

8th Joint IEA-IEF-OPEC Workshop

Roadmaps to Carbon Neutrality Differ

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Head of EMEA Natural Resources & Commodities
21 October 2021



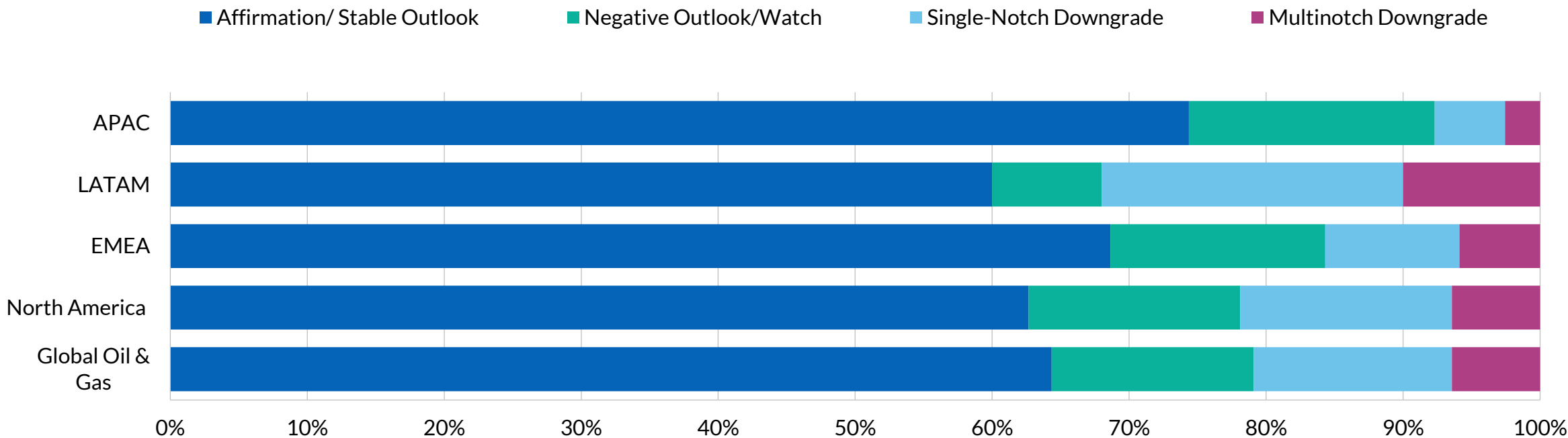
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Fitch's Rating Actions

FitchRatings

Global Oil & Gas – Downgrades Intensity Differs by Region

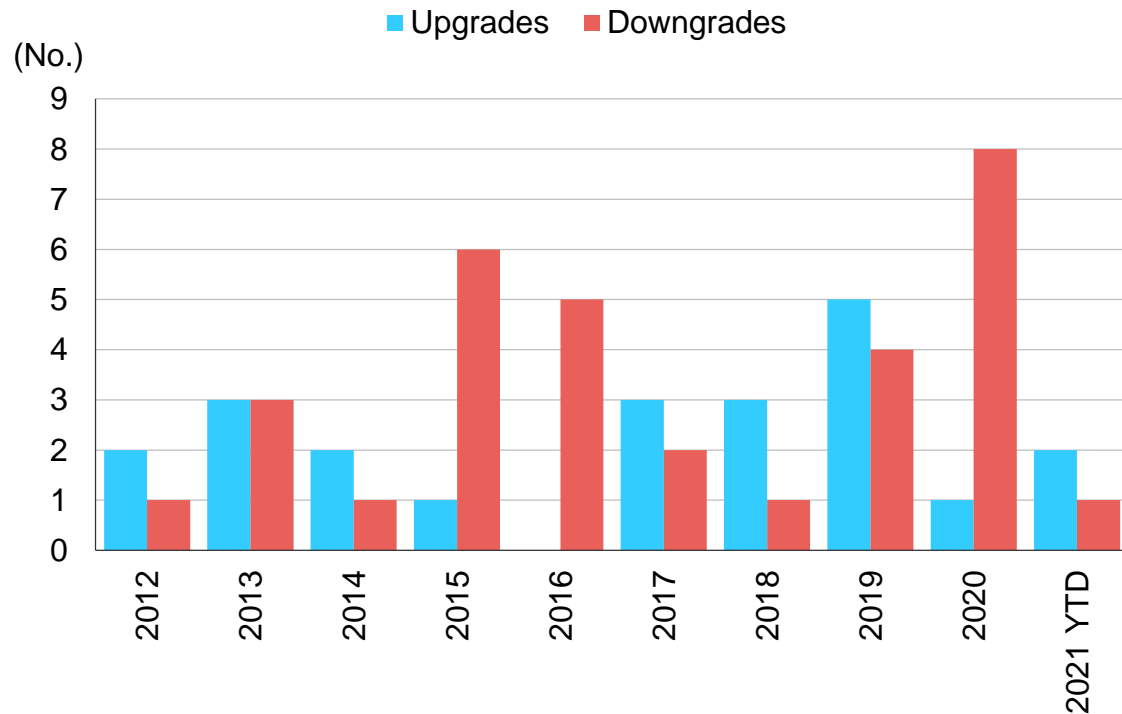
Rating Actions Since Start of Pandemic Until March 2021



Source: Fitch Ratings

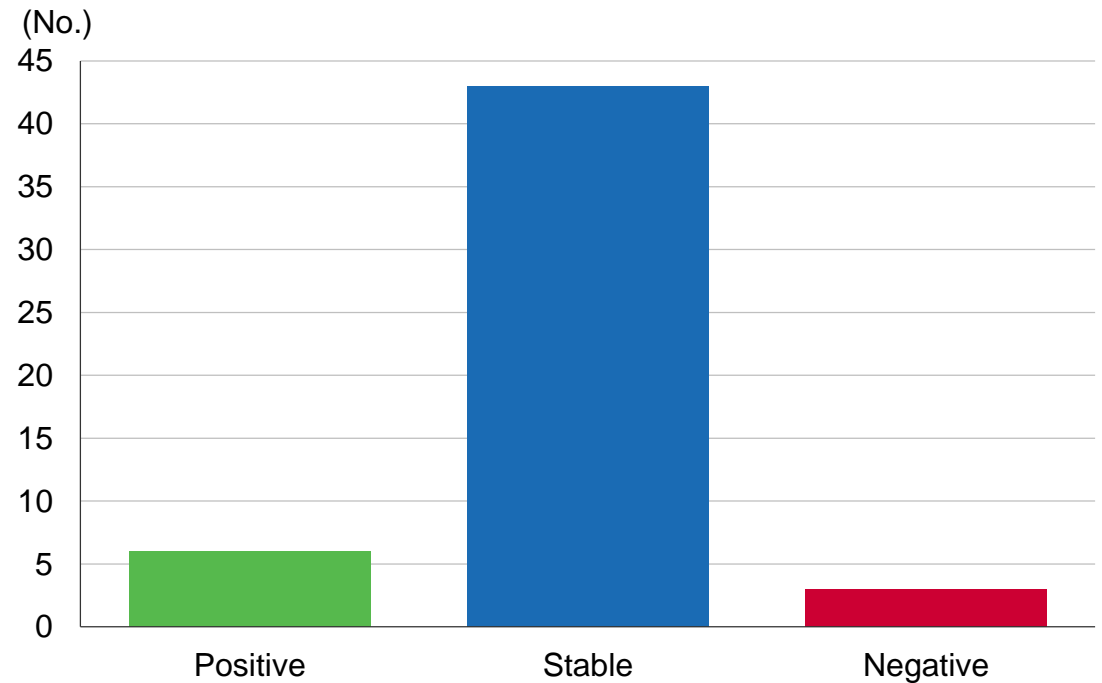
Forward Looking Rating Through the Cycle

EMEA Oil and Gas – Rating Actions



Source: Fitch Ratings

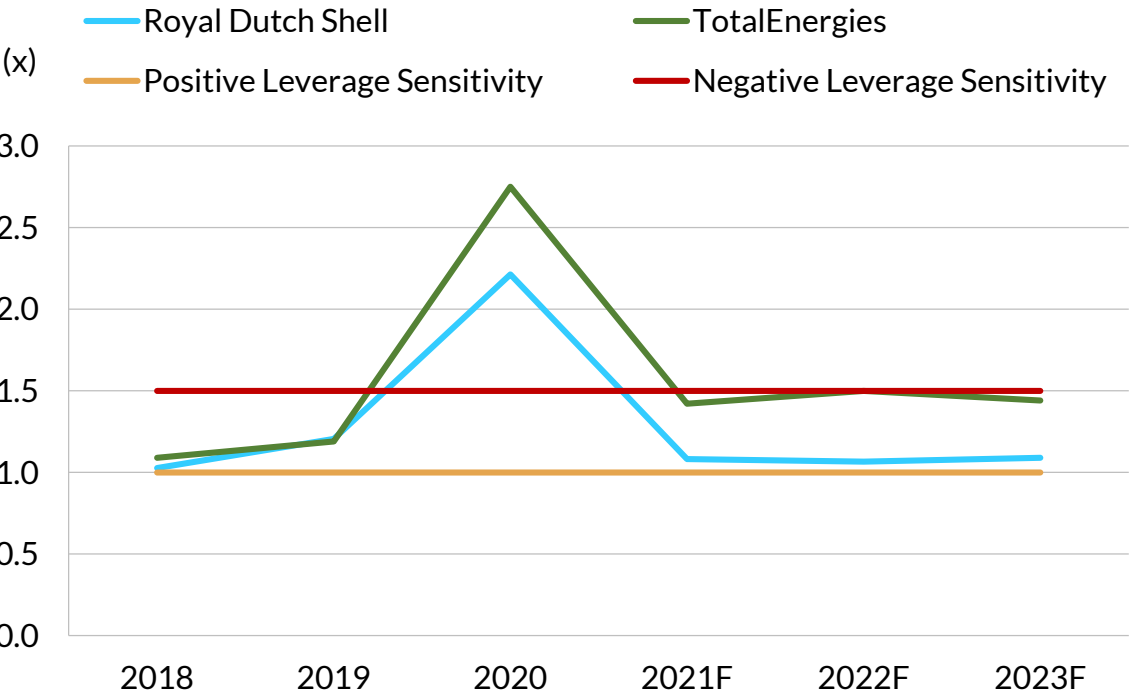
EMEA Oil and Gas - Rating Outlooks/ Watches, October 2021



Source: Fitch Ratings

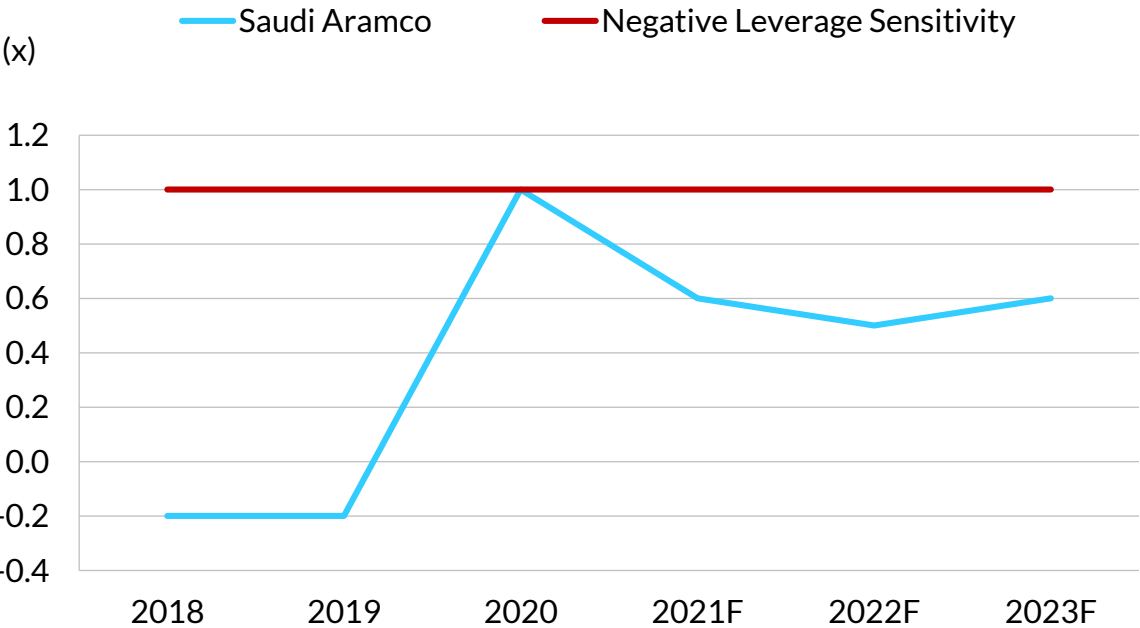
Leverage to Normalise from 2021

FFO Net Leverage Dynamics for Shell (AA-) and TotalEnergies (AA-)



Source: Companies data, Fitch Ratings

FFO Net Leverage Dynamics for Saudi Aramco



Source: Company data., Fitch Ratings



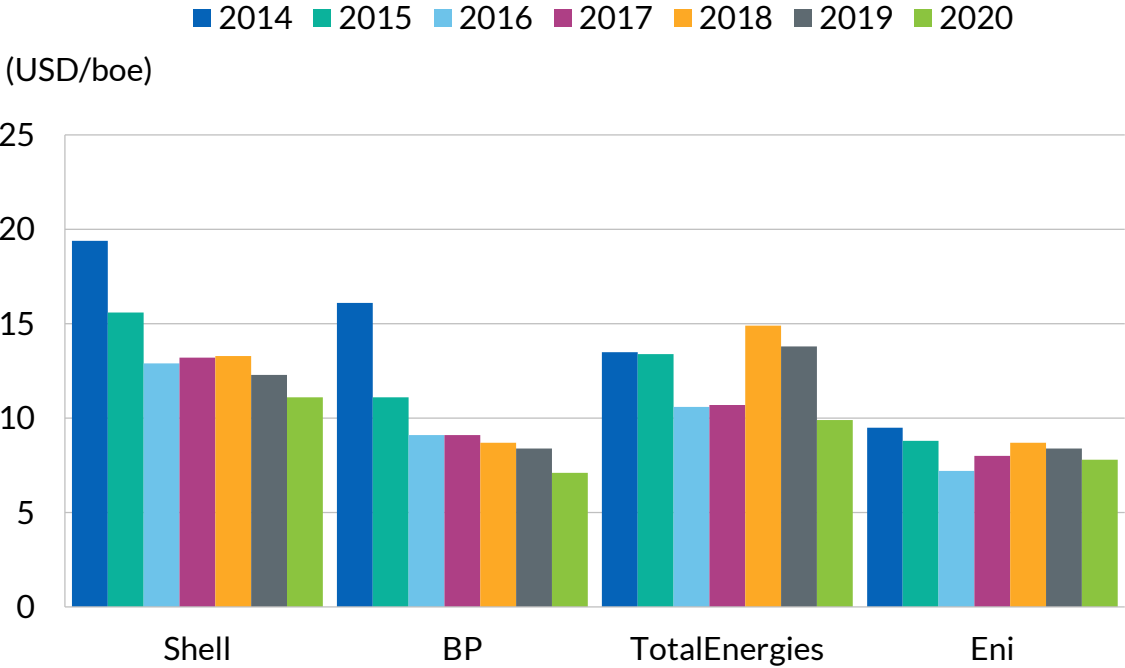
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Financial Policies

Declining Costs

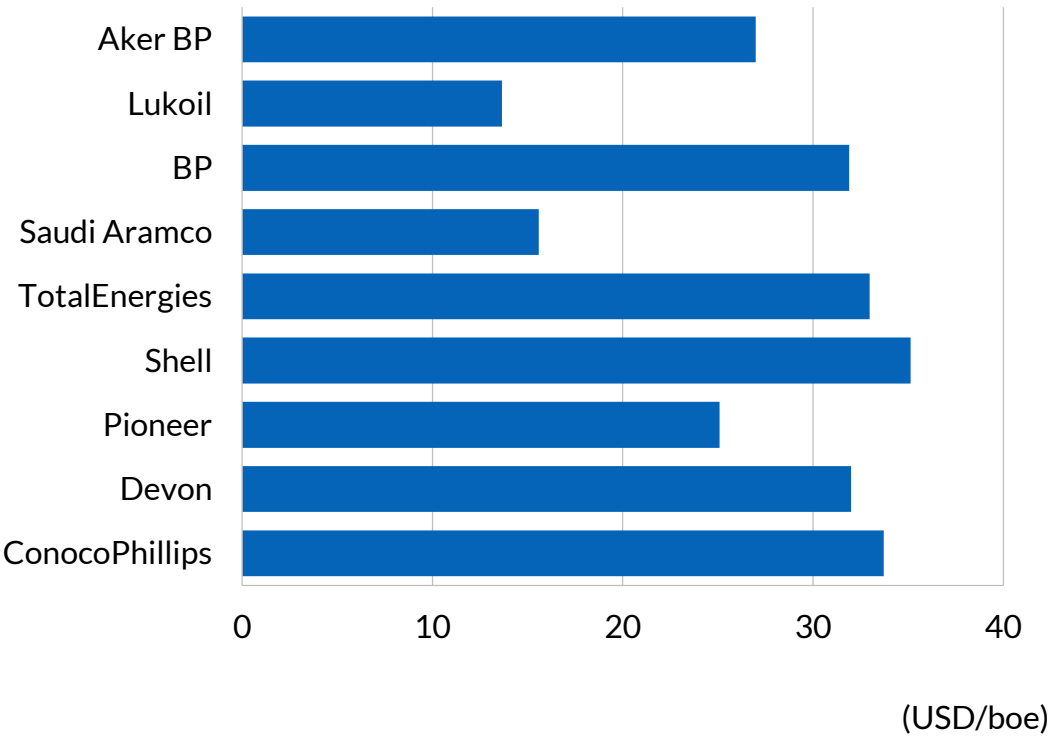
European Majors' Production Cost Evolution

Including Production Tax



Source: Companies data, Fitch Ratings

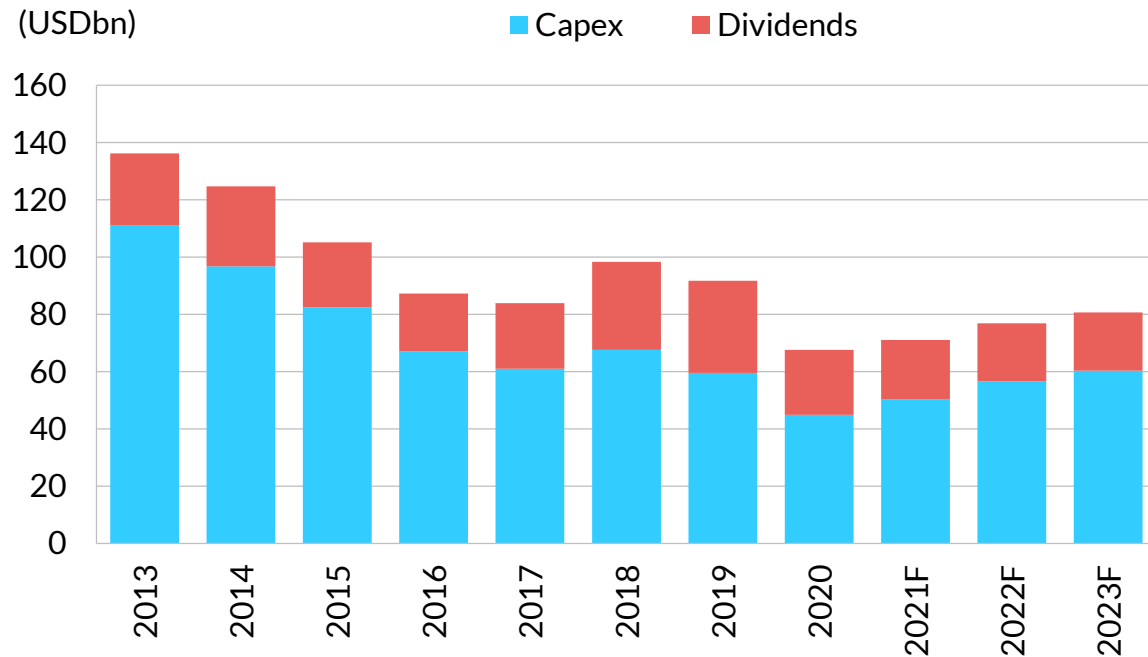
Total Full Cycle Costs



Source: Fitch Ratings

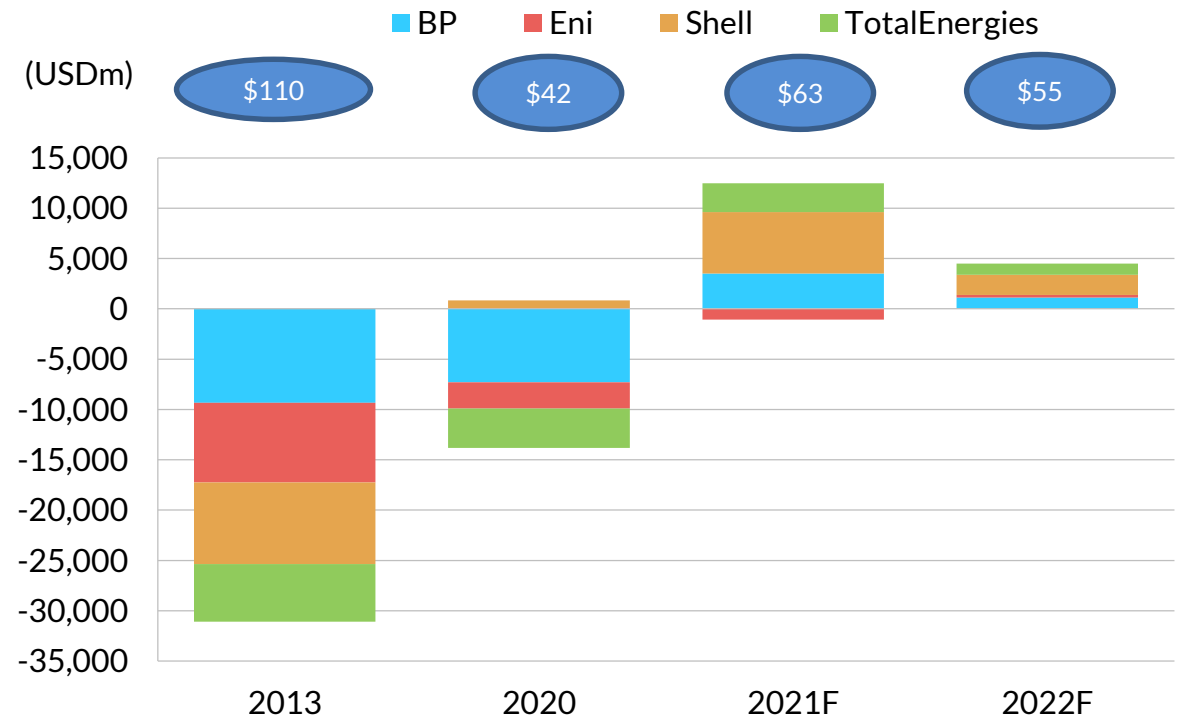
Capex, Dividend Cuts: Getting Ready For The Energy Transition

European Oil Majors' Cumulative Capex and Dividends



Source: Companies data, Fitch Ratings

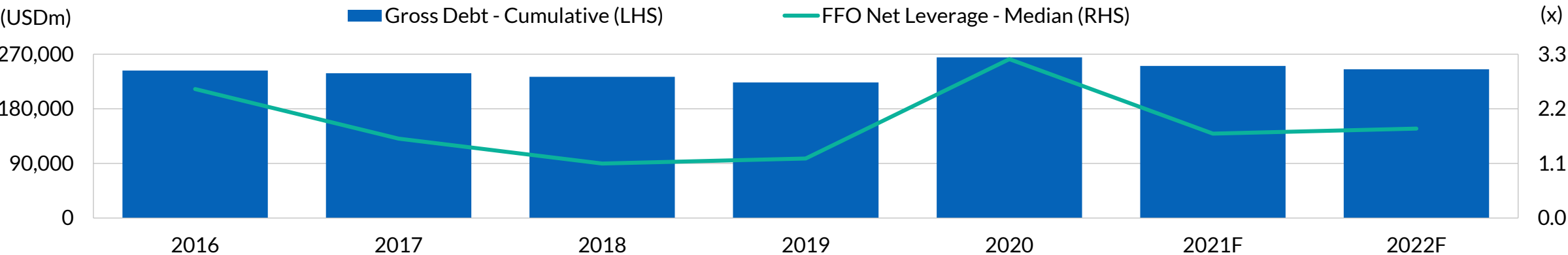
European Oil Majors' FCF After Capex and Dividends



Source: Companies data, Fitch Ratings

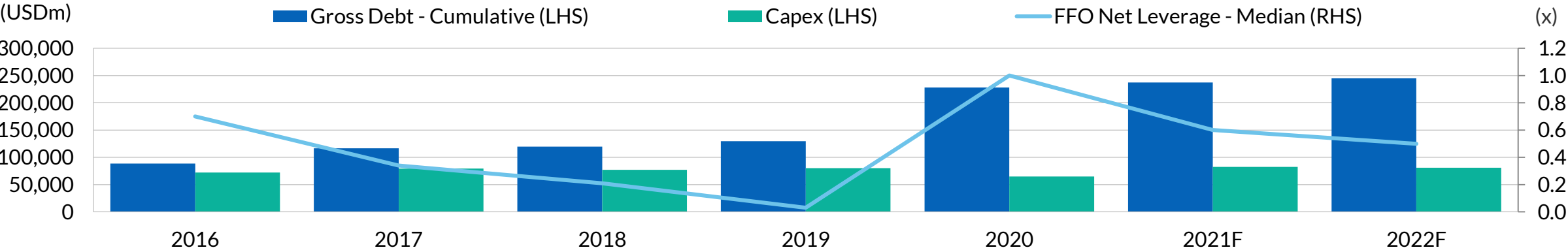
Broadly Stable Leverage

European Oil and Gas Majors' Debt and Leverage



Source: Companies data, Fitch Ratings

Selected EM EMEA Oil and Gas Companies' Debt and Leverage



Source: Companies data, Fitch Ratings

A photograph of a large wind farm with numerous white wind turbines on a grassy hill under a clear blue sky. The turbines are arranged in rows, and their blades are blurred from motion. A semi-transparent grey box with a diamond pattern is overlaid on the right side of the image.

3

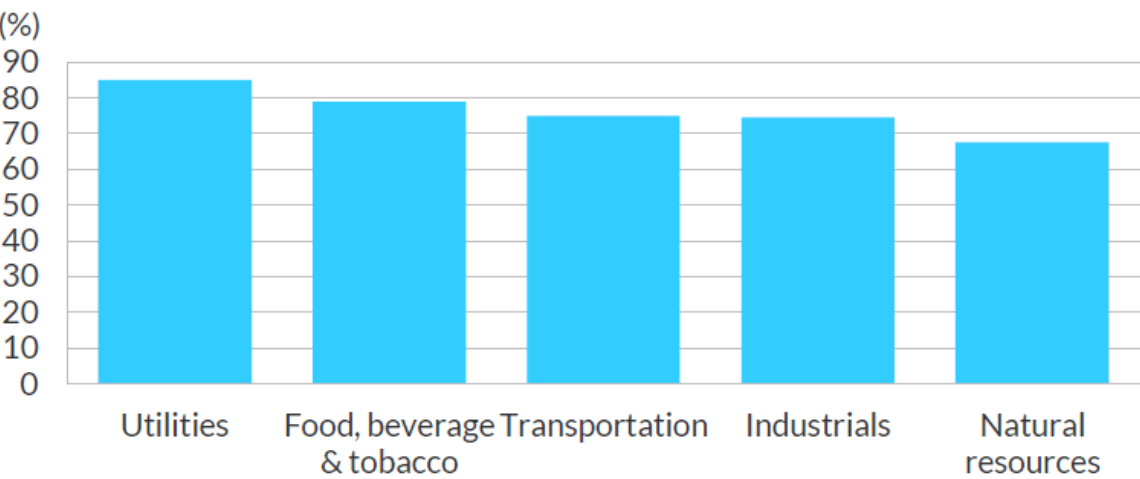
Energy Transition

FitchRatings

GHG Emissions Targets in Corporates More Common Across DM vs EM in EMEA

Developed Markets - EMEA

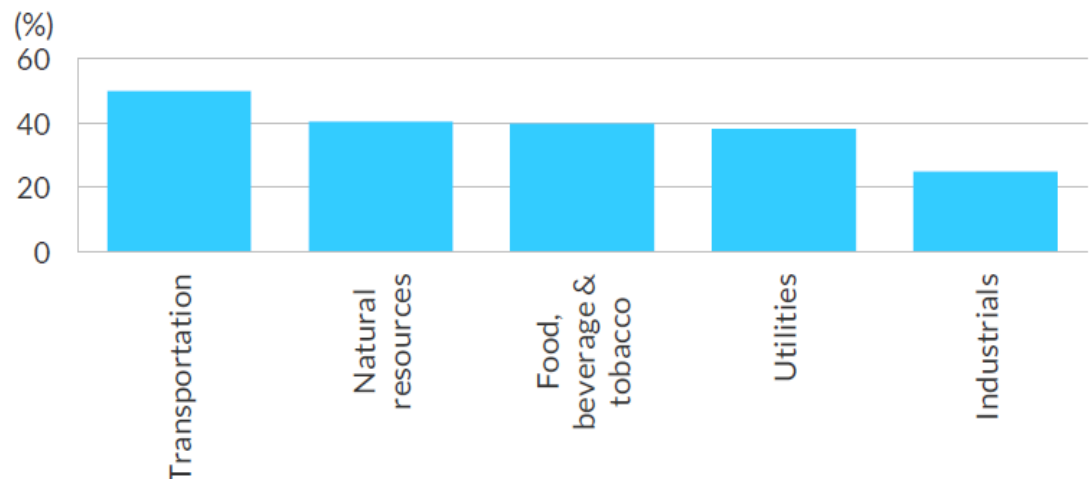
Proportion of Fitch-Rated Issuers with Public GHG Emissions Reduction Targets



Source: Fitch Ratings

Emerging Markets - EMEA

Share of Fitch-Rated Issuers with Public GHG Emissions Reduction Targets



Source: Fitch Ratings

European Oil & Gas: Companies Gearing Up for Energy Mix Transition

European Oil & Gas Majors' Minimum Decarbonisation Targets

	BP	Eni	Shell ^b	TotalEnergies
Scope 1 + 2 emissions	Net-zero by 2050	Net zero in upstream by 2030, in all activities by 2040	Net-zero by 2050	Net-zero by 2050
Scope 1 +2 +3 emissions	Net-zero across O&G production by 2050	Net-zero by 2050	Net-zero by 2050	Net-zero by 2050
Carbon intensity reduction^a	50% by 2050	Net-zero by 2050	100% by 2050, including customer actions	20% by 2030 from 2015 levels
Short-term capex commitment	USD3-4 billion a year by 2025, USD5 billion a year by 2030	EUR1.4 billion a year by 2024 on average	USD2-3 billion per year	USD3 billion a year by 2025 (renewable and power)
Renewable power capacity	20GW by 2025, 50GW by 2030 ^c	>6GW by 2025 15GW by 2030 60GW by 2050	3.9GW(net) in development	35GW by 2025, 100GW by 2030

^a The companies have different starting points for carbon intensity

^b Shell figures based on announced strategy, not including potential impact of court ruling

^c Developed to FID, excluding potential divestments

Source: Fitch Ratings








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ESG Relevance Scores and Climate Vulnerability Scores

FitchRatings

ESG Relevance Score

- An assessment of the impact of ESG considerations in the rating
- Aligned with the forecast horizon (3-5 years)
- A sector-based approach to scores

CREDIT-RELEVANT ESG SCALE		
How relevant are E, S and G issues to the overall credit rating?		
5		Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4		Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3		Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2		Irrelevant to the entity rating but relevant to the sector.
1		Irrelevant to the entity rating and irrelevant to the sector.

FitchRatings

BP plc

Corporates Ratings Navigator
Oil & Gas Production

Credit-Relevant ESG Derivation

BP plc has 12 ESG potential rating drivers

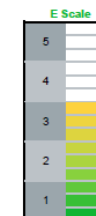
- ➔ BP plc has exposure to emissions regulatory risk but this has very low impact on the rating.
- ➔ BP plc has exposure to energy productivity risk but this has very low impact on the rating.
- ➔ BP plc has exposure to water management risk but this has very low impact on the rating.
- ➔ BP plc has exposure to waste and impact management risk but this has very low impact on the rating.
- ➔ BP plc has exposure to extreme weather events but this has very low impact on the rating.
- ➔ BP plc has exposure to land rights/conflicts risk but this has very low impact on the rating.

Showing top 6 issues

Overall ESG Scale			
key driver	0	issues	5
driver	0	issues	4
potential driver	12	issues	3
not a rating driver	1	issues	2
	1	issues	1

Environmental (E)

General Issues	E Score	Sector-Specific Issues	Reference
GHG Emissions & Air Quality	3	Emissions from OGP production	Diversification and Environmental Risk; Profitability
Energy Management	3	Energy use in OGP operations	Diversification and Environmental Risk; Profitability
Water & Wastewater Management	3	Water management (e.g. usage levels, recycling capacity)	Diversification and Environmental Risk; Profitability
Waste & Hazardous Materials Management; Ecological Impacts	3	Waste and material handling; operations proximity to environmentally sensitive areas	Diversification and Environmental Risk; Profitability
Exposure to Environmental Impacts	3	Hydrocarbon reserves exposure to present/future regulation and environmental costs	Diversification and Environmental Risk; Profitability; Financial Flexibility



How to Read This Page
ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant.

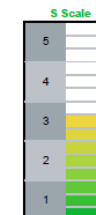
The Environmental (E), Social (S) and Governance (G) tables break out the individual components of the scale. The right-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sector-specific issue. These scores signify the credit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.

The Credit-Relevant ESG Derivation table shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far left identifies the some of the main ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the score.

Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI) and the Sustainability Accounting Standards Board (SASB).

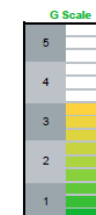
Social (S)






General Issues	S Score	Sector-Specific Issues	Reference
Human Rights, Community Relations, Access & Affordability	3	Operations proximity to areas of conflict or indigenous lands	Diversification and Environmental Risk; Profitability; Financial Flexibility
Customer Welfare - Fair Messaging, Privacy & Data Security	1	n.a.	n.a.
Labor Relations & Practices	3	Impact of labor negotiations and employee (dis)satisfaction	Profitability; Financial Structure; Financial Flexibility
Employee Wellbeing	2	Worker safety and accident prevention	Diversification and Environmental Risk; Profitability; Financial Flexibility
Exposure to Social Impacts	3	Social resistance to major projects or operations that leads to delays and cost increases	Production Size; Profitability; Financial Structure; Financial Flexibility



Governance (G)

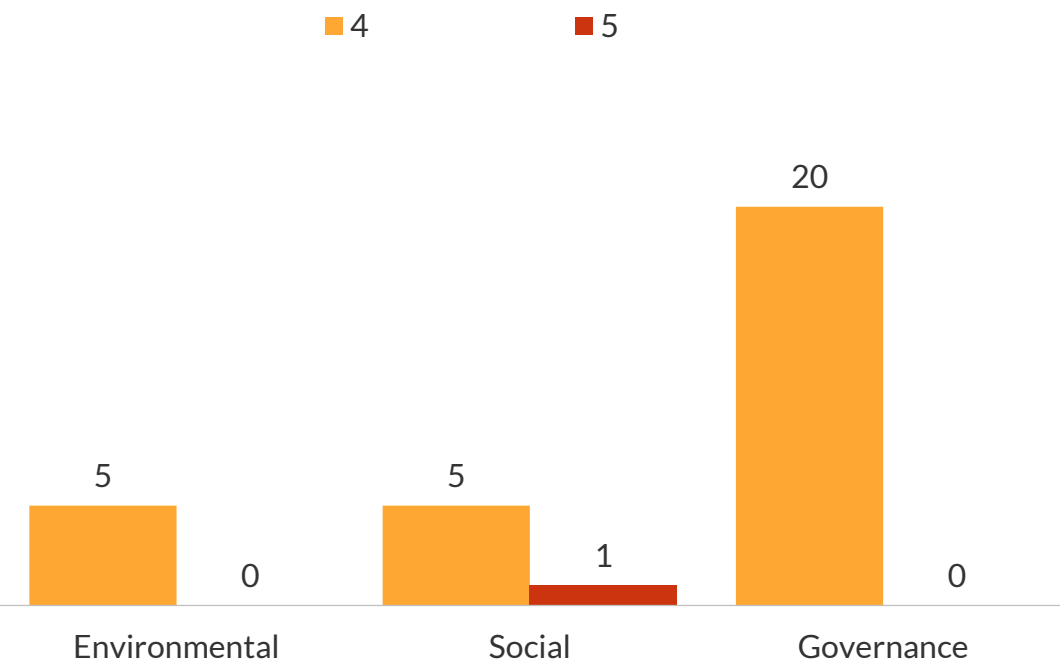
General Issues	G Score	Sector-Specific Issues	Reference
Management Strategy	3	Strategy development and implementation	Management and Corporate Governance
Governance Structure	3	Board independence and effectiveness; ownership concentration	Management and Corporate Governance
Group Structure	3	Complexity, transparency and related-party transactions	Management and Corporate Governance
Financial Transparency	3	Quality and timing of financial disclosure	Management and Corporate Governance



CREDIT-RELEVANT ESG SCALE		
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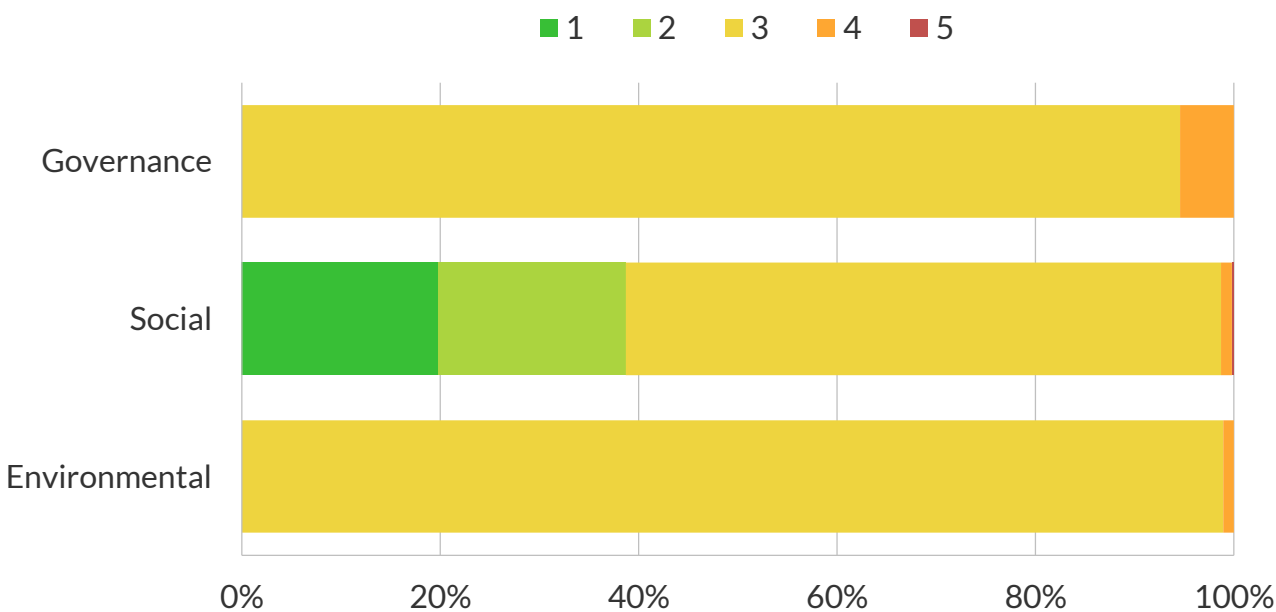
ESG.RS for Global Oil and Gas Production Companies

ESG Elements Driving Issuer Credit Impact^a



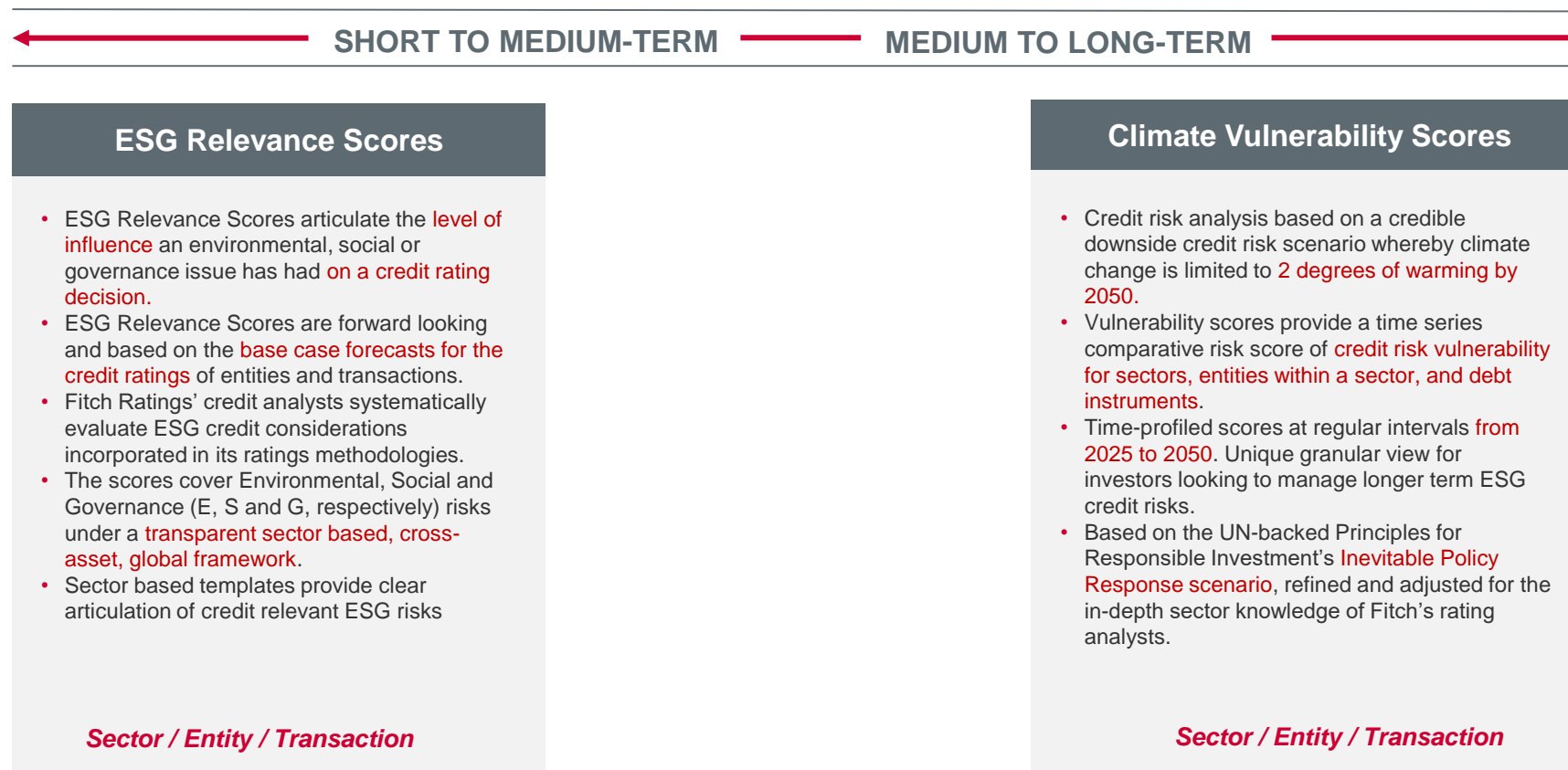
^a Chart counts the number of elements scoring '4' or '5' in each category
Source: Fitch Ratings

All ESG Elements -Total Overall Scoring Distribution^a



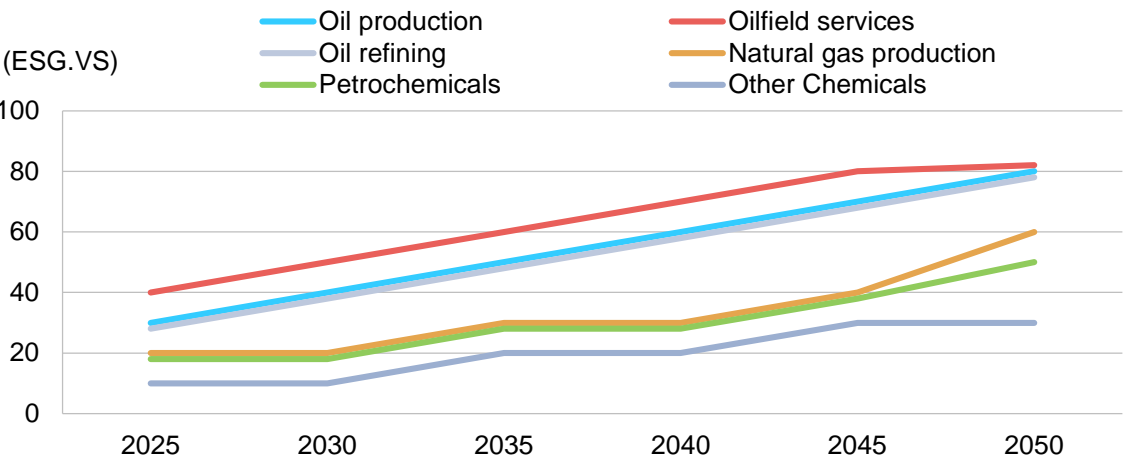
^a Table aggregates all 14 underling scores of each issuer rated
Source: Fitch Ratings

Relevance Scores and Climate Vulnerability Scores



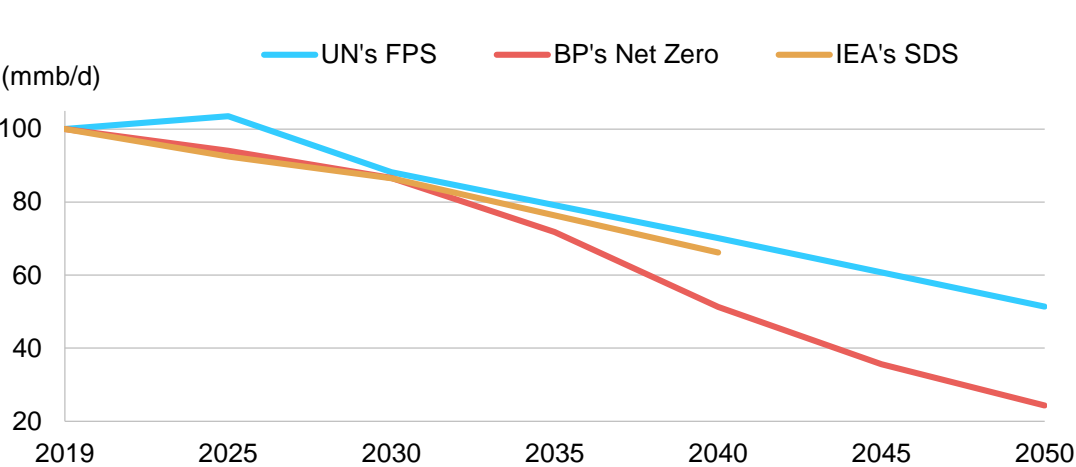
Climate Vulnerability Scores – Climate.VS

Cilmate.VS - Scores by Sub-Sector



Source: Fitch Ratings

Oil Demand by Scenario



Source: Fitch Ratings, IEA (2020), BP (2020), UN's FPS

Sector ESG.VS Definitions

	Sector ESG.VS				
	10	30	50	70	90
Description of cumulative risks to a point in time (e.g. 2050)	ESG trend neutral to positive for sector prospects	Fundamental demand drivers neutral to positive, despite major changes to existing business models or a need for heavy investment	Solid demand drivers but a need for material changes to products or production methods, which may threaten profitability	Major changes to markets, regulation and business model likely to disrupt profitability for an extended period	One or more ESG factors have the potential in a credible scenario to pose an existential threat to core business activities

Oil & Gas and Chemicals Global Climate.VS

	2025	2030	2035	2040	2045	2050
Oil production	30	40	50	60	70	80
Oilfield services	40	50	60	70	80	80
Oil refining	30	40	50	60	70	80
Liquids transportation ^a	20	30	40	50	60	80
Fuel retail	20	30	40	50	60	60
Natural gas production	20	20	30	30	40	60
Petrochemicals	20	20	30	30	40	50
Other chemicals	10	10	20	20	30	30
Integrated O&G companies	20-30	20-30	30-40	30-60	40-60	50-70

^a Our view on gas transportation and distribution is discussed in [Utilities – Long-Term ESG Vulnerability Scores](#)

Sector ESG.VS Definitions

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