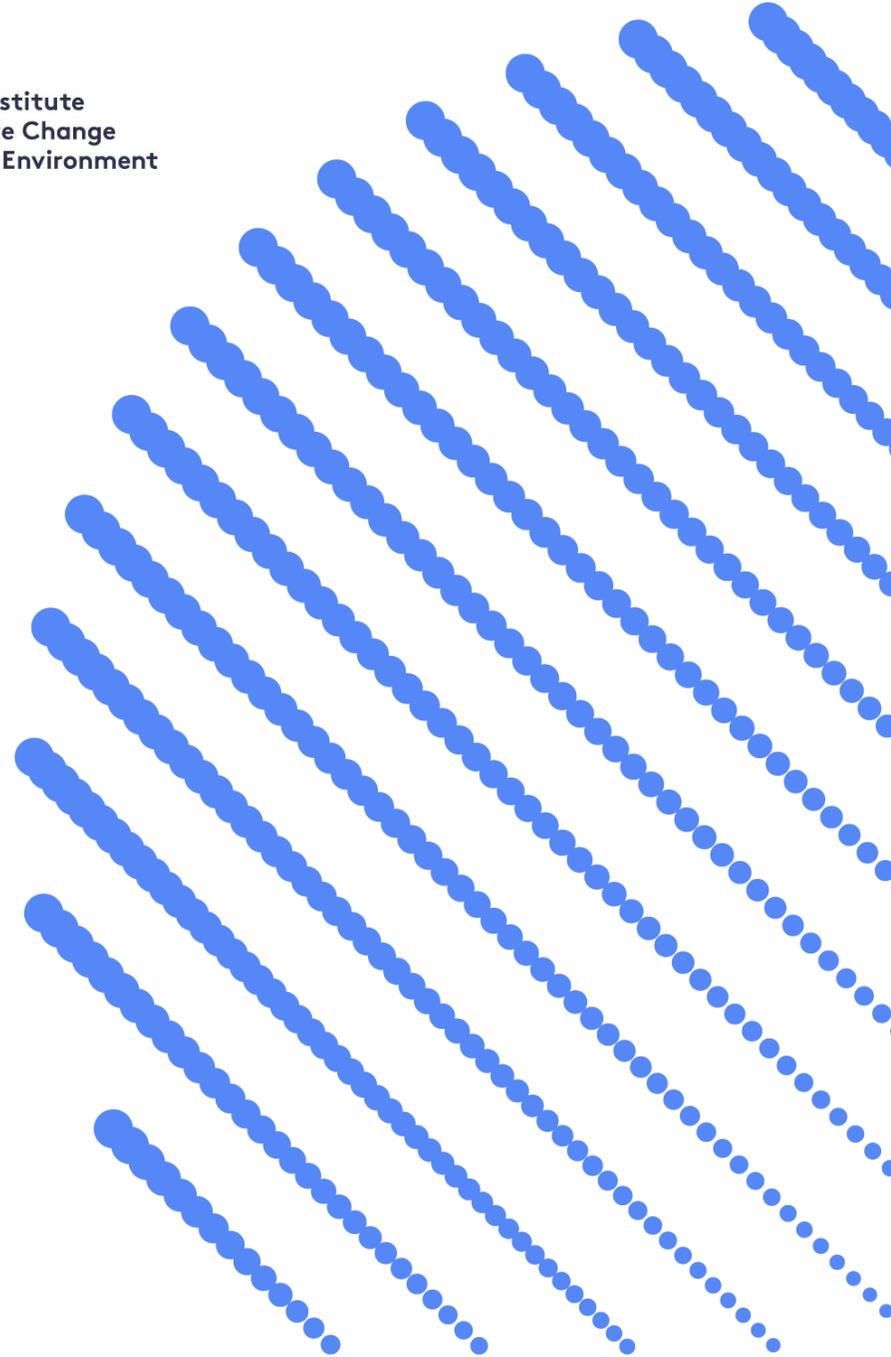




# Carbon Performance: Energy

## TPI Centre Scorecard 2023

December 2023



# Introducing the TPI scorecards

- The TPI Centre's 2023 'scorecards' consolidate the results of new Carbon Performance assessment into key insights.
- These results offer a unique understanding of how sectors – and their respective companies – are approaching the task of reducing their carbon emissions and addressing the challenge of climate change.
- This Energy cluster scorecard is the second in the 2023 series. It follows the publication of the [Industrials and Materials cluster scorecard](#) in October 2023.
- The scorecards now include the TPI Centre's 2023 Management Quality assessment results, offering investors a more comprehensive view of a sector's transition to a low-carbon economy.
- Key analyses within each scorecard include:
  - ✓ **Alignment assessment:** Evaluation of alignment with various climate scenarios, including 1.5°C, broken down by sectors and timeframes (2025, 2035 and 2050).
  - ✓ **Performance over time:** Comparison of consecutive assessment cycles to highlight key trends.
  - ✓ **Carbon management and governance:** Sector-specific results from TPI's Management Quality assessment, featuring the recently introduced Level 5 on transition planning and implementation.<sup>1</sup>



1. The Management Quality framework is based on a set of indicators that test whether a company has implemented a particular carbon management practice. Please see TPI's Methodology report: [Management Quality and Carbon Performance](#) and [Raising the bar: TPI's new Management Quality framework](#) report (November 2023) for more information.

## Energy cluster alignment with 1.5°C benchmark

131 companies assessed

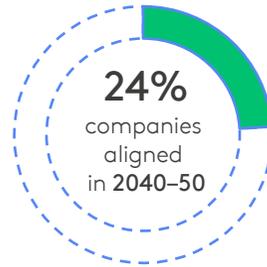
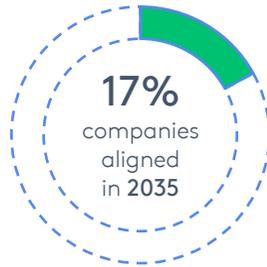
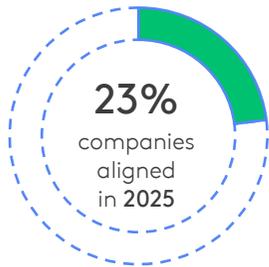
 52 Oil & gas producers

 79 Electricity utilities

TPI's coverage by market capitalisation for the oil and gas and electricity sectors is 60% and 90%, respectively

**11%** of the 131 energy companies<sup>1</sup> assessed by TPI are aligned with the 1.5°C benchmark across all the three timeframes (2025, 2035 and 2050).

## Energy cluster alignment by timeframe

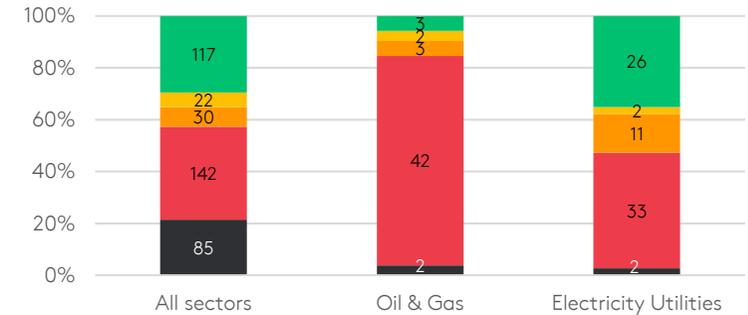


- Energy companies are the least likely to have 'no or unsuitable disclosure' of the 11 sectors assessed by TPI on Carbon Performance, due to their strong reporting of relevant emissions and activity data.
- The oil and gas sector has the second worst Carbon Performance of any TPI sector, as measured by alignment with the 1.5°C benchmark in the short, medium or long term.
- The electricity sector has among the best performance of any TPI sector, particularly in the long term. However, relatively few electricity companies are aligned with 1.5°C: although many have set net zero targets for 2050, the 1.5°C benchmark requires reaching net zero by 2040.<sup>2</sup>

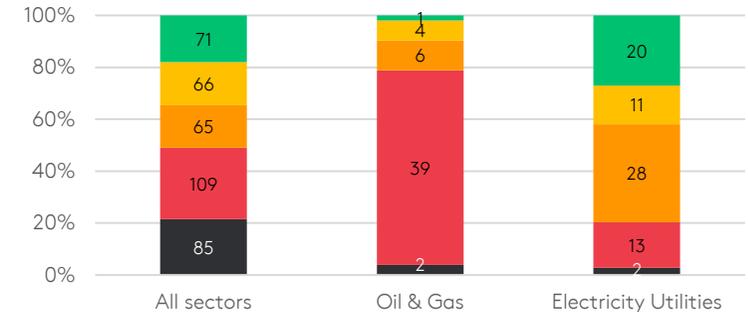
1. 126 of the 131 companies were given an alignment score as five companies did not match our methodology criteria.
2. The long-term alignment for the electricity sector is measured in 2040 instead of 2050 as the International Energy Agency (IEA) expects the sector to achieve net zero by 2040. TPI uses data from IEA for its electricity methodology.

## Alignment breakdown – no. and % of companies<sup>1</sup>

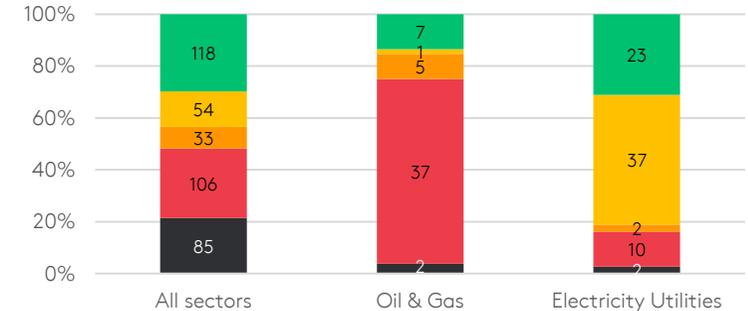
### Short-term alignment (2025)



### Medium-term alignment (2035)

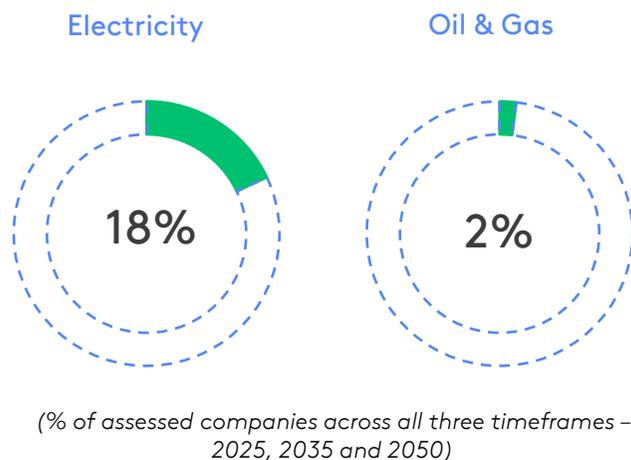


### Long-term alignment (2050)



● 1.5°C      ● National pledges      ● No or unsuitable disclosure  
● Below 2°C      ● Not aligned

## Energy cluster alignment with 1.5°C benchmark by sector



### A deeper dive into alignment

Electricity is among the three sectors most aligned with the 1.5°C benchmark (after diversified mining and shipping). By contrast, oil and gas is among the least aligned.

- **Electricity:** Strong alignment is supported by a clear technology pathway to decarbonisation (i.e. renewables) and most of its emissions falling into Scope 1, i.e. directly under the company's control, rather than being spread across the value chain.
- **Oil & Gas:** Decarbonisation fundamentally challenges the business model of oil and gas companies. It implies a significant shift away from traditional oil and gas operations or reliance on technologies like carbon capture. One of the outcomes of this conflict is that companies' targets tend not to be ambitious, in particular failing to sufficiently cover Scope 3 emissions. Ultimately, this leads to weak sector alignment.

## Energy cluster alignment with 1.5°C in 2023 vs. 2022

Comparing Carbon Performance in 2023 with 2022 reveals that certain companies consistently excel while others continue to lag. We categorise these companies as follows:<sup>1</sup>

### Leaders

**7%** are aligned with 1.5°C in the short, medium and long term, in both 2022 and 2023.

➔ All 'leaders' – nine companies – are from the electricity sector.

- **Electricity top 5:** Enel, Eversource Energy, E.ON, SSE, Meridian Energy

### Improvers

**3%** were not aligned with 1.5°C on any timeframe in 2022 but are aligned in the long term (2050) in 2023.

➔ The electricity and oil and gas sectors each have two 'improvers'.

- **Electricity:** NiSource, AGL Energy
- **Oil and gas:** Orron Energy, Origin Energy

### Regressors

**2%** were aligned with 1.5°C in the long term (2050) in 2022 but are no longer aligned in 2023.

➔ Both 'regressor' companies are from the oil and gas sector.

- **Oil & Gas:** Shell and TotalEnergies<sup>2</sup>

1. The example companies listed in each category are not exhaustive and represent those with the highest market capitalisation in 2022 within their respective sectors.
2. The change in alignment for both companies is not due to the companies explicitly setting weaker targets, rather it is due to how the companies' targets treat customer mitigation actions (including customers' use of offsets), and traded products, respectively. This footnote was added on the 19<sup>th</sup> of January 2024 to enhance the clarity on the reasons why the alignment for the assessed companies against the 1.5°C benchmark scenario changed.

## Management Quality indicator analysis

- Electricity and oil and gas companies are approaching Management Quality Level 4, with respective scores of 3.7 and 3.6. This exceeds the average score across all assessed (410) companies of 3.2.<sup>1</sup>
- Although electricity companies are relatively well aligned with the 1.5°C benchmark, only 5% provide quantified details on key elements of their emission reduction strategies (L5|19). The majority fail to disclose the specific contribution of each lever to their overall emission reduction targets.
- None of the oil and gas companies assessed has explicitly committed to a time-bound phase-out of investments in carbon-intensive assets or products (L5|21). Only 12% of electricity companies scored positively on this indicator.
- Indicator 15 is the sole indicator on Levels 0 to 4 on which the oil and gas sector significantly underperforms compared with the electricity sector. This indicator looks for the integration of climate change risks and opportunities into company strategy, including new products, research and development (R&D), and influence on financial planning (OpEx, CapEx, debt).

		Electricity	Oil & Gas	All sectors
	<b>Mean Management Quality level</b>	3.7	3.6	3.2
<b>Level 0</b>	L0 1. Acknowledge?	100%	100%	99%
	L1 2. Recognises as risk/opportunity?	99%	100%	93%
<b>Level 1</b>	L1 3. Policy commitment to act?	99%	100%	98%
	L2 4. Emissions targets?	96%	94%	86%
<b>Level 2</b>	L2 5. Disclosed Scope 1 and 2 emissions?	97%	100%	93%
	L3 6. Board responsibility?	99%	98%	87%
	L3 7. Quantitative emissions targets?	96%	92%	86%
	L3 8. Disclosed any Scope 3 emissions?	88%	76%	74%
	L3 9. Had operational emissions verified?	69%	88%	69%
	L3 10. Supports domestic and intl. mitigation?	65%	55%	42%
	L3 11. Process to manage climate risks?	97%	96%	84%
<b>Level 3</b>	L3 12. Disclosure of materially important Scope 3 emissions?	N/A	57%	19%
	L4 13. Long-term emissions targets?	96%	90%	83%
	L4 14. Incorporated climate change into exec. rem.?	73%	71%	53%
	L4 15. Climate risks/opportunities in strategy?	71%	47%	49%
	L4 16. Undertakes climate scenario planning?	73%	75%	60%
	L4 17. Discloses an internal price of carbon?	64%	51%	45%
<b>Level 4</b>	L4 18. Discloses actions to meet emissions reduction targets?	66%	63%	54%
	L5 19. Quantifies the key elements of emissions reduction strategy?	5%	12%	8%
	L5 20. Clarifies role played by offsets and/or negative emissions technologies?	3%	6%	3%
	L5 21. Commits to phasing out capital expenditure in carbon-intensive assets or products?	12%	0%	3%
	L5 22. Aligns future capital expenditures with long-term decarbonisation goals?	3%	0%	2%
<b>Level 5</b>	L5 23. Consistency between climate change policy and member trade associations?	4%	10%	5%

1. To ensure comparability between the Carbon Performance and Management Quality results in this scorecard, the data in the table exclusively represent the companies evaluated using both tools. At the time of publication, the TPI Centre has assessed 410 companies on Carbon Performance and 1,010 on Management Quality.

# About the LSE Transition Pathway Initiative Centre



The Transition Pathway Initiative Centre (TPI Centre) is an independent, authoritative source of research and data on the progress of corporate and sovereign entities in transitioning to a low-carbon economy.

The TPI Centre is part of the Grantham Research Institute on Climate Change and the Environment which is based at the London School of Economics and Political Science (LSE). The TPI Centre is the academic partner of the Transition Pathway Initiative (TPI), a global initiative led by asset owners and supported by asset managers.

As of December 2023, 144 investors globally, representing around US\$60 trillion combined Assets Under Management and Advice, had pledged support for TPI.

For further information on [TPI Sectoral Decarbonisation Pathways](#) and TPI Carbon Performance methodologies please click on the respective links for the [oil and gas](#) and [electricity](#) sectors.

## Contact

- General inquiries: [info@transitionpathwayinitiative.org](mailto:info@transitionpathwayinitiative.org)
- Research-related inquiries: [tpi@lse.ac.uk](mailto:tpi@lse.ac.uk)



Explore our tools at: [www.transitionpathwayinitiative.org](http://www.transitionpathwayinitiative.org)



Disclaimer: [Use of the TPI Centre's data](#)

## Supporters



**144**  
Supporters



**~\$60tn**  
Assets under management

## Carbon Performance



**400+**  
Companies assessed on Carbon Performance



**11**  
Sectoral benchmarks

## Management Quality



**1,000+**  
Companies assessed on Management Quality



**16**  
Sectors assessed on Management Quality

## Banks



**26**  
Banks assessed under TPI's [Net Zero Banking Assessment framework](#)

## Sovereign



**25**  
Countries assessed under [ASCOR Assessment framework](#)

The data and information provided by the TPI Centre can be used in a variety of ways – such as to inform investment research, corporate engagement and proxy-voting, to analyse portfolios and publish the outcomes to demonstrate to stakeholders delivery of climate policy objectives and to support TPI Centre in its mission. Investors should make their own decisions on how to use TPI data. The TPI Centre cannot guarantee the accuracy of any data made available, the data and information on this scorecard and of its website is not intended to constitute or form the basis of any advice (investment, professional or otherwise), and the TPI Centre does not accept any liability for any claim or loss arising from any use of, or reliance on, the data or information.