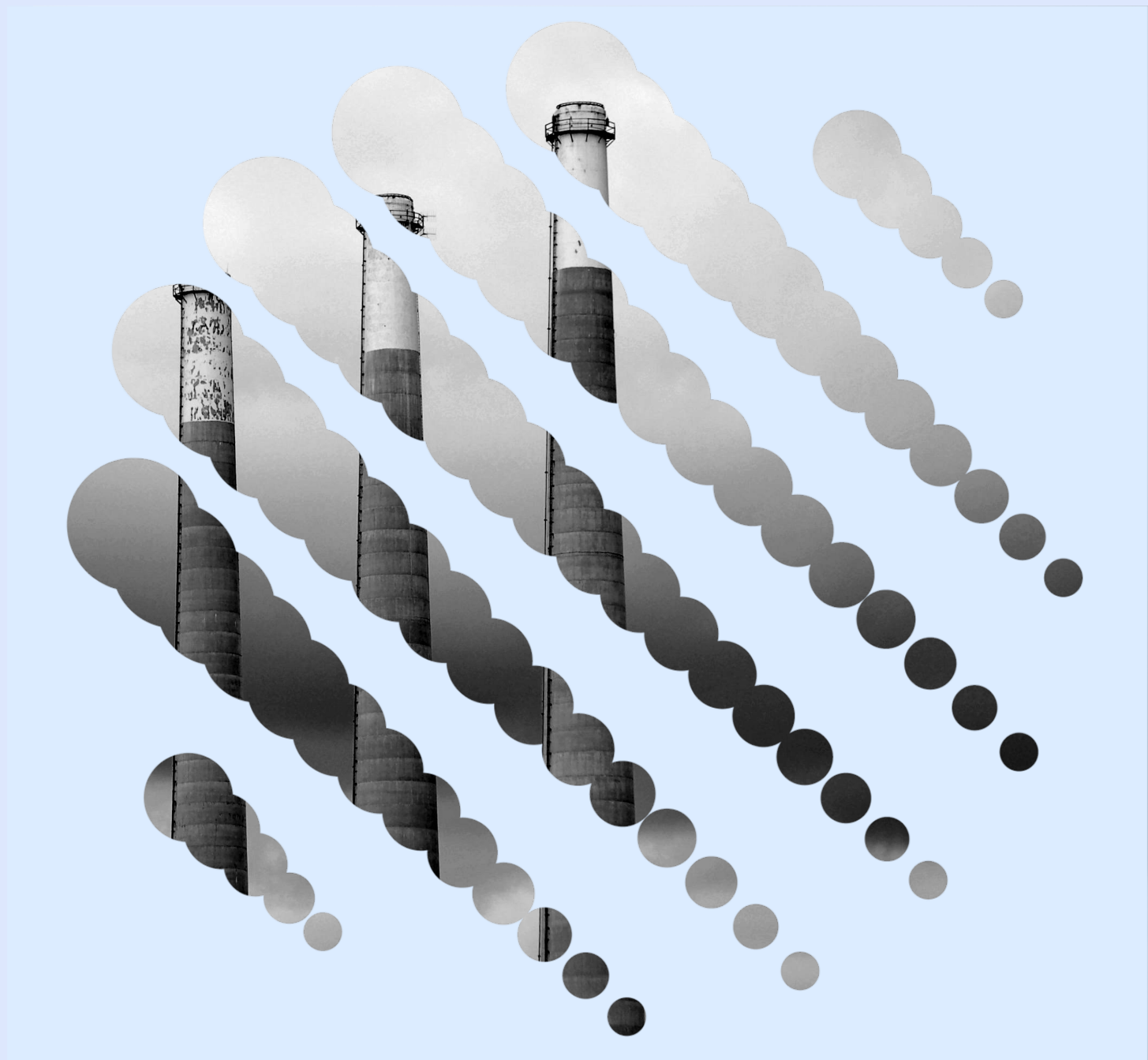


Transition
Pathway
Initiative

TPI Global Climate Transition Centre's online tool

Beata Bienkowska
Deputy Research and Project Lead



TPI Global Climate Transition Centre



Transition Pathway Initiative

- TPI is a **global initiative led by Asset Owners** and supported by Asset Managers, Service Providers and non-profits established in 2017.
- **TPI Global Climate Transition Centre** established in June 2022 based at the Grantham Research Institute of Climate Change and the Environment at LSE.
- Provides the **Climate Action 100+** Benchmark to assess 167 of the most carbon intensive and regionally significant companies
- Four State of Transition reports
- Data embedded into FTSE-TPI Climate Transition Index and increasingly referenced by London Stock Exchange

The TPI Centre at a glance

SUPPORTERS



131

SUPPORTERS



\$50_{tn}

COMBINED AUM

COMPANIES



479

COMPANIES



16

SECTORS



46

COUNTRIES OF
LOCATION



\$10_{tn}

OF TOTAL MARKET CAP

SECTORAL BENCHMARKS



2

BENCHMARKS
FOR ENERGY
Electricity, Oil &
Gas



3

BENCHMARKS
FOR TRANSPORT
Autos, Aviation,
Shipping

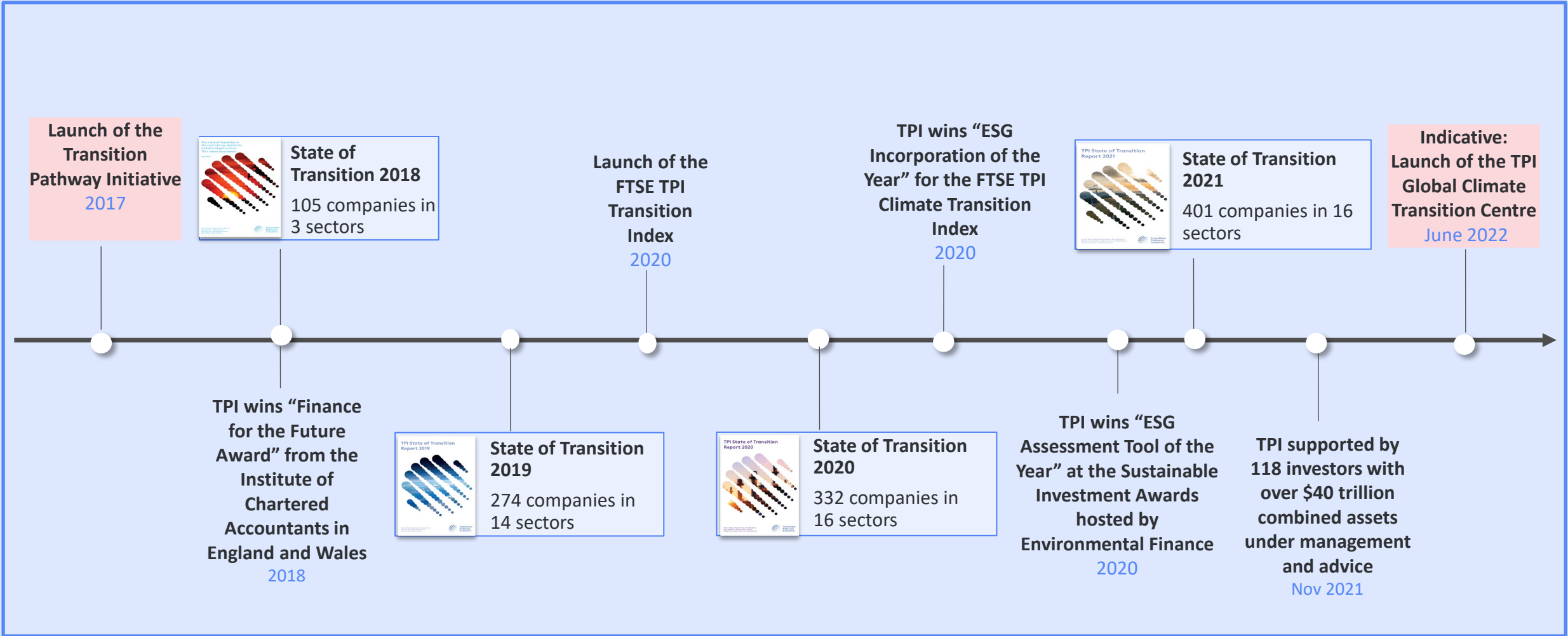


5

BENCHMARKS FOR
INDUSTRIALS AND
MATERIALS
Aluminium, Cement,
Diversified Mining, Paper,
Steel



Transition Pathway Initiative in a nutshell



TPI Global Climate Transition Centre

- **Aim:** The Centre is an authoritative, independent source of research and data into the progress being made by the financial and corporate world in making the transition to a low-carbon economy.
- **Data partner:** The Centre's team will be responsible for delivery of the research objectives in partnership with TPI's data partner, FTSE Russell.
- **Project partners:** investors networks such as IIGCC on banking and corporate climate lobbying, and initiatives such as ASCOR, which involves AOA, IIGCC, CERES, PRI.

The Centre intends to support investor commitments to:

**Align portfolios with
net zero targets**

**Place transparency and
independent analysis
at the heart of
informing investor
decision making**

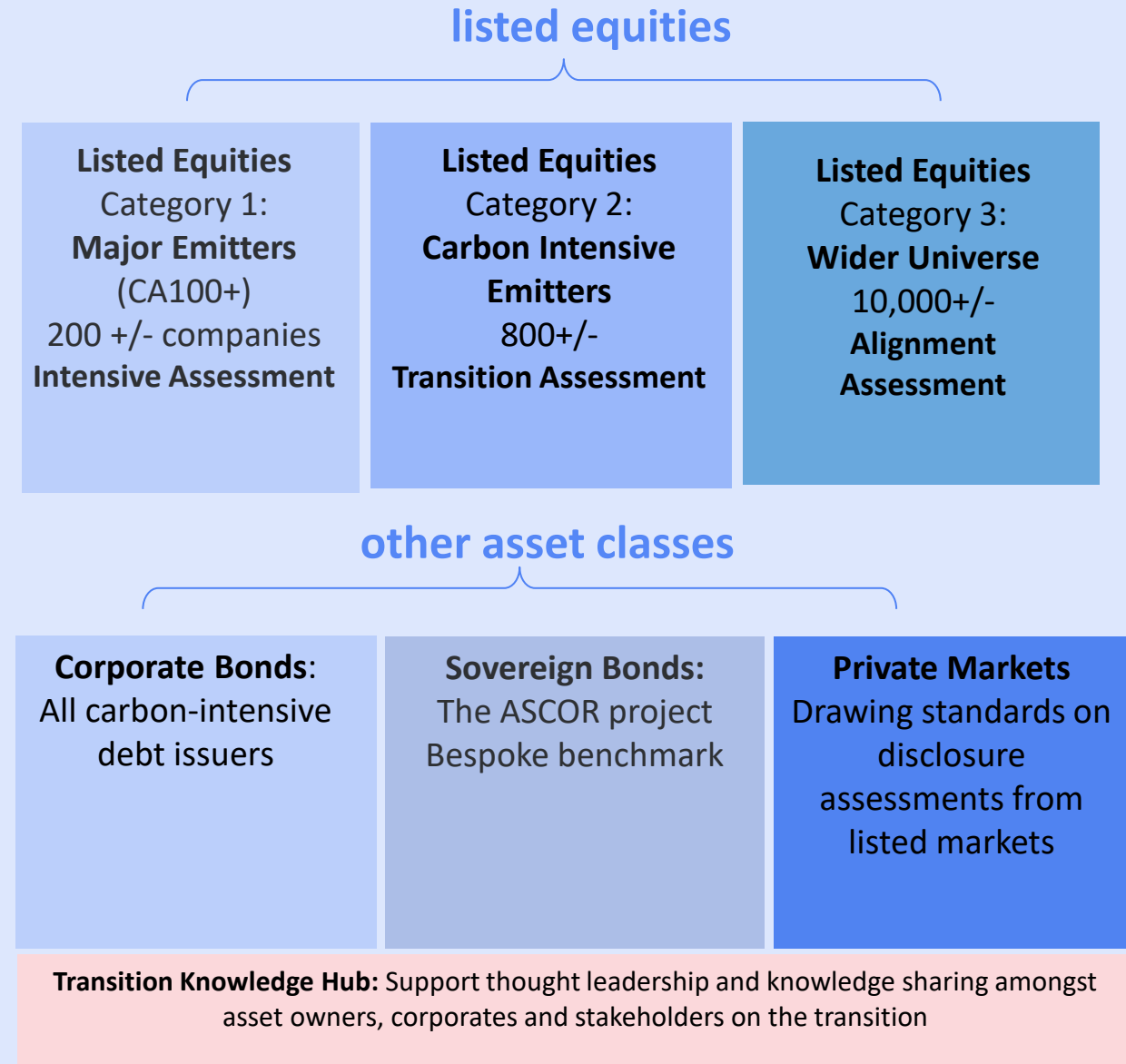
**Support global investor
engagement initiatives**
such as Climate Action
100+, which targets the
alignment of the 167
most carbon-intensive
companies

**Support the transition
within public,
corporate debt and
sovereign debt
markets**

TPI Global Climate Transition Centre

- Provide free and publicly available in-depth data on how **10,000 companies** are aligning with a net zero pathway, significantly scaling existing coverage across global equity markets
- The new centre will be a key part of a **post COP-26 financial infrastructure** to support transparency, accountability, and action on climate commitments

The Centre's coverage



The TPI Centre's online tool

Check out the TPI Centre's online tool

Climate assessments:

**Publicly
listed
equities**



Climate assessments:

**Corporate
bond
issuers**



Climate assessments:

Banks



Climate assessments:

**Sovereign
bond
issuers**



How Investors can use the TPI Centre's online tool to inform their impacts?

ESG Integration

Building TPI data into investors' portfolio construction or risk management processes.



Active Ownership

Investors use TPI's data for broad engagement strategy or for individual corporate engagements.



Proxy Voting

Analyse TPI's data and shape approaches to proxy voting.



Exclusions

Use TPI data to track companies performance and exclude laggards.



Product Creation

Use TPI data to create climate-sensitive financial products that can drive more climate aware company behaviours.



Due Diligence

Use TPI as part of investee due diligence procedures or to vet potential clients.



Demonstrating Commitment

Investors can show their clients that their interventions as investors are meaningfully contributing to Paris Agreement by being a member of TPI.



Use cases of the TPI Centre's data

The Church of England Pensions Board

is using FTSE Russell and TPI data to create a new climate index.



Robeco is using TPI data to guide its engagements on climate change.



Brunel is using TPI data to shape portfolio construction in its Global High Alpha strategy.



abrdn is using TPI data to identify transition leaders and laggards.



Länsförsäkringar

is using TPI data as an ESG integration tool to inform its exclusion and climate transition lists.



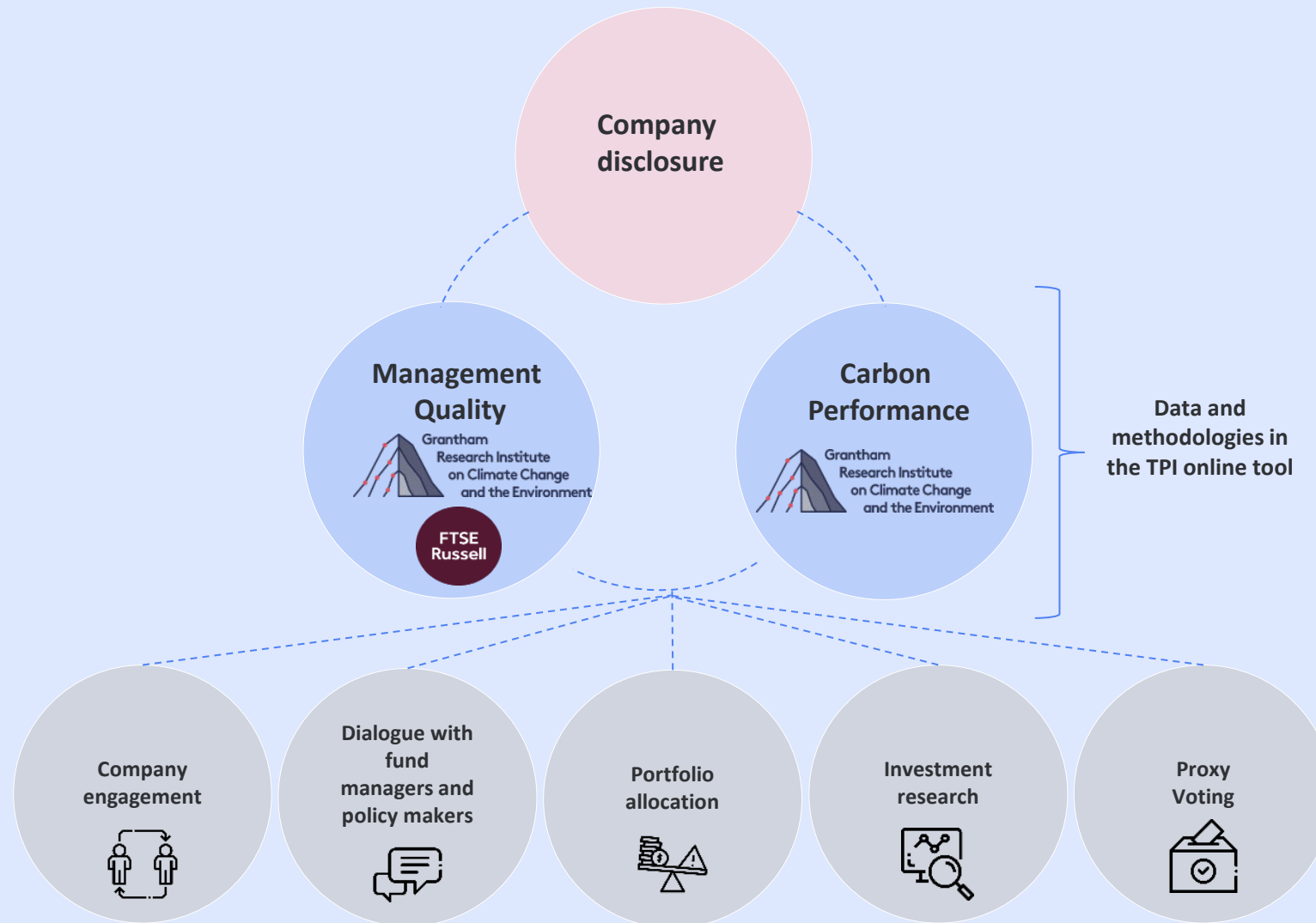
USS is using TPI data to inform voting and engagement decisions.



The TPI Centre's methodology for Publicly Listed Companies



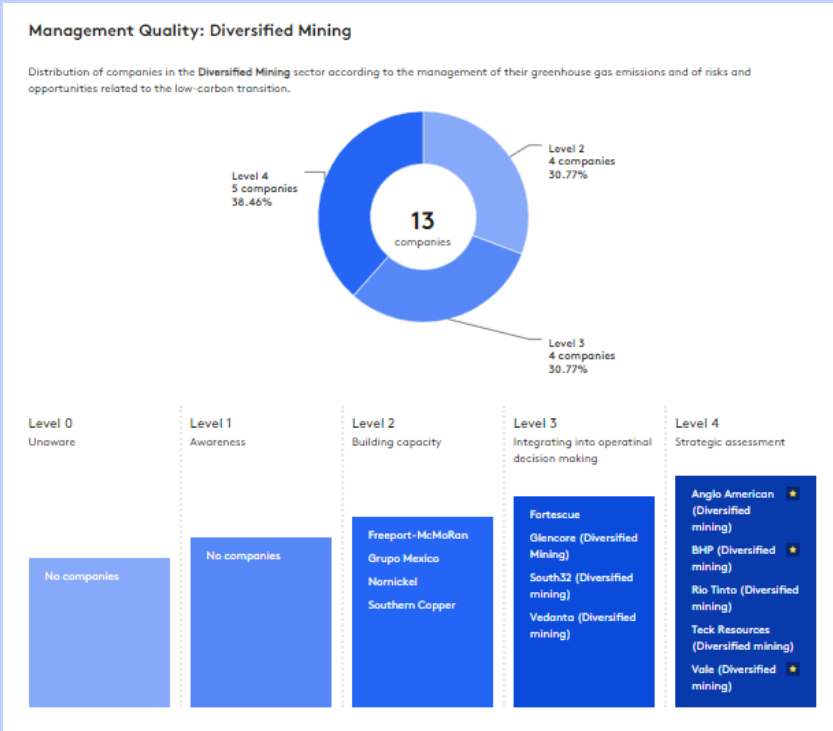
The TPI Centre's process – Publicly Listed Companies



Overview of the TPI Centre’s methodology for publicly listed companies

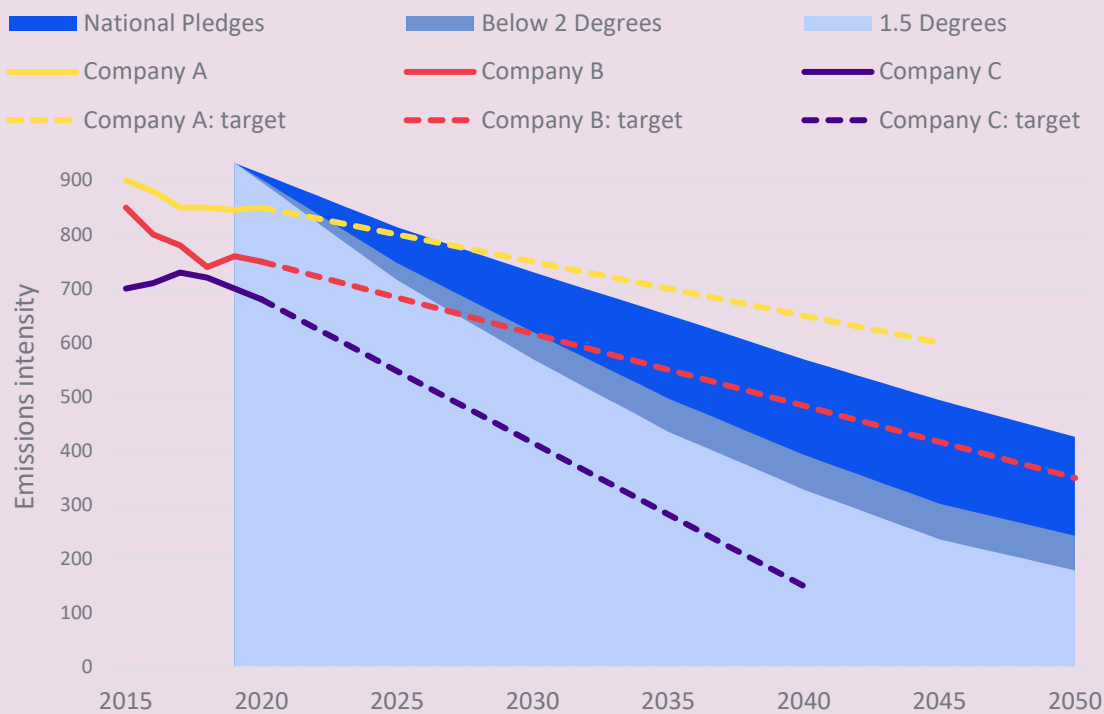
Management Quality

Assessment covers companies’ governance of greenhouse gas emissions and the risks and opportunities arising from the low-carbon transition.

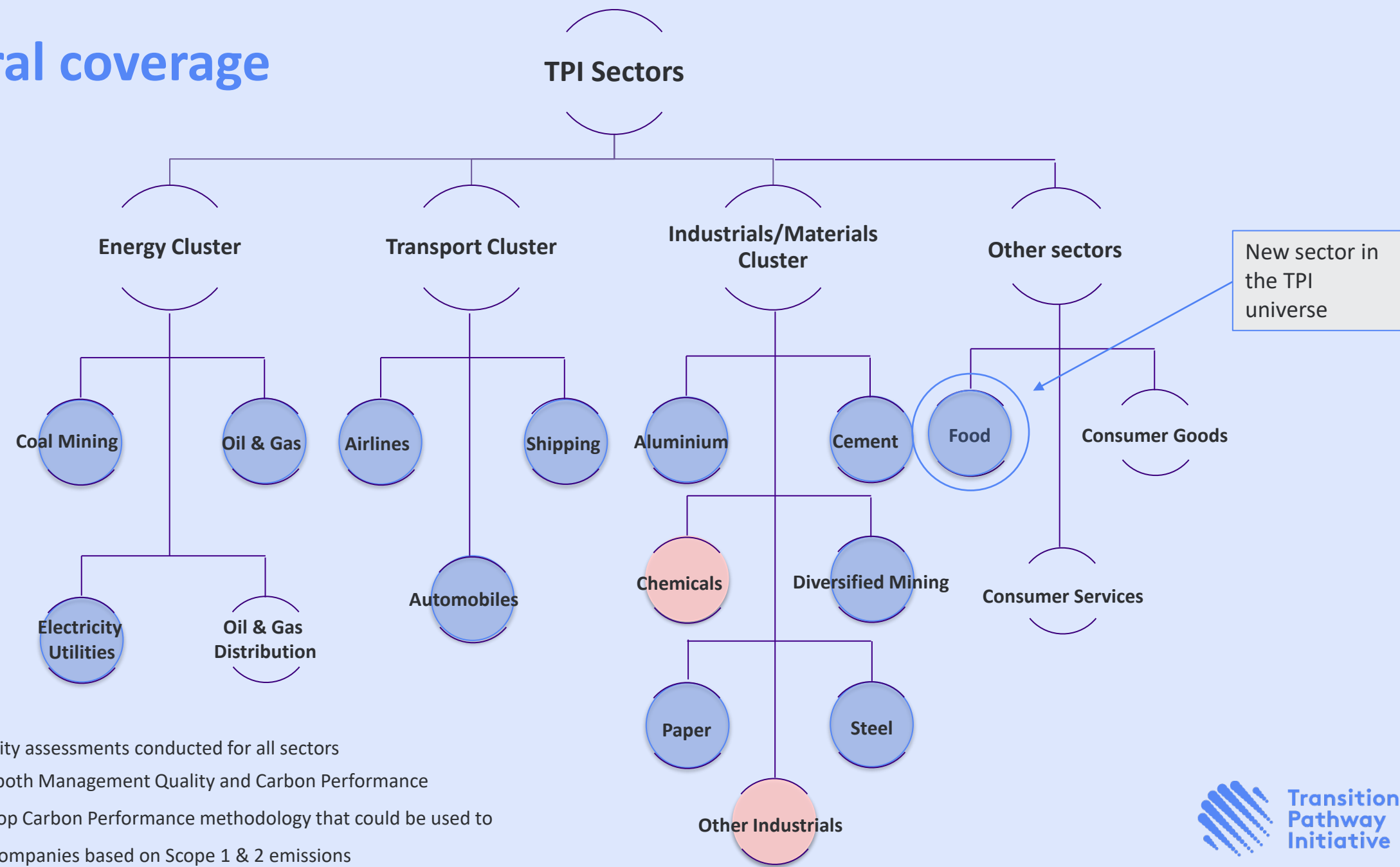


Carbon Performance

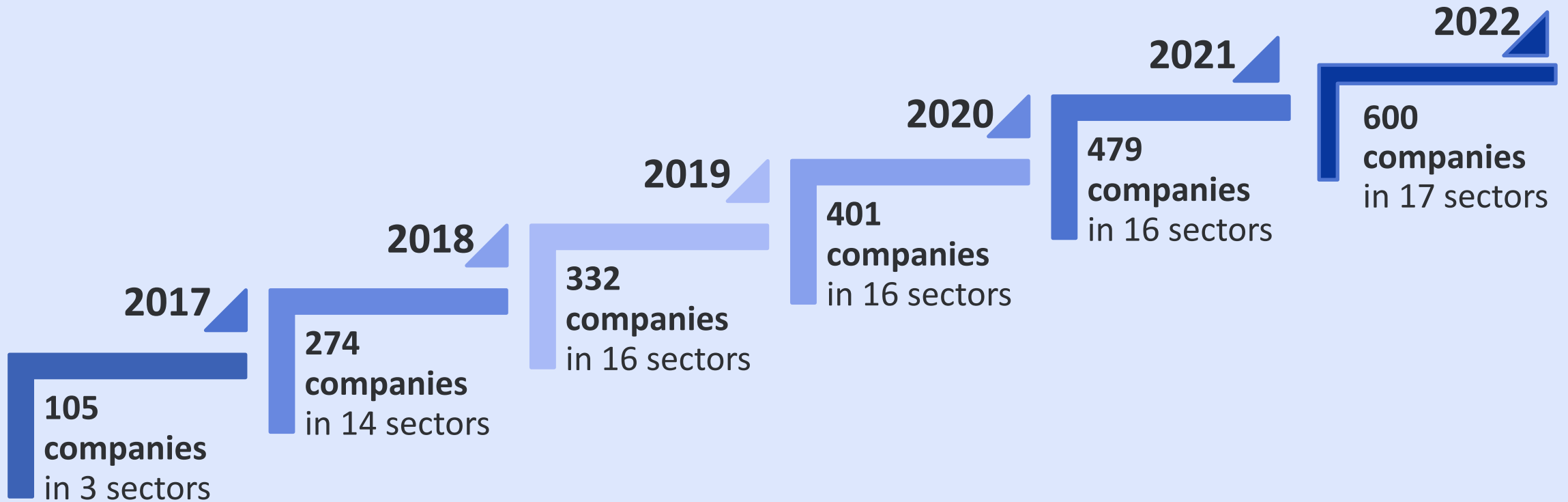
Assessment involves quantitative benchmarking of companies’ emissions pathways against different climate scenarios consistent with the 2015 UN Paris Agreement.



Sectoral coverage



Company coverage (by research cycle)



Management Quality

- TPI’s Management Quality framework is based on 19 indicators, each of which tests whether a company has implemented a particular carbon management practice. These indicators are used to map companies on to 5 levels.
- The data are provided by FTSE Russell
- See our latest *Methodology and Indicators Report, version 4.0*, for more detail.



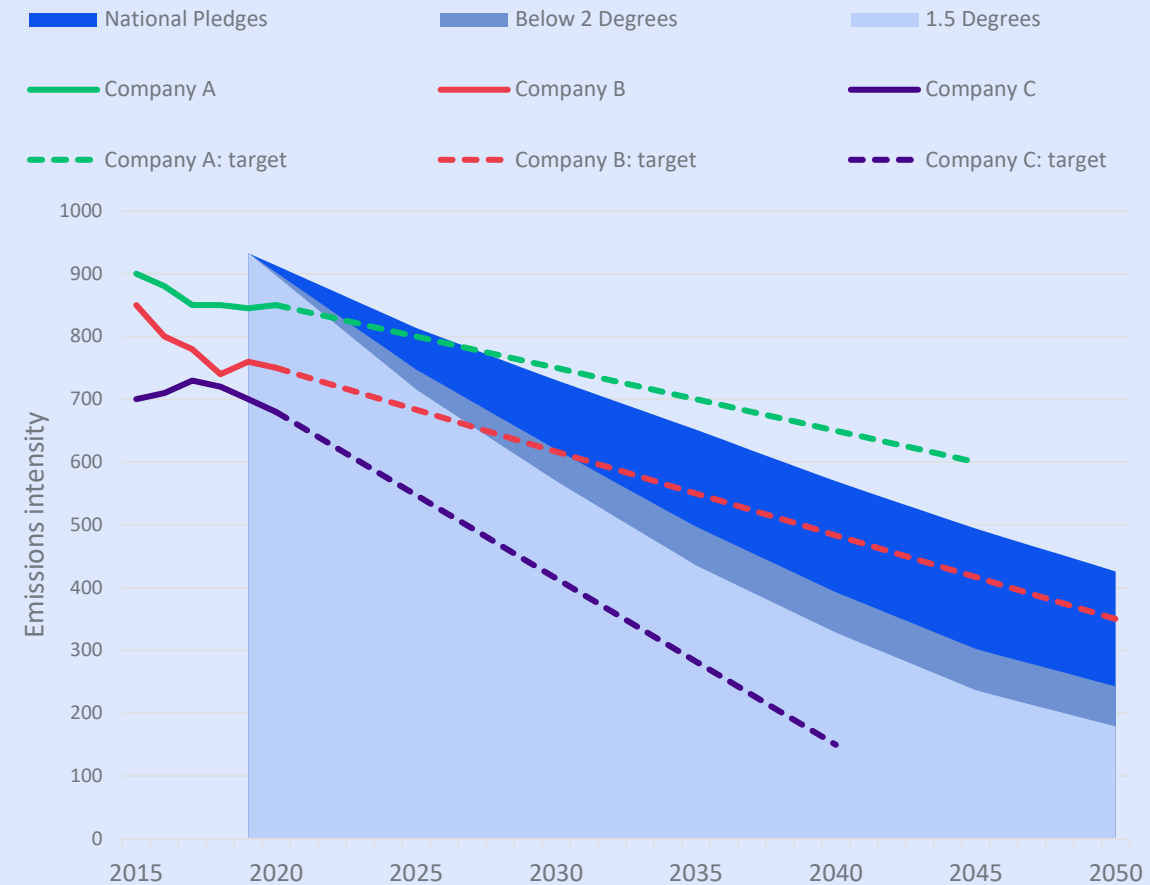
Carbon Performance

TPI's Carbon Performance assessment tests the alignment of company targets with the UN Paris Agreement goals.* Benchmarking is sector-specific and based on emissions intensity.

We use three benchmark scenarios for each sector, which in the energy sector cluster are:

1. **National Pledges**, consistent with emissions reductions related to policies introduced or under development up to at least mid-2020, depending on the sector; *these reductions collectively are insufficient to limit global warming to 2°C or below*;
2. **Below 2 Degrees**, consistent with holding the global temperature increase to below 1.8C with a 66% probability;
3. **1.5 Degrees**, consistent with holding the temperature increase to 1.5C with a 50% probability.

*We use the Sectoral Decarbonization approach (SDA), which was created by CDP, WWF & WRI in 2015 & is also used by the Science Based Targets Initiative.



Company A is not aligned with any of the benchmarks.

Company B is eventually aligned with the National Pledges, but neither with Below 2C nor 1.5C.

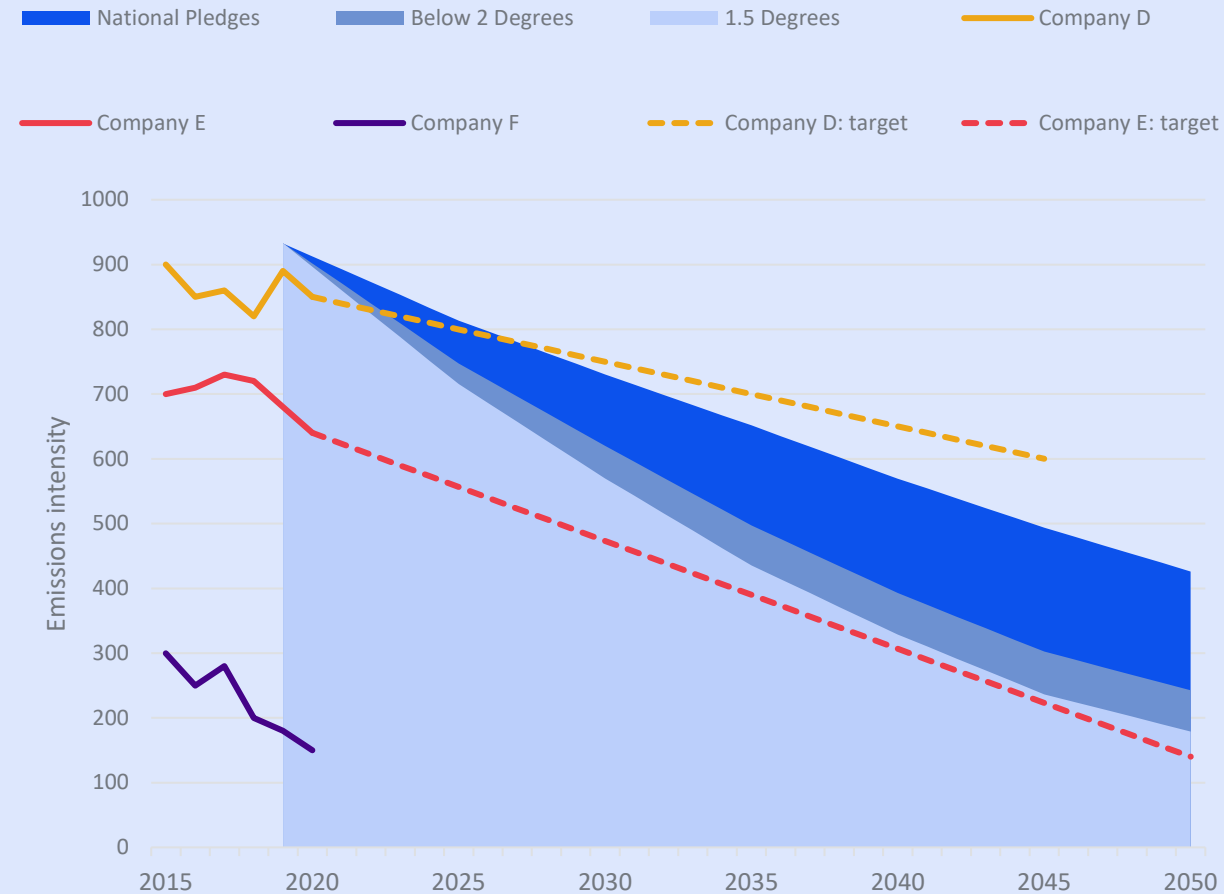
Company C is aligned with all Paris benchmarks, including 1.5C.

Reducing TPI's Carbon Performance data to a single alignment indicator

Is a company aligned with the Paris goals? To do this, we compare a company's emissions intensity in the last year for which we have data with the benchmarks at the end of the horizon.

We look out as far as 2050, so for example:

- **Company with a 2050 target:** the company's projected 2050 emissions intensity is compared with the benchmark emissions intensities in 2050;
- **Company with no target:** the company's latest historical emissions intensity is compared with the benchmark intensities in 2050 (i.e. a comparison of where the company is now with where it would need to be in 2050).



Company D has a 2045 target, which is compared with the benchmarks in 2050. Company D is not aligned with any benchmark.


























Company E has a 2050 target, which would place it below the 1.5C benchmark in 2050.

Company F has no target. However, in 2020, it already has an emissions intensity below the 1.5C benchmark.

TPI sectoral decarbonisation pathways

- We create sector-specific methodologies based on the Sectoral Decarbonisation Approach.
- We benchmark emissions in most sectors against three scenarios that are derived from modelling by the IEA.
- TPI benchmarks cover the majority of lifecycle emissions in each sector, while also taking into account issues of data availability.
- TPI benchmarks extend to 2050, allowing investors to see a company's transition pathway in the short, medium, and long term.
- TPI methodologies are free to use, allowing public review and scrutiny.

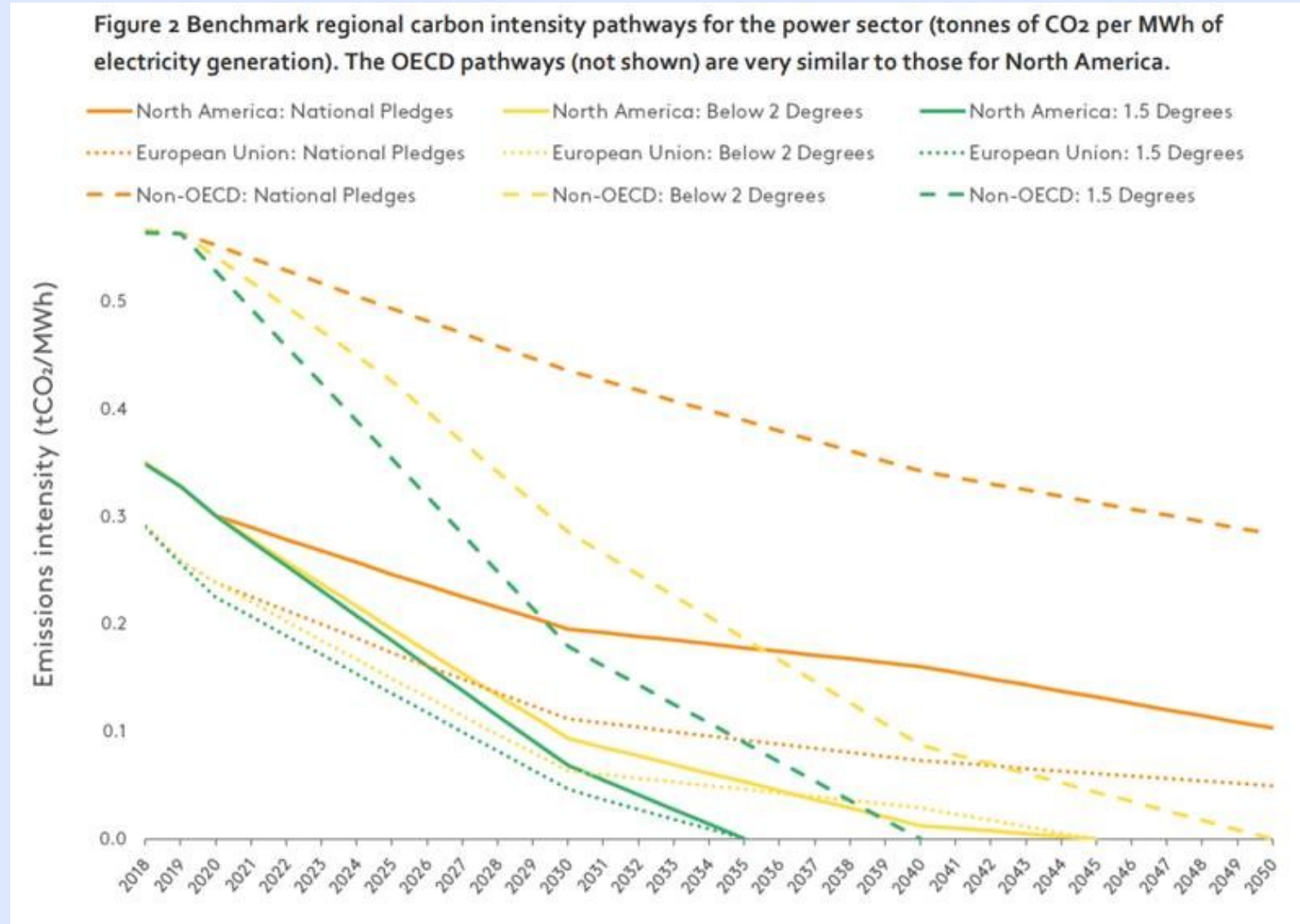
Table 1. Summary of key metrics on Carbon Performance benchmarks across sectors

Cluster	Sector	Scope of emissions	Benchmarks	Sectoral Carbon Performance measure
Energy	 Electricity utilities	1 from owned electricity generation	 1.5 Degrees scenario  Below 2 Degrees scenario  National Pledges scenario	Carbon intensity of electricity generation
	 Oil and gas	1, 2, 3 (cat 11)		Carbon intensity of primary energy supply
Transport	 Automobiles	3 (cat 11)	 2 Degrees (high efficiency)  2 Degrees (avoid shift, improve)  Paris Pledges scenario	New vehicle carbon emissions per kilometre
	 Airlines	1	 1.5 Degrees scenario  Below 2 Degrees scenario  International Pledges scenario	Carbon emissions per revenue tonne kilometre
	 Shipping	1		Carbon emissions per tonne kilometre
Industrials and materials	 Cement	1	 1.5 Degrees scenario  Below 2 Degrees scenario  National Pledges scenario	Carbon intensity of cementitious product
	 Diversified mining	1, 2,3 (cat 10, 11)		Carbon emissions per tonne of copper equivalent
	 Steel	1, 2		Carbon intensity of crude steel production
	 Aluminium	1, 2	 Below 2 Degrees scenario  2 Degrees scenario  Paris Pledges scenario	Carbon intensity of aluminium production
	 Pulp and paper	1, 2		Carbon intensity of pulp, paper, and paperboard production

TPI sectoral decarbonisation pathways

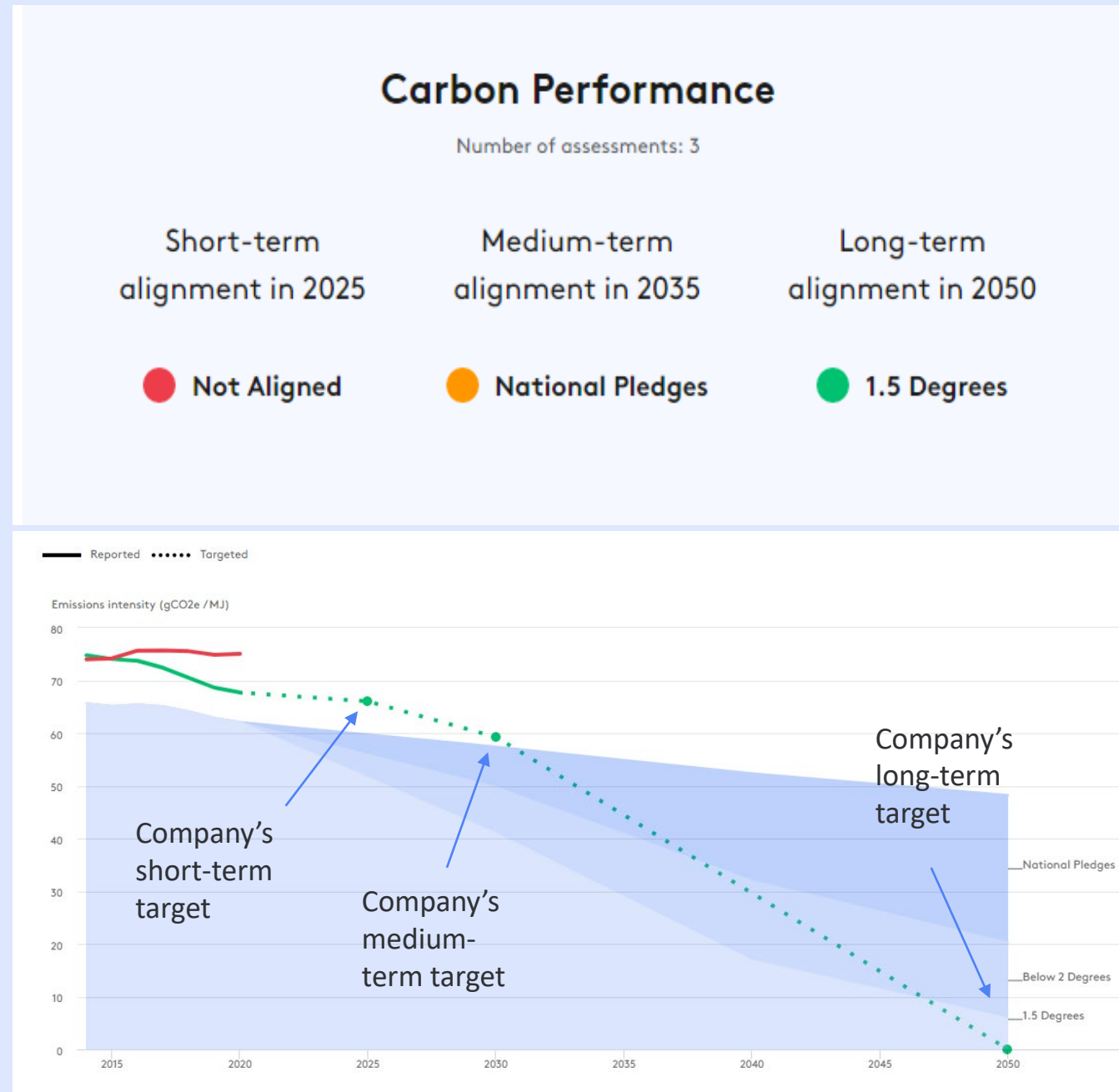
– regional pathways

- The UNFCCC and the Paris Agreement enshrine the principle of common but differentiated responsibilities.
- We have developed the regional alignment scores for electricity utilities using benchmarks for North America, Europe/European Union, OECD, and non-OECD.
- These benchmarks are based on the IEA's cost-minimisation modelling of the transition, which sets out faster decarbonisation pathways for the power sector in industrialised countries.



The pathway to net zero matters

- Increases in global temperature depends on cumulative CO2 emissions.
- Many companies plan to backload their efforts.
- Investors need to look at companies' entire transition pathways -> available on TPI's online tool.



The TPI Centre's online tool for banks



Objectives of the project

1

Develop, together with and for investors, a bespoke and action-focused framework assessing banks on their climate action and alignment with the Paris Agreement goals.

2





Inform investors about the climate-related efforts undertaken by banks as they transition to net zero.

3

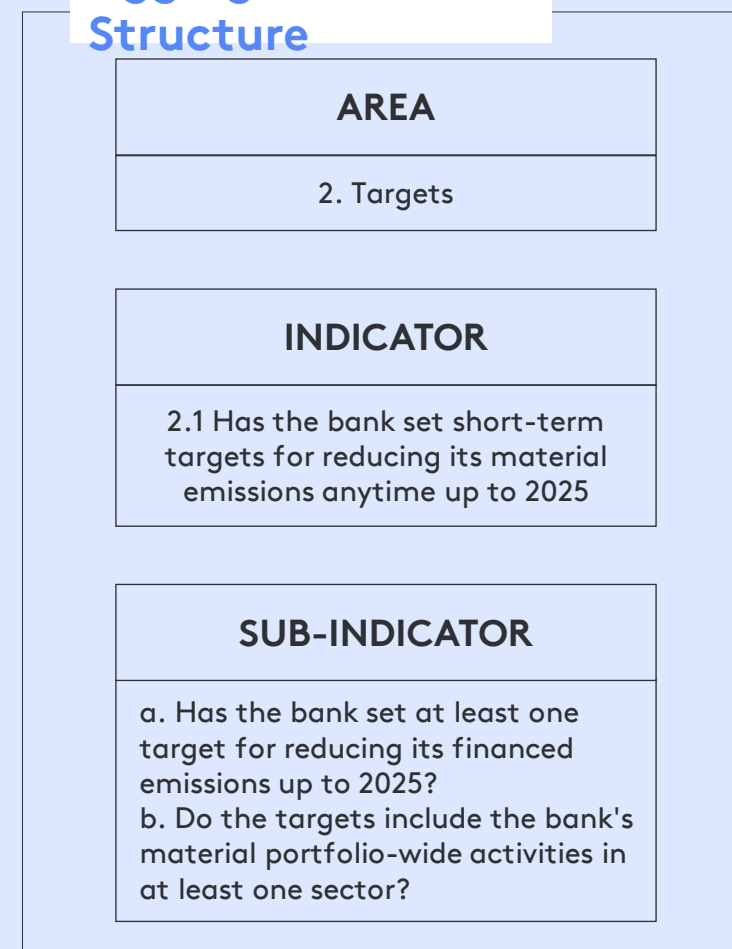
Add unique value to the current marketplace as the first investor-led banking initiative, complementing existing tools with key points of differentiation when assessing banks' decarbonization progress.

Framework Structure

Structured on the IIGCC Net Zero Investment Framework Implementation Guide, the v1 Framework indicators are divided into six sections:

-  Commitment (1 indicators)
-  Targets (2 indicators)
-  Decarbonization Strategy (9 indicators)
 - ➡ Engagement & Capital Allocation (4 indicators)
 - ➡ Exposure & Financed Emissions Disclosure (4 indicators)
 - ➡ Climate Scenario Analysis (1 indicator)
-  Climate Policy Engagement (3 indicators)
-  Climate Governance (4 indicators)
-  Audit and Accounts (3 indicators)

Aggregation Structure



TPI Centre Pilot Framework Key Points of Value

Key Differentiators of TPI Framework

- Evaluates ambition of net-zero financed emission targets
- Framework based on **investor input and priorities**
- Integrates novel indicators such as **capital allocation** and **sector-specific** policies
- Allows for scaling future assessments by **optimizing alignment** with CA100+

Targets

- Measures short, medium, and long-term alignment across entire portfolios.
- Sub-indicators measure relative ambition of banks' targets assessing what financing activities and high emitting sectors are covered or excluded.

Investor driven

- Developed using investors' direct input based around investor roundtables.
- Iterative process reflects ongoing collaboration with investors on priority areas for engagement.

Novel indicators

- Includes indicators that reflect key levers for the decarbonization of financing portfolios.
- Capital allocation is assessed by how banks are operationalizing finance withdrawal from high-emitting sectors and how banks engage with clients' transition plans.

CA100+ Alignment

- By aligning the assessment criteria of banks as much as possible with CA100+, the TPI framework allows for a forward-looking approach to scale assessments in the future.

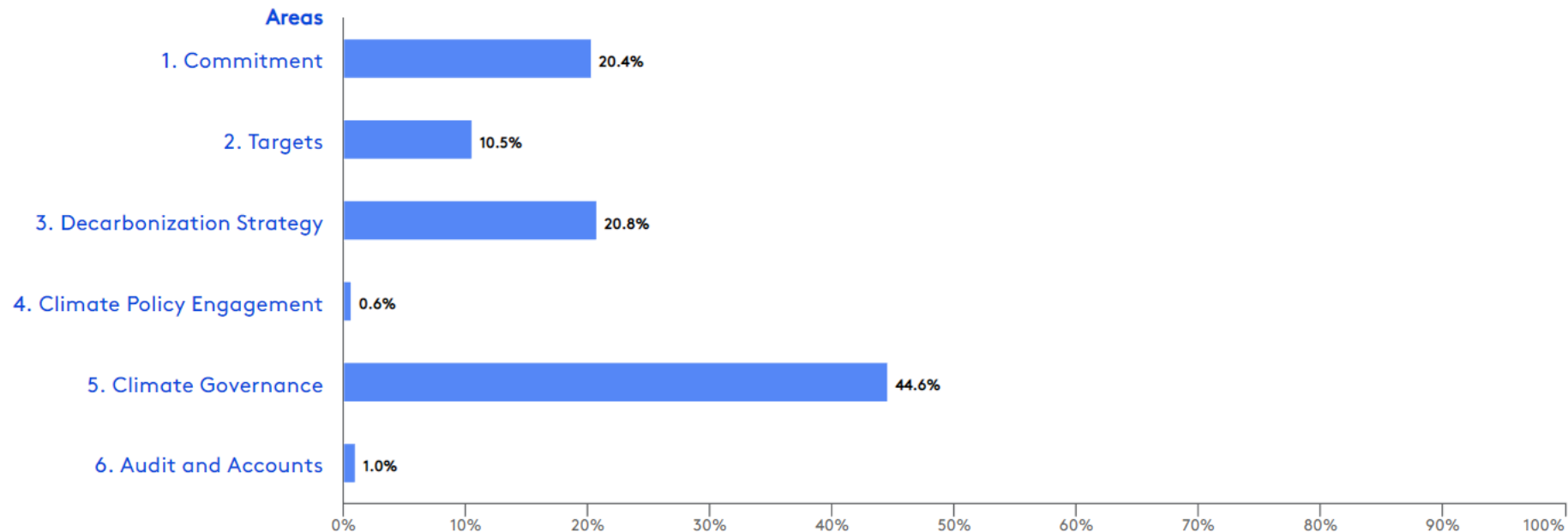
Framework Components

Pilot Assessment of Banks

Average bank score across each area

Assessment Date: 25 February 2022 ▼

Assessed banks alignment across the six areas (% of sub-indicators aligned with)



Annex: What is the state of transition in the highest emitting sectors?



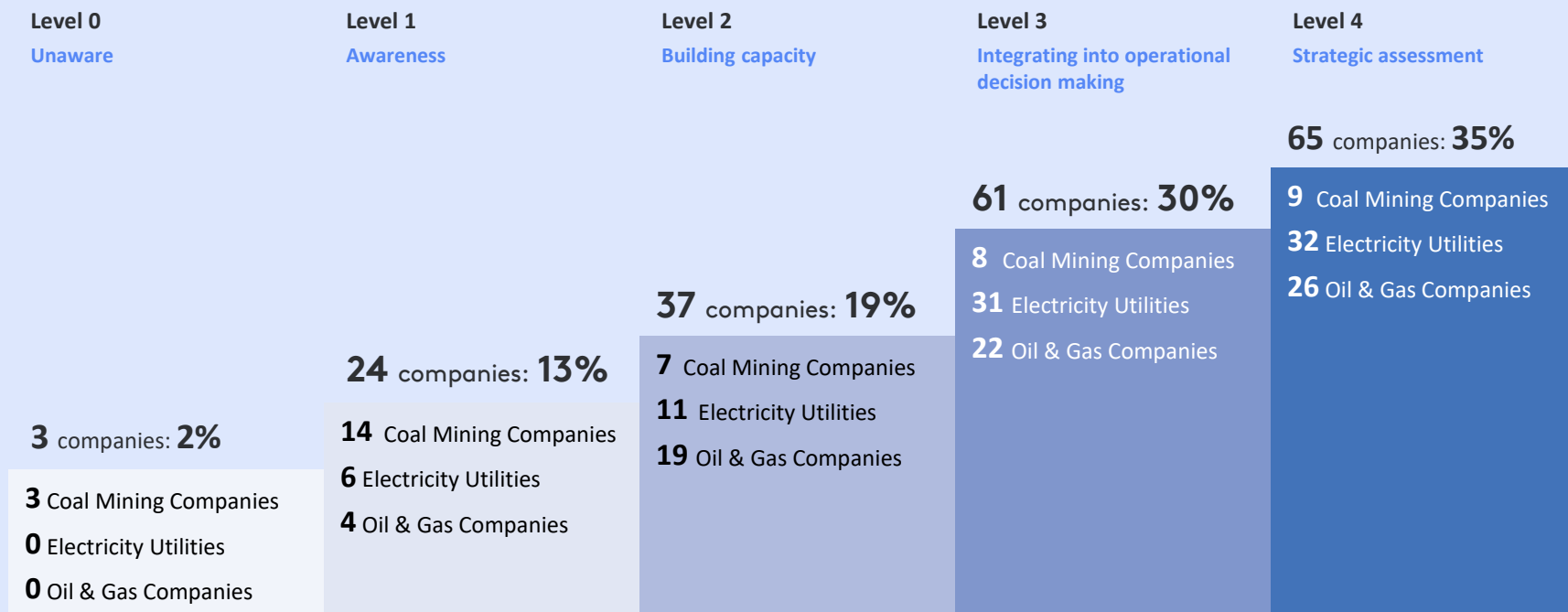
MANAGEMENT QUALITY OF ENERGY COMPANIES IN 2021

TOTAL NUMBER OF COMPANIES ASSESSED

 **80** ELECTRICITY UTILITIES  **58** OIL & GAS  **41** COAL MINERS

PERFORMANCE OF ENERGY COMPANIES ON MANAGEMENT QUALITY

The average Management Quality score of energy companies is 2.8, meaning that the companies in this cluster are between building capacity and integrating climate change into operational decision making. Electricity utilities lead with an average Management Quality score of 3.1, oil and gas companies score 3 and coal miners with a score of 2.1.



For further information on the Management Quality methodology: [TPI's Methodology Report: Management Quality and Carbon Performance, Version 4.0](#)
The [TPI 2021 Energy Report](#) is now available. All the data are published via the [TPI open-access online tool](#) and on [GitHub](#).

CARBON PERFORMANCE OF ENERGY COMPANIES

AUGUST 2021

TOTAL NUMBER OF COMPANIES ASSESSED

⚡ **76** ELECTRICITY UTILITIES

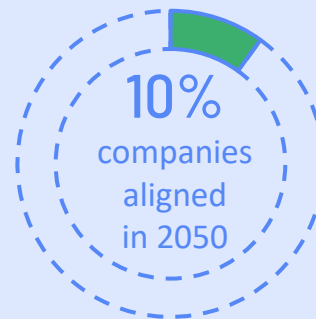
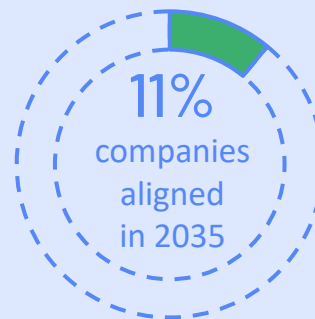
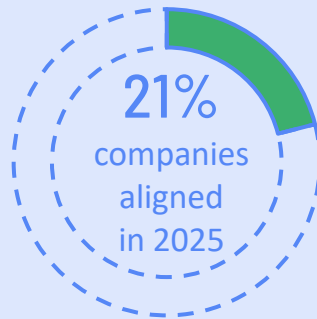
💧 **56** OIL & GAS

🚃 **6** DIVERSIFIED MINERS INVOLVED IN COAL

ALIGNMENT WITH TPI'S 1.5°C BENCHMARK



For the first time, TPI has measured the alignment of energy companies against a 1.5°C Scenario benchmark. In addition, TPI has updated its Below 2°C and National Pledges benchmarks.

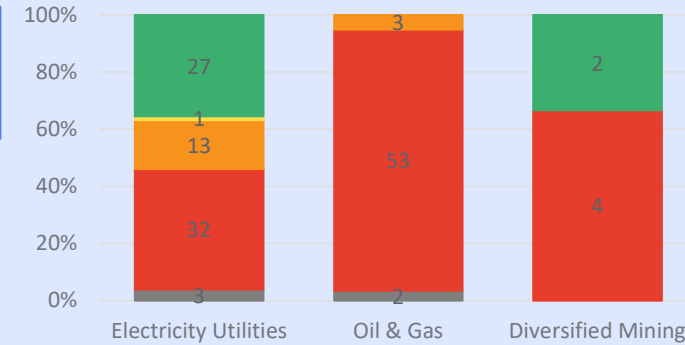


For further information on the TPI Carbon Performance methodology in the energy cluster:
[Carbon Performance assessment of electricity utilities, oil and gas, diversified mining](#)

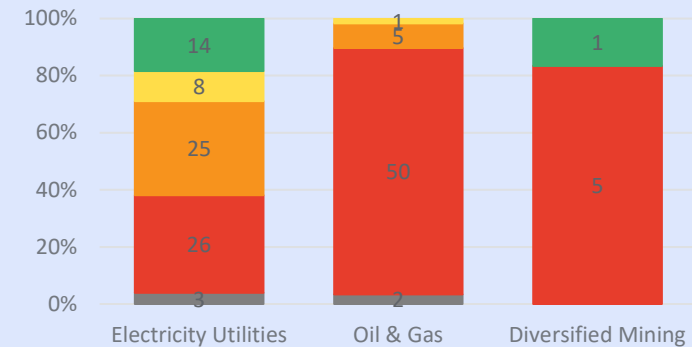
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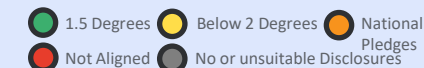
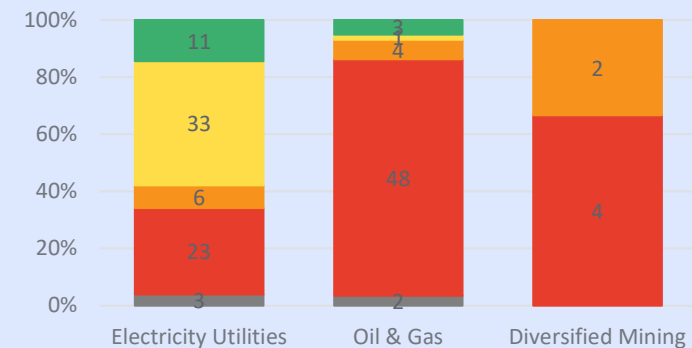
2025 Alignment



2035 Alignment



2050 Alignment



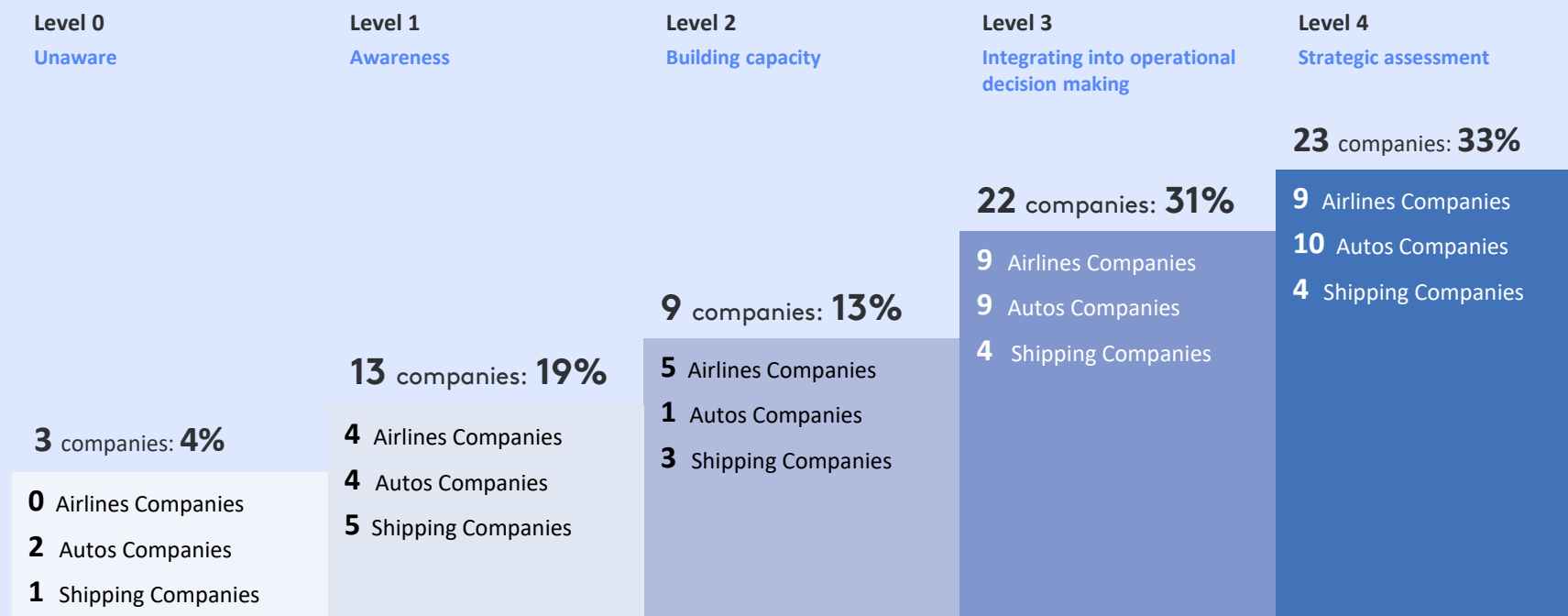
MANAGEMENT QUALITY OF TRANSPORT COMPANIES IN 2021

TOTAL NUMBER OF COMPANIES ASSESSED



PERFORMANCE OF TRANSPORT COMPANIES ON MANAGEMENT QUALITY

The average Management Quality score of transport companies is 2.7, meaning that the companies in this cluster are between building capacity and integrating climate change into operational decision making. Airlines lead with an average Management Quality score of 2.9, autos score 2.8, and shipping with a score of 2.3.






For further information on the Management Quality methodology: [TPI's Methodology Report: Management Quality and Carbon Performance, Version 4.0](#)
All the data are published via the TPI open-access [online tool](#) and on [GitHub](#).

CARBON PERFORMANCE OF TRANSPORT COMPANIES

JANUARY 2022

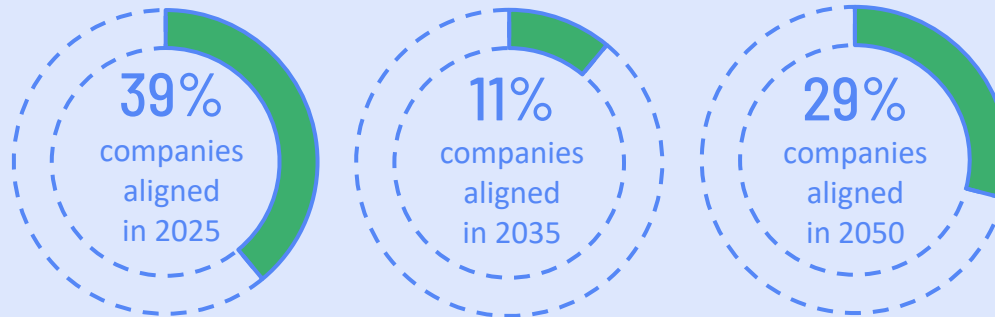
TOTAL NUMBER OF COMPANIES ASSESSED

 **27** AIRLINES  **17** SHIPPING  **26** AUTOS

ALIGNMENT WITH 1.5°C/2°C HIGH EFFICIENCY



For the first time, TPI measures the alignment of shipping and aviation companies against a 1.5°C Scenario benchmark. In addition, TPI has updated its Below 2°C and International Pledges benchmarks. In autos, the most ambitious benchmark continues to be the 2°C High Efficiency scenario.



For further information on the TPI Carbon Performance methodology in the transport cluster: [Carbon Performance assessment of airlines, international shipping, and automobile manufacturers](#)

All the data are published via the TPI open-access [online tool](#) and on [GitHub](#).

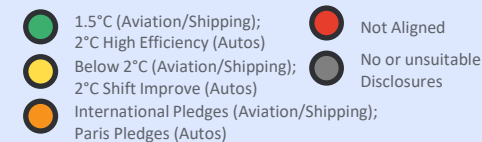
2025 Alignment



2035 Alignment



2050 Alignment



MANAGEMENT QUALITY OF INDUSTRIALS AND MATERIALS COMPANIES IN 2021

TOTAL NUMBER OF COMPANIES ASSESSED

 **36** STEEL  **41** CEMENT  **26** PULP & PAPER  **21** ALUMINIUM  **14** DIVERSIFIED MINING

PERFORMANCE OF INDUSTRIALS AND MATERIALS COMPANIES ON MANAGEMENT QUALITY

The average Management Quality score of industrials and materials companies is 2.65, meaning that the companies in this cluster are between building capacity and integrating climate change into operational decision making. Diversified mining leads with an average Management Quality score of 3.21, steel scores 2.61, paper scores 2.54, aluminium scores 2.48, and cement scores 2.41.



For further information on the Management Quality methodology: [TPI's Methodology Report: Management Quality and Carbon Performance, Version 4.0](#)
All the data are published via the TPI open-access [online tool](#) and on [GitHub](#).

CARBON PERFORMANCE OF INDUSTRIAL AND MATERIALS COMPANIES

APRIL 2022

TOTAL NUMBER OF COMPANIES ASSESSED

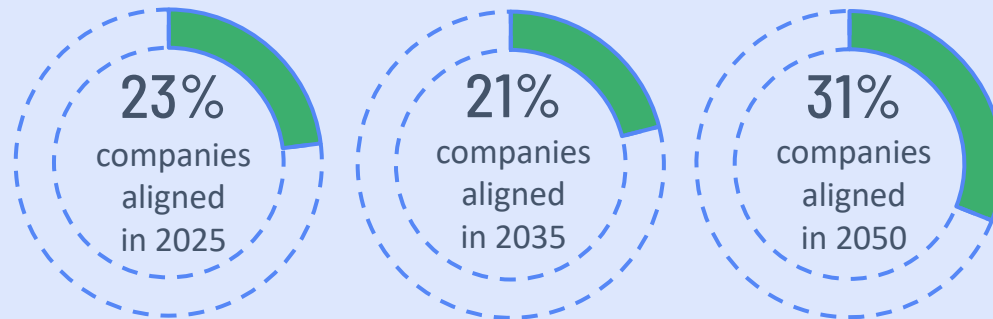
 **34** STEEL  **41** CEMENT  **26** PULP & PAPER  **21** ALUMINIUM

**3 steel and 5 aluminium companies' activities don't fit the scope of TPI's Carbon Performance assessment of their sectors. Hence they are not assessed on Carbon Performance.*

ALIGNMENT WITH 1.5°C/ Below 2°C



For the first time, TPI has measured the alignment of steel and cement companies against a 1.5°C Scenario benchmark. In addition, TPI updated its Below 2°C and National Pledges benchmarks. In paper and aluminium, the most ambitious benchmark continues to be the Below 2°C scenario.

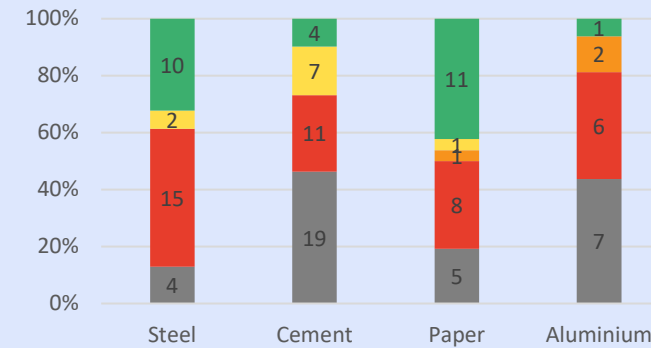


For further information on the TPI Carbon Performance methodologies in the industrials and materials cluster: Carbon Performance assessment of [steelmakers](#), [cement](#), [aluminium](#), and [paper](#).

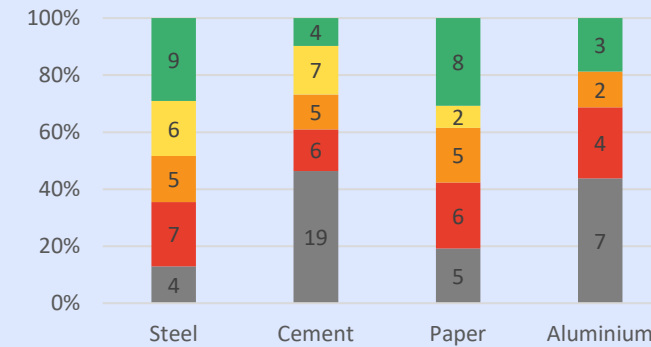
All the data are published via the TPI open-access [online tool](#) and on [Github](#).



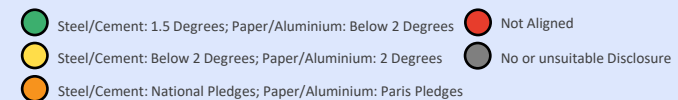
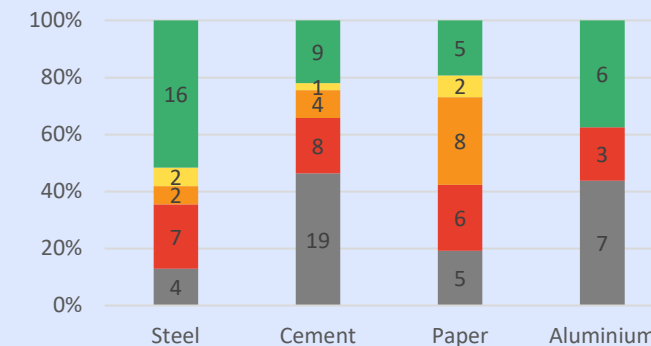
2025 Alignment



2035 Alignment



2050 Alignment



CARBON PERFORMANCE OF DIVERSIFIED MINING COMPANIES

JUNE 2022

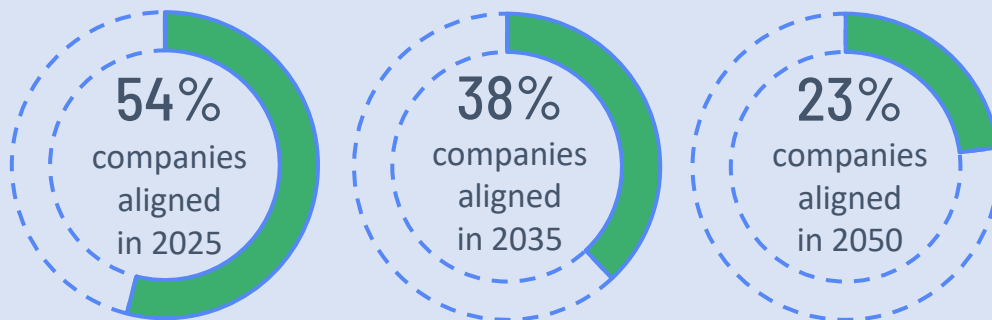
TOTAL NUMBER OF COMPANIES ASSESSED

 **13** DIVERSIFIED MINERS

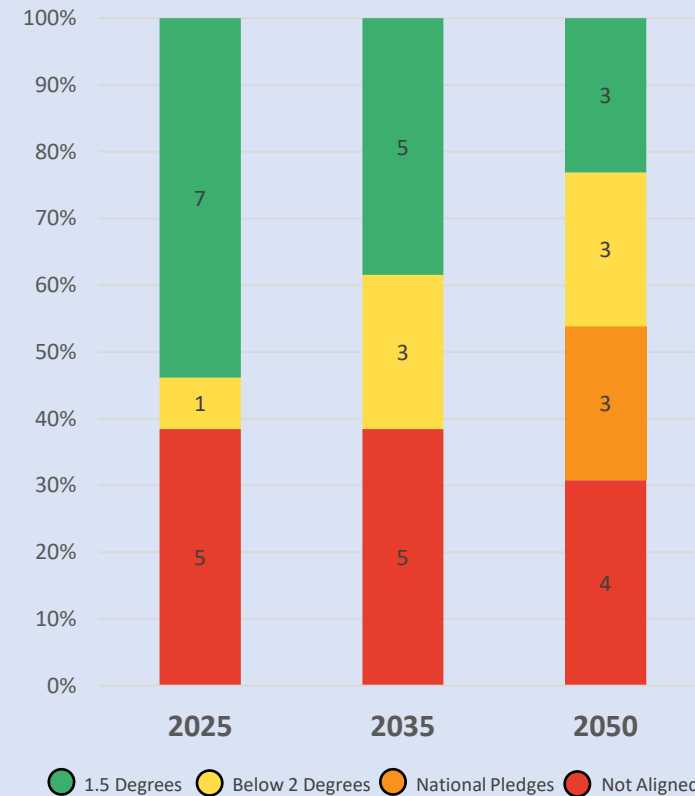
ALIGNMENT WITH 1.5°C



TPI has measured the alignment of diversified mining companies against a 1.5°C Scenario benchmark. The high degree of alignment in 2025 and 2035 is primarily **not** due to ambitious short and medium term targets. Rather, it is mainly due to the portfolio of some miners containing only commodities with low Scope 3 emissions from processing and use, which gives them a low emissions intensity starting point. The share of companies aligned with at least Below 2 Degrees in 2050 has improved from 31% to 45% compared to last year.



Alignment of diversified mining companies by year



For further information on the TPI Carbon Performance methodologies : Carbon Performance assessment of [diversified miners](#).
All the data are published via the TPI open-access [online tool](#).



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