



Transition
Pathway
Initiative

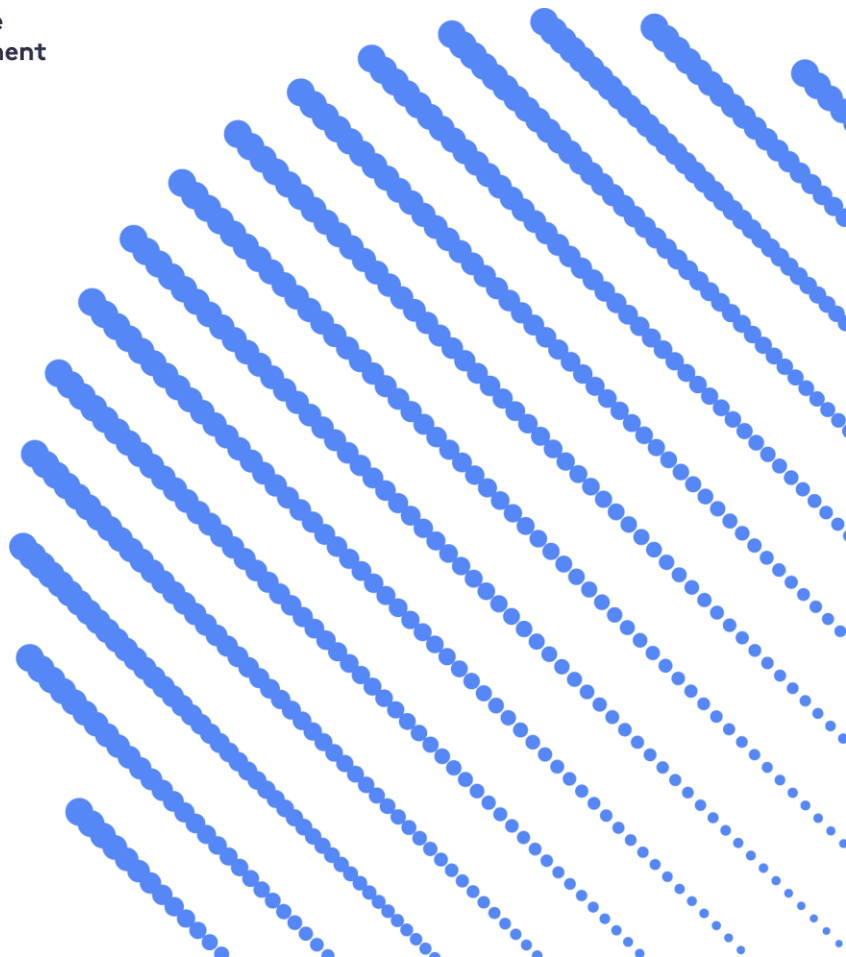


Grantham
Research Institute
on Climate Change
and the Environment

Raising the bar: TPI's new Management Quality framework

*An updated methodology and new
assessment of 1,000+ companies*

November 2023



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About the Transition Pathway Initiative Centre

Key insights and introduction

Key insights – introducing the changes

- TPI's new, updated Management Quality framework ('MQ version 5.0') raises the bar by adding a Level 5.
- Level 5 tests companies on whether they have transition plans that include defined, quantified and financed actions to **get to net zero**: giving greater insight into the rigour of companies' transition plans and whether they are credibly implementing them.
- We have increased the number of indicators in TPI's MQ framework from 19 to 23. In keeping with our research philosophy, a considerable amount of effort has been devoted to selecting only the most relevant indicators, ensuring minimal data noise and a high degree of precision.
- We now include a wider assessment of material **Scope 3 emissions disclosure**, with coverage extended to companies within the Food Producers, Diversified Mining and Chemicals sectors.
- 469 companies have been added to the TPI universe, taking the total number of listed companies covered by TPI's MQ framework to 1,010. This is the largest ever expansion of the TPI company universe.
- Level 5 data are available for all 1,010 companies.
- The expansion in coverage now includes the addition of a new sector, **Food Producers**. This follows the successful trialling of a Carbon Performance methodology for food producing and processing companies. The sector consists of the largest 58 companies by free float market capitalisation (25 of which were previously covered by the TPI Centre in the Consumer Goods sector).

Key insights – findings from this year's assessment

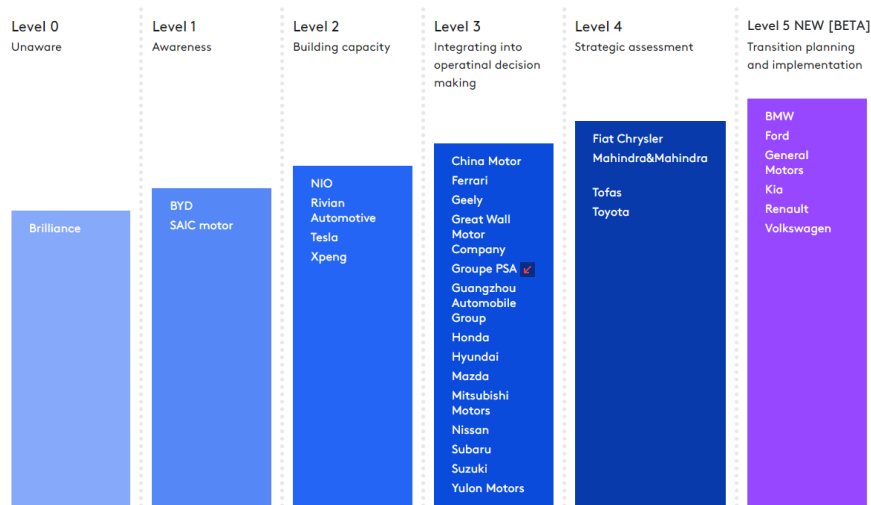
- No more than 5% of companies satisfy any MQ Level 5 indicator, and no company satisfies them all. This suggests that, while many companies are integrating climate change into operational decision-making and may be thinking about climate change strategically, credible transition planning and implementation remain scarce.
- 57% of TPI-assessed companies are on MQ Level 3 (*Integrating climate change into operational decision making*). 18% of companies are on Levels 0–2. This suggests that Level 3 functions as the new 'par score', indicating what may be considered normal. Companies that fall under this threshold can be considered laggards.
- The decline in companies scoring on Levels 0–2 is a result of a marked year-on-year improvement. On net, 23% of companies assessed in both 2022 and 2023 have moved up at least one MQ level, reinforcing the need for new and more testing indicators.
- While there is sectoral variation in MQ scores, there is no clear correlation between average MQ scores and the perceived difficulties faced in decarbonising different industrial sectors. For example, Airlines and Oil & Gas are two of the best performing sectors on MQ, despite being considered 'difficult to decarbonise'. These difficulties, however, do show up in the realised and targeted real world Carbon Performance for companies in these sectors, as measured by the TPI Centre*.
- Scores have an uneven geographical distribution: Australasian, European and Japanese firms score higher on both average MQ level and against the new Level 5 indicators than those headquartered in other regions.

* For further information regarding companies' Carbon Performance, please consult the [TPI online tool](#).

Context: the TPI tool's two pillars

Management Quality

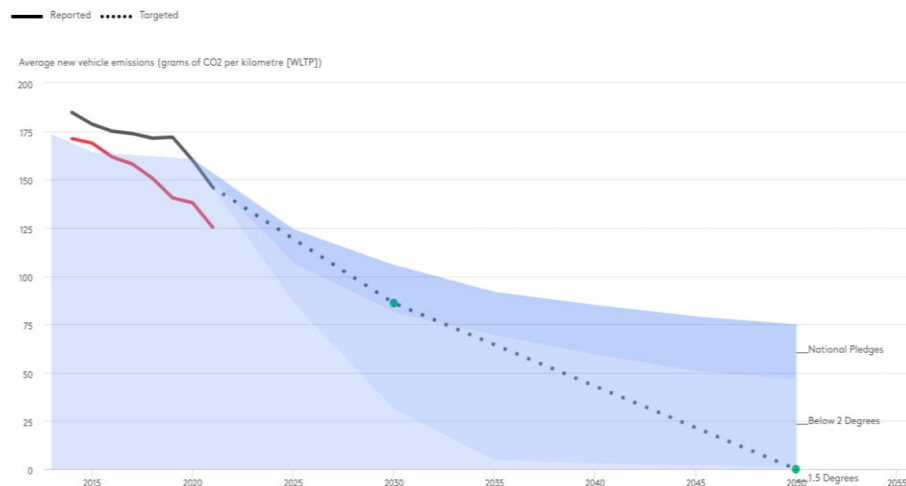
Companies' governance of greenhouse gas emissions, and the risks and opportunities arising from the low-carbon transition.



More detail: [TPI's methodology report: Management Quality and Carbon Performance](#)

Carbon Performance

Quantitative benchmarking of companies' emission pathways against different climate scenarios.



More detail: [TPI Explainer: Interpreting TPI's emissions scenarios and benchmarks](#)

Assessing Management Quality

Level 0

Unaware

Level 1

Awareness

Level 2

Building capacity

Level 3

Integrating into
operational decision
making

Level 4

Strategic assessment

Level 5 [BETA]

Transition planning
and implementation

- TPI's MQ framework is based on a set of indicators, each of which tests whether a company has implemented a particular carbon management practice (Yes/No).
- These indicators are used to map companies on to different levels.
- Our new framework has 23 indicators, up from 19, and adds a sixth level.
- The underlying data are provided by FTSE Russell, an LSEG business.

MQ1. Company does not recognise climate change as a significant issue for the business

MQ2. Company recognises climate change as a relevant risk/opportunity for the business

MQ3. Company has a policy (or equivalent) commitment to action on climate change

MQ4. Company has set GHG emission reduction targets

MQ5. Company has published info. on its operational GHG emissions

MQ6. Company has nominated a board member/committee with explicit responsibility for oversight of the climate change policy

MQ7. Company has set quantitative targets for reducing its GHG emissions

MQ8. Company reports on its Scope 3 GHG emissions

MQ9. Company has had its operational GHG emissions data verified

MQ10. Company supports domestic & international efforts to mitigate climate change

MQ11. Company has a process to manage climate-related risks

MQ12. Company discloses materially important Scope 3 emissions

MQ13. Company has set long-term quantitative targets (>5 years) for reducing its GHG emissions

MQ14. Company has incorporated climate change performance into executive remuneration

MQ15. Company has incorporated climate change risks and opportunities in its strategy

MQ16. Company undertakes climate scenario planning

MQ17. Company discloses an internal carbon price

MQ18. Company discloses the actions necessary to meet its emissions-reduction targets

MQ19. Company quantifies the key elements of its emissions reduction strategy and the proportional impact of each action in achieving its targets

MQ20. Company's transition plan clarifies the role that will be played by offsets and/or negative emissions technologies

MQ21. Company commits to phasing out capital expenditure in carbon intensive assets or products

MQ22. Company aligns future capital expenditures with its long-term decarbonisation goals and discloses how the alignment is determined

MQ23. Company ensures consistency between its climate change policy and the positions taken by trade associations of which it is a member

Methodology v.5.0: What's new?

The new Level 5: Transition planning and implementation

Motivation for the new MQ level

New indicators are required as investors' focus shifts from ambition to action, and to provide greater differentiation of high-performing companies.

Since MQ v. 1.0 in 2017, expectations of corporate climate action have risen, and performance has improved. As more companies recognise the importance of robust carbon governance and management, previously stretching indicators are becoming standard practice.

Why the focus on transition plans?

MQ Level 5 assesses whether companies have used their strategic understanding of climate change to create an actionable transition plan that sets out the measures and resources needed to achieve the company's emission targets. The five indicators included in Level 5 focus on the extent to which companies have evaluated and quantified how their business practices and capital expenditure align with their decarbonisation goals, and the subsequent clarity and precision of their transition plans.

As such, Level 5 gives greater insight into the rigour of companies' transition plans and the associated likelihood of their implementation.

Level 5 [BETA]
Transition planning and
implementation

MQ19. Company quantifies the key elements of its emissions reduction strategy and the proportional impact of each action in achieving its targets

MQ20. Company's transition plan clarifies the role that will be played by offsets and/or negative emissions technologies

MQ21. Company commits to phasing out capital expenditure in carbon intensive assets or products

MQ22. Company aligns future capital expenditures with its long-term decarbonisation goals and discloses how the alignment is determined

MQ23. Company ensures consistency between its climate change policy and the positions taken by trade associations of which it is a member

The new companies: expansion to over 1,000

- **Added companies:** 469 companies have been added to the TPI company universe, taking the total number of listed companies covered by TPI's MQ framework to 1,010. This is the largest ever expansion of the TPI company universe.
- **Added sector:** We have added a new sector, Food Producers, following the successful trialling of a Carbon Performance methodology for the sector. It consists of 58 companies, 25 of which were previously covered by the TPI Consumer Goods sector.
- **High-emitting sectors:** For each of the highest-emitting sectors, the TPI Centre now covers companies which together represent at least 90% of the total market capitalisation of that sector.
- **Size of companies:** Within the high-emitting TPI sectors, where coverage is relatively saturated, new companies tend to be small- and mid-cap, while in the Other Industrials, Consumer Goods, and Services sectors, new companies are mainly large-cap.

Cluster	Sector	New companies	Total companies*	Market Cap (Share of total sector)
Energy	Electricity Utilities	49	124	97%
	Oil & Gas	34	84	97%
	Coal Mining	11	54	100%
	Oil & Gas Distribution	8	25	100%
Transport	Airlines	5	38	100%
	Autos	4	37	100%
	Shipping	5	31	100%
Industrials / Materials	Other Industrials	82	116	Not Applicable
	Chemicals	42	99	90%
	Steel	25	65	97%
	Cement	17	60	100%
	Paper	2	36	100%
	Aluminium	8	31	100%
	Diversified Mining	14	27	97%
Consumer goods and Services	Services	82	88	Not Applicable
	Food	33	58	90%
	Consumer Goods	48	54	Not Applicable

*14 companies are assessed in more than one sector, so while TPI's MQ framework covers 1,010 companies, there are 1,027 assessments

Scope 3 applicability and changes to Level 4

MQ12, on Scope 3 emissions disclosure, has been expanded. Before, it asked about use of sold product emissions only; now, it asks about materially important Scope 3 emissions more broadly. This indicator has thus been expanded to include more Scope 3 categories and to apply to more sectors, as highlighted in the table below.

Cluster	Sector	Scope 3 Applicability
Energy	Coal Mining	Yes (use of sold products)
	Electricity Utilities	None
	Oil & Gas	Yes (use of sold products)
	O&G Distribution	Yes (use of sold products)
Transport	Airlines	None
	Autos	Yes (use of sold products)
	Shipping	None
Industrials / Materials	Aluminium	None
	Cement	None
	Chemicals	Yes (purchased goods and services and use of sold products)
	Diversified Mining	Yes (processing of sold products)
	Other Industrials	None
	Paper	None
	Steel	None
Consumer goods and Services	Food Producers	Yes (purchased goods and services)
	Consumer Goods	None
	Services	None

MQ methodology v.5.0 also includes modifications to Level 4. These are: i) a new indicator, MQ18, focusing on disclosure around emissions targets; ii) removal of an indicator on company membership of climate organisations/coalitions due to measurement challenges; and iii) moving a challenging indicator addressing trade association policy alignment to Level 5.

Level 4: Strategic assessment

MQ13. Company has set long-term quantitative targets (>5 years) for reducing its GHG emissions

MQ14. Company has incorporated climate change performance into executive remuneration

MQ15. Company has incorporated climate change risks and opportunities in its strategy

MQ16. Company undertakes climate scenario planning

MQ17. Company discloses an internal carbon price

MQ18. Company discloses the actions necessary to meet its emissions-reduction targets

Headline results

2023 results for the TPI universe

Level 0

Unaware

9 companies: 1%

0 Consumer Goods & Services

1 Energy

7 Industrials & Materials

1 Transport

Level 1

Awareness

79 companies: 8%

10 Consumer Goods & Services

23 Energy

33 Industrials & Materials

13 Transport

Level 2

Building capacity

95 companies: 9%

6 Consumer Goods & Services

38 Energy

36 Industrials & Materials

15 Transport

Level 3

Integrating into operational decision making

583 companies: 57%

138 Consumer Goods & Services

137 Energy

261 Industrials & Materials

47 Transport

Level 4

Strategic assessment

160 companies: 16%

35 Consumer Goods & Services

45 Energy

61 Industrials & Materials

19 Transport

Level 5

Transition planning and implementation

101 companies: 10%

11 Consumer Goods & Services

43 Energy

36 Industrials & Materials

11 Transport

Management Quality level

The average MQ level of the new TPI universe is 3.1 (measured from Levels 0–5).

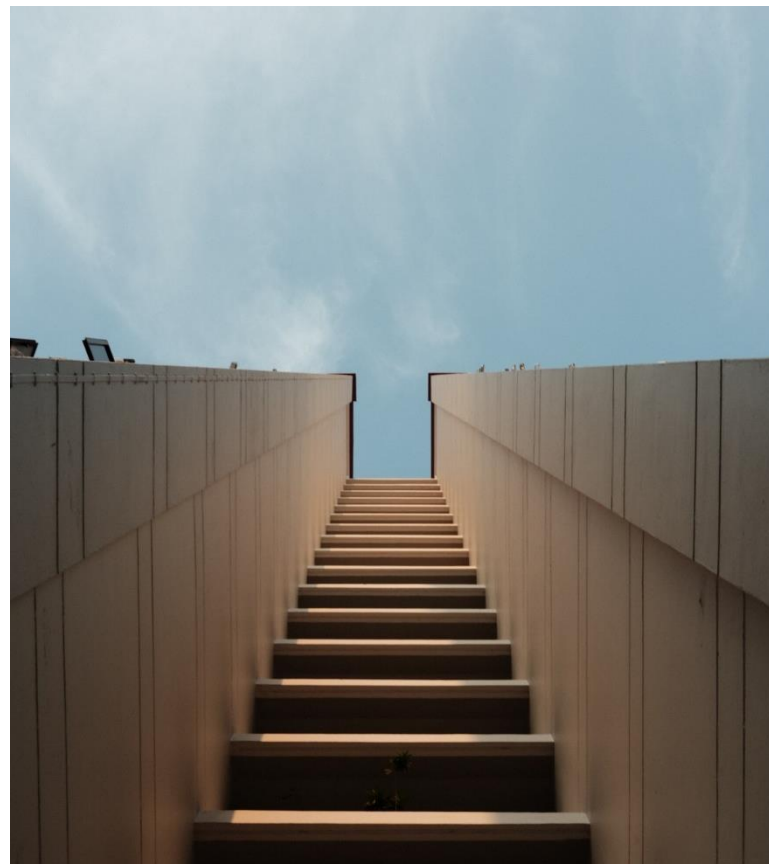
- This is up from 2.9 in 2022, measured from Levels 0–4.
- This means that, on average, companies have now integrated climate change into operational decision making (Level 3) but are still well short of strategic assessment (Level 4).
- Ten per cent of companies reach Level 5.

There are important caveats to consider when comparing average MQ scores:

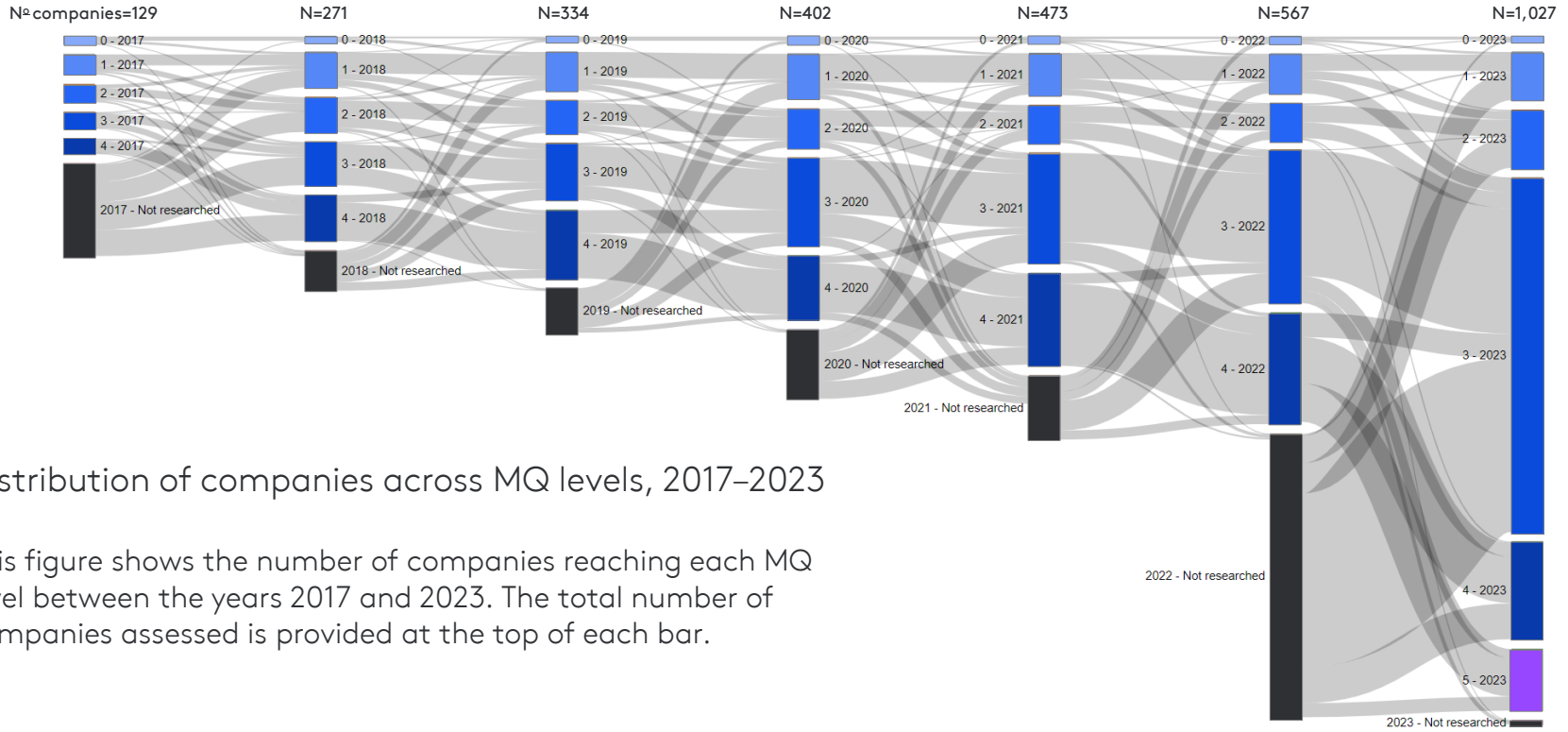
- The addition of a new MQ Level 5 increases the maximum level companies can attain.
- Changes to MQ Levels 3 and 4 have made it marginally more challenging for companies to progress.

There are important sectoral differences:

- Cement and Coal Mining are notable laggards, with average MQ scores of 2.5 and 2.4, respectively.
- At the other end of the spectrum is Other Industrials (comprising largely Industrial Engineering and Technology Equipment companies) with an average of 3.3 (See slide 20 for more details.)



Management Quality trends and progress (1)



Distribution of companies across MQ levels, 2017–2023

This figure shows the number of companies reaching each MQ level between the years 2017 and 2023. The total number of companies assessed is provided at the top of each bar.

Management Quality trends and progress (2)

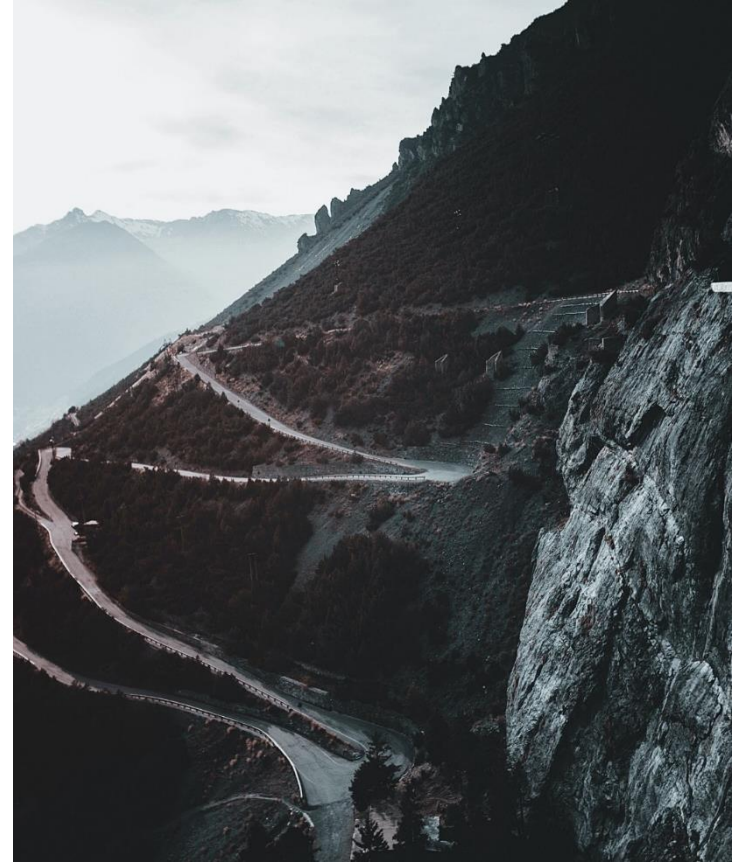
We have trend data on 561 companies and most of those companies have been assessed at least three times. Current and historic data can be downloaded from the [TPI online tool](#).

Overall, the distribution of companies across levels has moved upwards:

- In 2017, companies were relatively evenly distributed across TPI's then five MQ levels, 0–4. Now, 57% of companies are on MQ Level 3, and only 18% of companies are on Levels 0–2.
- This suggests Level 3 functions as the new 'par score', indicating what may be considered normal. Companies that fall under this threshold can be considered laggards.
- Levels 3–5 now account for 82% of companies.

Most companies (343) stay on the same level they were on in 2022:

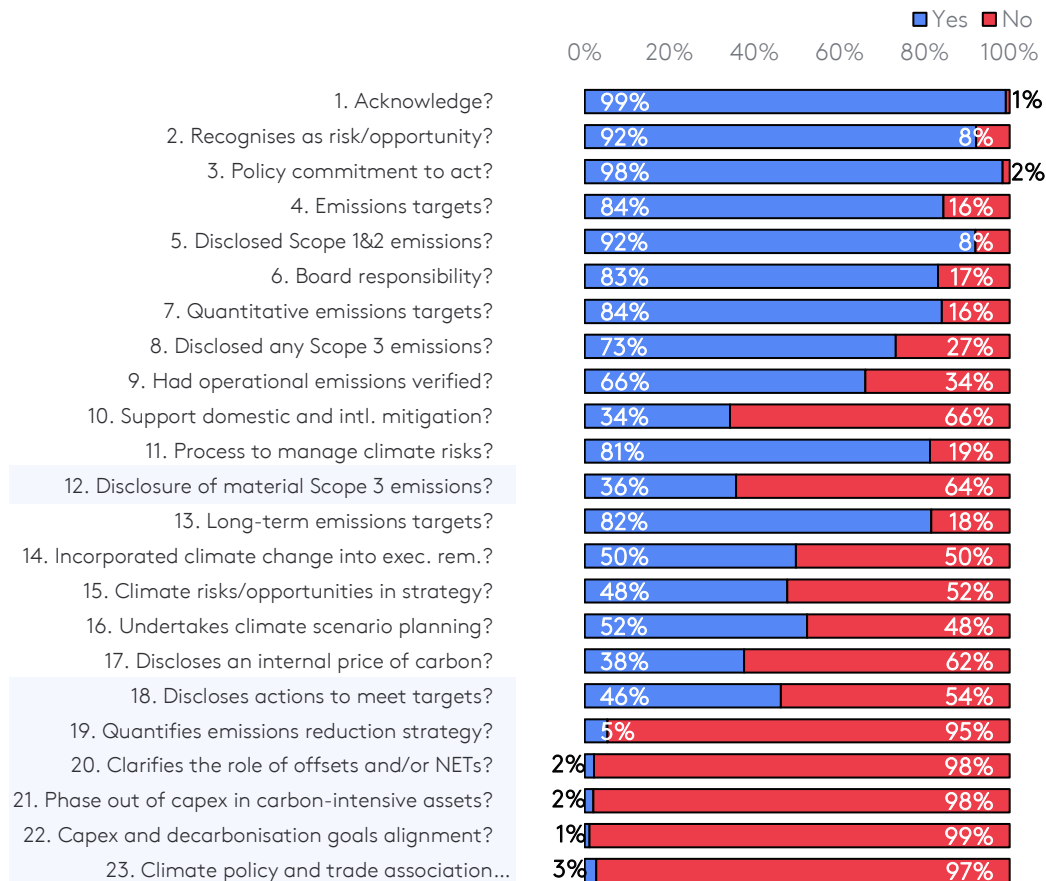
- More companies have moved up at least one level (173) than have moved down (45), with the upward trend being stronger this year than in 2022.
- We see this trend despite changes to MQ Level 3 that have resulted in 40 companies moving from Levels 4 to 3.



In-depth analysis

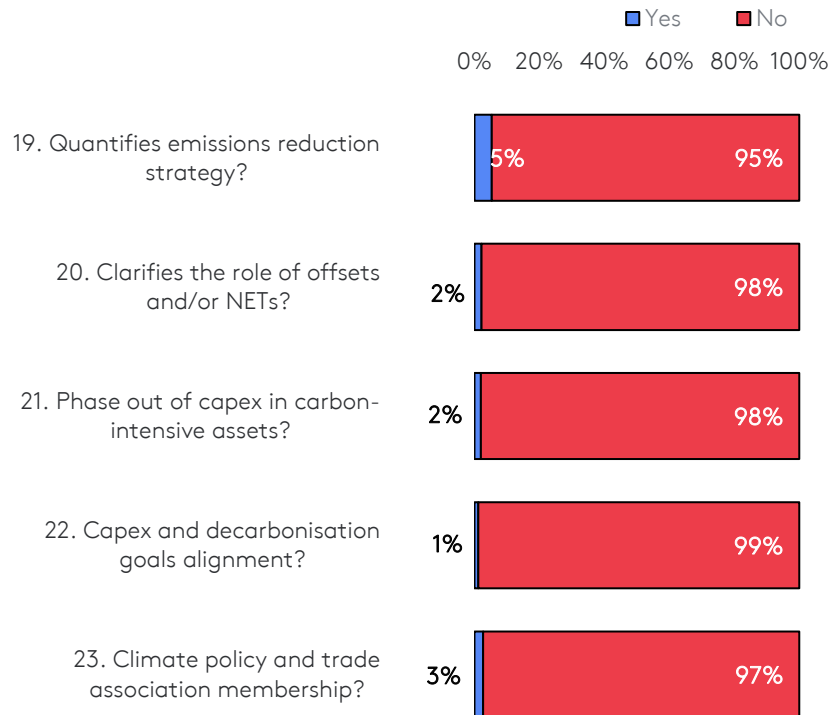
Indicator analysis

- Almost all companies acknowledge climate change (MQ1), recognise it as a relevant business risk/opportunity (MQ2), and have a policy commitment to act (MQ3). This holds true despite the addition of many smaller companies to the TPI universe.
- More than four in five companies now have at least some form of GHG emission reduction target (MQ4).
- Despite 83% of companies having assigned board-level responsibility for climate change (MQ6), only half of companies currently tie executive remuneration to climate change performance (MQ14).
- Companies also struggle disproportionately on MQ10 (support for domestic/international climate action) and MQ12 (disclosure of material Scope 3 emissions).



Level 5: Transition planning and implementation

- No company meets all Level 5 indicators and less than 5% score on any individual Level 5 indicator. Even in high-scoring sectors like Other Industrials and Electricity Utilities, only a handful of companies satisfy any Level 5 indicator. Thus, while these sectors are further along in their transition, they still appear to lack standout leaders or 'transition champions'.
- Australasian-headquartered companies do notably well on MQ Level 5 indicators: MQ19 (15% score 'Yes'), MQ22 (10% score 'Yes') and MQ23 (8% score 'Yes'). Even European-headquartered companies, which are subject to increased climate reporting and accounting regulation, do less well.
- The Diversified Mining sector is the clear leader on Level 5 indicators, scoring 9% on average across the level, ahead of Aluminium at 5%. Diversified Mining companies perform particularly well on MQ22 and MQ23, with 15% of companies scoring on both.
- The only sector in which a quantified emission reduction strategy is somewhat common (MQ19) is Airlines, where more than 10% of companies have quantified the proportional impacts of their key actions in achieving their emission reduction targets.



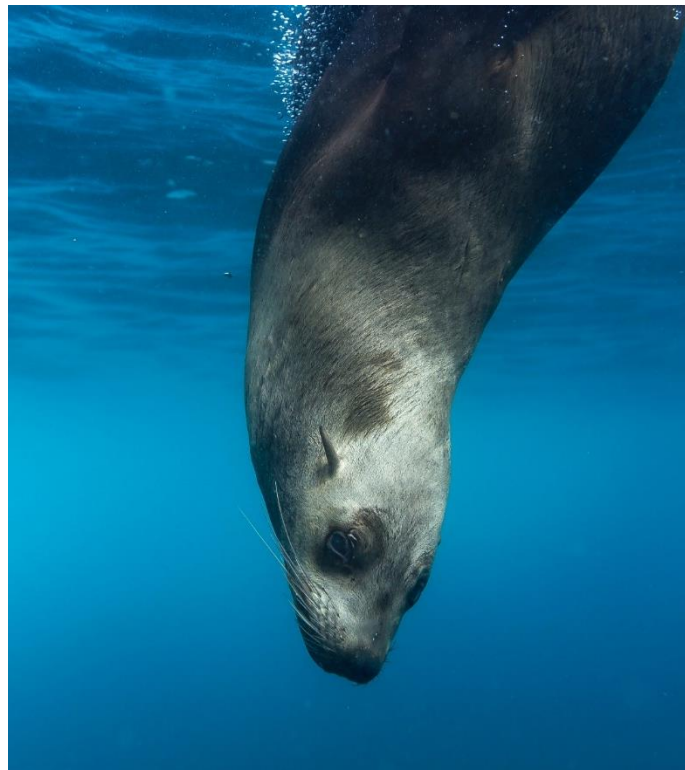
NET= negative emissions technology

Proportion of 'Yes' scores by sector and indicator

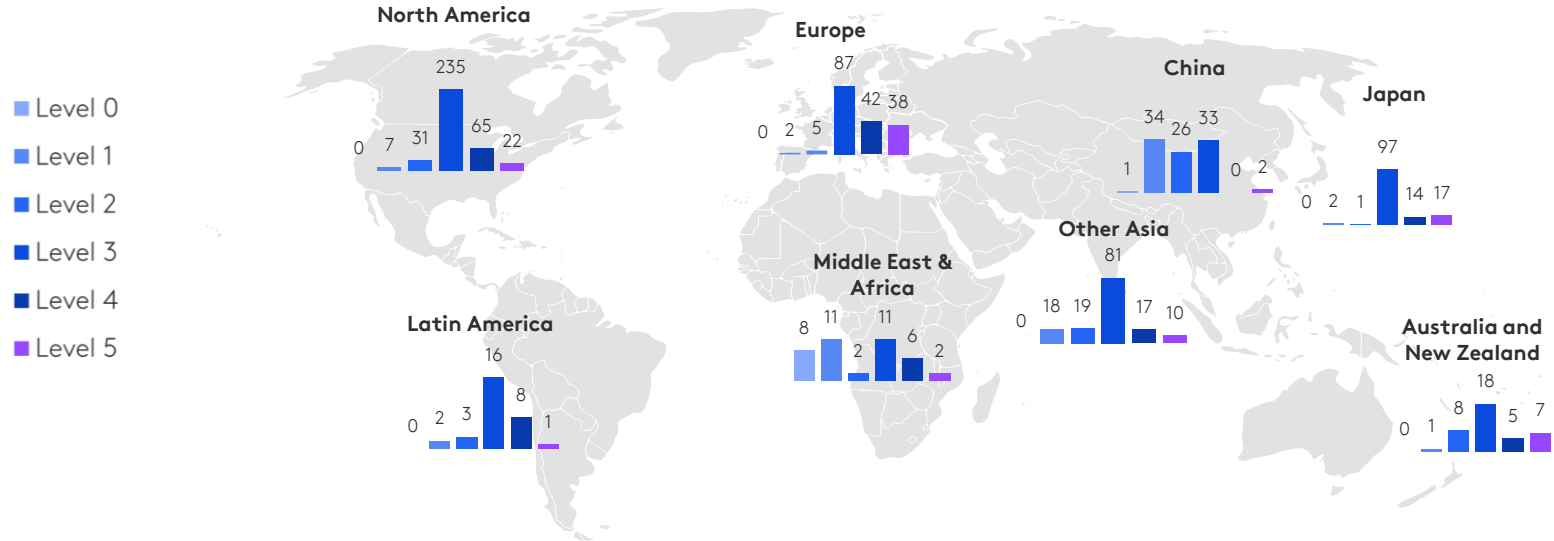
		Level 0		Level 1		Level 2		Level 3							Level 4							Level 5 [BETA]				
Sector	Mean Level	L0 1. Acknowledge?	L1 2. Recognises as risk/opportunity?	L1 3. Policy commitment to act?	L2 4. Emissions targets?	L2 5. Disclosed Scope 1&2 emissions?	L3 6. Board responsibility?	L3 7. Quantitative emissions targets?	L3 8. Disclosed any Scope 3 emissions?	L3 9. Had operational emissions verified?	L3 10. Support domestic and intl. mitigation?	L3 11. Process to manage climate risks?	L3 12. disclosure of materially important Scope 3 emissions?	L4 13. Long-term emissions targets?	L4 14. Incorporated climate change into exec. rem.?	L4 15. Climate risks/opportunities in strategy?	L4 16. Undertake a climate scenario planning?	L4 17. Discloses an internal price of carbon?	L4 18. Discloses the actions to meet emissions-reduction targets?	L5 19. Quantifies the key elements of emissions reduction strategy?	L5 20. Clarifies the role that will be played by offsets and/or negative emissions technologies?	L5 21. Commits to phasing out capital expenditure in carbon intensive assets or products?	L5 22. Aligns future capital expenditures with long-term decarbonisation goals?	L5 23. Ensures consistency between climate change policy and the trade associations of which it is a member?		
Other Industrials	3.5	100%	100%	100%	98%	100%	98%	98%	91%	81%	38%	95%	23%	98%	68%	63%	53%	45%	52%	2%	2%	2%	0%	3%		
Electricity Utilities	3.4	99%	95%	98%	88%	91%	90%	88%	81%	69%	52%	90%	NA	85%	62%	57%	63%	52%	52%	4%	2%	7%	2%	2%		
Oil & Gas	3.3	100%	100%	99%	89%	94%	88%	88%	68%	71%	43%	88%	40%	86%	56%	35%	58%	39%	48%	7%	4%	0%	0%	6%		
Consumer Goods	3.3	100%	96%	100%	96%	98%	89%	96%	93%	89%	30%	89%	NA	93%	72%	69%	67%	48%	67%	6%	4%	0%	0%	2%		
Airlines	3.2	97%	92%	97%	76%	89%	79%	76%	66%	61%	47%	79%	NA	76%	34%	37%	39%	34%	58%	13%	3%	0%	0%	0%		
Services	3.2	100%	99%	98%	94%	98%	92%	93%	89%	75%	36%	91%	NA	92%	53%	53%	60%	24%	40%	5%	3%	3%	1%	0%		
Oil & Gas Distribution	3	100%	100%	96%	76%	88%	76%	76%	60%	56%	40%	76%	24%	76%	52%	44%	48%	32%	40%	4%	0%	0%	0%	0%		
Chemicals	3	99%	92%	99%	94%	96%	86%	93%	79%	68%	37%	86%	26%	90%	56%	65%	57%	52%	53%	6%	2%	1%	0%	1%		
Autos	2.9	100%	86%	100%	76%	92%	78%	76%	70%	59%	32%	78%	51%	73%	35%	54%	57%	32%	46%	5%	0%	3%	0%	8%		
Aluminium	2.9	97%	81%	94%	77%	87%	65%	77%	52%	55%	35%	68%	NA	77%	39%	19%	55%	29%	45%	6%	0%	3%	6%	6%		
Steel	2.9	100%	94%	97%	77%	94%	82%	77%	68%	58%	18%	77%	NA	77%	37%	38%	52%	34%	46%	6%	2%	0%	2%	3%		
Diversified Mining	2.9	100%	93%	100%	78%	93%	89%	78%	74%	70%	30%	85%	37%	70%	48%	37%	63%	44%	52%	7%	4%	4%	15%	15%		
Food Producers	2.9	100%	92%	100%	90%	95%	80%	90%	73%	53%	12%	80%	54%	80%	37%	44%	37%	20%	34%	5%	0%	2%	0%	0%		
Shipping	2.8	100%	81%	100%	81%	77%	68%	81%	55%	65%	19%	61%	NA	81%	23%	32%	45%	23%	42%	0%	0%	3%	0%	0%		
Paper	2.8	100%	83%	100%	75%	81%	75%	72%	61%	50%	28%	67%	NA	67%	33%	36%	50%	31%	28%	3%	11%	0%	0%	0%		
Cement	2.6	92%	80%	92%	62%	80%	60%	62%	53%	52%	27%	55%	NA	58%	37%	38%	35%	32%	33%	8%	0%	2%	0%	3%		
Coal Mining	2.4	100%	72%	100%	54%	80%	65%	54%	41%	46%	20%	59%	17%	50%	30%	20%	26%	22%	31%	7%	4%	0%	4%	4%		
TOTAL TPI UNIVERSE	3.1	99%	92%	98%	84%	92%	83%	84%	73%	66%	34%	81%	36%	82%	50%	48%	52%	37%	46%	5%	2%	2%	1%	3%		

Sectoral deep-dive

- There is no clear relationship between how difficult it is to decarbonise a sector and its TPI MQ Level. For example, [Paper](#) companies score poorly on average, but [Airlines](#) and [Oil & Gas](#) companies score well, even though the Paper sector faces fewer barriers to decarbonisation.
- While roughly half of assessed [Electricity Utilities](#) and [Airlines](#) support domestic and international policies to address climate change, support from companies in other sectors is typically much lower (especially in the [Steel](#) and [Food Producer](#) sectors).
- Only 35% of [Autos](#) manufacturers tie a proportion of executive remuneration to achieving their emission reduction targets (compared with 45% across the entire TPI universe, and 62% in electricity utilities), despite the accelerated move from the internal combustion engine to electric vehicles.
- [Coal Mining](#) companies score poorly on average because only just over half (54%) have set an emission reduction target, leaving 50% of companies on Level 1 or Level 2.
- The [Food Producer](#) sector is the best performer on MQ12, disclosure of materially important Scope 3 emissions, despite it being notoriously difficult to calculate emissions for food product supply chains.



Geographical deep-dive



- There is clear outperformance on MQ scores by European companies, 46% of which score on Levels 4–5. By way of comparison, only 24% of North American companies score on these levels.
- Within Asia, 24% of Japanese companies score on Levels 4–5; 19% score on these levels in 'Other Asia' (Asia excluding Japan and China) and 2% do so in China.

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 October 2023, 143 investors globally, representing around US\$60 trillion combined Assets Under Management and Advice, have pledged support for TPI.

Using companies' publicly disclosed data, the TPI Centre:

- Assesses the quality of companies' governance and management of their carbon emissions and of risks and opportunities related to the low-carbon transition, in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).
- Assesses whether companies' current and planned future emissions are aligned with international climate targets and national climate pledges, including those made as part of the Paris Agreement.
- Provides the data for the Climate Action 100+ Net Zero Company Benchmark.
- Publishes its methods and results online and fully open access at www.transitionpathwayinitiative.org and on GitHub.



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3. The data and information provided by the TPI Centre can be used by you in a variety of ways – such as to inform your investment research, your corporate engagement and proxy-voting, to analyse your portfolios and publish the outcomes to demonstrate to your stakeholders your delivery of climate policy objectives and to support the TPI in its initiative. However, you must make your own decisions on how to use TPI data as the TPI Centre cannot guarantee the accuracy of any data made available, the data and information on the website is not intended to constitute or form the basis of any advice (investment, professional or otherwise). The TPI and the TPI Centre do not accept any liability for any claim or loss arising from any use of, or reliance on, the data or information. Furthermore, the TPI does not impose any obligations on supporting organisations to use TPI data in any particular way. It is for individual organisations to determine the most appropriate ways in which data and information from the TPI Centre can be helpful to their internal processes.
4. Subject to paragraph 3 above, the Management Quality and the Carbon Performance indicators that are part of the TPI online tool and available publicly on the TPI Centre’s website are:
 - Free, if they are used for internal and not for commercial purposes, including for research, as one of the inputs to inform portfolio construction, for financial decision-making including cases of lending and underwriting, for engagement and client reporting, for use in proprietary models as part of climate transition analysis and active investment management.
 - Restricted, unless licensed where the use is for further commercial exploitation through redistribution, derived data creation, analytics, and index or fund creation (inclusive of where the index is used as the basis for the creation of a financial product, or where TPI data is a key constituent of a fund’s construction).
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