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The Oil & Gas sector: towards the last drop?

An analysis of the oil and gas sector with the CIA methodology

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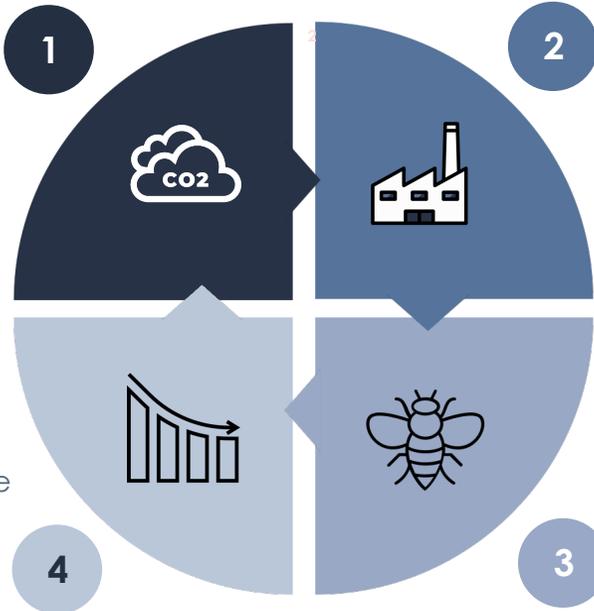
Table of contents

1. Introduction Carbon4 Finance
2. An overview of the sector
3. CIA methodology for Oil & Gas
4. A short case study
5. Where do we go from here?

Our services

Assessment of transition risks (CIA)

Carbon footprint
Scope 1, 2 & 3
Emission Savings
Climate scenario alignment



Web platform & Datafeed

Issuer Analysis
Portfolio performance

Assessment of physical risks (CRIS)

7 climate Hazards
3 IPCC Scenarios
2 time-horizons

Assessment of Biodiversity risks and Impacts (BIA-GBS™)

MSA.Km2
Scope 1, 2 & 3
10 Terrestrial and Aquatic pressures

Our approach



An innovative bottom-up technology



An international coverage (c. 400,000 instruments, corporate and sovereign)



25 analysts, each specialized in specific sector



A multi-sector approach
Listed and unlisted Assets

Climate



 **carbone4** | conseil



carbon
impact
analytics



climate
risk
impact
screening

Biodiversity



CDC BIODIVERSITÉ



biodiversity
impact
analytics

Our approach



Robust, scientific and
transparent methodologies

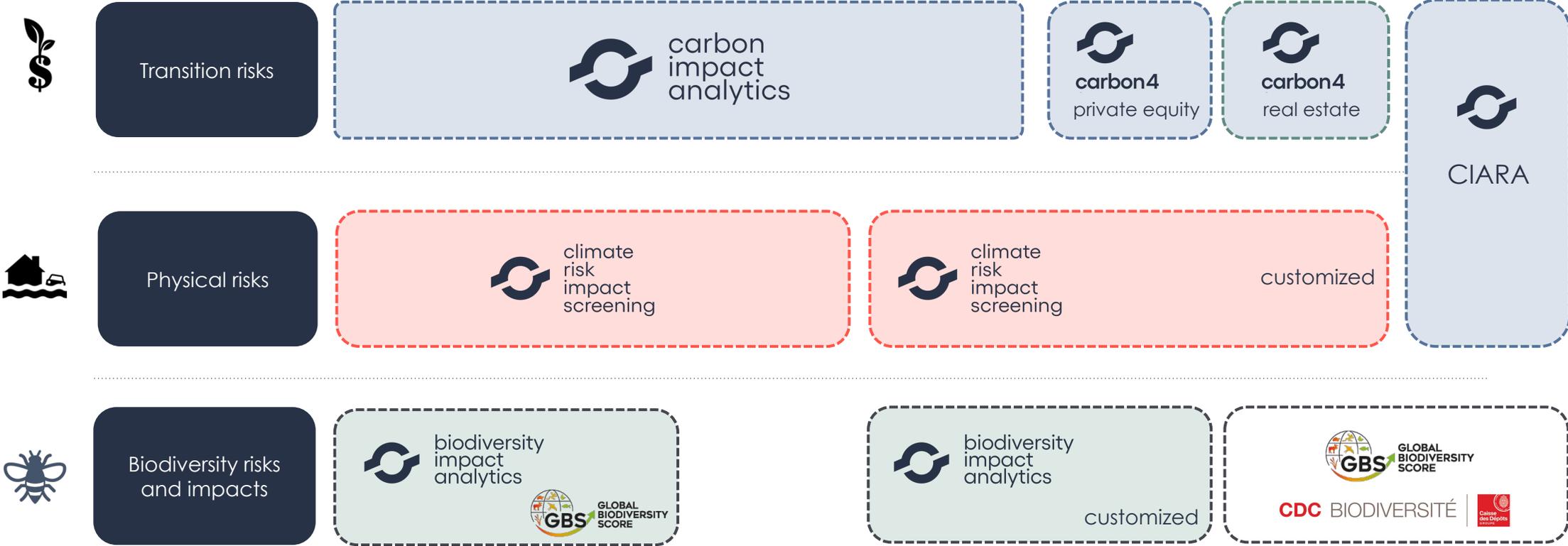
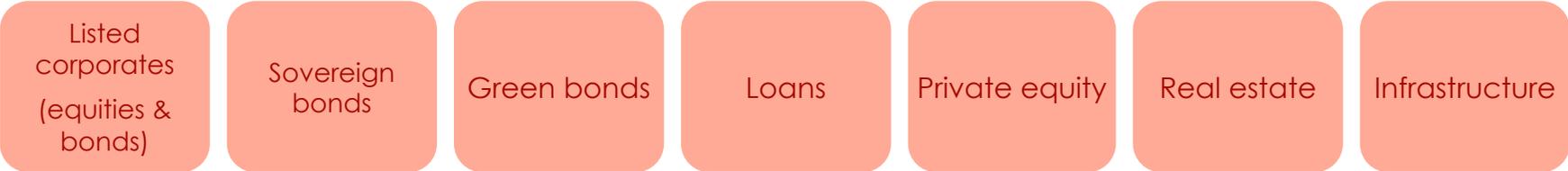


Support by methodological
experts and analysts



Customized and adapted to
Clients' needs

A comprehensive service offering with common methodological principles for all asset classes



Common methodological principles for all asset classes: bottom-up logic, measurement of Scope 3 emissions and saved emissions, qualitative forward-looking assessment, etc.

Carbon4 Finance

Carbon4 Finance, a pioneer in measuring the carbon impact of financial institutions

Securities portfolio



Reporting requirements (TCFD-compliant, Article 29, SFDR)
Transition and Physical risks
Bottom-up data on 60 sectors (Equity, Sovereign, Green bonds)
Additional sectoral data (energy, green/fossil shares, reserves, etc.)

Assets & Loan Book



Carbon footprint of Loan & Credit Portfolios
Implementation of climate score into credit process
Exposure's assessment of central banks assets
Research papers on climate risk impacts on financial value

Other collaborations



Indices – Recast of Low Carbon 100, Euronext's low carbon index
Fintech – positive impact financing and savings platforms
Data integration into platforms
Schools – conferences on the role of finance in climate mitigation, research paper

Climate data provider of the Eurosystem



European Central Bank +20 Central Banks in Europe

Carbon4 Finance

BIA-GBSTM, trusted to assess the biodiversity impact of investment portfolio

Securities portfolio

Impact of an investment portfolio on biodiversity
Communicate impacts on biodiversity
Engagement with companies

Transparency & research

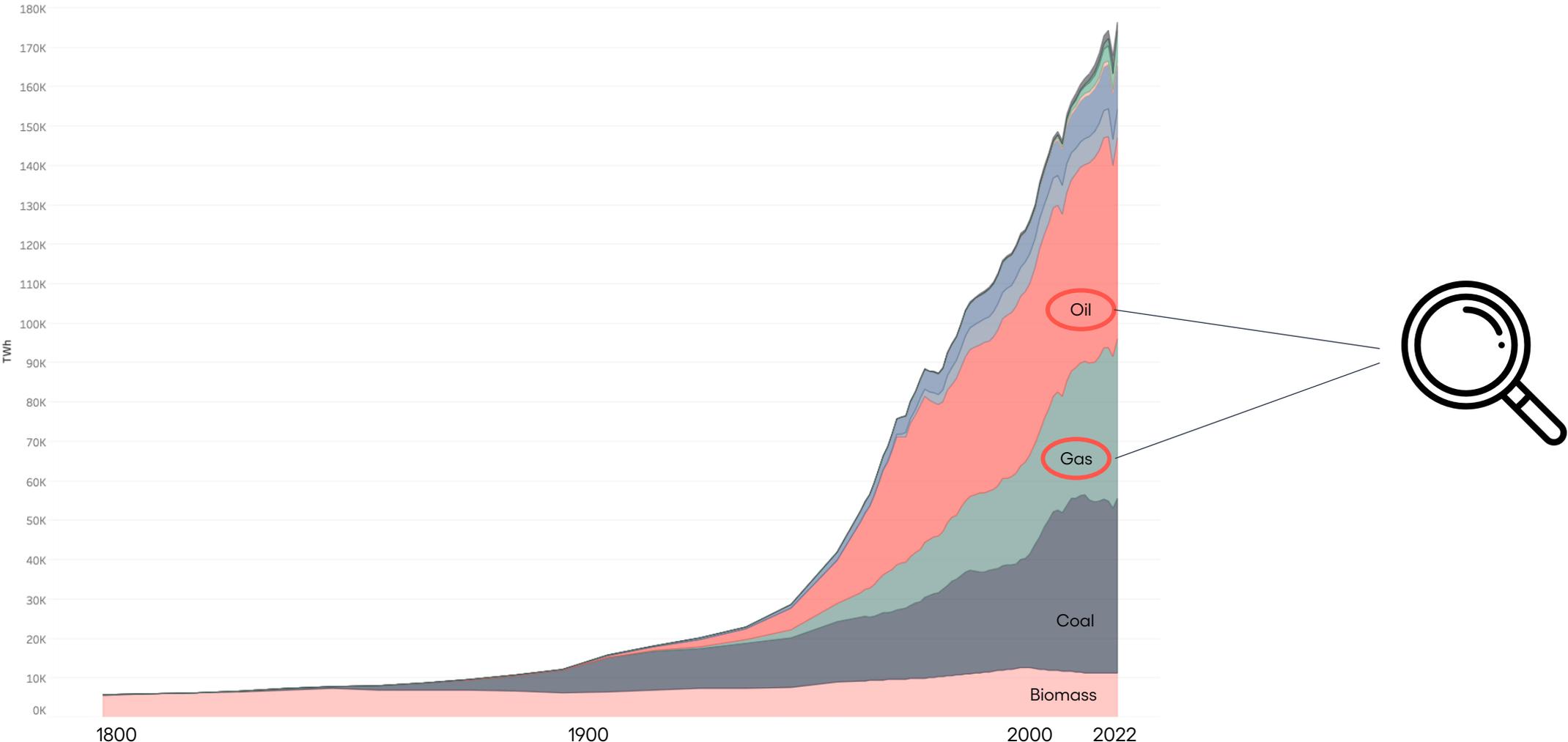
Regulatory requirements (Article 29 French Energy & Climate Act)
Research paper on biodiversity risk impacts on financial valuation
Reporting

Table of contents

1. Introduction Carbon4 Finance
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3. CIA methodology for Oil & Gas
4. A short case study
5. Where do we go from here?

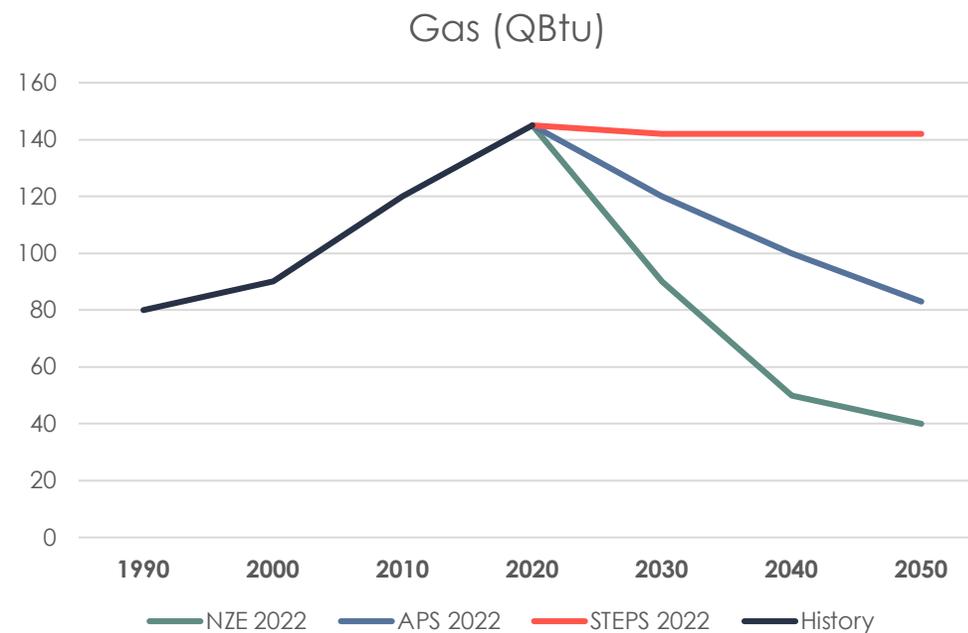
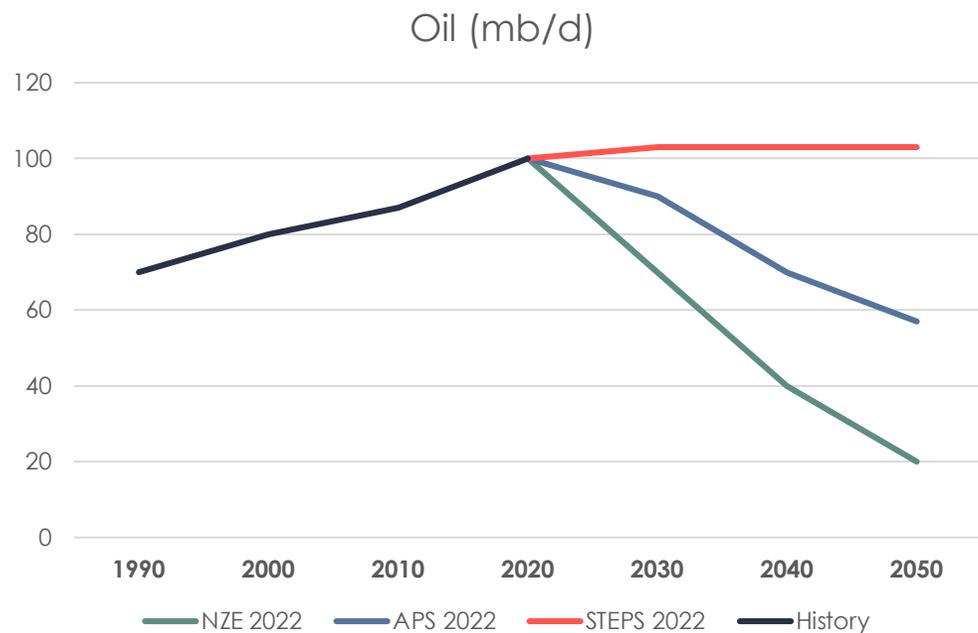
Global energy consumption has risen steadily over the last two centuries

Global energy consumption, by type of energy, in TWh



A drastic reduction of our hydrocarbon consumption is needed to achieve our climate objectives

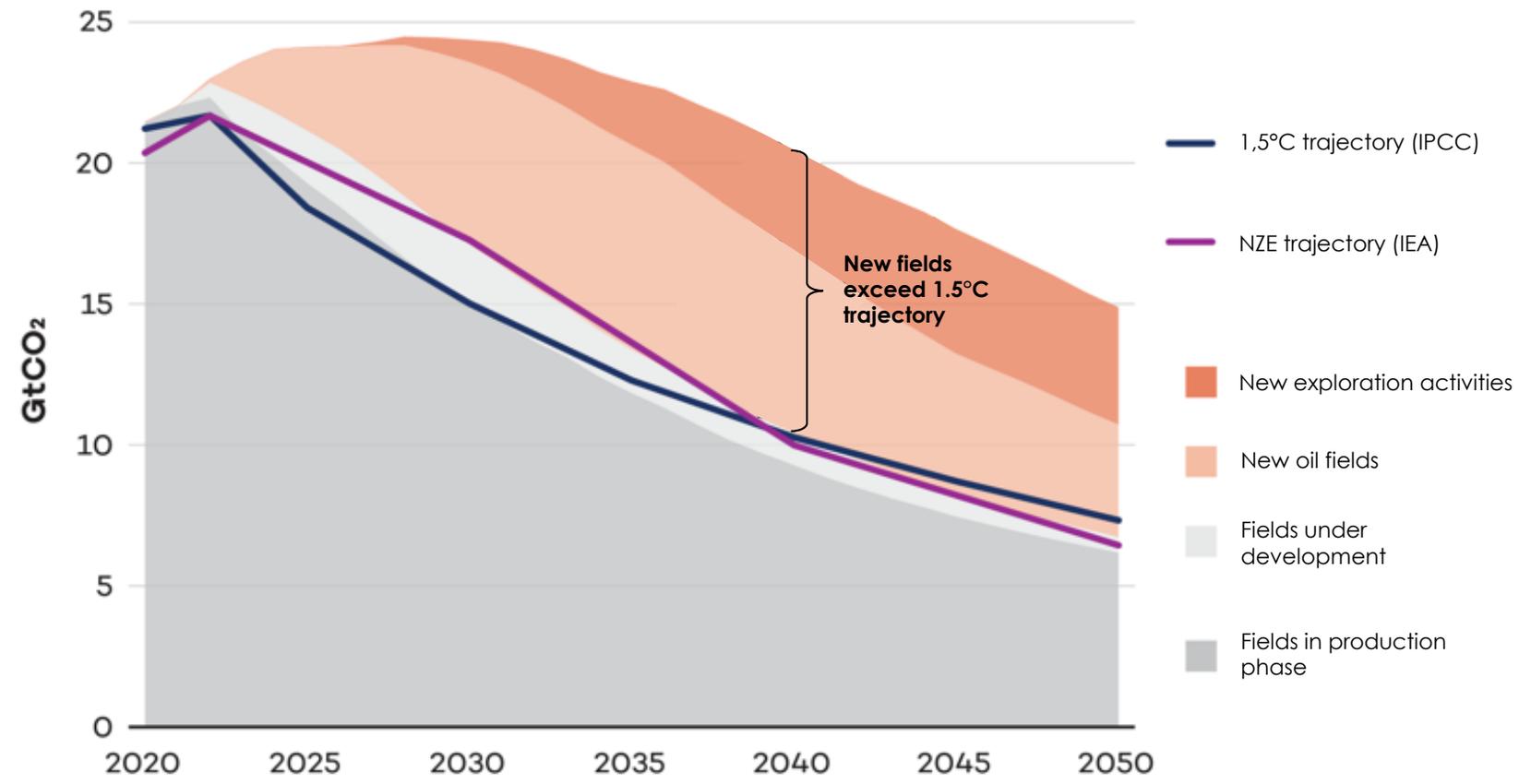
Hydrocarbon consumption trends to 2050, by scenario



Source: Resources for the Future

The oil industry is moving in the opposite direction of climate objectives

Global hydrocarbon production trends, various scenarios



The sector is exposed to a variety of transition risks



Policy

- Increasing price of GHG emissions
- Heavier emissions-reporting obligations
- Regulation of existing products and services



Market

- Changing consumer behaviors
- Volatile hydrocarbon prices



Technology

- Substitution of existing products with lower-emissions options
- Unsuccessful investment in new technologies
- Costs to transition to lower emissions technologies



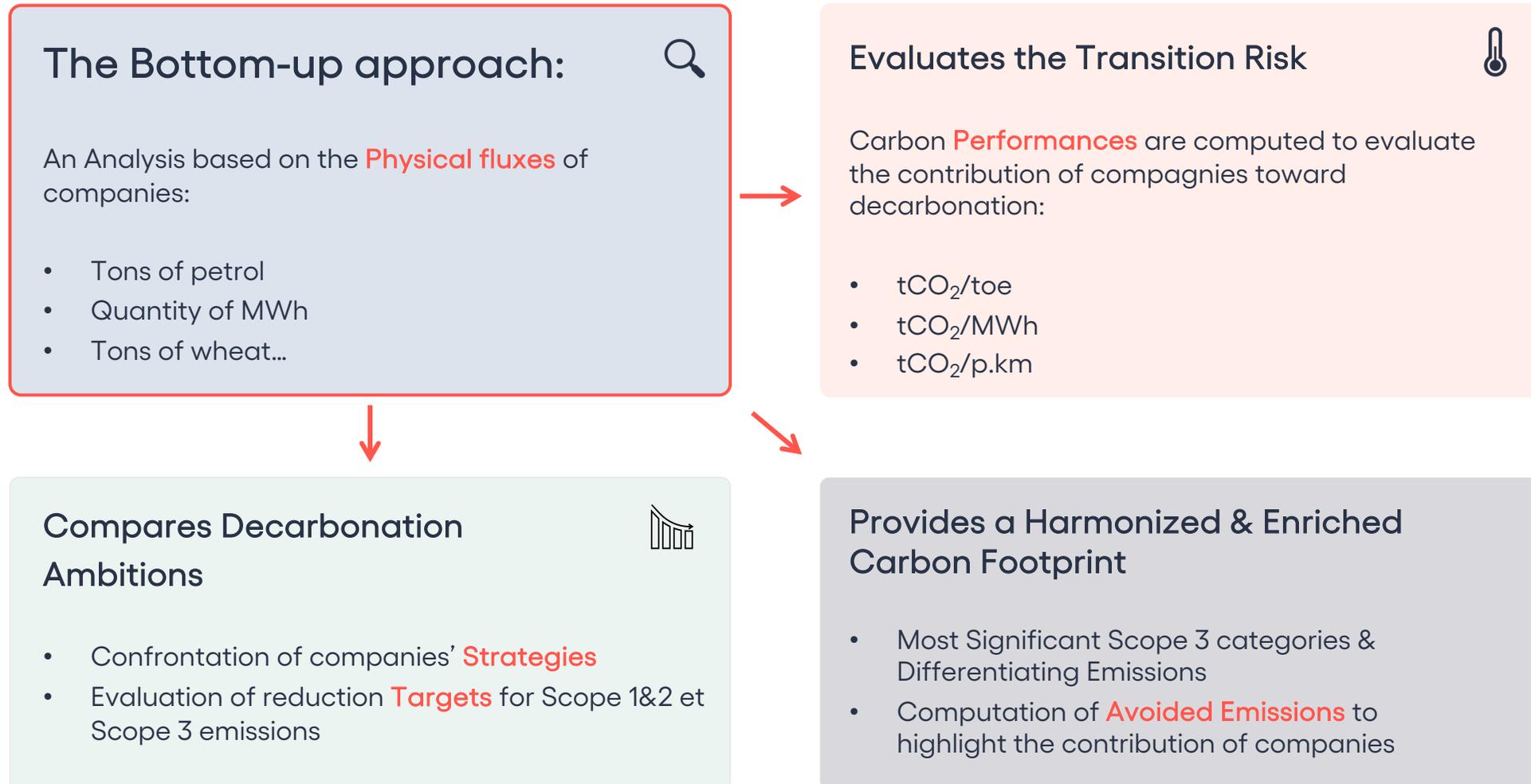
Reputation

- Difficulty in receiving financing from investors
- Stigmatization of the sector
- Increased stakeholder concern or negative stakeholder feedback

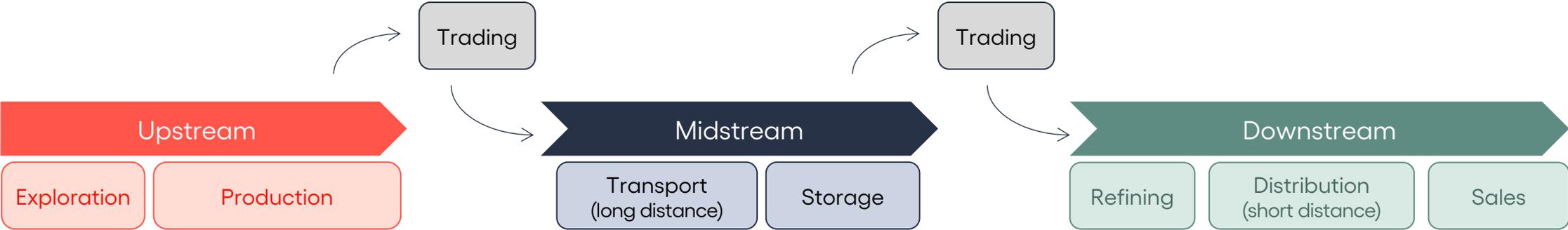
Table of contents

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3. CIA methodology for Oil & Gas
4. A short case study
5. Where do we go from here?

The key methodological pillars of CIA



The CIA methodology covers the entire value chain

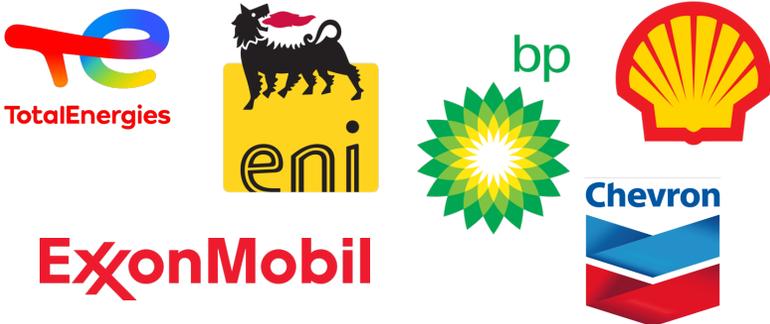


Company profiles

Independent
assets at a single stage in the value chain



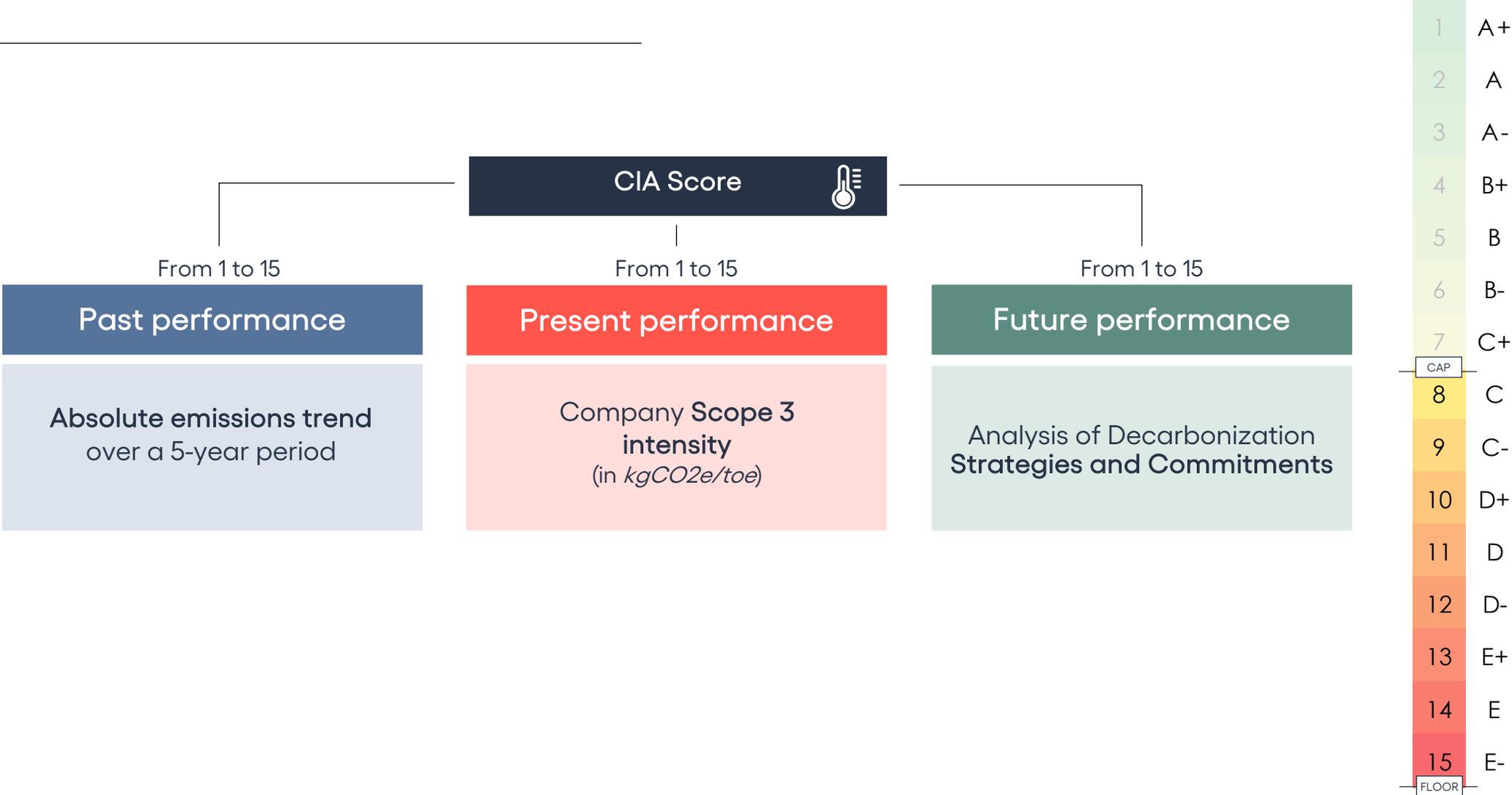
Integrated players
assets at several stages in the value chain



Intermediary players



Establishing an order of merit between companies of sector



Over the past 5 years, oil and gas volumes have increased by 31% within our sample

Past performance



Evolution of Scope 1, 2 & 3 emissions over the last five years, per company

Companies that mainly exploit gas receive a better performance rating than companies which mainly exploit oil

Present Performance

ExxonMobil



How do the strategies of the largest companies in the sector compare?

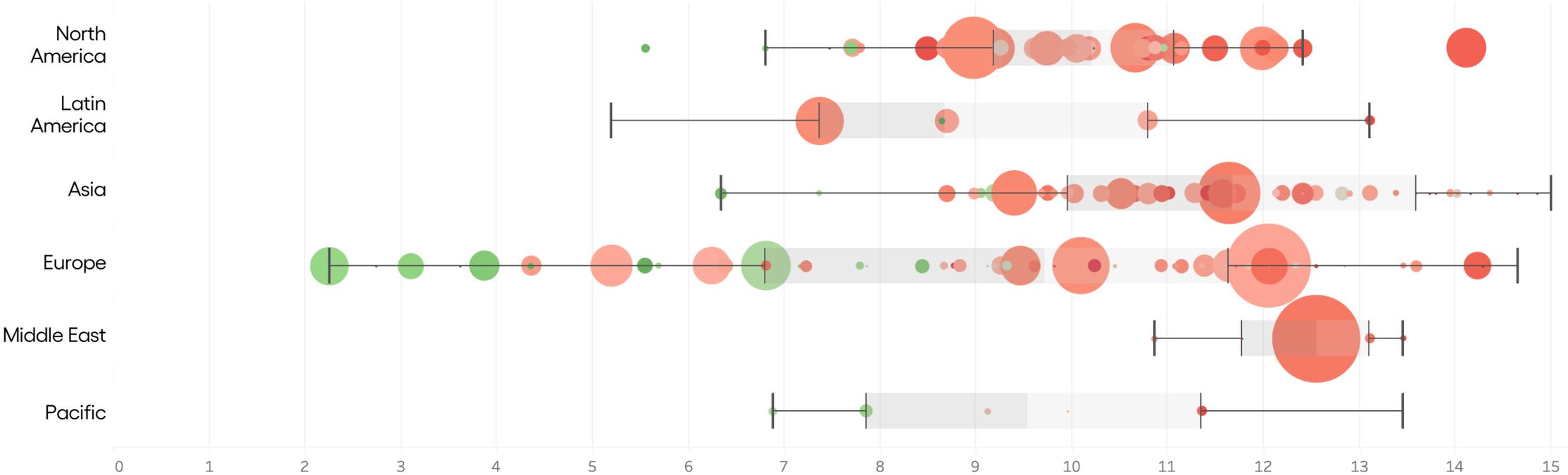
Performance Future

Focus on the strategies of five oil companies

Company	Strategy	Low-carbon investments	Scope 3 emissions reduction targets
BP	<ul style="list-style-type: none"> BP plans to reduce operational emissions (Scope 1&2) by around 50% by 2030 BP has set a short-term deadline for reducing its hydrocarbon volumes 	<ul style="list-style-type: none"> BP invests around 17% of its CAPEX in low-carbon activities (renewable energies, recharging of electric vehicles, etc.) 	<ul style="list-style-type: none"> BP plans to reduce emissions linked to the combustion of products sold by around 35% by 2030 (using 2019 as the reference year).
Eni	<ul style="list-style-type: none"> Eni plans to reduce its Scope 1&2 emissions by 40% by 2025 (using 2018 as the base year) Eni expects gas to account for 90% of its production in 2050, but does not cap its gas volumes 	<ul style="list-style-type: none"> Eni invests 25% of its CAPEX in low-carbon activities (renewable energies, energy efficiency, carbon capture and storage, etc.) 60 GW of renewable electricity generation capacity by 2050 	<ul style="list-style-type: none"> Eni has set itself a target of reducing its Scope 3 emissions by 35% by 2030 compared with 2018 levels
Total Energies	<ul style="list-style-type: none"> TE plans to reach a plateau in petroleum production by 2025, while significantly increasing its gas volumes TE plans to increase its renewable energy production capacity tenfold between 2021 and 2030 	<ul style="list-style-type: none"> TE is investing around 25% of its CAPEX in low-carbon activities (renewable energies, biofuels, green hydrogen, etc.). 100 GW of renewable electricity generation capacity by 2050 	<ul style="list-style-type: none"> TE has defined two Scope 3 reduction targets: the first aims to cap these emissions at their current level (400 Mt) in 2030, and the second aims to reduce the intensity of products sold by 20% by 2030 (using 2015 as the reference year).
ExxonMobil	<ul style="list-style-type: none"> ExxonMobil has not defined a cap on its hydrocarbon volumes and is investing heavily in unconventional resources. ExxonMobil has, however, set itself a target of reducing its Scope 1&2 emissions by 20% by 2030, using 2016 as the base year. 	<ul style="list-style-type: none"> ExxonMobil invests 10% of its CAPEX in low-carbon activities, but the exact content of these investments is difficult to verify. ExxonMobil invests a significant proportion of its CAPEX in E&P. 	<ul style="list-style-type: none"> ExxonMobil has not set a target for reducing its Scope 3 emissions.
Saudi Arabian Oil Co.	<ul style="list-style-type: none"> Saudi Aramco has set a Scope 1&2 emissions reduction target in intensity, which is considered irrelevant. Saudi Aramco has no plans to reduce its hydrocarbon production volumes, on the contrary, it plans to increase them. 	<ul style="list-style-type: none"> The overwhelming majority of Saudi Aramco's investments are aimed at oil and gas development and production projects. 	<ul style="list-style-type: none"> Saudi Aramco has not set a Scope 3 emissions reduction target.

European companies are ahead of their peers regarding their energy transition

Breakdown of future performance ratings by continent



Establishing an order of merit between integrated companies

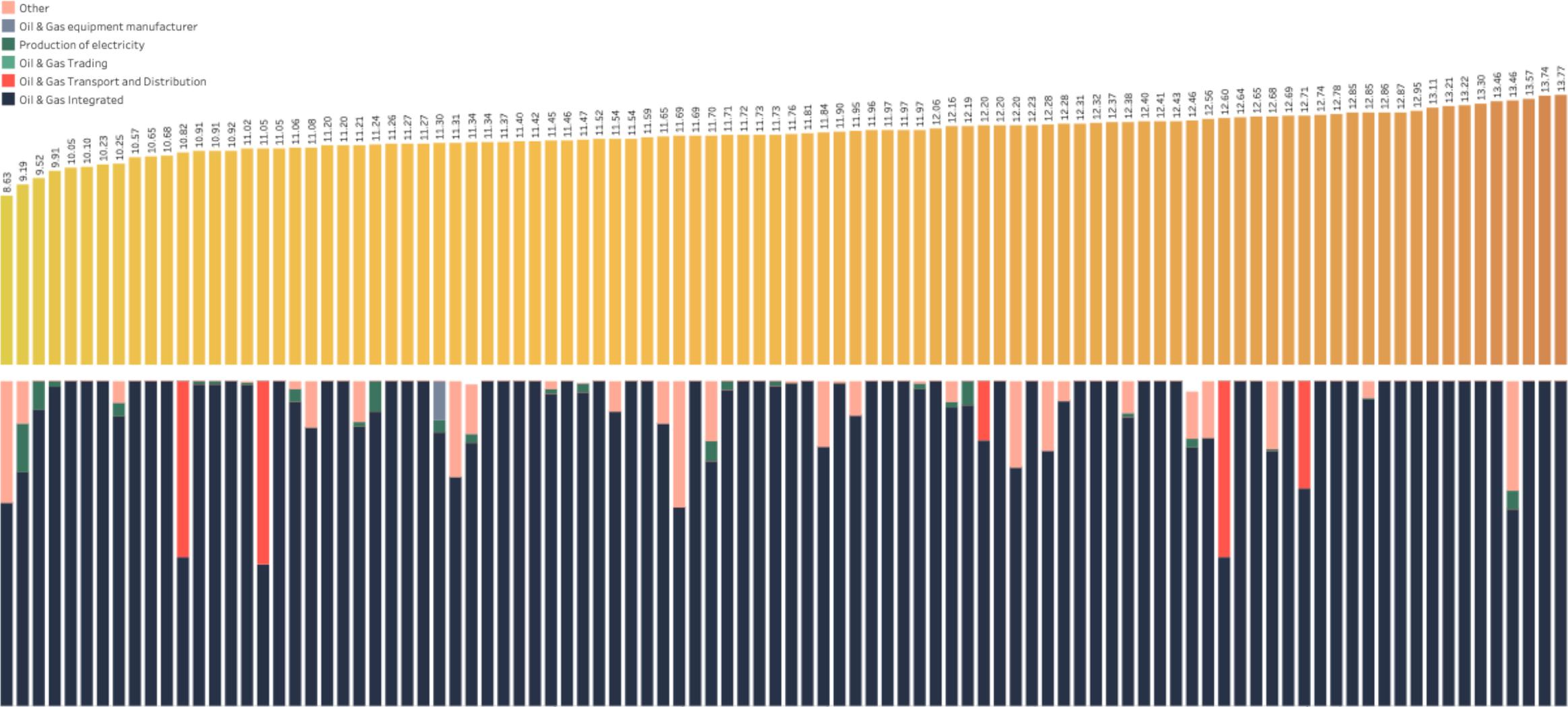


Table of contents

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TotalEnergies, an epitome of virtue?



The company is first and foremost a producer of hydrocarbons



Oil & Gas

98,6%

PAST
2017 - 2022

+7%
between N-5
and N

Scope 1, 2 & 3
emissions trends

11.5/15

PRESENT
2022

2 838
kgCO2e/toe

34% gas in the
product mix

11.5/15

Power generation

1,1%

PAST
2017 - 2022

2,37 °C

Scope 1&2
evolution
alignment
temperature

6/15

PRESENT
2021

285
gCO2e/kWh

Carbon intensity
of the power
generation mix

4/15



Electricity sales

0,3%

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Table of contents

1. Introduction Carbon4 Finance
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3. CIA methodology for Oil & Gas
4. A short case study
5. Where do we go from here?

Record profits jeopardize the energy transition of European majors



Exclusive: Shell cuts low-carbon jobs, scales back hydrogen in overhaul by CEO

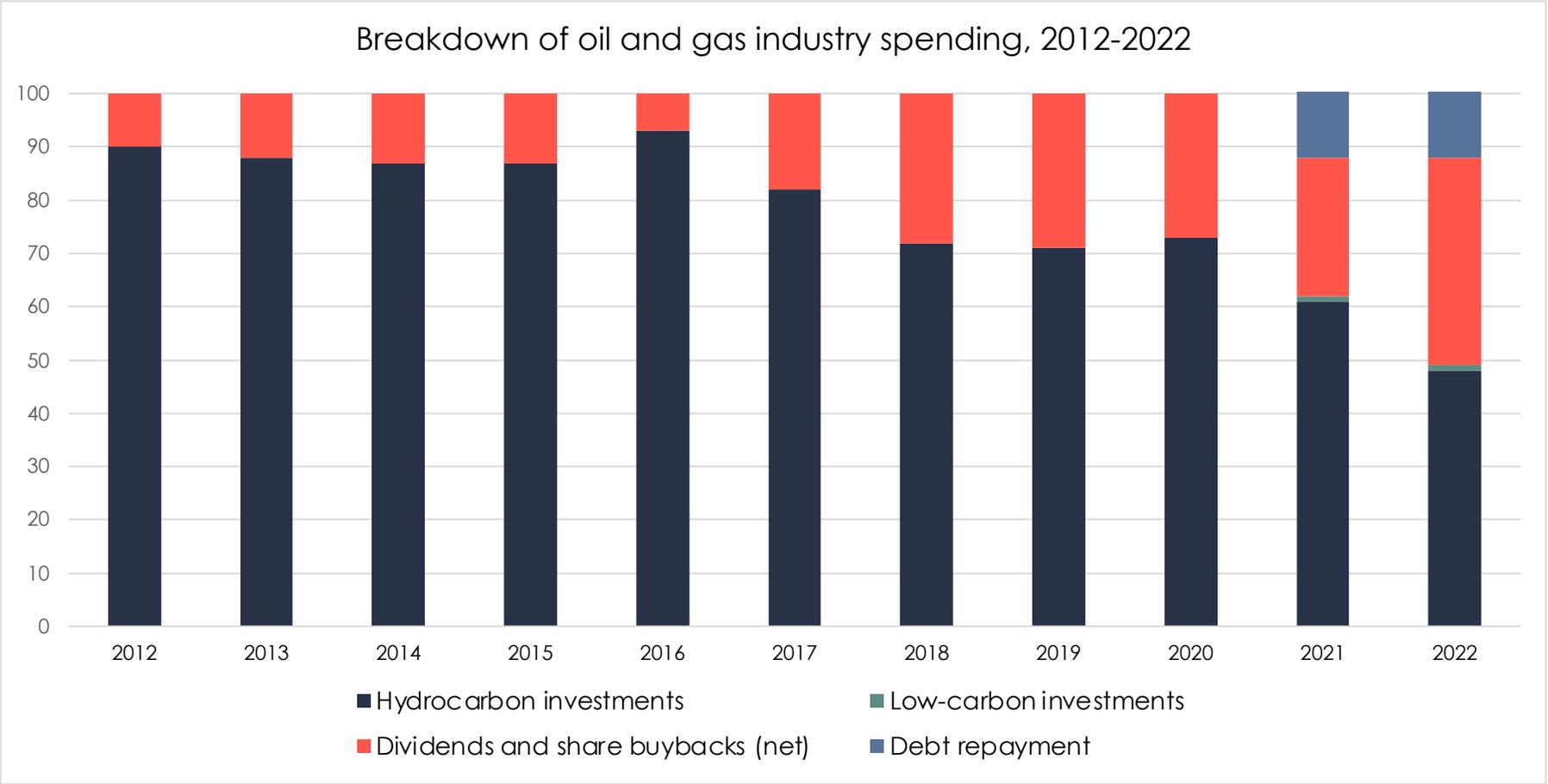
In its 2021 strategy, the company said it would aim for “an expected gradual reduction in oil production of around 1-2 per cent each year”.

Shell now says that production will remain stable until 2030, and it will invest \$40 billion (€36.7 bn) in oil and gas production between 2023 and 2035.

Aims	2025 target	2030 aim
① Net zero operations* Scope 1 and 2	20% ^a	50% ^a 30-35% ^b
② Net zero production* Scope 3	10-15% ^{ac} 20% ^b	20-30% ^{ac} 35-40% ^b

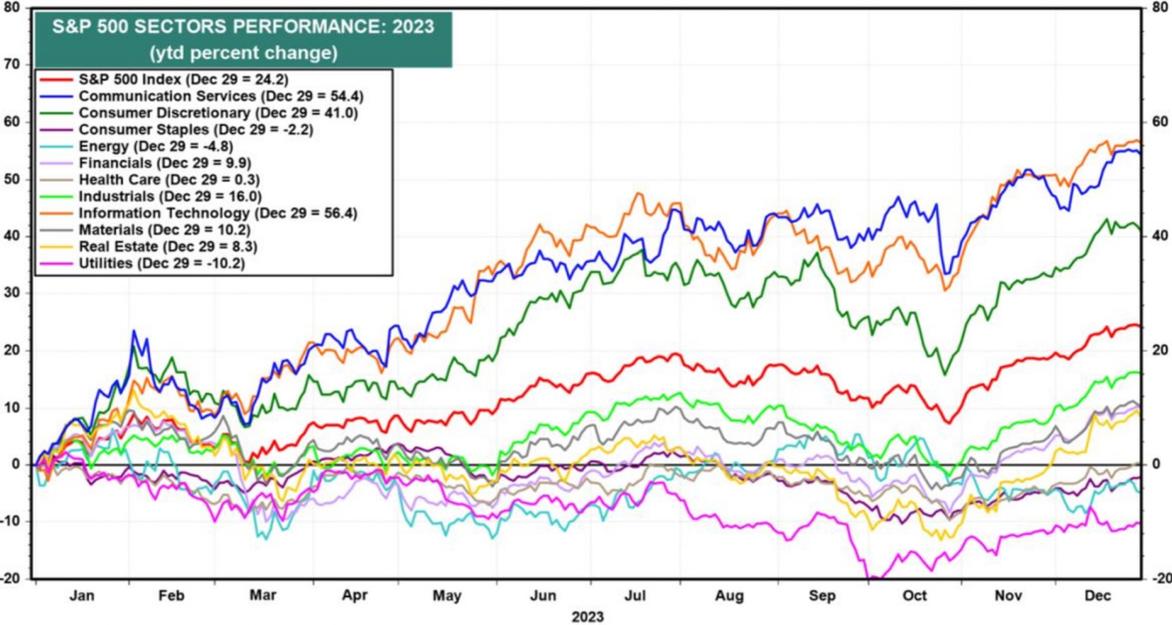
c Updated February 2023. We are now targeting a 10-15% reduction by 2025 compared to the 2019 baseline (previously a 20% reduction) and aiming for 20-30% reduction by 2030 (previously a 35-40% reduction).

Big Oil, Big Profits



Source: International Energy Agency

Fiduciary responsibility: the Trojan horse of transition?



Source: LSEG Datastream and © Yardeni Research.

US Public Pensions Are Paying Huge Price for Not Divesting From Fossil Fuels, Report Shows

Value of \$10,000 invested in 2014



Source: S&P • Rebased total return
Lower line represents the S&P 500 Energy Index



Questions?



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