

# European Oil: Navigating Credit Risk Towards Net Zero

How Credit Ratings Could Better Integrate Climate Risks

Kevin Leung, Sustainable Finance Analyst, Debt Markets, Europe, IEEFA



# Contents

- Key Findings .....4
- Executive Summary .....5
- Energy Transition Factor Applied Unevenly .....6
- Credit Rating Horizons Fall Short Amid Structural Decline of Oil.....9
- Long-Term Credit View Offers Market Stability Against Existential Risks.....11
- Climate Scenarios and Policies Provide a Clear View To Capture Sector-Wide Risk: A Case From Europe .....14
- Energy Transition Factor Should Be Made Explicit in Sector Methodological Approach.....17
- Better Risk Integration Requires Formal Consideration of Non-Oil and Gas Business Profiles.....20
- Transition Plan Assessment as a Cornerstone of Credit Analysis.....23
- Rethinking Investments, Capital Requirements and Financial Policy in Oil and Gas Credits.....27
- One Step at a Time.....29
- About IEEFA.....30
- About the Author .....30

## Figures

Figure 1: Ratings Are Relatively Steady Despite Volatile Earnings .....	9
Figure 2: European Non-Financial Corporate and Fossil Fuel Sector Outstanding Bonds .....	13
Figure 3: Qualitative Assessments Are More Likely To Reward Scale of Hydrocarbons Than Scale of Low-Carbon Activities .....	21
Figure 4: IEEFA Recommendations for CRAs' Clearer Assessments for Fossil Fuel Companies Planning to Diversify into Businesses Outside the Typical Scope of the Sector Criteria .....	22
Figure 5: European Oil Companies' Large Investments in High-Carbon Projects Leave Them Exposed to Downside Scenarios .....	28

## Tables

Table 1: S&P Has Unequivocally Cited Energy Transition in a Sector-Wide Negative Rating Action....	7
Table 2: S&P Reversed Some Rating Actions on Oil Prices Bouncing Back.....	7
Table 3: CRAs Have Cited the Energy Transition, Albeit Unevenly, in Rating Sensitivities .....	8
Table 4: Short Horizon of CRAs' Oil Price Assumptions Limits Integration of Long-Term Credit View .....	11
Table 5: Fitch Is the Only Big Three Agency That Explicitly Cites Environmental Risk in Its Sector-Specific Rating Criteria .....	19
Table 6: CRAs Have Developed Plausible Tools To Assess Transition Plans, But They Remain Separate From Credit Ratings .....	25

## Key Findings

**A long-term credit ratings view should be applied to oil and gas companies to account for the unprecedented sector-wide exposure to transition risk, as observed from the case of European firms.**

**Credit rating agencies' methodological approach does not systematically integrate asset stranding risk and competition from low-carbon technologies faced by the European oil and gas sector.**

**Despite the short-term focus of credit financial modelling, rating agencies are well-placed to better utilise their qualitative levers to account for rising climate-related credit risks.**

**Integrating assessments of oil and gas company transition plans into final credit ratings will help ensure the relevance of ratings as investors navigate climate-related transition risks.**



## Executive Summary

The oil and gas value chain is one of the most exposed sectors to energy transition risk. This view is increasingly echoed by the big three credit rating agencies (CRAs): Fitch, Moody's and S&P. In Europe – this paper's region of focus – technological, market, societal and regulatory trends add structural pressures to oil and gas demand, presenting substantial credit challenges to the entire sector.

In 2021, S&P took multiple negative rating actions on oil majors, clearly citing the energy transition as a driver – a prominent move, in IEEFA's view, that highlights S&P's concrete action to incorporate the energy transition into final credit ratings. Meanwhile, Moody's and Fitch have used new scoring tools to indicate any potential credit impacts of environmental, social and governance factors. They have also clearly cited the energy transition as a constraint for upgrading European oil majors' ratings. These moves have substantiated the agencies' increasing warning signs of long-term business risk faced by the oil and gas industry.

But these efforts do not extend to a systematic integration of climate-related risk in final ratings and outlooks. This remains constrained by relatively short-term rating horizons, where the rating tends to measure an issuer's repayment ability for up to three years. It can sometimes be challenging to incorporate or predict severe, sudden credit events in financial modelling. However, considering the material role the oil and gas industry plays in the widespread and irreversible impact of climate change, taking a long-term credit view necessitates treating energy transition risk as a distinct risk factor. Any short-term credit view that causes bond mispricing could result in investor losses.

CRAs' "through-the-cycle" approach leads to largely steady ratings in the European oil sector, despite inherent oil price volatility, which has recently been exacerbated by COVID and Russia's war of aggression against Ukraine. However, the approach may not fully reflect a structural shift. Risk integration involves considering climate scenarios. For example, the International Energy Agency's three scenarios offer a wide set of choices – each with varying degrees of ambition and implementation – for governments and companies. All scenarios give a predominantly negative outlook for oil and gas, regardless of whether the world experiences an orderly or disorderly energy transition.

CRAs could take reasonable steps to leverage their existing toolkits to foster a long-term view qualitatively. For example, considering sector-wide industry headwinds could explicitly account for low-cost alternatives enabled by technology. Also, assessing an issuer's capital requirements amid climate change could include how these interplay with the company's recent record of shareholder remuneration and its fossil fuel and renewable investment splits. IEEFA recognises that CRAs have made significant progress in developing dedicated – albeit separate – tools for assessing transition plans, making the agencies well-positioned to take gradual steps to formally apply these assessments to final credit ratings.

IEEFA further recommends that CRAs should regularly enhance their sector-specific rating criteria with more coherent, explicit risk integration in the assessment process. The criteria's overriding focus on assessing the scale, diversity and integration of hydrocarbons appears to be increasingly unfit when taking a long-term view. The methodological approach for business profiles should explicitly consider meaningful contributions from low-carbon activities – businesses that normally fall outside the oil and gas sector remit.

## Energy Transition Factor Applied Unevenly

As global oil prices fell dramatically in 2020 amid COVID-induced demand shocks, the major credit rating agencies (CRAs) – Fitch, Moody's and S&P – swiftly warned about the negative impacts on oil company financials.<sup>1,2,3</sup> This concurrently drew attention to the increased uncertainty of long-term oil demand, as the CRAs have been broadly shifting their perspectives on fossil fuels over the last 20 years.<sup>4</sup>

In early 2021, S&P responsively heightened its assessment of risk for the overall oil and gas industry, unequivocally citing the energy transition as one of the risk drivers, alongside price volatility and weak profitability. As a result of S&P's revised industry assessment, global oil companies' ratings were negatively impacted.<sup>5</sup> The final rating impacts varied. Ratings of Shell and TotalEnergies were downgraded and BP's rating outlook turned negative (Table 1).<sup>6</sup> Smaller European oil companies were shielded from a downgrade,<sup>7</sup> but weaker business risk profiles might have lowered the rating buffer.

Revised assessments relating to transition risk were not explicitly made by the other two CRAs. For example, Moody's and Fitch retained Shell's ratings due to the company's strong balance sheet,<sup>8</sup> and Moody's downgraded TotalEnergies and BP primarily on weaker credit metrics.<sup>9,10</sup> However, warning signs of long-term climate-related risks have been made clear: Moody's stated that its ratings considered the companies' energy transition strategies,<sup>11</sup> and Fitch's rating affirmation for

<sup>1</sup> S&P Global Ratings. [Harsh Downturn Prompts Rating Actions On Multiple European Oil And Gas Companies](#). 25 March 2020.

<sup>2</sup> Moody's Ratings. [Outlook turns negative as low oil prices, coronavirus will hit 2020 earnings](#). 26 March 2020.

<sup>3</sup> Fitch Ratings. [Fitch Ratings Cuts Oil, Gas Price Assumptions on Coronavirus, Price War](#). 19 March 2020.

<sup>4</sup> IEEFA. [A matter of opinion: CRAs evolve on climate change, fossil fuel risk](#). 14 March 2024.

<sup>5</sup> S&P Global Ratings. [S&P Global Ratings Takes Multiple Rating Actions On Major Oil And Gas Companies To Factor In Greater Industry Risks](#). 26 January 2021.

<sup>6</sup> This paper illustrates the case study of the European oil and gas sector, focusing on 12 investment grade-rated integrated oil companies and independent exploration and production (E&P) companies.

<sup>7</sup> S&P Global Ratings. [Ratings On Nine EMEA Oil And Gas Producers Affirmed Amid Increased Industry Risks](#). 28 January 2021.

<sup>8</sup> Moody's Ratings. [Moody's changes Shell's outlook to stable, affirms Aa2 ratings](#). 24 March 2021.

<sup>9</sup> Moody's Ratings. [Moody's downgrades Total's senior unsecured rating to A1 and affirms its P-1 rating; stable outlook](#). 24 March 2021.

<sup>10</sup> Moody's Ratings. [Moody's downgrades BP's rating to A2, stable outlook](#). 23 March 2021.

<sup>11</sup> Moody's Ratings. [Oil majors increasingly diverge on financial policy, response to energy transition](#). 29 March 2021.

Shell acknowledged that “successful execution on this [energy transition] strategy will gradually become more important to the rating”.<sup>12</sup>

**Table 1: S&P Has Unequivocally Cited Energy Transition in a Sector-Wide Negative Rating Action**

European Oil Companies’ Rating Changes by S&P in 2021 Citing Energy Transition

Issuer	Actions	Date
Shell	Ratings placed on negative watch	26 January 2021 <sup>13</sup>
TotalEnergies	Ratings placed on negative watch	
BP	Outlook revisions to negative	
Shell	Rating downgrade	18 February 2021 <sup>14</sup>
TotalEnergies	Rating downgrade	18 February 2021 <sup>15</sup>

Source: S&P Global Ratings.

Russia’s war of aggression against Ukraine in early 2022 sent oil prices to a more than decade high. This somewhat dampened the mood about the long-term demand declines relating to the energy transition. The CRAs took some positive rating actions in the sector on better profitability and reduced debt leverage, including S&P’s reversed actions on BP and TotalEnergies (Table 2). However, S&P’s heightened industry risk assessment has remained in place, indicating the agency’s continued view of increased transition risk. S&P has not reversed the downgrade of Shell.<sup>16</sup> Overall, however, European oil companies’ ratings are now broadly similar to pre-pandemic 2019 levels.

**Table 2: S&P Reversed Some Rating Actions on Oil Prices Bouncing Back**

Issuer	Actions	Date
BP	Outlook revisions to stable	28 July 2022 <sup>17</sup>
TotalEnergies	Rating upgrade	30 June 2022 <sup>18</sup>

Source: S&P Global Ratings.

<sup>12</sup> Fitch Ratings. [Fitch Affirms Royal Dutch Shell plc's IDR at 'AA-'; Outlook Stable](#), 6 May 2021.

<sup>13</sup> S&P Global Ratings. [S&P Global Ratings Takes Multiple Rating Actions On Major Oil And Gas Companies To Factor In Greater Industry Risks](#), 26 January 2021.

<sup>14</sup> S&P Global Ratings. [Royal Dutch Shell PLC Downgraded To 'A+/A-1' On Heightened Industry Risk Assessment; Outlook Stable](#), 18 February 2021.

<sup>15</sup> S&P Global Ratings. [France-Based Integrated Energy Company Total Downgraded To 'A' On Increased Industry Risk; Outlook Stable](#), 18 February 2021.

<sup>16</sup> S&P Global Ratings. [Global Energy Company Shell Affirmed At 'A+' On Strong Operating Performance And Gradual Debt Reduction; Outlook Stable](#), 31 July 2023.

<sup>17</sup> S&P Global Ratings. [BP Ratings Affirmed At 'A-' On Stronger Financial Risk Profile; Outlook Stable](#), 28 July 2022.

<sup>18</sup> S&P Global Ratings. [European Energy Company TotalEnergies SE Upgraded To 'A+' From 'A' On Continued Deleveraging; Outlook Stable](#), 30 June 2022.

In addition, the CRAs are increasingly communicating how the energy transition could lead to a rating upgrade or downgrade (Table 3). Moody's and Fitch have cited the energy transition in rating sensitivity (a description of what could change the rating) for about half of the European oil and gas companies. They are also particularly clear that the energy transition is a constraint that limits the oil majors' rating upside. However, these rating sensitivities remain largely qualitative (for example, both Fitch and Moody's have said TotalEnergies' failure to develop low-carbon businesses could lead to downgrade).<sup>19,20</sup> The mentions have not been applied consistently across the sector: The energy transition citation is skewed more to the upside for mid-sized integrated companies and is not observed for pure-play small integrated and E&P companies. CRAs haven't shown a systematic, coherent approach in conveying the potential rating impacts of the energy transition on the sector.

**Table 3: CRAs Have Cited the Energy Transition, Albeit Unevenly, in Rating Sensitivities**

	Rating (S&P/Moody's/ Fitch)	Upgrade trigger citing energy transition			Downgrade trigger citing energy transition		
		S&P	Moody's	Fitch	S&P	Moody's	Fitch
Shell	A+/Aa2/AA-	Y	Y (limited upside)	Y (limited upside)	N	Y	Y
BP	A-/A1/A+	N	Y (limited upside)	Y (limited upside)	N	Y	Y
TotalEnergies	A+/Aa3/AA-	N	Y	Y (limited upside)	N	Y	Y
Eni	A-/Baa1/A-	N	N	Y	N	N	Y
Equinor	AA-/Aa2/-	Y	Y	-	N	Y	-
OMV	-/A3/A-	-	Y	N	-	N	N
Repsol	BBB+/Baa1/BBB+	N	Y	Y	Y	Y	N
Orlen	-/A3/BBB+	-	N	Y (limited upside)	-	N	N
Moeve (formerly Cepsa)	BBB-/Baa3/BBB-	N	N	N	N	N	N
MOL	BBB-/BBB-	N	-	N	N	-	N
Aker BP	BBB/Baa2/BBB	N	N	N	N	N	N
Harbour Energy	BBB-/Baa2/BBB-	N	N	N	N	N	N

As of 14 February 2025; based on the latest ratings press releases.

Source: S&P Global Ratings, Moody's Ratings, Fitch Ratings, IEEFA.

<sup>19</sup> Fitch Ratings. [Fitch Affirms TotalEnergies SE at 'AA-'; Outlook Stable](#). 6 September 2024.

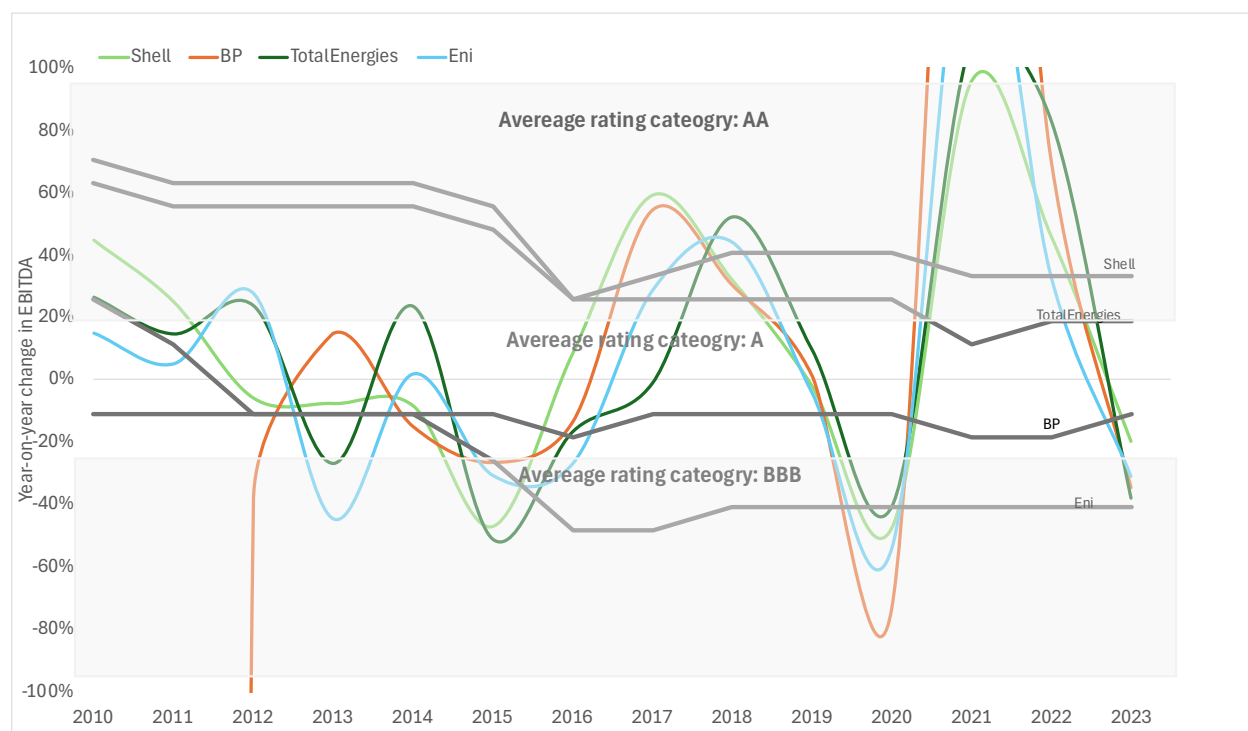
<sup>20</sup> Moody's Ratings. [Moody's Ratings upgrades TotalEnergies SE's rating to Aa3 from A1; stable outlook](#). 9 December 2024.



## Credit Rating Horizons Fall Short Amid Structural Decline of Oil

Oil prices have historically been volatile, over and apart from the two recent shocks caused by COVID and Russia's war of aggression against Ukraine. This is an important credit factor in the sector. But ratings, especially those of oil majors, tend to be relatively resilient despite volatile profitability amid large price movements at times. The CRAs consider these companies' large scale, business diversification and financial buffer to "rate through the cycle".

**Figure 1: Ratings Are Relatively Steady Despite Volatile Earnings**



Source: LSEG Workplace, IEEFA.

CRAs have begun to develop more transparent approaches to their use of new tools and warning signs regarding energy transition risk. This transparency allows investors to make their own predictions of the possible rating outcomes in various climate scenarios. For example, S&P recognises climate change as a megatrend with a "high" potential impact on creditworthiness.<sup>21</sup>

Still, IEEFA observes that the energy transition is not systematically cited. Considering the widespread and irreversible impact of climate change, the energy transition risk is not sufficiently factored in today's ratings, in IEEFA's view. Despite S&P's energy transition-driven revision – which

<sup>21</sup> S&P Global Ratings. [Assessing How Megatrends May Influence Credit Ratings](#). 18 April 2024.

by itself reflects a meaningful step – European oil companies are broadly rated in the same category. While credit assessments acknowledge transition strategies, the impact of transition risks on European oil sector credit ratings remains largely “limited”, according to Moody’s ESG Credit Impact Score.<sup>22</sup> However, Moody’s does note “potential for future negative impact over time”,<sup>23</sup> though it remains unclear how and when this may materialise. Fitch’s Climate Vulnerability Signals tool indicates that “climate-risk factors are not expected to affect the credit profile [for oil and gas production] materially” in 2025, while providing a long-term view and warning the materiality will increase over 2025-2050.<sup>24</sup>

The energy transition is a structural shift, not a cyclical factor. This raises doubts about the oil sector’s business viability – a view agreed by the CRAs. Moody’s put over US\$1 trillion of debt from the sector globally into the category “very high” energy transition credit risk in its November 2024 “heat map”. The structural factor in turn increases the uncertainties of through-the-cycle ratings over time as unforeseen events could become more likely. It might not always be easy to incorporate severe, sudden credit events with a low likelihood, such as liquidity shocks and environmental disasters. But it is likely that such episodes would trigger widespread, spillover impacts, especially events accompanying a disorderly transition scenario.

Credit ratings, often limited by their relatively short horizon, find it difficult to account for the oil sector’s long-term decline, given the unclear timing and magnitude of the downturn. Among the CRAs, Fitch is uniquely positioned with its Climate Vulnerability Signals tool, which offers a long-term outlook to 2050.<sup>26</sup> But the tool only predicts increasing credit “vulnerability” over time and measures the possible rating impacts at several future points, as opposed to bringing the long-term outlook into today’s ratings.

Energy transition risks have not yet clearly materialised, making it difficult to model their impacts on financial forecasts. Additionally, the uncertain timing of these risks’ materialisation complicates the modelling efforts. For example, S&P uses up to three years of price assumptions in modelling, analysis and determining of ratings.<sup>27</sup> Fitch cited oil and gas price assumptions for five years in a rating action;<sup>28</sup> Moody’s cited two years<sup>29</sup> and used “medium-term price ranges”.<sup>30</sup> CRAs’ oil consumption and production forecasts in different climate scenarios are even less clear. This may constrain the CRAs from taking a more forward-looking approach, potentially explaining their modest actions to date.

---

<sup>22</sup> Moody’s Ratings. [General Principles for Assessing Environmental, Social and Governance Risks](#). 28 September 2023.

<sup>23</sup> Moody’s Ratings. [Moody’s Ratings affirms Shell’s Aa2 rating with stable outlook](#). 29 August 2024.

<sup>24</sup> Fitch Ratings. [Climate Vulnerability Signals](#).

<sup>25</sup> Moody’s Ratings. [Heat map: Sectors with \\$4.3 trillion in debt face heightened environmental credit risk](#). 11 November 2024.

<sup>26</sup> Fitch Ratings. [Climate Vulnerability Signals](#).

<sup>27</sup> S&P Global Ratings. [S&P Global Ratings Revises Its Natural Gas Price Assumptions; Oil Price Assumptions Unchanged](#). 10 September 2024.

<sup>28</sup> Fitch Ratings. [Fitch Affirms Shell at 'AA-/Stable](#). 22 July 2024.

<sup>29</sup> Moody’s Ratings. [TotalEnergies SE](#). 17 December 2024.

<sup>30</sup> Moody’s Ratings. [Medium-term price ranges underscore credit analysis amid market volatility](#). 25 April 2022.

**Table 4: Short Horizon of CRAs' Oil Price Assumptions Limits Integration of Long-Term Credit View**

Brent price assumption (US\$/barrel)	S&P	Moody's	Fitch
2025	80	65	70
2026	80	65	65
2027	80	-	65
Mid-cycle	80	55-75	60
<b>IEA net-zero scenario (IEA crude oil US\$/barrel)</b>			
2030		42	
2040		30	
2050		25	

Source: S&P Global Ratings,<sup>31</sup> Moody's Ratings,<sup>32,33</sup> Fitch Ratings,<sup>34</sup> International Energy Agency,<sup>35</sup> IEEFA.

## Long-Term Credit View Offers Market Stability Against Existential Risks

CRAs play a key role in accurately assessing the forward-looking creditworthiness of companies. This should include factoring in any material risks (“rating the uncertainties”). Rating accuracy is important to avoid market mispricing – and a 2008-09-style spillover credit collapse and default spikes. The impact of climate change, in IEEFA’s view, has similar potential to cause widespread financial downturns.

Against this backdrop, in IEEFA’s view, there is a strong case for more integration of a long-term credit view for the oil sector – one of the sectors with the highest exposure to transition risk. These unprecedented risks may pose existential threats to the whole sector and beyond. In light of this, a short-term-minded approach limits a comprehensive understanding of an issuer’s credit profile. Also, ratings reflecting a longer forward-looking view are more likely to align with investors’ horizons and in turn be more relevant in helping investors anticipate future risk-adjusted returns and make more informed decisions.

<sup>31</sup> S&P Global Ratings. [S&P Global Ratings Revises Its Natural Gas Price Assumptions; Oil Price Assumptions Unchanged](#). 10 September 2024.

<sup>32</sup> Moody's Ratings. [TotalEnergies SE](#). 17 December 2024.

<sup>33</sup> Moody's Ratings. [Earnings set for steady path in 2025, but risks rising for oil prices](#). 25 November 2024.

<sup>34</sup> Fitch Ratings. [Fitch Ratings Revises Gas Price Assumptions, Leaves Oil Prices Unchanged](#). 5 December 2024.

<sup>35</sup> International Energy Agency. [Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach](#). September 2023.

Oil market volatility might trigger broad commodity volatility and other spillover disruptions.<sup>36</sup> The widespread, complex and unprecedented nature of climate change requires a nuanced approach to modelling the oil sector. While the oil sector has contributed to climate change, it is also exposed to demand and supply shocks induced by physical climate events and political and societal shifts related to the energy transition. The interconnected impacts of climate change will ripple across economic activities, social welfare and well-being. IEEFA has also noted that consistent and effective public opposition to fossil fuel projects in many parts of the world, notably leading to delays and cancellations of major investments, has been recognised as a material risk for the sector.<sup>37</sup> Additional volatility faced by the oil sector spurred by these feedback loops underscores the need for long-term mitigation planning.

Research has observed that oil and gas assets are already seen as riskier than renewables.<sup>38</sup> The magnitude of shifting away from fossil fuels adds debt repayment risks even for oil majors with large, stable profiles highly rated by CRAs today. Any severe shocks to the industry – such as the collapse of a highly rated and prominent issuer that is not well-incorporated in credit assessments – could lead to financial system instability through the bond market and banking system. The 12 companies studied in this paper have a combined total outstanding indebtedness of around US\$260 billion, accounting for more than 5% of Europe’s outstanding non-financial corporate bonds.<sup>39</sup> The meaningful oil sector debt may have implications for overall default rates in the event of widespread shocks.

European oil issuers often have long and lengthened<sup>40</sup> debt maturity profiles, which implies their bonds may be owned by investors with more long-term investment horizons. In Europe, nearly a third of bonds issued in the sector will mature after 10 years, compared with one-fifth of bonds issued by non-financial corporates.

Credit ratings should, therefore, be adapted to become fit for purpose to offer a long-term view, addressing the scenario of sector-wide credit deterioration over time. A long maturity profile can be a feature of today’s credit strength, but mispricing long-term risks leading to widening spreads over time could cause material losses to long-term investors. Besides, any heightened refinancing risks – albeit usually considered when issuers face material near-term debt maturities – could present an abrupt tipping point. Elevated business risk amid an accelerating energy transition would increasingly limit the issuers’ ability to issue long-dated bonds (or force them to bear a substantially higher cost).

---

<sup>36</sup> Studies often differentiate the impacts of different types of oil price shocks: aggregate demand shock, oil supply shock and other oil-specific shocks (Kilian, L. [Not all oil price shocks are alike: disentangling demand and supply shocks in the crude oil market](#). American Economic Review. Volume 99(3), pages 1053-1069. June 2009). For example, research found high contributions of oil-specific demand shocks on agricultural commodity prices after the 2008 food price crisis (Wang, Y., Wu, C. and Yang, L. [Oil price shocks and agricultural commodity prices](#). Energy Economics. Volume 44, pages 22–35. July 2014).

<sup>37</sup> IEEFA. [A matter of opinion: Credit rating agencies evolve on climate change, fossil fuel risk](#). 14 March 2024.

<sup>38</sup> Oxford Sustainable Finance Group. [ETRC – Cost of Capital and Investment Tracking](#). 2024.

<sup>39</sup> Data taken from LSEG Workspace (formerly Refinitiv), accessed on 14 February 2025.

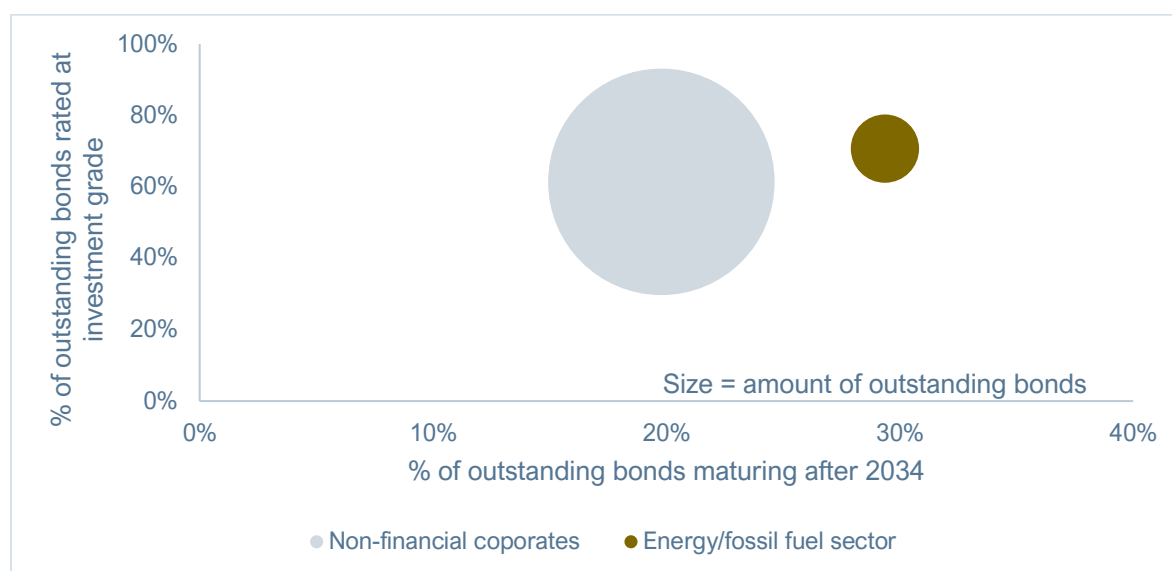
<sup>40</sup> Anthropocene Fixed Income Institute. [Buyers of long-dated oil bonds beware](#). 7 May 2024.

This could lead to suddenly spiralling refinancing costs or dramatically shorten their debt maturity profile – a credit negative.

European oil sector debt is mostly investment grade rated, reflecting relatively high creditworthiness profiles. Oil majors are very highly rated at AA or high A, implying their bondholders are long-term minded and relatively risk averse. A long-term view should cushion against credit events that may cause ratings to rapidly fall to high yield from investment grade and trigger exacerbated impacts on the cost of debt and access to funding.<sup>41</sup>

### Figure 2: European Non-Financial Corporate and Fossil Fuel Sector Outstanding Bonds

The Long-Dated and Highly Rated Nature of European Oil Debts Underscores the Materiality of Long-Term Considerations



Source: LSEG Workplace, IEEFA. Note: Corporate bond data is screened by sector and country of risk, accessed on 14 February 2025.

The CRAs' institutional progress on the overall shift in perspective remains slow.<sup>42</sup> They should continue to revisit their approaches to be more forward-looking, which would help them better rate the uncertainties caused by the energy transition.

<sup>41</sup> European Central Bank. [Understanding what happens when "angels fall"](#). November 2020.

<sup>42</sup> IEEFA. [A matter of opinion: Credit rating agencies evolve on climate change, fossil fuel risk](#). 14 March 2024.

## Climate Scenarios and Policies Provide a Clear View To Capture Sector-Wide Risk: A Case From Europe

The energy transition has far-reaching, sector-wide implications for oil and gas issuers' business and financial viability. While fossil fuel demand depends on evolving carbon budgets, a long-term view should incorporate a weighted approach considering all expected possible outcomes.

There are some certainties to the uncertainties: Evidence shows a clear direction of travel. Peak fossil fuel demand is modelled in all three of the International Energy Agency's (IEA) energy transition scenarios:<sup>43</sup> Stated Policies, Announced Pledges and Net Zero. Moody's has also brought this into view.<sup>44</sup> Research points to risks of significant fossil fuel reserve being stranded in a 1.5-degree scenario.<sup>45</sup>

The case is much more prominent in Europe, given the region's ambitious pledges and measures aligning with the Paris agreement. The EU recognises decarbonisation as a core pillar of its clean industrial strategies<sup>46</sup> and economic competitiveness.<sup>47</sup> The European oil and gas companies studied in this paper have a significant exposure to European oil and gas demand. They are exposed to high regulatory and societal pressures as well as countries' legally binding net-zero goals and other interim targets. Against this backdrop, the Transition Pathway Initiative carbon performance assessments show that BP, Equinor, Repsol and Shell are misaligned with the initiative's National Pledges pathway for 2027,<sup>48</sup> for example. This indicates likely exposure to downside risks.

Europe (including oil producer Norway) is largely an oil and gas importer. Net imports accounted for 77% of Europe's crude oil supply and 61% of its gas supply in 2022, according to the IEA.<sup>49</sup> The region also has a vested interest, from an energy security perspective, in accelerating the energy transition.

Oil accounts for two-thirds of Europe's energy-related emissions, and the transport sector accounts for two-thirds of final consumption of oil products.<sup>50</sup> Decarbonising the transport sector has become a top policy agenda to reach climate goals.

For example, the EU has a comprehensive mobility strategy<sup>51</sup> to reduce the use of oil products. The EU will ban the sale of new petrol and diesel cars in 2035 and aim for all vehicles on the road to be

<sup>43</sup> International Energy Agency. [World Energy Outlook 2024](#). October 2024.

<sup>44</sup> Moody's Ratings. [Shifting energy landscape creates uncertainty for Big Oil. A \\$613 billion windfall provides options](#). 13 December 2023.

<sup>45</sup> Welsby, D., Price, J., Pye, S. et al. [Unextractable fossil fuels in a 1.5°C world](#). Nature. Volume 597, pages 230–234. 8 September 2021.

<sup>46</sup> IEEFA. [IEEFA welcomes EU Clean Industrial Deal but warns of LNG lock-in risk and overreliance on CCS](#). 26 February 2025.

<sup>47</sup> European Commission. [A Competitiveness Compass for the EU](#). 29 January 2025.

<sup>48</sup> Transition Pathway Initiative. [Oil & Gas \(Beta V5.0\)](#) [Accessed on 13 February 2025].

<sup>49</sup> International Energy Agency. [Europe oil](#).

<sup>50</sup> Ibid.

<sup>51</sup> European Commission. [Mobility Strategy](#).

carbon neutral by 2050.<sup>52</sup> Technology advancements, such as high-density solid-state electric vehicle batteries and low-carbon aviation fuels, can provide extra support to the policies.

European oil companies rely heavily on proposals for carbon capture, utilisation and storage to align with emission reduction targets. These proposals are unproven and subject to execution, technical, economic, operational and legislative risk, in IEEFA's view.<sup>53</sup> Even if projects achieve expected performance rates, the business is still fundamentally exposed to the risk of declining oil demand.

EU demand for oil products is already in structural decline, with 2022 consumption 19% below its 2001 peak.<sup>54</sup> European Commission scenarios estimate that EU oil consumption will drop by three-quarters by 2050, compared with 2020.<sup>55</sup>

European oil companies are investing in liquified natural gas (LNG) to diversify from oil E&P activity. For example, Shell, a significant global LNG player, generated about a third of its 2023 earnings before interest, taxes, depreciation and amortisation from its integrated gas segment. However, IEEFA finds that Shell underestimates barriers to LNG demand growth in emerging Asia,<sup>56</sup> while LNG demand in Europe, Japan and South Korea will likely fall through 2030.<sup>57,58</sup> Also, TotalEnergies' Mozambique LNG project has an increasingly uncertain outlook.<sup>59</sup>

In the EU, renewable power deployment, electrification and energy efficiency will continue to pressure gas demand. Seven west European countries pledged in 2023 to decarbonise their electricity systems by 2035,<sup>60</sup> the UK has a more ambitious target of 2030.<sup>61</sup> These ambitions somewhat compel countries to further grow their renewable power and grid infrastructure to cater for higher electricity demand fuelled by artificial intelligence.

Additional regulatory pressure will likely be transmitted through finance. Increased carbon prices in the EU Emissions Trading System will support low-carbon industry.<sup>62</sup> Prospects of an EU-wide energy tax reform<sup>63</sup> could facilitate the energy transition. For example, evidence from the UK green fiscal reform indicates the role of environmental taxes in decarbonisation.<sup>64</sup> Community and health

---

<sup>52</sup> European Parliament. [EU ban on the sale of new petrol and diesel cars from 2035 explained](#). 3 November 2022.

<sup>53</sup> IEEFA. [Carbon capture and storage: Europe's climate gamble](#). 10 October 2024.

<sup>54</sup> Eurostat. [Complete energy balances](#).

<sup>55</sup> European Commission. [Securing our future: Europe's 2040 climate target and path to climate neutrality by 2050 building a sustainable, just and prosperous society](#). 6 February 2024.

<sup>56</sup> IEEFA. [Shell's latest LNG outlook underestimates barriers to demand growth in Asia](#). 20 February 2024.

<sup>57</sup> IEEFA. [Global LNG Outlook 2024-2028](#). 25 April 2024.

<sup>58</sup> IEEFA. [European LNG Tracker](#). 18 February 2025.

<sup>59</sup> IEEFA. [List of reasons not to finance TotalEnergies' Mozambique LNG project grows](#). 12 February 2025.

<sup>60</sup> Government of the Netherlands. [Group of European countries aim to decarbonize their electricity system by 2035](#). 18 December 2023.

<sup>61</sup> UK Government. [Energy experts appointed to deliver clean power 2030 mission](#). 10 October 2024.

<sup>62</sup> IEEFA. [Carbon pricing: Governments increasingly make polluters pay for climate change](#). 30 May 2024.

<sup>63</sup> Bloomberg Tax. [Higher Costs Await as the EU Continues Energy Tax Reform Talks](#). 9 December 2024.

<sup>64</sup> Ekins, P., Summerton, P., Thoung, C. and Lee, D. [A Major Environmental Tax Reform for the UK: Results for the Economy, Employment and the Environment](#). Environmental and Resource Economics. Volume 50, pages 447-474. 15 May 2011.

co-benefits of climate change mitigation,<sup>65</sup> such as reducing air pollution, may increase political incentives to support stricter fossil fuel measures.

The European Central Bank's stress tests show that "delaying the transition, and not acting at all, leads to even higher costs and risks in the long run".<sup>66</sup> European financial regulators are increasingly integrating transition planning into their prudential frameworks.<sup>67,68</sup> These consider the oil and gas companies' effect on the climate and how the companies are subject to climate-related risks.<sup>69</sup> Financial institutions, including banks, asset owners and asset managers, are increasingly pressured to align their portfolios with climate goals (for example, by implementing exclusion policies).<sup>70</sup> This could push up cost of debt for European oil and gas companies that are laggards in the energy transition.

Exposure to societal pressures, reputation damages and litigation could accelerate credit impacts – for example, from increased public scrutiny of oil companies' lobbying and sponsorship activities. Controversies<sup>71</sup> over oil and gas companies' energy transition strategies may affect their social licence to operate over time.

All these materialities point to why the energy transition should be a key credit consideration on its own. Oil and gas issuers' exposure to downside risks is sector wide. Impacts on an issuer's long-term credit profile could at best remain limited, but they can be more severe, depending on issuer-specific strengths and regional and business exposure. A long-term credit view should be able to differentiate companies with strong energy transition planning, even when near-term impacts are limited.

---

<sup>65</sup> Workman, A., Blashki, G., Bowen, K. J., Karoly, D. J. and Wiseman, J. [Health co-benefits and the development of climate change mitigation policies in the European Union](#). Climate Policy. Volume 19(5), pages 585-597. 14 November 2018.

<sup>66</sup> European Central Bank. [Faster green transition would benefit firms, households and banks, ECB economy-wide climate stress test finds](#). 6 September 2023.

<sup>67</sup> European Banking Authority. [The EBA publishes its final Guidelines on the management of ESG risk](#). 9 January 2025.

<sup>68</sup> IEEFA. [European banks' prudential transition plans must support climate neutrality goals](#). 26 April 2024.

<sup>69</sup> This reflects the "double materiality" principle that underpins the EU sustainable finance regime. See the European Commission's article on [sustainable finance](#).

<sup>70</sup> IEEFA. [Approaching the Target: SBTi Financial Institutions Net-Zero Standard Comes Into View](#). 17 October 2024.

<sup>71</sup> Controversies arise from frequent, severe negative sentiments by media and civil society. For example, a Financial Times article with the headline "[How oil and gas companies disguise their methane emissions](#)" and an InfluenceMap report titled "[How the Oil Industry Has Sustained Market Dominance Through Policy Influence](#)".



## Energy Transition Factor Should Be Made Explicit in Sector Methodological Approach

As the CRAs should extend their credit view on the oil industry to take long-term energy transition risks into account, the question remains as to how they make progress without overhauling the modelling approach. While financial profiles may not capture impacts that have not yet materialised, qualitative assessments have become more determinant in how these risks are factored in.



**The CRAs' qualitative approaches specific to the oil and gas sector do not clearly consider the market risk arising from asset stranding and competition from low-carbon technologies.**

Transition risk is significant enough to be a rating factor on its own, but it poses credit risk through multiple channels. The CRAs' frameworks could capture general risk factors resulting from the energy transition, such as governance factors relating to reputation and litigation, broad regulatory pressures and capital requirements (see [next section](#)). However, IEEFA finds that the CRAs' qualitative approaches specific to the oil and gas sector do not clearly consider the market risk arising from asset stranding and competition from low-carbon technologies. This warrants distinct considerations under a dedicated energy transition factor to be formally incorporated into the sector criteria.

S&P's use of qualitative industry risk considerations is a good example under the current criteria. There is still potential for S&P to further heighten the oil industry risk profile to a maximum of "very high risk" from the current level of "moderately high risk". A "very high risk" profile is very rare, but, given the industry's unprecedented exposure as alternative energy sources become more mainstream, the industry could face risks that fit S&P's definition.<sup>72</sup> This could potentially send highly rated oil majors to speculative grades.<sup>73</sup>

S&P also recalibrated the "competitive position" (the other key dimension of determining an overall business profile assessment, alongside industry risk) of companies to capture the uneven impacts of the energy transition in different regions.<sup>74</sup> Yet large European oil majors broadly still scored the highest level of "excellent", mainly due to their status as large, integrated and diversified fossil fuel players. When considering the competitive position, S&P focuses on the profile of oil companies'

<sup>72</sup> Based on [S&P's General Criteria: Methodology: Industry Risk](#) (2024), S&P considers the competitive risk and growth factor to be of "very high risk" if all of the following conditions hold. (1) Barriers to entry are either very low or nonexistent. (2) Material prospective or actual pressure on operating margins. Alternatively, margins may be increasing unsustainably and creating the risk of a collapse in industry profitability. (3) High risk of prospective or actual substitution from outside the industry. (4) Established industry where sales are either rising by less than 1%, or are declining, over the medium term.

<sup>73</sup> Based on [S&P's corporate rating methodology](#) (2024), "very high risk" industry risk can yield an anchor rating of at best BB+, considering an "excellent" competitive position and a "low" country risk.

<sup>74</sup> S&P Global Ratings. [Ratings On Nine EMEA Oil And Gas Producers Affirmed Amid Increased Industry Risks](#). 28 January 2021.

hydrocarbon activities. This doesn't explicitly differentiate the issuer's transition strategy from its diversification into non-hydrocarbon activities, which importantly mitigates the differing exposure to transition risk in different regions. Incorporating a long-term view, a lack of transition progress should result in a competitive position downgrade, driven by higher unmitigated business risk.

Moody's has a sector-specific weighted scorecard to determine corporate entity-level ratings, unlike S&P with an explicit industry risk dimension in its credit model. Moody's specific methodology for integrated oil and gas companies has, like S&P's, only considered the strengths of hydrocarbon activities – including reserve size, hydrocarbon production volume and diversity of hydrocarbons produced – despite the agency's clear warnings of the industry risk of these activities. Moody's acknowledges that transition risk may not be directly captured in the scorecard for these companies.<sup>75</sup> But it could notch the final rating down from the scorecard outcome to capture the risks, if needed. Moody's ESG credit scores show "limited" credit impact for European oil companies, as the agency considers other factors to mitigate the exposure to transition risk. This indicates that there is room for Moody's to further incorporate a long-term view.

Fitch is the only CRA that explicitly considers environmental risk – centred on emissions targets – in the sector-specific rating criteria. Fitch made a commendable step in formally integrating this environmental risk as a sub-factor in its natural resources criteria in May 2023. It said at the time: "As energy transition is gathering pace, it is becoming an important factor for the natural resources companies' credit profiles driven by the development of their environmental targets and strategies."<sup>76</sup>

---

<sup>75</sup> Moody's Ratings. [Integrated Oil and Gas Methodology](#). 23 September 2022.

<sup>76</sup> Fitch Ratings. [Fitch Ratings Updates Sector Navigators – Addendum to the Corporate Rating Criteria](#). 12 May 2023.

**Table 5: Fitch Is the Only Big Three Agency That Explicitly Cites Environmental Risk in Its Sector-Specific Rating Criteria**

Snapshot of CRAs' Specific Qualitative Approaches to Oil and Gas

<b>S&amp;P: Oil and gas exploration and production<sup>77</sup> (competitive position component of business risk)</b>	<b>Moody's: Integrated oil and gas methodology<sup>78</sup></b>	<b>Fitch: Oil and gas production companies<sup>79</sup></b>
<p><b>Competitive advantage</b></p> <ul style="list-style-type: none"> <li>The growth prospects inherent in its acreage (the area on which it has an oil and gas licence)</li> <li>The quality of liquids and gas produced</li> <li>Unit revenue realised at each producing region</li> <li>Extent of vertical integration, if any, among its operating segments</li> </ul> <p><b>Scale, scope and diversity</b></p> <ul style="list-style-type: none"> <li>Size of the reserves (larger reservoirs offer potential economies of scale)</li> <li>Geographic diversity of production sources</li> <li>Diversity of hydrocarbons produced</li> <li>Operational risk required to exploit the reserves</li> <li>Quality of the reserves</li> </ul> <p><b>Operating efficiency</b></p> <ul style="list-style-type: none"> <li>Operating and production costs</li> <li>Exploration and development costs (including capital efficiency and reserve replacement costs)</li> </ul>	<p><b>Scale (20% weight in the scorecard)</b></p> <ul style="list-style-type: none"> <li>Average daily production (10%)</li> <li>Proved reserves (5%)</li> <li>Crude distillation capacity (5%)</li> </ul> <p><b>Business profile (25%)</b></p> <ul style="list-style-type: none"> <li>Size and diversification of its hydrocarbon resource base, by geography and basin</li> <li>Project execution and technological capabilities, including for its LNG operations</li> <li>Extent of the integration of upstream, midstream and downstream operations</li> <li>Scale, efficiency and market position of downstream operations, including its chemicals franchise and its marketing operations</li> </ul> <p><b>Notching factor: government policy framework</b></p> <ul style="list-style-type: none"> <li>Regulatory and fiscal risk</li> </ul>	<p><b>Diversification and environmental risk</b></p> <ul style="list-style-type: none"> <li>Diversification (vertical integration)</li> <li>Regulatory risk (exposure to environmental regulations; remediation costs relative to projected cash flows)</li> <li>Environment risk (emissions targets)</li> </ul> <p><b>Proved reserves</b></p> <ul style="list-style-type: none"> <li>Reserve base</li> </ul> <p><b>Cash flow cycle</b></p> <ul style="list-style-type: none"> <li>Mid-cycle unit economics</li> </ul> <p><b>Operational scale</b></p> <ul style="list-style-type: none"> <li>Daily production</li> </ul>

Source: S&P Global Ratings, Moody's Ratings, Fitch Ratings, IEEFA.

<sup>77</sup> S&P Global Ratings. [Sector-Specific Corporate Methodology](#). 4 April 2024.

<sup>78</sup> Moody's Ratings. [Integrated Oil and Gas Methodology](#). 23 September 2022.

<sup>79</sup> Fitch Ratings. [Sector Navigators – Addendum to the Corporate Rating Criteria](#). 21 June 2024.

## Better Risk Integration Requires Formal Consideration of Non-Oil and Gas Business Profiles

The entire fossil fuel value chain – exploration, extraction, transportation, refining, marketing, distribution – is experiencing a long-term decline as electrification and energy substitution gain momentum. The CRAs largely adopt a sector-specific view that focuses on the business strength only within the fossil fuel value chain – the sector criteria’s scope. This inherently limits the integration of transition risk as fossil fuels’ strength is becoming less credit relevant amid substantial sector-wide existential challenges. The other side of the coin is that having a strong integrated oil and gas business profile – rewarded with a high credit rating – may lower a company’s incentive to implement a transition plan, increasing its risk exposure over time.

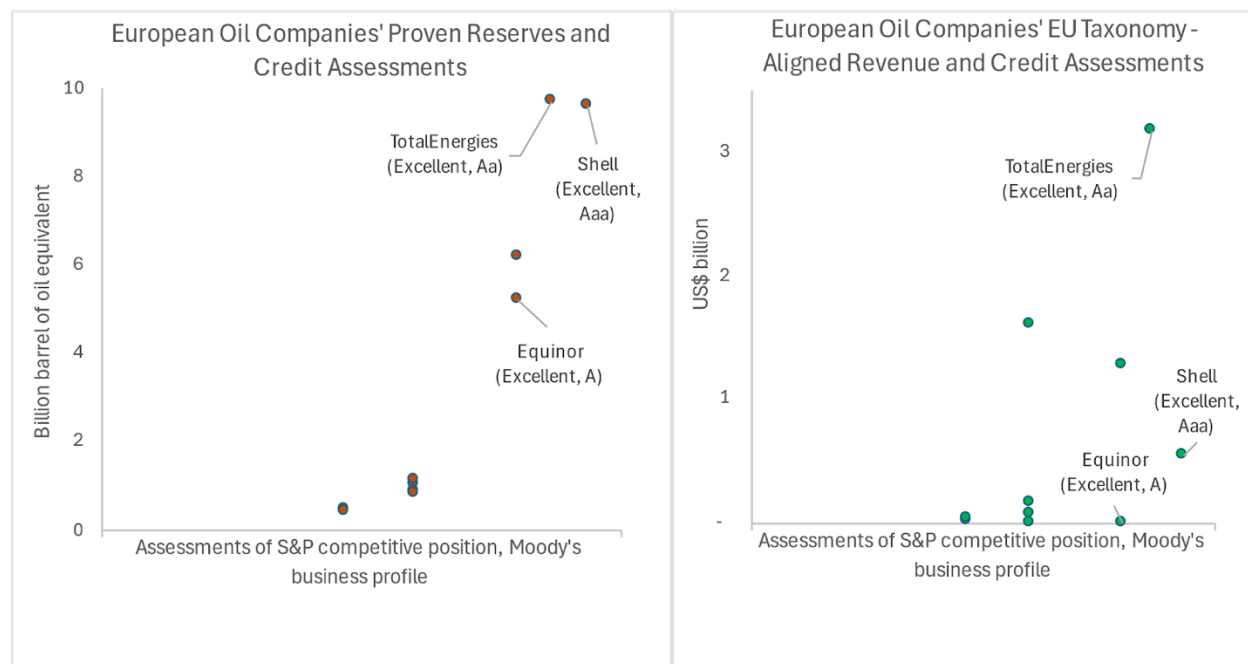
This sector perspective provides little recognition for those companies that are pushing for credible transition plans with responsible deadlines. The incongruity between rising climate-related credit risk and European oil companies’ largely positive credit ratings necessitates a review of the CRAs’ sector-specific methodological approaches.

For example, under CRA methodologies the size of proven oil reserves indicates a company’s scale and future revenue viability, but this is likely to become less relevant as reserves are increasingly subject to stranded asset risk. The metric doesn’t consider timing either – for example, a new or additional proven reserve is more likely to have a long lead time that makes it more exposed to the stranded asset risk. Alternative approaches, such as a revenue measure, will better reflect the scale of a company overall, considering the contributions of non-fossil fuel businesses. IEEFA suggests CRAs promptly introduce a revenue measure and gradually increase its weight while reducing the weight of hydrocarbon operating metrics.

For companies deciding to move away from their fossil fuel focus, consideration of the prospects of non-fossil fuel businesses should become an important mitigant of energy transition-related business risk that applies to the entire sector value chain, in addition to the standard consideration of diversification benefits.

The European oil case study shows that the companies’ qualitative business profiles tend to overly reward the strength of hydrocarbons (Figure 4). For example, Shell achieves the highest possible score by S&P (“excellent” competitive position) and Moody’s (“Aaa” business profile), despite the relatively small scale of its low-carbon businesses in dollar terms, represented by EU taxonomy-aligned revenue (one-sixth of TotalEnergies’). Equinor scores highly thanks to its proven reserves, despite having no qualified low-carbon activities.

**Figure 3: Qualitative Assessments Are More Likely To Reward Scale of Hydrocarbons Than Scale of Low-Carbon Activities**

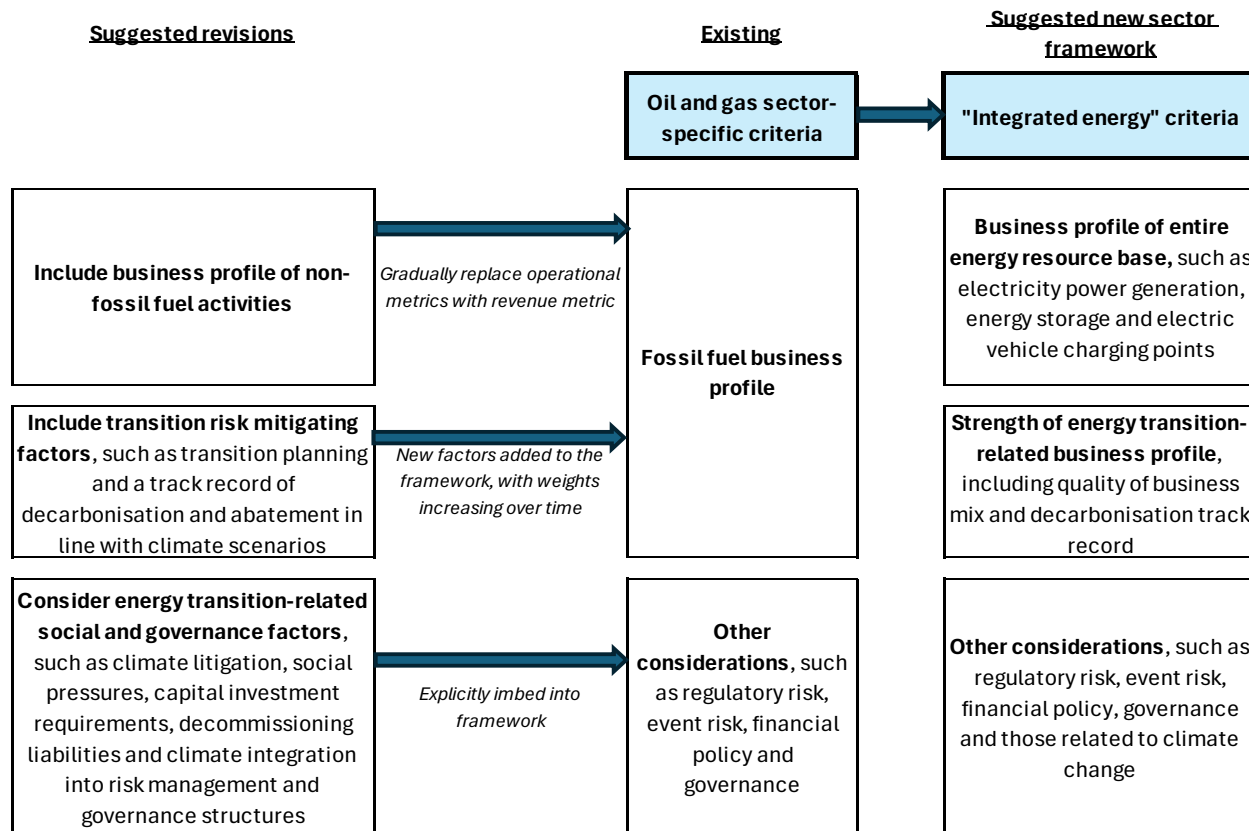


Source: S&P Global Ratings, Moody's Ratings, company reports, IEEFA. Note: BP has not reported EU taxonomy alignment, but it plans to from financial year 2024.

S&P and Moody's can start by catching up with Fitch and formally introducing transition risk as a sub-factor – starting with a small weighting. Weights should be reviewed regularly and gradually increase over time to reflect rising exposure. Transition risk considerations should become more comprehensive over time to capture the full credit implications. Fitch's consideration is currently only explicitly limited to emissions and regulatory exposure, indicating room for enhancement.

Some oil companies may attempt to become integrated energy companies, while new business models with multiple activities – spanning electricity power generation, energy storage solutions and electric vehicle charging networks – may emerge. These new businesses don't automatically fall under the oil and gas sector scope. Introducing sector guidance for multi-disciplinary energy companies would be more appropriate over time; this can accurately assess an issuer's strength across varying business mixes, differentiating it from a pure oil production player with substantially higher industry risk. Considering the energy transition away from the entire fossil fuel value chain towards low-carbon alternatives, this introduction is increasingly needed. This contrasts with industrial sectors like car manufacturing, where transition risks related to the shift to electric vehicles can be captured by the same sector considerations of market dynamics and product strengths. The multi-disciplinary approach is somewhat akin to CRAs' approaches to diversified mining companies, which can inherently capture both stranded asset risks faced by coal mining operations and potential benefits amid increasing demand for metals such as lithium.

**Figure 4: IEEFA Recommendations for CRAs' Clearer Assessments for Fossil Fuel Companies Planning to Diversify into Businesses Outside the Typical Scope of the Sector Criteria**



Source: IEEFA.

## Transition Plan Assessment as a Cornerstone of Credit Analysis

As both public and private sectors aim to align with climate goals, transition plans have become increasingly important considerations for investors, particularly when it comes to driving transition finance and channelling investments to hard-to-abate sectors and transitional technologies.<sup>80</sup> The launch of the International Transition Plan Network at COP29 aims to advance approaches to transition planning.<sup>81</sup> In the EU, the Corporate Sustainability Due Diligence Directive, a sustainable finance regulatory regime, requires large companies to adopt and put into effect Paris-aligned transition plans; the Corporate Sustainability Reporting Directive requires corresponding disclosure – despite its proposed drastically reduced scope.<sup>82</sup> The European Financial Reporting Advisory Group recently published an early draft implementation transition plan guidance.<sup>83</sup>

At the forefront of these developments, the CRAs have developed new tools to potentially improve the quality of their climate change assessments. All three agencies have launched some form of “transition” or “net-zero” assessment. Although they vary in scope, they all offer an independent and systematic review, broadly measuring companies’ levels of Paris-aligned ambition, implementation and governance. These tools are promising steps and can be used in many ways as they include independent, economy-wide, sector- and company-specific standards on climate change; they will inform decision-making for investors and wider stakeholders.

The elements of transition plans correspond to some key climate-related credit considerations for the oil and gas sector raised in this paper. These include:

- S&P’s qualitative focus on company activities, such as considering the share of low-carbon businesses, asset retirement plans and investment in climate-aligned technologies
- Moody’s assessments on business viability in a low-carbon economy and the investments, financing and operational costs an entity needs to implement the transition plans
- Fitch’s clear metrics on transition investments and revenues with sector-specific thresholds

These would help address gaps in the credit rating criteria. The overlap can increase further as regulatory frameworks relating to transition plans come into effect, leading to greater implications for companies.

---

<sup>80</sup> IEEFA. [Beyond COP28: Financial institutions should adopt nuanced transition finance frameworks to support net zero](#). 13 February 2024.

<sup>81</sup> The International Transition Plan Network. [ITPN launches at COP29 to drive global collaboration on transition plans](#).

<sup>82</sup> IEEFA. [IEEFA warns EU Omnibus package risks undermining bloc’s clean industrial policy](#). 27 February 2025.

<sup>83</sup> European Financial Reporting Advisory Group. [Implementation Guidance \[draft\] on Transition Plan for Climate Change Mitigation](#). 4 November 2024.

Despite that, these transition assessments are not part of credit ratings, although Moody's has explicitly hinted at a potential combination with credit rating scenario analysis in its internal strategic review.<sup>84</sup> In IEEFA's view, the combination would represent a key milestone in integrating energy transition risk into credit ratings. This would also improve the long-term view of credit rating frameworks, ensuring the relevance of credit ratings, especially in the context of the oil and gas industry.

In addition, the close relationship between transition plan assessments and credit risks can be illustrated through the uptake of innovative sustainability-linked debt instruments,<sup>85</sup> where the bond coupon rates are linked to the issuer's preset sustainability performance targets. This helps bond investors price in energy transition risks or deploy risk hedging.<sup>86</sup> Transition plan assessments indicate the plausibility of setting, benchmarking and meeting these targets. Missing targets indicate laggards in transition progress and may raise climate-related credit risks and lead to widening spreads, which can be – if appropriately priced – compensated by a coupon rise. For example, Eni has issued €4.75 billion of sustainability-linked bonds set upon targets including reducing its upstream net carbon footprint for Scope 1 and 2 emissions by 65% by 2025, from a 2018 baseline,<sup>87</sup> with a step-up margin of 0.5% per annum.

---

<sup>84</sup> IEEFA. [Moody's sets new course to rigorously assess carbon transition net-zero plans as a business imperative](#). 16 April 2024. (Taken from Moody's proprietary document. March 2024).

<sup>85</sup> IEEFA. [Takeaways from Enel's sustainability-linked bonds performance targets](#). 25 March 2024.

<sup>86</sup> Anthropocene Fixed Income Institute. [Sustainability-Linked Bond Handbook](#). May 2024.

<sup>87</sup> Eni. [Sustainability-linked financing framework](#). April 2023.



**Table 6: CRAs Have Developed Plausible Tools To Assess Transition Plans, But They Remain Separate From Credit Ratings**

	<b>S&amp;P: Climate Transition Assessments<sup>88</sup></b>	<b>Moody's: Net Zero Assessments<sup>89</sup></b>	<b>Sustainable Fitch: Transition Assessment<sup>90</sup></b>
<b>Definition</b>	The expected alignment of a company's activities with a low-carbon, climate-resilient future once its planned transition changes are realised, considering implementation actions and risks	An independent assessment of an entity's carbon transition plan relative to a global net-zero pathway, consistent with the goals of the 2015 Paris Agreement on climate change	An assessment of the strength and implementation of an entity's transition plan that benchmarks companies' relative progress towards net zero
<b>Final score</b>	Six-colour scale	Five-point scale	Six-colour scale
<b>Relationship with credit ratings</b>	Climate Transition Assessments are not credit ratings and do not assess credit quality or factor into credit ratings	Net Zero Assessments are not credit ratings. They do not directly address credit risk or provide an opinion on the credit implications of an entity's transition plan	Transition Assessments are not credit ratings
<b>Feature</b>	Sector agnostic	Sector agnostic	Sector specific; hard-to-abate sectors only
<b>Methodology</b>	<p><b>Current activity</b> (alignment with a low-carbon, climate-resilient future)</p> <p><b>Metrics and targets</b> (scope, time horizon, decarbonisation pathways) Green revenue targets, greenhouse gas emission targets, renewable energy targets</p>	<p><b>Ambition</b> Scope 1, 2 and 3 short- and long-term targets (target coverage, cumulative emissions, regional benchmarks, intensity targets and growth projections)</p>	<p><b>Emissions ambition</b> (to 2050 and 2030; in absolute and intensity terms)</p> <p><b>Emissions reduction</b> (long and short term; in absolute and intensity terms)</p>

<sup>88</sup> S&P Global Ratings. [Analytical Approach: Climate Transition Assessments](#). 18 July 2024.

<sup>89</sup> Moody's Ratings. [Assessment Framework Net Zero Assessments](#). 9 November 2023.

<sup>90</sup> Sustainable Fitch. [Transition Assessment](#).

<p><b>Methodology (continued)</b></p>	<p><b>Actions and investments</b> (time horizon, magnitude of impact, track record of execution) Research and development, mergers and acquisitions, capex, asset retirement plans, carbon removal technologies, and changes in upstream and downstream activities and other areas may be relevant to the climate transition plan</p> <p><b>Implementation</b> <i>Organisation alignment</i></p> <ul style="list-style-type: none"> <li>• Leadership structure and lines of accountability</li> <li>• Incentives, financial or non-financial, for senior management to deliver</li> <li>• Commensurate resourcing and personnel allocation planning</li> <li>• Track record of achieving previous climate transition targets where relevant</li> </ul> <p><i>Financial management</i></p> <ul style="list-style-type: none"> <li>• The estimated cost of the plan</li> <li>• Expectations for funding these costs</li> </ul> <p><i>Blockers</i></p> <ul style="list-style-type: none"> <li>• Significant stakeholder opposition</li> <li>• Overreliance on unproven or undeveloped technological innovations</li> <li>• Unfavourable regulatory environment</li> </ul>	<p><b>Implementation</b> (against Scope 1, 2 and 3 short- and long-term targets) <i>Technical dimension</i></p> <ul style="list-style-type: none"> <li>• Scope 1: clarity and soundness of a company's planned actions</li> <li>• Scope 2: sources of future energy consumption and details about energy efficiency strategies</li> <li>• Scope 3: key short-term actions, including plans to reduce inputs in the manufacturing process or use recycled materials, plans to increase the energy efficiency of its products in the use phase, as well as strategies to engage with suppliers and customers to reduce their emissions</li> </ul> <p><i>Business dimension</i> Viability of these strategies in a low-carbon economy; the investments, financing and operational costs an entity needs to implement the plans; and how, overall, the business strategy aligns with the emissions reduction transition plan</p> <p><b>Greenhouse gas governance</b> <i>Greenhouse gas accounting</i></p> <ul style="list-style-type: none"> <li>• Strength of greenhouse gas disclosures</li> <li>• Third-party assurance around greenhouse gas disclosures</li> <li>• Targets frequency and reporting</li> </ul> <p><i>Integration of climate objectives</i></p> <ul style="list-style-type: none"> <li>• Corporate climate conduct</li> <li>• Quality of board oversight</li> <li>• Management incentives</li> <li>• Binding mechanisms</li> </ul>	<p><b>Financial actions</b> <i>Transition investments</i></p> <ul style="list-style-type: none"> <li>• Total green and decarbonising percentage (of total annual investments)</li> <li>• Green-to-decarbonising investment ratio percentage (of total annual investments)</li> </ul> <p><i>Transition revenue</i></p> <ul style="list-style-type: none"> <li>• Green and decarbonising annual revenue growth (percentage)</li> <li>• Green and decarbonising annual revenue (percentage of total revenue)</li> </ul> <p><b>Sector-specific adjustments</b></p> <ul style="list-style-type: none"> <li>• Systemic change</li> <li>• Governance</li> <li>• Commitments related to fossil fuels</li> </ul> <p><b>Safeguards</b> (checking earlier results against a set of prerequisites)</p>
---------------------------------------	--	---	--

Source: S&P Global Ratings, Moody's Ratings, Sustainable Fitch, IEEFA.

## Rethinking Investments, Capital Requirements and Financial Policy in Oil and Gas Credits

The CRAs often cite execution risks for almost all large investments (including enlarged capital spending and business acquisitions). And rightly so. Debt-funded large investments immediately increase a company's debt leverage, and the deleveraging pathway and timing are subject to the successful completion of projects and future market conditions. Large acquisitions also entail integration risks. Consistently sizeable investments or an acquisitive appetite may translate into a more aggressive financial policy, a key qualitative credit measure by CRAs.

The agencies consider the implication of a business expansion for a company's business profile, including diversification, vertical integration benefits and better market positioning. A stronger business profile can increase profits, driving a lower debt leverage over time. All impacts will weigh on the credit ratings.

In the context of the oil and gas industry, the impact of capital expenditure (capex) credit metrics and related execution risks should be carefully measured against the expected benefits the investments will bring for the company to mitigate its transition risks. The benefits – usually derived from the company's diversified future-proof profiles, like expanding into the renewable energy value chain – should be captured in rating assessments, either through an overall notching tool or sector-specific sub-factors.

Companies depend on various forms of capital for success.<sup>91</sup> The conventional, business-as-usual view considers the requirements to replenish a company's depreciated capital relative to its balance sheet strength. However, in the face of climate change, oil and gas companies wishing to move into a new business model will need to replenish the four capitals: physical capital – switching to renewable infrastructure and equipment; human capital – upskilling of the workforce in renewable activities; social capital – wider stakeholder management; and natural capital – minimising environmental impacts. This substantially increases the perceived capital requirements to mitigate the heightening downside risks, which could then translate into a weaker financial policy than previously assessed.

CRAs have assigned highly positive assessments of oil majors' financial policies, often explained by their balance sheet strength.<sup>92</sup> Such high assessments seem to overlook the larger-than-expected capital requirements and decommissioning liabilities that could arise over time, as the companies' high-carbon assets face stranding risks in more adverse scenarios. European oil companies' continued investments in fossil fuels leave them continually exposed (Figure 5).

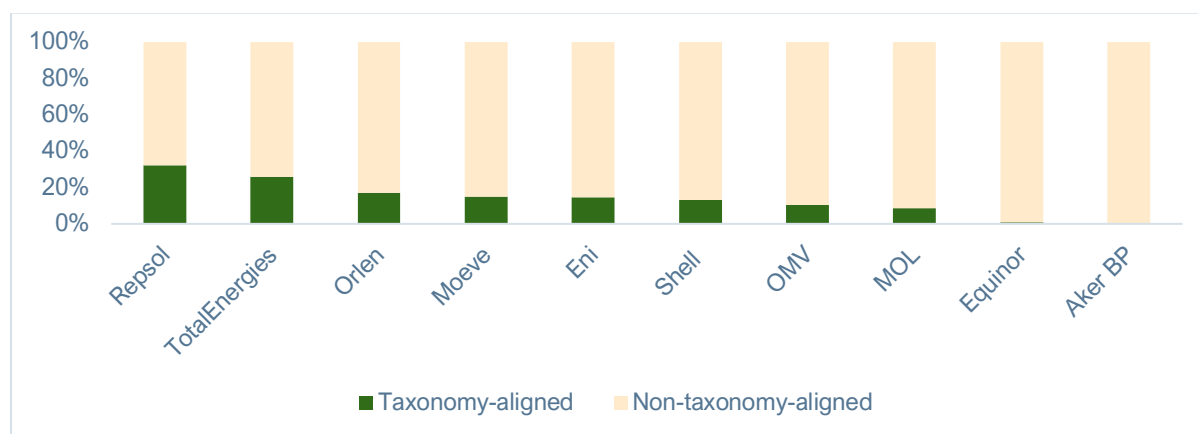
<sup>91</sup> IFRS Foundation. [Integrated Reporting Framework](#). January 2021.

<sup>92</sup> Moody's has assigned European oil majors a financial policy score of Aa-A. S&P has assigned neutral financial policy assessments for European oil majors, indicating "future credit ratios won't differ materially over the time horizon beyond what we have projected" and low event risk (see S&P's [Corporate Methodology](#). 7 January 2024).

The investments in the four capitals for business value creation should be compared against the other capital investments that may expose a company to physical capital stranding risk or damaging social or natural capital that may result in a feedback loop. For example, a more prominent credit-negative view should be given to fossil fuel expansion plans that lead to carbon lock-in. The analysis should evaluate not only how well capital is being used to create value now, but also how the company is preparing for and managing its long-term financial obligations and potential risks.

### Figure 5: European Oil Companies' Large Investments in High-Carbon Projects Leave Them Exposed to Downside Scenarios

2023 Capex Aligned With the EU Taxonomy



Source: Company reports, IEEFA. Note: BP and Harbour Energy are not included because they did not disclose EU taxonomy alignment data.

CRAs view all shareholder returns as strictly credit negative without business profile implications. For the oil and gas industry, the consideration of financial policy relating to shareholder returns interacts with the companies' propensity to invest in business transformation. Adopting a more aggressive dividend policy is not only unfavourable for creditors over the short term, but it could also suggest that the company is less engaged in long-term transition planning, thereby increasing its risk exposure.

Listed European oil majors BP, Eni, Shell and TotalEnergies delivered total shareholder returns (dividends and share buybacks) of US\$125 billion between 2022 and 2023. Primarily driven by windfall profits, these shareholder returns are "allowed" by the CRAs under the companies' respective rating levels and assessments of financial policy. If these payouts had been reinvested in green projects, Shell and TotalEnergies, for example, would have raised their EU taxonomy-aligned capex by nearly five times and nearly two times, respectively, in 2023. In this context, these shareholding policies could amplify a shift in favour of short-term shareholders' interests, to the detriment of long-term creditors. This dynamic represents an important energy transition consideration within broader assessments of the companies' financial and risk management practices, which could be made more explicit in CRAs' rating criteria.

## One Step at a Time

CRA can capture energy transition-related factors in the current rating approach by using assessments of industry risk, financial policy and rating notching adjustments. While they can further utilise these levers as they move towards a long-term perspective, the shift should continue improving risk integration in rating frameworks.

This involves revisions to the qualitative criteria. IEEFA recommends that CRAs begin by formally incorporating a dedicated energy transition factor into their sector-specific criteria. While the consideration of energy transition may be implicit in various sectors, ranging from car manufacturers to mining, this requires explicit attention in the oil and gas sector against the backdrop of the transition away from the entire sector value chain. Specifically, CRAs could explicitly document the following energy transition-related considerations in the rating criteria:

- Business profile of non-fossil fuel activities (diversification beyond fossil fuel remit)
- Transition risk mitigating factors
- Climate integration into financial policy and risk management practices
- Other factors such as climate litigation and energy-related social pressures

Over time, CRAs could consider introducing a new methodology to cater for emerging companies with new business models in the wider energy sector. What's more, as CRAs have been developing dedicated tools to assess transition plans, steps towards formally integrating the assessments into final credit ratings will ensure the relevance of ratings as investors navigate climate-related transition risks.

Regular updates to methodological approaches could be taken one step at a time without requiring an overnight overhaul that can cause immediate volatility in ratings. But the changes should be long-term minded and appropriately reflect the structural shifts in the sector – prominently the development of credible low-carbon technologies aligning with country-specific decarbonisation scenarios.

The case study of European oil and gas shows an increasing exposure to transition risks is sector wide, with a clear direction of travel. The region's trajectory of market, societal and regulatory shifts provides very limited upside for the companies' creditworthiness if they double down on their fossil fuel businesses. Through an enhanced methodological approach, CRAs are more likely to increase transparency by systematically outlining how ratings and assessments of rating factors and sub-factors could move due to climate change, in turn helping bond investors make informed decisions.

Climate change impacts are unprecedented: A cautious and prudent approach for CRAs requires proactivity and foresight.

## About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. [www.ieefa.org](http://www.ieefa.org)

## About the Author

### Kevin Leung

Kevin Leung is a Sustainable Finance Analyst, Debt Markets, Europe, at IEEFA. He has authored reports on topics relating to sustainable credits, transition finance and sustainable finance regulatory initiatives.

Before joining IEEFA, Kevin worked in Sustainable Finance at Moody's, where he led comprehensive ESG assessments for corporates and financial institutions. Prior to that role, he worked as a credit rating analyst at Moody's for six years, covering a wide range of corporate sectors.

Kevin holds a Master's Degree in Finance from HEC Paris and a Bachelor of Science Degree from the University of Warwick.

**This report is for information and educational purposes only. The Institute for Energy Economics and Financial Analysis ("IEEFA") does not provide tax, legal, investment, financial product or accounting advice. This report is not intended to provide, and should not be relied on for, tax, legal, investment, financial product or accounting advice. Nothing in this report is intended as investment or financial product advice, as an offer or solicitation of an offer to buy or sell, or as a recommendation, opinion, endorsement, or sponsorship of any financial product, class of financial products, security, company, or fund. IEEFA is not responsible for any investment or other decision made by you. You are responsible for your own investment research and investment decisions. This report is not meant as a general guide to investing, nor as a source of any specific or general recommendation or opinion in relation to any financial products. Unless attributed to others, any opinions expressed are our current opinions only. Certain information presented may have been provided by third parties. IEEFA believes that such third-party information is reliable, and has checked public records to verify it where possible, but does not guarantee its accuracy, timeliness or completeness; and it is subject to change without notice.**

