable cash flows.

Other activities may provide stable cash generation and/or support the market positioning of an oil and gas company, especially if it benefits from limited competition. For example, oil and gas transportation and storage infrastructure can generate stable cash flow through long-term contracts or regulation with limited exposure to commodity prices or transported/stored volumes. The growing exposure to electricity and hydrogen value chains indicates the adaptability of the business models amid the energy transition and may further enhance credit quality through exposure to activities with relatively low correlation with oil and gas prices as well as forward integration along the value chain (e.g. gas-fired generation and retail sales of gas). The latter applies not only to electricity but also to the chemicals value chain (e.g. fuel-to-chemicals transformation).

The table below applies to both IOCs and pure E&P players. The E&P companies' missing exposure to refining and other activities is reflected through a refining capacity of 0. We also note that upstream activities typically have a stronger impact on our assessments compared to downstream primarily due to their role in overall cash generation.

² The importance of the LNG business is backed by the growth in demand for natural gas and, in particular, for LNG, which is expected to outpace the growth in demand for other fossil fuels in the coming years. Integration and global presence are not only a competitive advantage, but they also improve resilience because they allow capturing value as it shifts to different parts of the LNG value chain or geographical regions, e.g. in the case of arbitrage price differentials in fragmented markets. Integrated LNG projects are highly capital intensive and usually have longer execution times and production profiles than conventional E&P projects. Because of this, the majority of LNG produced is sold under mid- to long-term agreements, typically with prices linked to crude oil but also to some gas benchmarks. As a result, LNG projects provide better cash flow visibility and above-average earnings during the operational phase. We also highlight that a relatively high share of gas in the upstream mix can support a low carbon strategy and reduce dependence on oil prices.

³ Proved reserves are the quantities of oil and gas that can be estimated with reasonable certainty to be economically producible. Proved reserves estimates are typically calculated pursuant to the US Securities and Exchange Commission (SEC) Rules and the FASB's Topic 932. Proved reserves can be either developed or undeveloped.

⁴ The Nelson complexity index measures the sophistication of an oil refinery, where more complex refineries can produce more valuable products from a similar barrel of oil.

Figure 3 – Market position by rating category

	AA and above	A	BBB	BB	B	CCC and below
Market position over all main activities⁵	Very strong market position over all main activities	Strong market position over all main activities	Good market position over all main activities	Moderate market position over all main activities	Weak market position over all main activities	Very weak market position over all main activities
Oil and gas production, '000 boe/d	>1,000	500 to 1,000	100 to 500	50 to 100	<50	<50 and rapidly declining production
Average reserve life, years	>10	8 to 10	6 to 8	4 to 6	<4	<4 and rapidly declining reserves
Refining capacity, '000 boe/d	>2,000	1,000 to 2,000	200 to 1,000	100 to 200	<100	

Source: Scope Ratings

Diversification

The location of a company's assets is central to assessing geographical diversification. Changes in taxation or royalty regimes can happen overnight and significantly change the economics of an oil and gas project. A global presence provides exposure to different pricing schemes for natural gas including LNG as well as refining and petrochemical margins that may diverge from one region to another. Country risk⁶ is an important consideration and can be relatively high in the oil and gas industry, especially in E&P. Country risk can be effectively mitigated through diversification across multiple countries.

The diversity of the business mix includes conventional E&P, LNG, refining, (petro-)chemicals, marketing and trading, and power generation. Downstream activities play an important role in reducing income and cash flow volatility because of a relatively low correlation between oil and gas prices on the one hand, and refining and petrochemical margins and non-oil products on the other. A company's retail activities are also characterised by the stability of its performance through the commodity price cycle. A high degree of integration along the value chain typically reduces income and cash flow volatility.

Asset diversity is very important, since operational issues with one single production facility, refinery or (petro-)chemical plant caused by technical errors or natural disasters are not unusual. We note that the hydrocarbon resource base spread over several fields or basins even within a single country may benefit overall diversification. We also note that offshore operations are inherently riskier than onshore activities.

Customer and supplier concentration is rarely an issue for large global companies but can be a negative rating factor for smaller regional players. Overreliance on any one client or supplier is a potential risk factor, especially if the entity has a weak credit quality or is deemed unreliable.

⁵ Based on factors described above

⁶ As indicated by a sovereign rating from a regulated and supervised CRA. We typically treat countries rated B and below as high risk countries.

Figure 4 – Diversification by rating category*

	AA and above	A	BBB	BB	B and below	CCC and below
Geographical diversification	Global presence	Significant presence in different regions ⁷	Significant presence in multiple countries	Operations concentrated in few countries	Operations concentrated in a single country	
Exposure to high-risk countries	Very low	Low	Modest	Moderate	High	Dominant exposure to a single high-risk country
Business mix	Very strong/balanced mix	Strong/largely balanced mix	Good/significant bias to the main segment	Moderate/strong bias to the main segment	Weak/single or very dominant segment	
Asset concentration/d dependence on a single asset	Very low	Low	Modest	Moderate	High	Very high/dominant exposure to a single asset
Supplier and customer concentration	Very strongly diversified supplier and customer base	Strongly diversified supplier and customer base	Modest dependence on single suppliers or customers	Moderate dependence on single suppliers or customers	High dependence on single suppliers or customers	

* Based on earnings as measured by EBIT, EBITDA or net profit. In case a split by earnings is not available, we can also use revenue or asset value.
Source: Scope Ratings

Operating profitability and efficiency

We use the EBITDA margin as the primary measure of profitability and operating efficiency for oil and gas companies. However, EBITDA margins vary greatly depending on the different activities that oil and gas companies undertake (given different levels of capital intensity). We apply two different sets of thresholds for upstream (more capital intensive) activities and downstream (less capital intensive) activities. The comparability is further complicated by trading/hedging activities that can mitigate some of the industry's inherent volatility. However, these strongly dilute EBITDA margins. In many cases, the dilutive effect of trading/hedging activities cannot be isolated, therefore we also look at the Scope-adjusted return on capital employed (SaROCE) to facilitate a comparison across the entire spectrum of companies covered by this methodology.

We assess EBITDA volatility (as measured by the coefficient of variance), which is primarily driven by fluctuations in sales prices and volumes, feedstock, and other inputs. A relatively low (high) volatility compared to what is typical for the industry may positively (negatively) impact our assessment of profitability. Our assessment of profitability and efficiency further considers the utilisation and/or availability rates of facilities; the economic age of facilities and their environmental footprint; health and safety records; the ability to adapt to market conditions during downturns; and the ability to continuously reduce operating costs through productivity measures. A relatively high (low) efficiency compared to what is typical for the industry may positively (negatively) impact our assessment of profitability by up to one notch.

⁷ We identify the following seven global regions: Europe, North America, Latin America, Oceania/Australia, Asia, Africa and the Middle East.

Figure 5 – Operating profitability and efficiency by rating category*

	AA and above	A	BBB	BB	B	CCC and below
EBITDA margin upstream (excluding trading)	>60%	45% to 60%	30% to 45%	20% to 30%	<20%	EBITDA insufficient to cover interest payments and maintenance capex
EBITDA margin downstream (excluding trading)	>15%	10% to 15%	7% to 10%	4% to 7%	<4%	EBITDA insufficient to cover interest payments and maintenance capex
Scope-adjusted return on capital employed	>15%	10% to 15%	6% to 10%	3% to 6%	0% to 3%	<0%

* We typically consider a long-term average (five years or more) when assessing profitability. Moreover, we may put more emphasis on forecasts if these are more representative of the credit profile, e.g. after major investments or divestments, or when pricing dynamics are expected to change significantly.

Source: Scope Ratings

3.2 Financial risk profile

Our assessment of an oil and gas company's financial risk profile follows the general guidance in our General Corporate Rating Methodology. We focus on recent and forward-looking financial data. Key parameters include leverage, interest cover and cash flow. We also assess liquidity, which is central to our analysis of non-investment grade issuers.

We adjust financial information when the impact on credit metrics is considered material. Our analysis typically adjusts a company's debt by various factors, including off-balance sheet debt from the leasing of long-term assets (if not reflected by IFRS 16), debt-like provisions such as unfunded pension provisions and unfunded provisions for decommissioning and restoration obligations.

Treatment of decommissioning and restoration obligations

Oil and gas companies are required to make provisions for the decommissioning, dismantling and removal of their assets including the associated remediation, restoration and reclamation of the surface and subsurface. Such obligations can vary noticeably depending on each country's legislation and regulations and the technologies and industrial practices used in each company. Scope highlights that the characteristics of decommissioning and restoration obligations are different to conventional debt regarding timing, measurement of the estimated obligation including potential asset salvage values, tax effects or funding mechanisms. In some cases, the expected decommissioning and restoration obligation is covered in full or to a large extent either by funds set aside to cover future obligations or by the expected scrap value relating to the assets to be retired. Moreover, the payment schedule may often extend over a very long time horizon, with obligations arising more than 20 years after the cessation of assets. As with pension provisions, Scope-adjusted debt would consider the unfunded part of such obligations (reported accounting values on the balance sheet). Dedicated retirement fund assets are likely to cover required payments in times of economic distress. Scope's debt adjustments for decommissioning and restoration obligations aim to capture the nature of individual expected payments that Scope deems appropriate for the corresponding assets (i.e. oil rigs, refineries). When assessing the debt burden from decommissioning and restoration obligations, Scope takes into account the likely funding requirement net of deferred tax assets that are related to such obligations. The reasoning behind this approach is twofold: on the one hand, Scope views potential funding needs for very-long-term obligations as not completely representative of the creditworthiness of a corporate and of the full coverage of interest-bearing debt instruments. On the other hand, Scope points to the strong impact of discount rates on very-long-term provisions. As such discount rates may fluctuate strongly over a long time horizon, a full approach on the theoretical funding requirements may be misleading.

Tax rates can vary greatly from one jurisdiction to another. In cases of above-average tax rates, we focus on credit metrics that consider tax payments.

The financial risk profile indicates a company's financial flexibility and viability in the short-to-medium term. A company with a strong financial risk profile is more likely to be resilient to economic downturns, adverse industry dynamics, unfavourable regulation or an unexpected loss of a revenue source. The ability to retain financial flexibility during an economic downturn is a rating driver for oil and gas companies as it indicates an ability to invest at all phases of the economic cycle.

3.2.1 Credit metrics

Our general assessment of credit metrics (e.g. leverage, interest cover and cash flow cover) is outlined in the General Corporate Rating Methodology.

Given the strong cyclicity in the oil and gas industry and the significant volatility in earnings and cash flow over a commodity's price cycle, the cycle phase is important when assessing credit metrics. The credit metrics outlined in the Corporate Rating Methodology provide an indication of ratios that are expected to be maintained in a mid-cycle scenario under normal market conditions. We often take guidance from a company's over-the-cycle leverage targets when assessing financial ratios and consider long-term average (five years or more) credit metrics. We determine where we are in the price cycle by observing long-term price trends and futures prices.

3.2.2 Liquidity

Our general assessment of liquidity is outlined in the General Corporate Rating Methodology.

3.3 Supplementary rating drivers

3.3.1 Financial policy

Our assessment of supplementary rating drivers is described in the General Corporate Rating Methodology.

3.3.2 Parent/government support

Our assessment of parent support is described in the General Corporate Rating Methodology. When assessing the credit quality of an oil and gas company that may benefit from government support, we incorporate the sovereign's or sub-sovereign's capacity and willingness to bail out the company in financial distress, as laid out in our Government Related Entities Rating Methodology. The standalone credit assessment can also be adjusted downwards in case of potential credit-negative interventions by the public sponsor.

3.3.3 Peer context

Our assessment of supplementary rating drivers is described in the General Corporate Rating Methodology.

3.3.4 Governance and structure

Our assessment of supplementary rating drivers is described in the General Corporate Rating Methodology.

3.4 Environmental, social and governance (ESG) assessment

Credit-relevant environmental and social factors are implicitly captured in the rating process, while corporate governance is explicitly captured at the 'governance and structure' analytical stage (see 3.3.4).

The rating analysis focuses on credit quality and credit assessment drivers. An ESG factor is only credit-relevant when it has a discernible and material impact on the issuer's cash flow, and, by extension, its overall credit quality.

Some ESG factors are particularly important to the oil and gas industry because of their significant impact on the environment and hazardous working conditions. The energy transition is also having a significant impact on the regulation and demand patterns.

Credit-relevant ESG factors can directly and indirectly affect all elements of the business risk profile, financial risk profile and supplementary rating drivers. This is in contrast to ESG ratings, which are largely based on quantitative scores on various rating dimensions. For example, risks related to climate change and the energy transition impact the entire industry and are therefore reflected in our industry risk assessment. These industry inherent risks can be mitigated by company-specific factors, e.g. low GHG intensity of the assets or the adaptability of the business model.

The General Corporate Rating Methodology provides further detail on how ESG factors and supplementary rating drivers are incorporated into the credit analysis.

4. Issuer rating

The final issuer rating is based on our analysis of the business risk profile, financial risk profile and supplementary rating drivers. The rating committee decides on the relative importance of each rating driver. The business risk profile and financial risk profile are generally weighted equally for companies that are perceived as crossover credits between investment-grade and non-investment-grade related to the final issuer rating. The business risk profile is typically emphasised for investment-grade companies, while the financial risk profile is mostly the focus of ratings assigned to companies that are perceived as having high-yield credit profiles. However, the latter also depends on the level of the financial risk profile. We put less emphasis on strong financial risk profiles of companies showing a weak/vulnerable business risk profile (in the B or low BB category) since for such companies, the financial risk profile is subject to high volatility. This takes into account that the credit rating of companies with business risks that reflect weak or moderate credit quality should not be bolstered by a temporary strong financial risk profile. Hence, the weighting between the business risk and financial risk profiles is adapted to each issuer's business model and market(s).

5. Additional methodology factors

For more details on our rating Outlooks for corporate issuer ratings, long-term and short-term debt ratings, the recovery analysis see the General Corporate Rating Methodology.

6. Appendix

6.1 Definition of financial items and key performance indicators applicable only to the oil and gas industry

The General Corporate Rating Methodology defines in detail the indicators used in our financial risk profile assessments.

Scope-adjusted return on capital employed	<p>This ratio measures how efficient a company is at generating earnings from its assets. It allows a comparison between companies with different business mixes and capital intensities (e.g. upstream versus downstream).</p> <p>Balance sheet values are typically used as reported, while EBIT is adjusted for significant, exceptional or non-recurring items.</p> <p>We take into account the average exposure of capital employed, taking the average of the balance sheet values for periods t and t-1.</p>
Profitability and efficiency	
$\frac{\text{Scope-adjusted EBIT}}{\text{Average capital employed (total assets – investments in joint ventures, associates and other non-controlled entities – current liabilities)}}$	

6.2 Related documents

For more information, see the following documents:

- [General Corporate Rating Methodology](#)
- [Government Related Entities Rating Methodology](#)
- [Chemicals Rating Methodology](#)
- [European Utilities Rating Methodology](#)
- [Retail and Wholesale Rating Methodology](#)
- [Credit Rating Definitions](#)



Oil and Gas Rating Methodology

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