



# The Asia Pacific financed emissions benchmarking study

**A first look into the state of financed  
emissions in Asia Pacific**

**June 2026**





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## 01

# Executive summary – Overview

## Purpose

This report is our **first regional benchmarking study** on how financial institutions (FIs) across Asia Pacific measure, manage and report their financed emissions. Conducted in the second half of 2025, it draws on the **2024 Sustainability Reports** of selected banks, insurers, asset managers and asset owners across Asia Pacific markets, covering countries such as Australia, Indonesia, Japan, Malaysia and Singapore. These insights are derived from the availability of data at the point of time the study was conducted. Insights could change with new and more recent data made available.

**18**

Banks studied

**10**Insurers / Asset  
Managers / Asset Owners  
studied**USD \$10,153Bn**total assets on  
balance sheet**USD \$1,246Bn**total assets on  
balance sheet

## Why is it important?

The **sustainability reporting landscape continues to evolve** amid heightened geopolitical tensions, faster technological change and intensifying climate impacts, alongside a shifting regulatory environment. Regulators, investors and clients **expect clearer disclosures on climate-related risks and credible transition plans from FIs**.

**Financed emissions** provide a **quantified view of the potential climate-related impacts and risks** embedded in lending and investment portfolios, showing where **institutions are most exposed** and where **opportunities exist to decarbonise** high-emitting sectors and invest in lower-carbon technologies and business models.



Frameworks such as the **Partnership for Carbon Accounting Financials (PCAF)** and the **Greenhouse Gas (GHG) Protocol** give institutions structured ways to link emissions to their financing activities and report them consistently, enabling more meaningful benchmarking and clearer insight into portfolio risks and opportunities.

This benchmarking **study provides a structured comparison** across four dimensions:



**Disclosure** – how financed emissions and related climate information are reported.



**Scope and assumptions** – which portfolios and emissions scopes are included, and the methodological choices applied.



**Data** – the availability, quality and sources of data used to calculate financed emissions.



**Target setting and decarbonisation strategy** – how FIs use financed-emissions insights to set targets, steer portfolios and support the real-economy transition.

Together, these insights help Asia Pacific FIs understand how their practices compare with peers and global trends<sup>1</sup>, and identify areas where they can strengthen financed emissions management and disclosure.

<sup>1</sup> A similar benchmarking study has been conducted covering the UK, US, Europe and Middle East. See July 2025 PwC UK [YE24 Financed emissions benchmarking](#)

# Executive summary– Selected market trends

## 01

### Disclosure

**External assurance is increasingly recognised as a crucial step for FIs aiming to strengthen credibility.** Within the Asia Pacific region, 68% of FIs included in this exercise have engaged external assurance providers for at least part of their emissions reporting.

**PCAF standards are the predominant reference used to inform financed emissions calculations.** Within Asia Pacific, 100% of banks and 70% of insurers, asset managers and asset owners (Ins/AMs/AOs) publicly disclose their use of PCAF standards. No information has been disclosed from banks or Ins/AMs/AOs regarding the use of bespoke methodologies.

**Restatements are common, with over half of Asia Pacific FIs having restated at least one financed or operational emissions metric.** The reasons behind this include efforts to improve data quality, correct errors, and adapt to evolving methodologies.

## 02

### Scope and assumptions

**The business models of FIs shape their approach to financed emissions coverage.** Banks focus their disclosures on core lending portfolios, including business loans, mortgages, and commercial real estate. In contrast, Ins/AMs/AOs prioritise their investment activities, resulting in higher disclosure rates for listed equity and corporate bonds.

**FIs report varying baseline years across asset classes and sectors.** This variation reflects differences in data availability, business strategies and the phased expansion of reporting scopes as more sectors are incorporated within emissions boundaries.

**The extent of financed emissions derived from operational boundaries of emissions (Scope 1, 2 and 3) are still maturing** and remain variegated.

## 03

### Data

**Across most sectors and asset classes, a broad spectrum of PCAF scores is observed,** reflecting the diverse data sources and data treatments FIs employ to calculate their financed emissions.

**The disclosure of data provider usage is relatively widespread.** 94% of banks and 80% of Ins/AMs/AOs referenced data providers in their disclosures. While the PCAF database remains the most commonly used source among banks (utilised by 83% of those sampled), Ins/AMs/AOs rely on a more diversified set of providers, including Morgan Stanley Capital International (MSCI) and the Carbon Disclosure Project (CDP).



## 04

**Target  
setting and  
decarbonisation  
strategy**

**Interim portfolio emissions reduction targets have become standard practice rather than the exception.** Within the Asia Pacific region, 78% of banks and 50% of Ins/AMs/AOs have disclosed at least one interim target.

**A smaller proportion of banks have revised their portfolio emissions reduction targets.** Benchmarking indicates that 17% of banks have reset their targets. This proportion is likely to rise in the coming years as reference scenarios develop and potentially diverge.







# Disclosure

## Framing the reporting landscape

The complexity and judgment inherent in emissions calculations can introduce uncertainty regarding their reliability and comparability. This can create a credibility gap that limits stakeholders' ability to compare performance and assess climate-related risks reflected in sustainability disclosures. This analysis focuses on independent assurance – ranging from limited to reasonable – as a key mechanism to support the quality of sustainability disclosures and enhance confidence in climate reporting within the financial sector.

### 2.1 Assurance over emission disclosures

“Over time and where possible, data should be verified to at least a level of limited assurance. Financial institutions should disclose whether data is verified and to what level.”

**PCAF, 2025<sup>2</sup>**

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<sup>2</sup> See December 2025 PCAF – [Financed Emissions GHG Standards Part A](#)

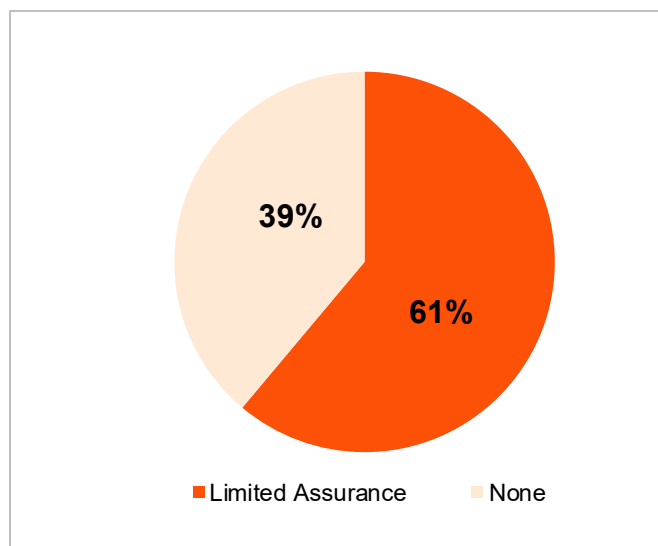


## Key insights

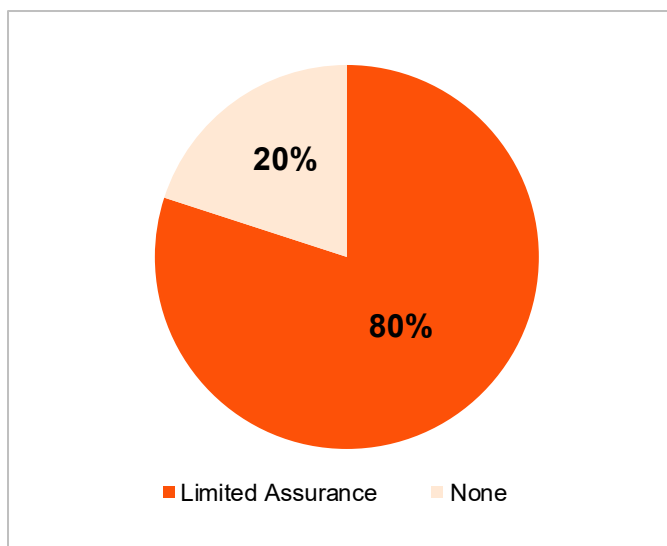
**Overall, 68% of the FIs in this exercise have secured at least limited assurance** on specific data supporting their financed emissions disclosures.

**None of the FIs have engaged / completed reasonable assurance over their financed emissions.**

**Banks – Assurance Distribution**



**Ins/AMs/AOs - Assurance Distribution**



## Additional points:

The extent of assurance disclosed varies across FIs. Generally, limited assurance is provided on absolute emissions figures. However, some FIs explicitly specify that limited assurance extends to additional metrics, such as emissions intensity or absolute emissions broken down by sector.

Several firms in EMEA and the US have attained reasonable assurance for their financed emissions. However, as previously noted, no Asia Pacific institution has completed this, nor have any announced plans to pursue it to date.





## 2.2 Use of PCAF

The PCAF is a global industry-led initiative that develops methodologies for measuring e.g. financed emissions, aligned with the GHG Protocol for Scope 3 Category 15. PCAF is explicitly referenced and aligned with several regulatory and voluntary frameworks as the preferred approach for FIs. These include the Australian Prudential Regulation Authority, the Science Based Targets initiative (SBTi), and the Taskforce on Climate-related Financial Disclosures (TCFD).

As of December 2025, PCAF noted more than 680 institutions worldwide, representing **USD\$97.6 trillion** in assets, have committed to measuring financed emissions using the PCAF methodology. This commitment enhances the comparability of disclosures for stakeholders.



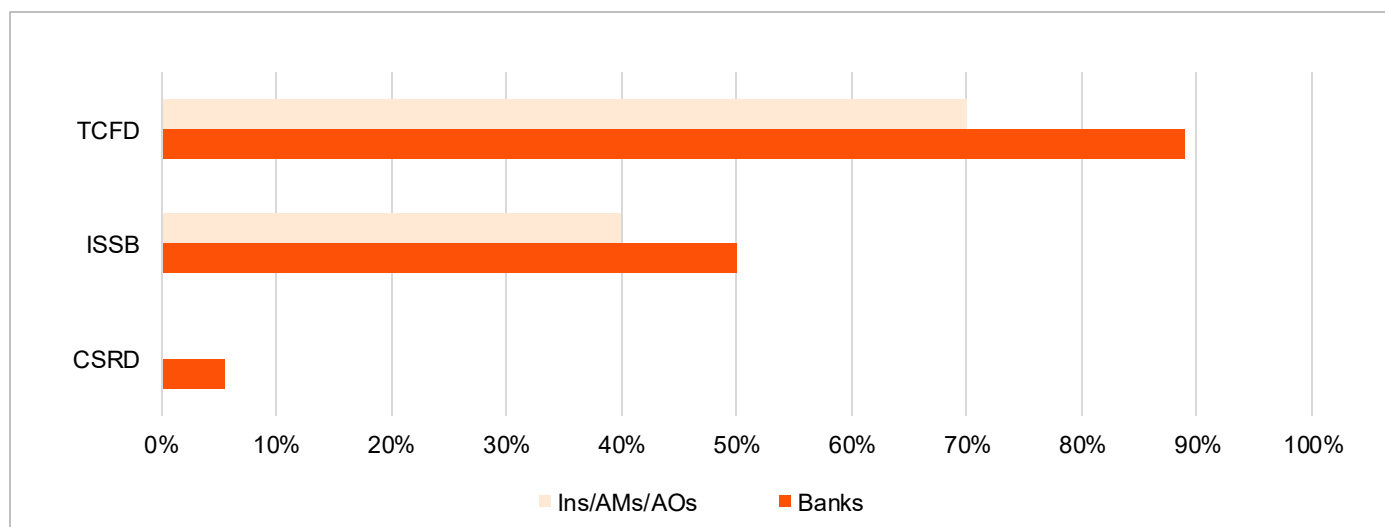
### Key insights

**100% of the banks and 70% of Ins/AMs/AOs studied – representing 89% of FIs in this exercise – have disclosed that the financed emissions metrics' calculation methodologies are in line with PCAF guidance.** This compares to 92% of banks and 86% of Ins/AMs/AOs reviewed in EMEA and the US.

Whilst the GHG Protocol Corporate Value Chain Accounting and Reporting Standard<sup>4</sup> requires companies to report 'a description of the methodologies... used to calculate Scope 3 emissions', **the remaining 14% of FIs did not disclose the use of PCAF nor other methodologies.**

**Many FIs continue to report using proxies** where data remains limited or unavailable.

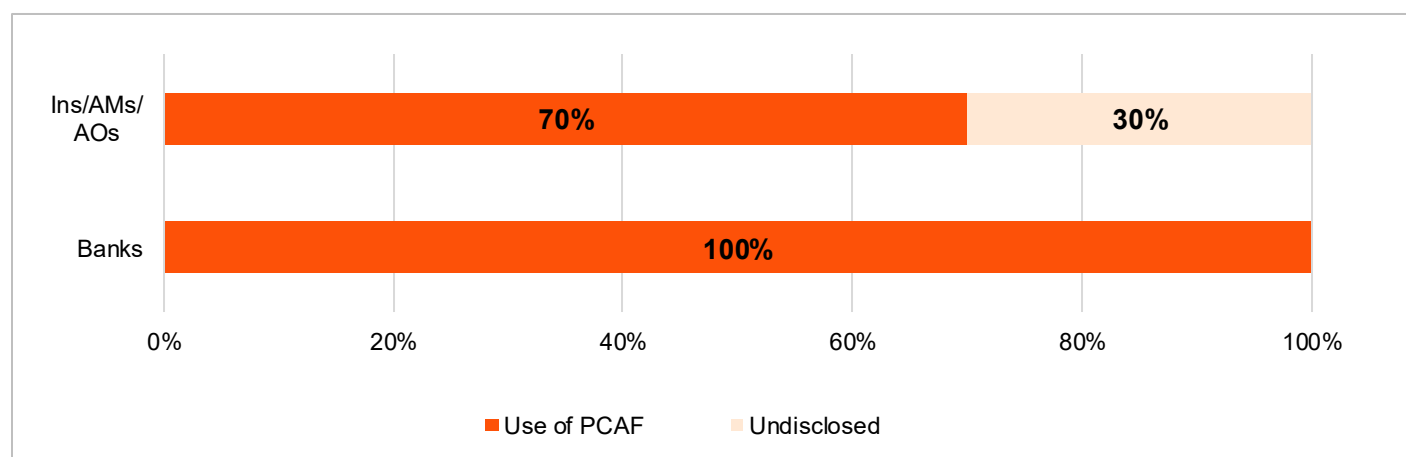
### Disclosure and alignment



<sup>4</sup> See 2011 - [GHG Protocol Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#)



### Disclosure of use of PCAF



## PCAF continues to expand its reach and refine its methodologies

PCAF has launched a **new India chapter** in September 2025, establishing **new partnerships in the Asia Pacific region**.

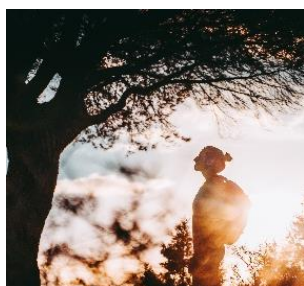
A recent update to the PCAF guidance<sup>5</sup> included:

- Use of **Proceeds Accounting**
- Securitised and Structured Products
- **Sub-Sovereign Debt**
- Guidance on **Financed Avoided Emissions** and Forward-Looking Metrics

PCAF, 2025<sup>5</sup>

<sup>5</sup> See December 2025 – [PCAF releases updated guidance for measurement of financed emissions](#)





“An entity shall correct material prior period errors by restating the comparative amounts for the prior period(s) disclosed unless it is impracticable to do so.”

IFRS S1, 2023<sup>6</sup>

## 2.3 Restatements

Restatements are common practice used by companies to ensure the accuracy and consistency of their carbon footprint disclosures. Restatements support transparency, comparability, and regulatory compliance such as IFRS S1. It is typically made when miscalculations occur in disclosed emissions, including base year emissions. PCAF and GHG protocols do not mandate restatements, however they specify requirements for establishing a baseline recalculation policy.



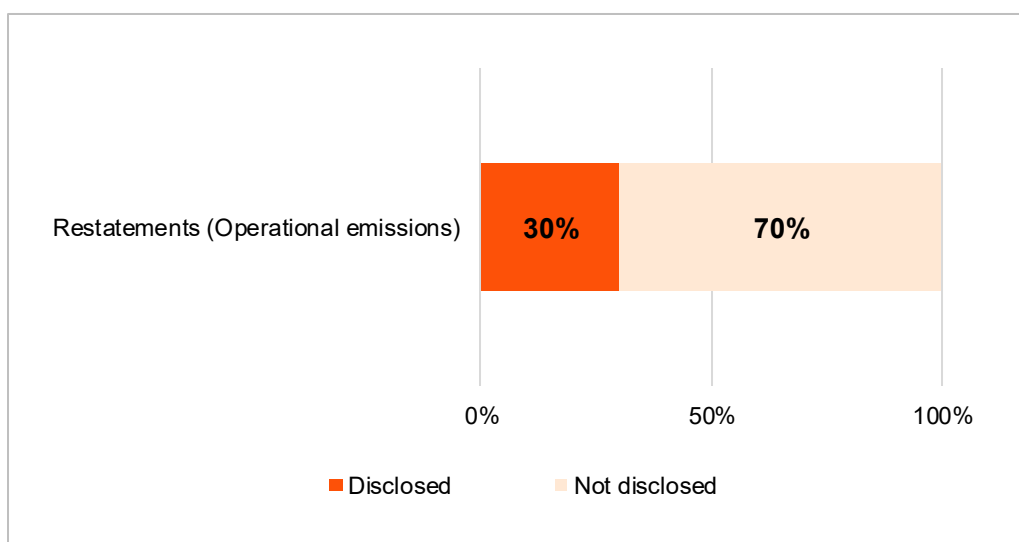
### Key insights

Overall, **57% of sampled FIs restated either a financed or operational emissions in their 2024 disclosures**. The most common adjustments are due to errors, changes in calculation methodologies, or the expansion of reporting scope.

**Only 22% of banks have disclosed basis of restatement**, where they provide narratives explaining materiality threshold for a restatement.

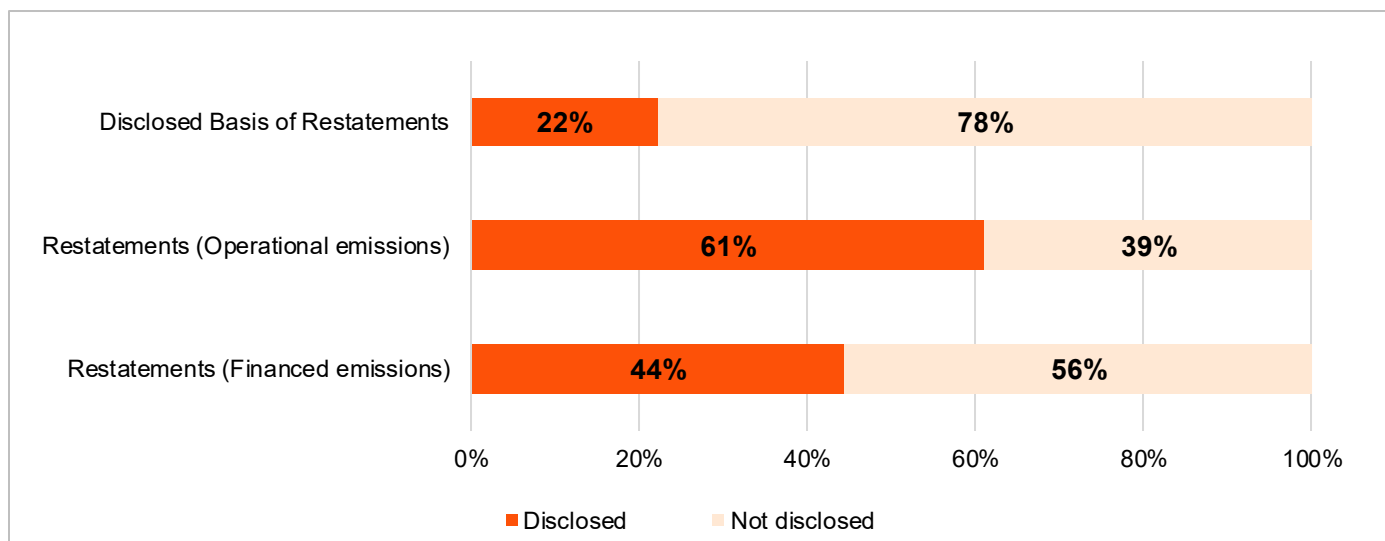
**Insurers and asset managers studied did not disclose any basis of restatement policies or restatements of financed emissions**, although they have disclosed restatement for operational emissions.

Ins/AMs/AOs - Restatement



<sup>6</sup> See June 2023 IFRS S1 – [IFRS Sustainability Disclosure Standard](#)

### Banks - Restatement



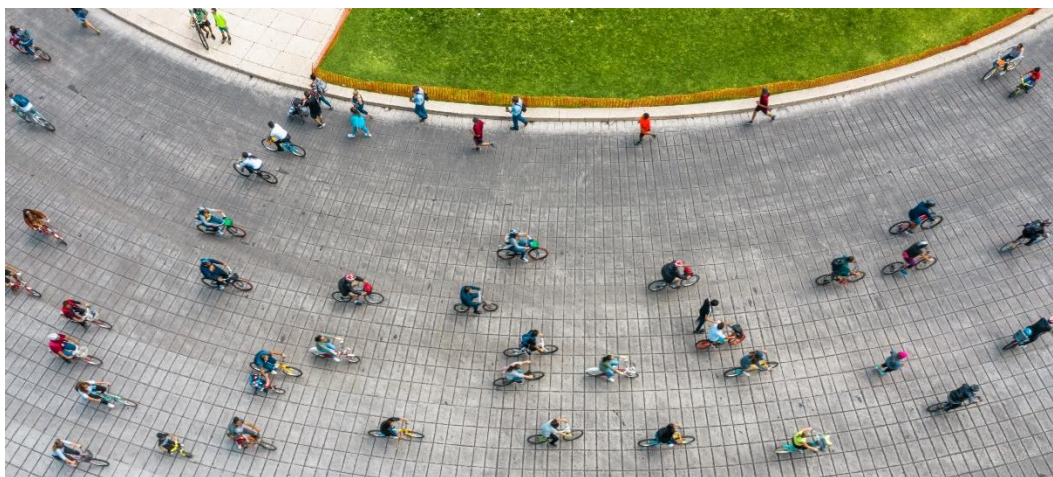
“Sustainable finance incorporates climate, green and social finance while also adding wider considerations concerning the longer-term economic sustainability of the organisations that are being funded, as well as the role and stability of the overall financial system in which they operate.

**International Capital Markets Association (ICMA), 2020<sup>7</sup>**

## 2.4 Sustainable finance

Banks engage with sustainable finance through sustainable lending practices, including environmental project finance and green mortgages. In contrast, Ins/AMs/AOs primarily participate through sustainable investment instruments, such as green bonds.

Disclosure expectations on FIs in this area vary. Within the EU, for example, the Sustainable Finance Disclosures Regulation (SFDR - currently under review) mandates extensive reporting requirements for in-scope sustainable financing activity<sup>8</sup>. Within Asia Pacific however, we do not yet observe regimes equivalent to the SFDR in place.



<sup>7</sup> See May 2020 ICMA – [Sustainable Finance High-Level definitions](#)

<sup>8</sup> For example, certain investment funds must disclose the degree to which their investments align with the definitions found in the EU Taxonomy.



Reporting remains a central pillar of the guidelines that underpin sustainable finance practice and markets across Asia Pacific. For example the Green Bond Principles developed by the ICMA that apply to issuers<sup>9</sup>, or Green Loan Principles developed by the Loan Syndications and Trading Association (LSTA), that apply to borrowers<sup>10</sup>. FIs in turn typically disclose headline lending or investment numbers, although such practice is not required, for example, by prevailing sustainability reporting standards.

Sustainable finance taxonomies – for example, the Singapore-Asia Taxonomy or EU Taxonomy – are often used to enhance the credibility of corporate and financial sector sustainable finance frameworks and transactions. Within Asia Pacific, most taxonomies contain “amber” criteria to help determine economic activities not currently aligned to a 1.5 degree trajectory but may still contribute towards a low carbon future. Such amber criteria often underpin “transition finance” instruments.



### Key insights

- **Disclosures show that banks provide the majority of sustainable finance within the region**, considering total sustainable finance lending to date compared against levels of sustainable finance investment provided by Ins/AMs/AOs.
- **FIs typically report on levels of sustainable finance lent/invested to date, rather than disclosing progress made towards an overarching sustainable finance mobilisation target.**
- **Reported levels of engagement with “transition finance” appear relatively low.** For example, only three banks report levels of transition finance origination compared with 11 that are disclosing levels of green financing. This is despite the presence of amber criteria in APAC taxonomies.

**USD \$1.19Tn**

Banks – Total sustainable finance lending to date

**USD \$1.86Tn**

Banks – Sustainable finance future commitments

**USD \$0.49Tn**

Ins/AMs/AOs – Total sustainable finance investment to date

**USD \$0.11Tn**

Ins/AMs/AOs – Sustainable finance future commitments

<sup>9</sup> See June 2025 ICMA – [Green Bond Principles](#)

<sup>10</sup> See March 2025 LSTA – [Green Loan Principles](#)

# Scope and assumptions

## Defining the boundaries

While guidance for measuring financed emissions has been established, it is guideline-based and uses terms such as “shall” or “required”, which imply mandatory requirements, alongside terms such as “should” and “may”, which allow for discretion and are open to interpretation. As a result, FIs adopt varying approaches, which contributes to differences in the scope of reported figures.

### 3.1 Asset classes

The PCAF methodology offers a structured approach to measuring and disclosing GHG emissions from financing activities at the asset class level. This approach helps enhance comparability, given the number of FIs that use it. Institutions are expected to calculate baseline emissions for each asset class separately. In line with PCAF’s “follow the money” principle, FIs map their exposures to defined PCAF asset classes to ensure consistent and transparent attribution of financed emissions.





“All financial institutions that commit to using this Financed Emissions Standard shall fulfil certain requirements when disclosing their financed emissions publicly. However, they do have the flexibility to decide where they want to start with measuring and disclosing their financed emissions—for instance, at a specific asset class level or for a specific sector within a certain asset class. Flexibility in reporting is allowed largely because of recognized limitations in data availability and quality.”

**PCAF**, 2025<sup>11</sup>

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<sup>11</sup> See December 2025 PCAF – [Financed Emissions GHG Standards Part A](#)



## Key insights

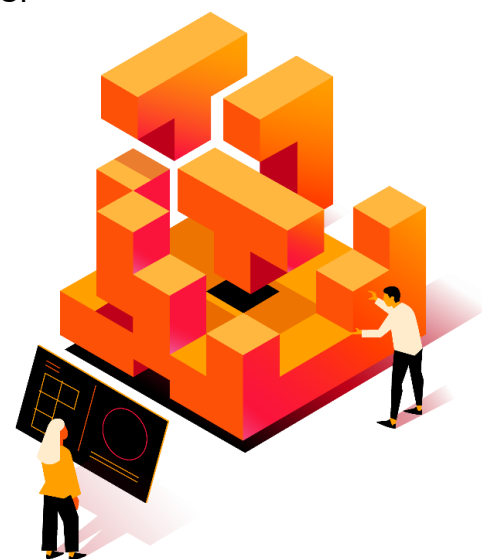
**Business loans, project finance, mortgages and commercial real estate were the most reported asset classes by banks** – this mirrors the findings in EMEA and the US.

**Listed equity and corporate bonds are the most reported asset class by Ins/AMs/AOs.**

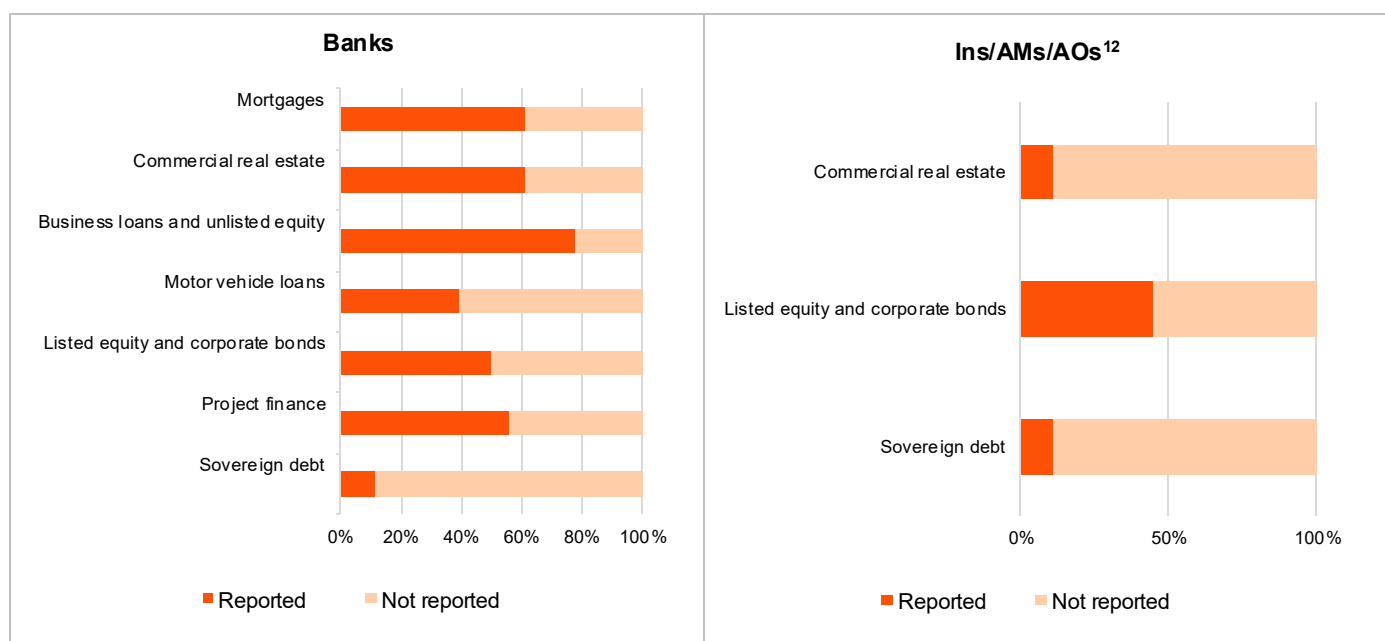
**FIs are taking a phased approach to disclosing financed emissions**, focusing on the most material sectors / asset classes first.

**Most Ins/AMs/AOs (50%) are disclosing financed emission at an overall level**, i.e. no asset class level breakdown.

No Ins/AMs/AOs have reported financed emissions information at the sector level.



**Distribution of the number of FIs which reported financed emissions by asset class defined in PCAF**



Certain asset classes are more relevant to a lending book activities (i.e. Banks) compared to investment activities (i.e. Ins/AMs/AOs) and vice versa.

<sup>12</sup> One insurer has been excluded from the Ins/AMs/AOs above because its business is cross-sector and does not conform to the typical investment accounting for financed emissions followed by insurers, asset managers, and asset owners.





### 3.2 Baseline year

“A meaningful and consistent comparison of emissions over time requires that companies set a performance datum with which to compare current emissions. This performance datum is referred to as the base year emissions”

**GHG Protocol, 2024<sup>13</sup>**

“Companies shall publicly report... Once a base year has been established: the year chosen as the scope 3 base year;... scope 3 emissions by category in the base year”

**GHG Protocol Corporate Value Chain (Scope 3), 2011<sup>14</sup>**

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<sup>13</sup> See March 2024 - [GHG Protocol Revised](#)

<sup>14</sup> See 2011 - [GHG Protocol Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#)





## Key insights

**FIs report different baseline years across asset classes and sectors.** This often reflects variations in data availability and strategic approach, together with the phased expansion of reporting scope as additional sectors are brought within emissions boundaries. PCAF does not outline the requirement to disclose baseline year and emissions, although it is recommended to note where relevant (PCAF, 2025 Annex 10.2).

Across the sample, **FIs commonly disclose across multiple years subsequent to the baseline** to facilitate year-on-year comparison. The number of years reported varies more markedly within the banking cohort. Similarly, PCAF also does not prescribe the requirement to disclose their financed emissions for multiple comparable time periods.

**Baseline years are not consistently included in disclosures;** some FIs report emissions metrics for their baseline year, while others state the year but do not provide corresponding metrics.

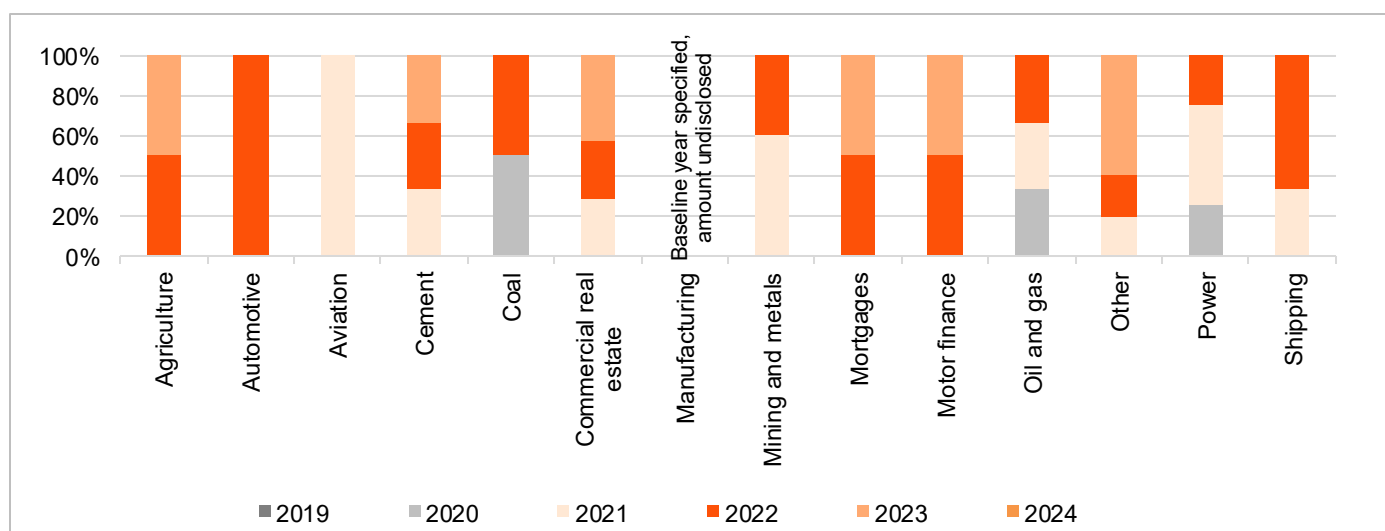
### Banks

- Across sectors, the most commonly disclosed baseline year is 2022.
- On average, the **high emitting sectors** (such as power, coal and oil and gas), **have earlier baseline years** compared to other sectors, reflecting the phased in approach.

### Ins/AMs/AOs

- The majority of Ins/AMs/AOs have disclosed financed emissions without setting a baseline year.
- **Only one insurer disclose a baseline year.**

**Banks - Baseline years (sector level)**





### 3.3 Scope of emissions from borrowers and investees (Financed emissions)

All banks, insurers, asset managers and asset owners in this exercise have disclosed financed emissions. PCAF requires FI to disclose absolute emissions, whereas disclosure of emission intensity is recommended<sup>15</sup>. However, one bank and three Ins/AMs/AOs disclosed emission intensity metrics without disclosing the absolute emissions.

“Financial institutions shall report the absolute Scope 1 and Scope 2 emissions of borrowers and investees across all sectors. For reporting the Scope 3 emissions of borrowers and investees, PCAF follows a phase-in approach which requires Scope 3 reporting for lending to and making investments in companies depending on the sector in which they are active.”

**PCAF, 2025<sup>16</sup>**

While, based on the phase-in approach, all sectors are expected to report Scope 3 emissions by 2025 financial year ended, PCAF acknowledges that data availability for Scope 3 remains very limited.

“Financial institutions shall explain if they are not able to report the required Scope 3 emissions because of data availability or uncertainty.”

**PCAF, 2025<sup>16</sup>**

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<sup>15,16</sup> See December 2025 PCAF – [Financed Emissions GHG Standards Part A](#)





## Key insights

### Banks – Financed emissions

Most banks **do not consistently disclose emission scope** across their sector classes, with some sectors do not disclose the emission scope.

**Commercial real estate and mortgages show the lowest Scope 3 emissions disclosure** among sectors.

**Banks – Facilitated** (indirect emissions associated with capital market activities)

17% of banks have disclosed facilitated emissions. Among those disclosed, this covered coal, oil and gas, and the power sectors, through either debt capital market, equity capital market or syndicated loans.

A greater proportion of banks have disclosed **all Scope 1, 2, and 3 emissions for high-emitting sectors** like **coal and oil & gas** compared to other sectors. This is consistent with PCAF phase-in approach for scope 3 emissions inclusion.

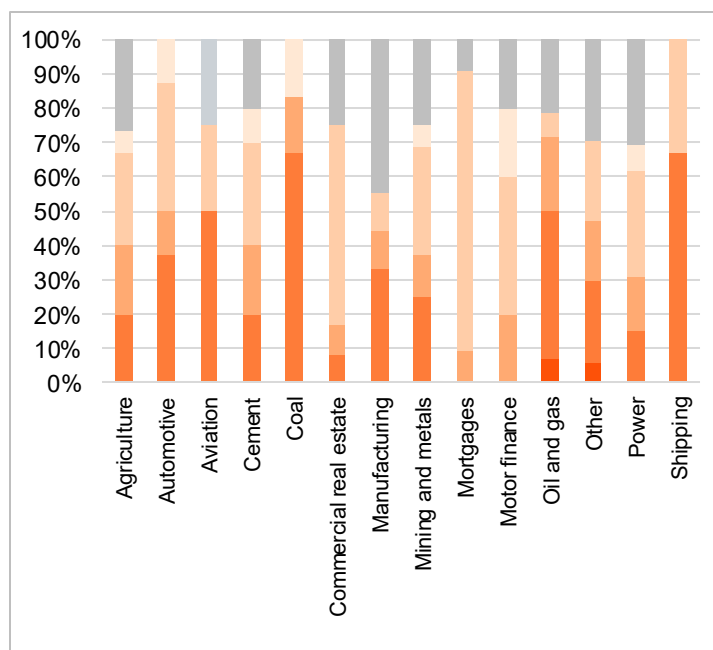
Banks disclosing **facilitated emissions focus mainly on high-emitting sectors** - coal, oil & gas, and power.

### Ins/Ams/AOs

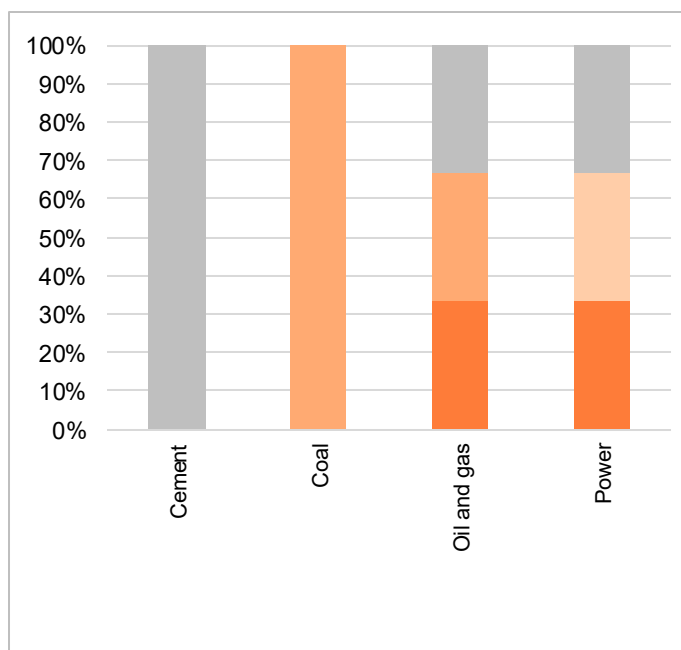
With the exception of listed equities and corporate bonds, FIs do not disclose the absolute emission scopes of their investee's financed emissions.



Banks - Financed absolute emissions sector breakdown



Banks - Facilitated absolute emissions sector breakdown



■ S1; S2 and S3 separately   
 ■ S1&S2 and S3 separately   
 ■ S1&S2&S3 combined   
 ■ S1&S2 combined only; no S3  
■ S1 and S2 separately, no S3   
 ■ S1&S3 only   
 ■ Scope not disclosed



### 3.3 Sector level value chain considerations

The GHG Protocol technical guidance for Scope 3 Category 15 highlights the importance of calculating greenhouse gas emissions across the entire value chain of investee companies, noting that this “can help the investor understand and manage the climate change-related risks associated with investments.”<sup>17</sup> Such comprehensive disclosure enables investors to identify emissions hotspots, more effectively manage climate-related risks, and align their investment decisions with long-term sustainability goals by accurately reflecting the true greenhouse gas impact of their portfolios.

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<sup>17</sup> See Category 15: Investments – [Technical Guidance for Calculating Scope 3 Emissions](#)





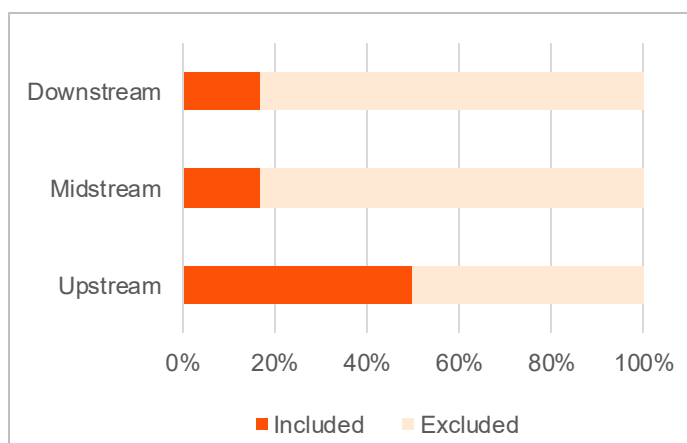
## Key insights

**Disclosures in the oil and gas and power sectors consistently prioritise the upstream segment of the value chain.** This focus likely reflects FIs' phased decarbonisation strategies, targeting the most mature and directly attributable data to calculate financed emissions for the most carbon-intensive segment of the value chain.

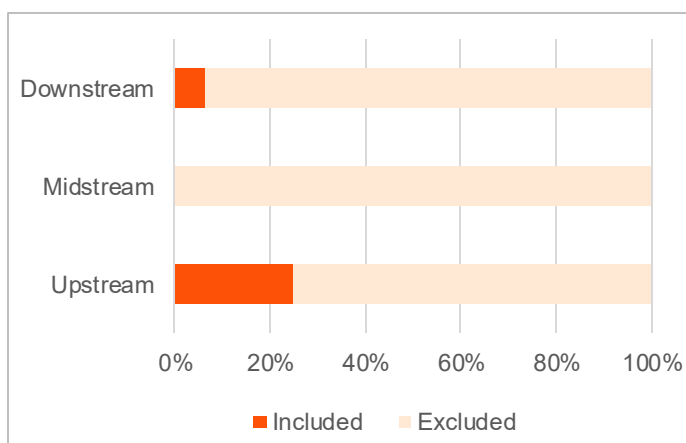
**In the automotive and metals and mining industries, value chain reporting – based on the limited sample available – generally covers the entire value chain, with balanced disclosure across upstream, midstream, and downstream stages.**

**Conversely, Ins/AMs/AOs demonstrate limited disclosure of value chain information.**

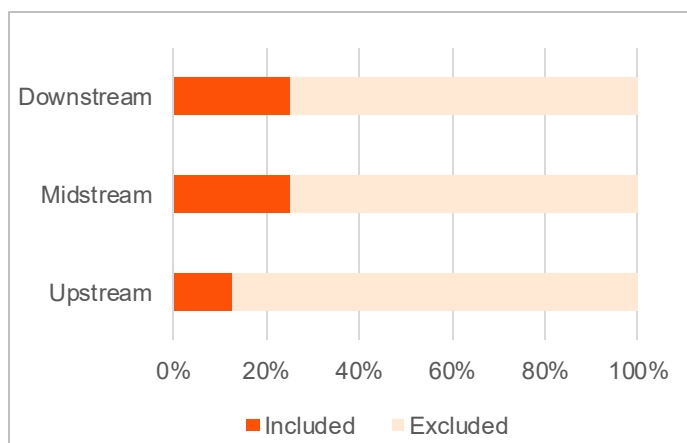
**Banks – Oil and gas**



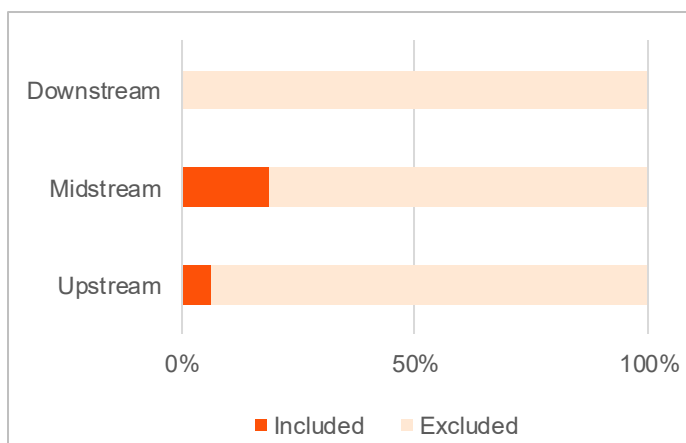
**Banks – Power**



**Banks – Automotive**



**Banks – Metals and mining**



To ensure comparability, our analysis focuses on the sectors most broadly represented across the FIs reviewed, which also correspond to the highest-emitting sectors. Additionally, the value-chain construct, in the context of financed emissions, does not apply to mortgages and commercial real estate.

# Data

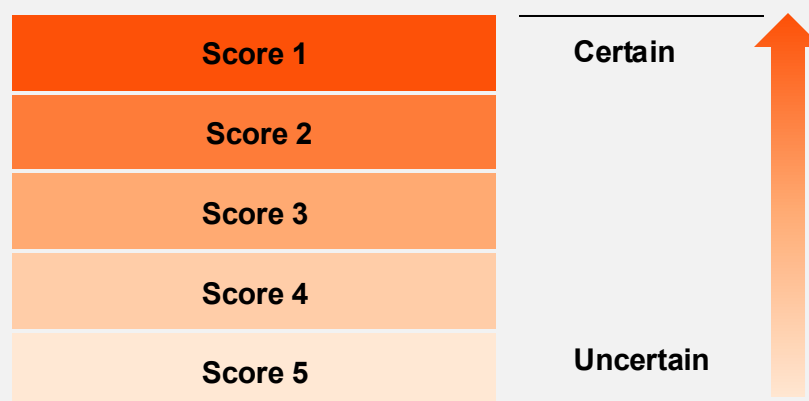
## Driving the evolving landscape

### 4.1 PCAF data quality scores

PCAF data quality scores provide a clear and comparable way to communicate data confidence, which in turn can provide greater insights. Using a scale from 1 to 5, these scores indicate the robustness and specificity of the GHG data underpinning FIs' calculations. Disclosure of the data score is not required by PCAF, but recommended.

The score considers both the origin of the emissions data – ranging from company-reported and independently verified figures to modelled or proxy values – and the quality of the attribution inputs used for allocation. Examples include enterprise value including cash for listed equity and corporate bonds, or outstanding loan balance for lending.

### PCAF data quality scoring





# 61%

**Within the Asia Pacific region, 61% of banks disclosed a PCAF data quality score across any sector (2020 to 2024).** This compares with 96% of banks presented in EMEA and the US as reviewed previously<sup>18</sup>.



## Data quality score of banks – breakdown by sectors

The following are the mean average of the PCAF data quality scores in selected sectors for 2024 reporting year.

|                                                                             |                                                                                         |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <b>Power</b><br>Scope 1 and 2: <b>3.70</b><br>Scope 1, 2 and 3: <b>3.35</b> | <b>Oil and gas</b><br>Scope 1 and 2: <b>2.13</b><br>Scope 3 <sup>19</sup> : <b>2.90</b> |
| <b>Mining and metals</b><br>Scope 1 and 2: <b>2.95</b>                      | <b>Residential mortgages</b><br>Scope 1 and 2: <b>4.28</b>                              |
| <b>Commercial real estate</b><br>Scope 1 and 2: <b>3.73</b>                 | <b>Automotive</b><br>Scope 1 and 2: <b>2.81</b><br>Scope 1, 2 and 3: <b>3.95</b>        |

**While PCAF proposed a phase-in approach which requires FIs to separately disclose Scope 3 emissions, for 2024 reporting year, most sectors have not included Scope 3 except for power, oil and gas and automotive.**

## Data quality score of Ins/AMs/AOs

PCAF data quality scores for Ins/AMs/AOs were excluded from this report due to limited sample size; with only one insurer disclosing a total PCAF score.

For further insights, please refer to the PwC UK benchmark report<sup>20</sup> for comparable insights on Life Insurers and Asset Managers in the EMEA and the US region.

<sup>18</sup> See July 2025 PwC UK [YE24 Financed emissions benchmarking](#)

<sup>19</sup> Although this reporting is only for Scope 3, there is accompanying Scope 1 & 2 disclosures for these banks.

<sup>20</sup> See July 2025 PwC UK [YE24 Financed emissions benchmarking](#)



### Key insights (Bank specific)<sup>21</sup>

**Overall, high(er) emitting sectors<sup>22</sup> (with the exception of Power) have relatively lower PCAF data quality scores<sup>23</sup>.**

For example, the average Scope 1 and 2 PCAF score for the mining and metals sector was 2.9, while for oil and gas the observed average was 2.1.

Although both sectors have average PCAF scores below 3, the oil and gas sector's scores are more consistent, showing generally better data quality across FIs. In contrast, the mining and metals sector has much more variation in its scores.

**The highest PCAF data quality scores were observed in the real-estate sector.** For residential mortgages, all banks registered PCAF scores of more than 4, while for commercial real estate, the average PCAF score observed was 3.73 (as per disclosed information). Despite the availability of Global Real Estate Sustainability Benchmark (GRESB)<sup>24</sup>, the average PCAF score remains relatively high.

**Power and mortgages are the only sectors from the six reviewed that showed a consistent increase in their average PCAF score, year on year.**

<sup>21</sup> The insights presented on this page are limited to the six highest emitting sectors that banks have disclosed information on.

<sup>22</sup> The European Commission identifies emission-intensive, trade-exposed sectors for the purposes of the EU Emissions Trading System and carbon leakage protection, encompassing: Refining, Basic metals, Cement and lime, Chemicals, Pulp and paper, Certain transport subsectors (e.g., aviation) - [Official Journal of the European Union, L 120, 8 May 2019](#)

<sup>23</sup> Specifically regarding Scope 1 and Scope 2 emissions disclosures combined, rather than separate.

<sup>24</sup> GRESB delivers sustainability data, benchmarks, and insights that help investors assess performance, manage risks, and drive measurable impact and resilience in commercial real estate. As such, it would be expected that comprehensive and reliable data are available for commercial real estate.

## Adoption and coverage

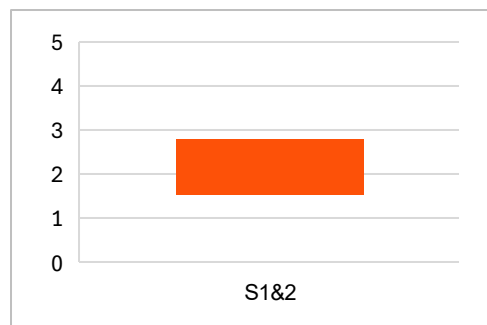
### Banks

Nearly all FIs (96%) in EMEA and the US report PCAF scores across sectors. In Asia Pacific, disclosure is lower at 61%.

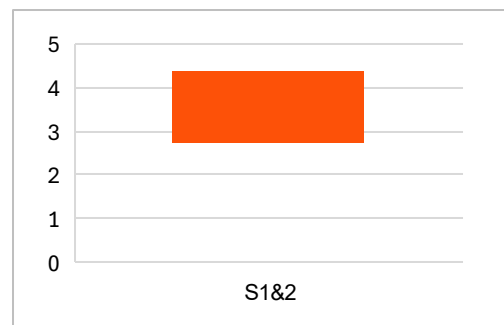
### Ins/AMs/AOs

48% of banks in EMEA and US included sectoral breakdown of their PCAF scores. In contrast, Asia Pacific has almost no disclosure, with only one insurer reporting a total PCAF score.

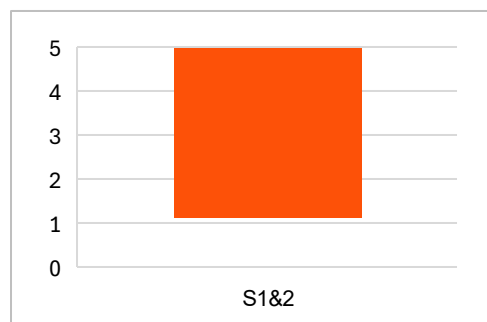
Oil and gas, 2024



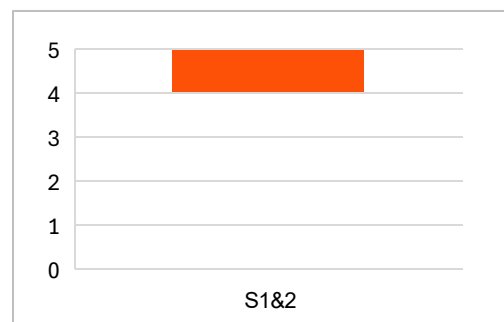
Power, 2024



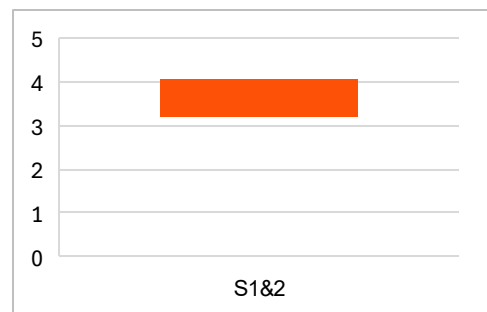
Mining and metals, 2024



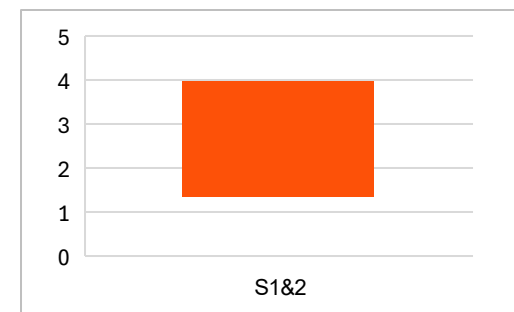
Mortgages, 2024



Commercial real estate, 2024



Automotive, 2024





## 4.2 Data providers

While PCAF sets certain standards on the quality and scope of proxy data, FIs must source their own data and assess its relevance and accuracy. Consequently, there is substantial variation in the data sources used by FIs. The sources cited in disclosures are summarised below.



### Key insights

**The PCAF database is the most frequently used data source** according to disclosures, with 83% of sampled banks utilising it.

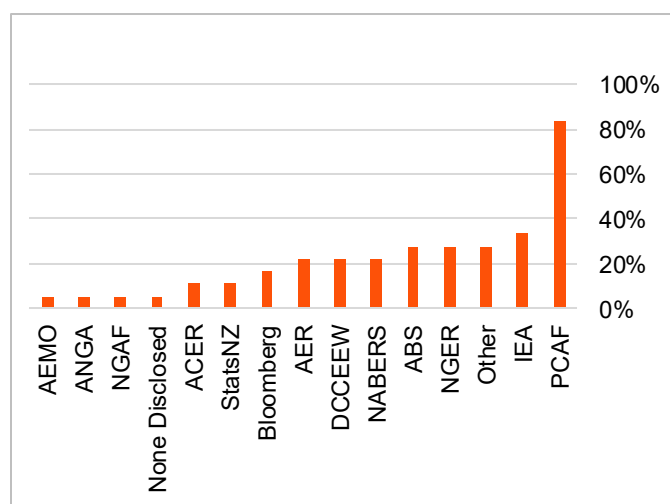
It integrates a variety of inputs from external sources (e.g., EXIOBASE) and organises them within its methodological guidance.

With 94% of sampled banks aligned with the PCAF methodology, this widespread adoption of the resource is unsurprising.

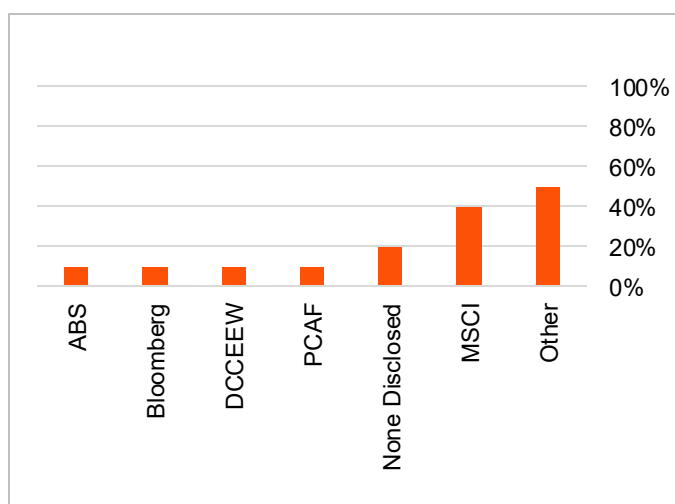
**Overall, 94% banks and 80% of Ins/AMs/AOs referenced data providers in their disclosures;** however, these references were seldom consistent across sectors and asset classes and rarely constituted an exhaustive listing of providers.

**Some data providers mentioned are specific to certain geographies or asset classes,** such as AEMO (Australian Energy Market Operator) or DCCEEW (Department of Climate Change, Energy, the Environment and Water of Australia). Consequently, these providers are unlikely to be disclosed by institutions without a presence in those regions or significant portfolios in the related asset classes.

Data providers - Banks



Data providers – Ins/AMs/AOs



**ABS:** Australian Bureau of Statistics, **AEMO:** Australian Energy Market Operator, **AER:** Australian Energy Regulator, **ANGA:** Australian National Greenhouse Accounts, **Bloomberg:** Bloomberg L.P., **CDP:** Carbon Disclosure Project, **DCCEEW:** Department of Climate Change, Energy, the Environment and Water (Australia), **IEA:** International Energy Agency, **MSCI:** MSCI Inc. (formerly Morgan Stanley Capital International), **NABERS:** National Australian Built Environment Rating System, **NGAF:** National Greenhouse Accounts Factors, **NGER:** National Greenhouse and Energy Reporting (scheme, Australia), **PCAF:** Partnership for Carbon Accounting Financials, **S&P:** S&P Global (formerly Standard & Poor's), **Stats NZ:** Statistics New Zealand

# Target setting and decarbonisation strategy

## 5.1 Interim and net-zero targets

To demonstrate climate commitments, FIs typically set two types of targets: net-zero targets, which are long-term decarbonisation goals, and interim targets, which are short to medium-term milestones defined by sector or asset class. Whilst **PCAF does not require formal reporting of target setting or decarbonisation strategies**, the standard recommends FIs' reporting to "align with its specific business goals; for instance, for identifying and managing climate-related transitions risks or for steering toward a specific emission reduction target."<sup>25</sup> The SBTi Target Guidance and Net Zero Standard require companies to set targets for their investment and lending activities, including one or more near-term targets plus a long-term net-zero alignment target.<sup>25</sup>

As reflected below, many FIs disclose a combination of net-zero commitments and interim targets as part of their approach to managing financed emissions.

"IFRS S2 specifies the disclosure requirements to identify climate-related risks and opportunities. It requires reporting on physical and transition risks, scenario analysis, financial effects, and metrics and targets."

**PCAF, 2025<sup>25</sup>**

<sup>25</sup> See December 2025 PCAF – [Financed Emissions GHG Standards Part A](#)

<sup>26</sup> See October 2020 SBTi target guidance (FI-C15) and July 2025 net zero standard (FINZ – C12,C13 and C15) - [Financial sector science-based targets guidance](#) and [Financial Institutions Net-Zero Standard](#)



## Key insights

72% of banks and 20% of Ins/AMs/AOs have disclosed a net-zero target.

78% of banks and 50% of Ins/AMs/AOs in our sample have disclosed at least one interim target.

Banks tend to provide more comprehensive financed-emissions disclosures, disclosing targets at the sector level, whereas Ins/AMs/AOs tend to disclose a single, portfolio-wide target instead.

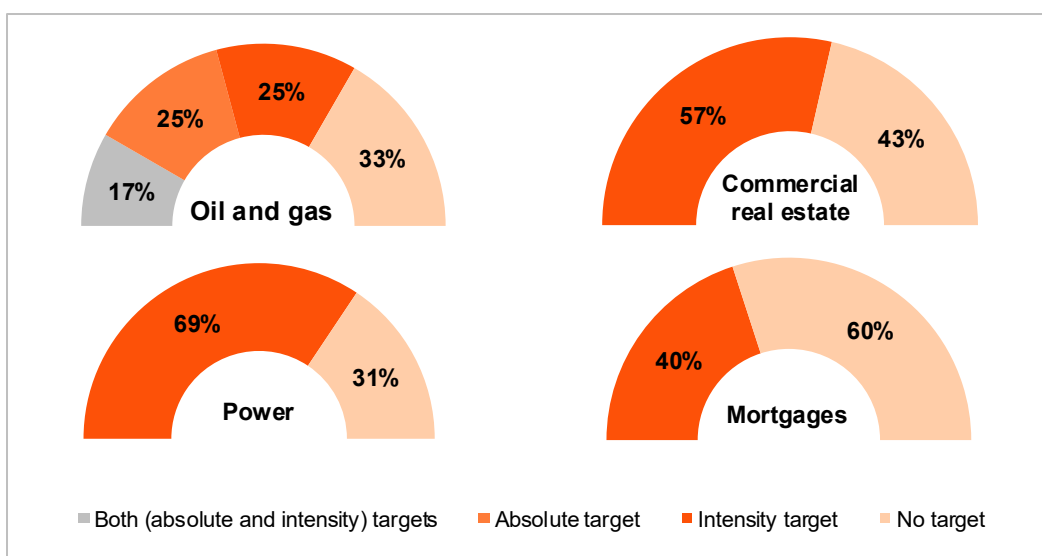
20% of Ins/AMs/AOs disclosed a specific target for their commercial real estate portfolio.

Across most sectors, 2030 is the most frequently cited interim target year. The banking sample exhibits a broader range of interim target years than the Ins/AMs/AOs sample.

There is a general preference for intensity targets over absolute emissions targets across most sectors. This trend aligns with observations in EMEA and the US, where production-intensity targets are also favoured.

## Disclosed targets:

### Banks





## 5.2 Rebaselining and target resetting

In certain jurisdictions, FIs are increasingly expected to set credible decarbonisation targets and demonstrate effective governance over relevant revisions and monitoring. As methodologies and data quality improve, and facts and circumstances have changed as reporting requirements such as TCFD and ISSB become more specific, many FIs are reassessing their previously disclosed targets.

Two common mechanisms are used in this context: target resetting and rebaselining. Target resetting involve revising or replacing previously disclosed targets, while rebaselining refers to changing the base year emissions used to measure progress.



### Key insights

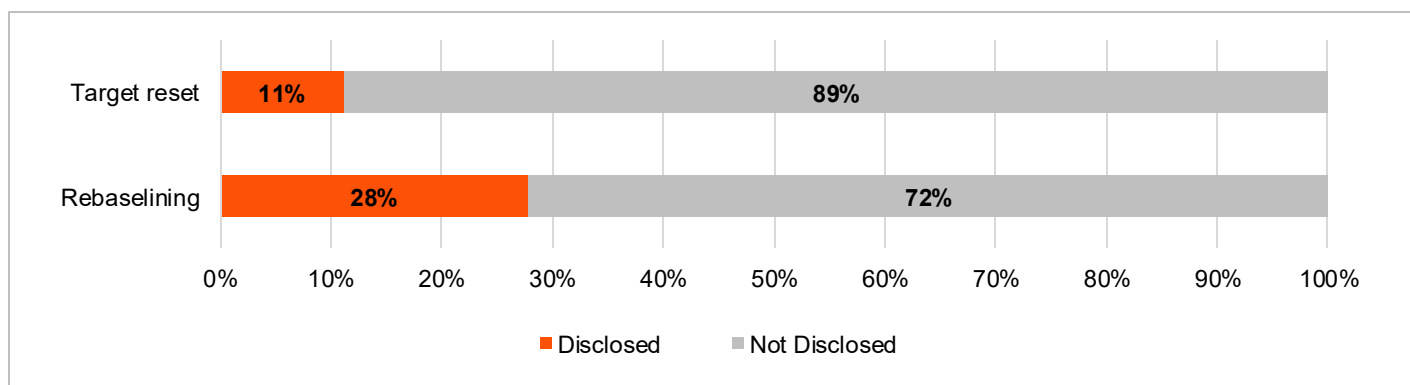
**39% of the banks sampled disclosed a rebaselining or a resetting of a target.** In view of the proximity of 2030, an interim target year for many FIs, restatement rates may increase in the coming years<sup>27</sup>.

The proportion of banks that reset their targets in EMEA and the US is **similarly low (12%)** as in the Asia Pacific region. One bank in Asia Pacific had reset its target, and similarly reported a rebaselining as part of the same disclosure, too.

**Banks that rebaselined or had a target reset generally did so to improve data accuracy, refine methodologies, and update classification or allocation approaches.** These changes reflect ongoing efforts to align with evolving industry standards and enhance the quality and reliability of tracking emissions and reporting.

Our study **shows no Ins/AMs/AOs** having rebaselined or reset targets, thus we have not included a graph below. This result is consistent with EMEA and US benchmarking study.

#### Banks – Rebase lining and resetting targets



<sup>27</sup> [UNEP FI NZBA Commitment Statement](#), requires member banks to set intermediate targets for 2030 (or sooner) across key sectors, establishing 2030 as a common interim target year for FIs.

## 5.3 Target setting & tracking – Reference pathway selection

FIs increasingly anchor their decarbonisation objectives to benchmark scenarios – reference pathways established by industry bodies such as the International Energy Agency – to determine both interim and net-zero emission reduction targets. By translating these scenario trajectories into portfolio- and sector-level glidepaths, FIs can calibrate their targets against validated, science-based assumptions.



### Key insights

#### Banks:

**83% of banks disclosed at least one reference pathway across any sector/asset class.**

**The Power sector (72%) and the Commercial real estate asset class (56%) are the most common sectors/classes to disclose a reference pathway.**

#### Ins/AMs/AOs:

**50% of Ins/AMs/AOs disclosed at least one reference pathway across a sector/asset class.**

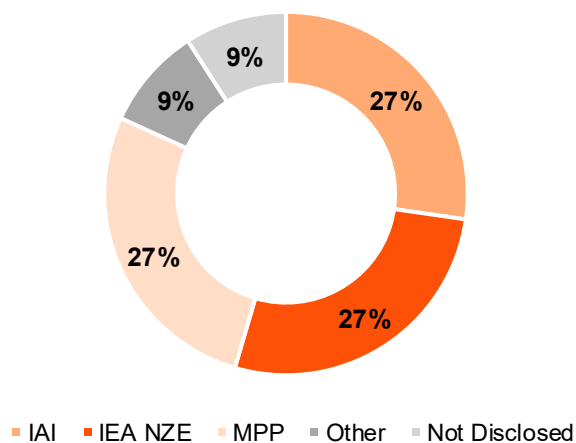
**Reference pathways which fell under the “other” category included predominantly: SBTi, the Paris Agreement and the Net-Zero Asset Owner Alliance.**



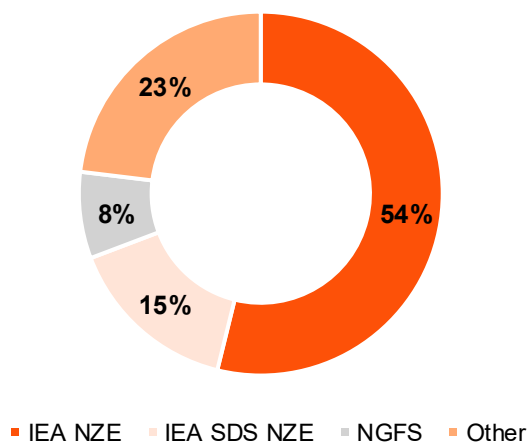


## Banks

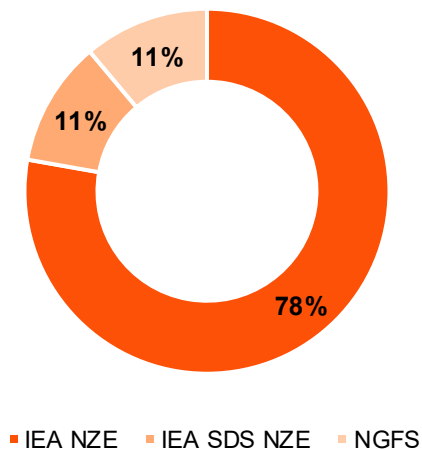
Banks: Mining and metals



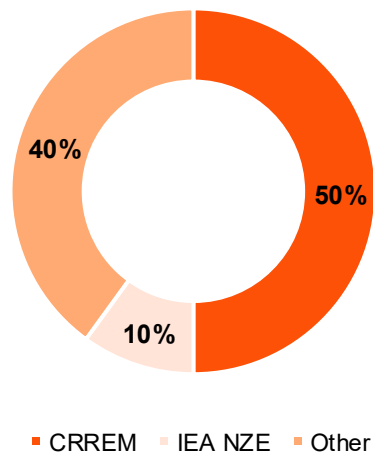
Banks: Power



Banks: Oil and gas



Banks: Commercial real estate





# How PwC can help

## How PwC can help you in your sustainability journey



### Sustainability reporting

- Gap assessment
- Define reporting framework
- Implement and refine
- Ensure assurance readiness



### Transformation roadmap and implementation

- Transformation roadmap development
- Supply chain and procurement
- Operations and logistics
- People and culture
- Data, technology, and cyber



### Strategy development and transition planning

- Decarbonisation strategy and optimisation
- Portfolio and counterparty management
- Risk appetite
- Transition planning
- Credit risk decisioning

**Data sourcing and processing**

- External data selection and processing
- Sensitivity and benchmarking analysis
- Proxy sourcing and calculation

**Emissions modelling and climate stress testing**

- Maturity assessment and level setting
- Emissions baseline
- Stress testing
- Risk management frameworks

**Assurance**

- Emission metrics
- Sustainable finance
- External disclosures

## Other publications



[YE24 Financed Emissions Benchmarking](#)



[Financed emissions: Navigating the data challenge](#)



[Navigating the sustainability reporting landscape in the UK for banks - UK SRS](#)

## GHG emissions analyser

To explore the **full benchmark dataset** and gain access to our comprehensive **GHG Emissions Analyser**, **please reach out to our global team.**

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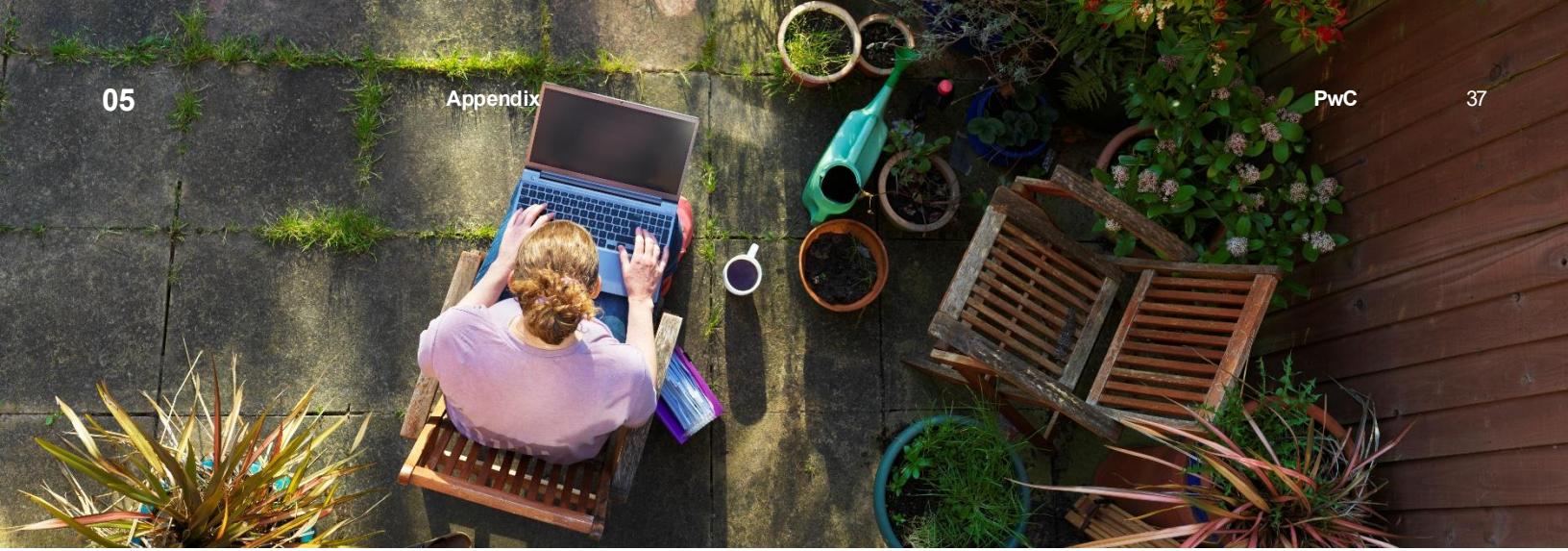




# Appendix





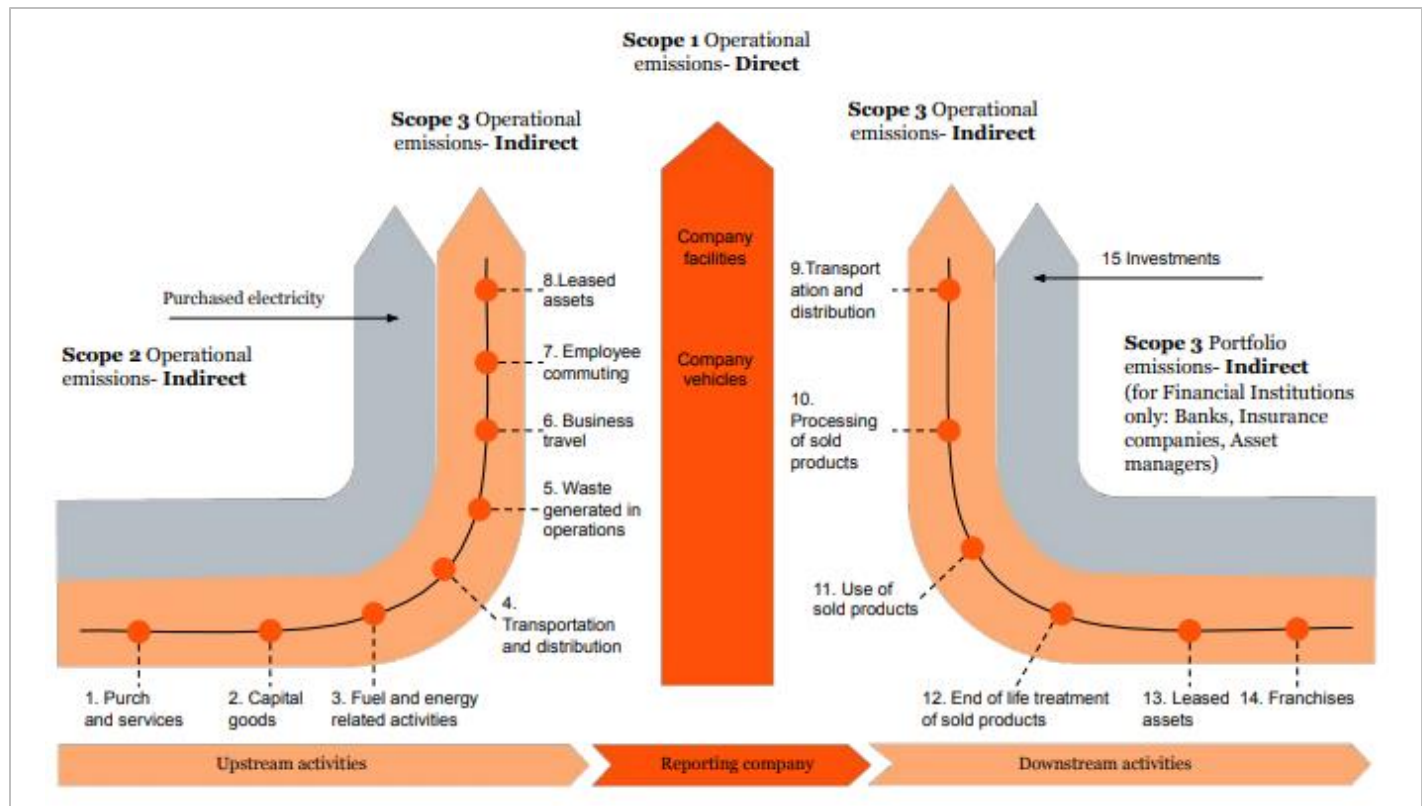


## Annex A: Emissions scopes

The granularity of emissions reporting can be increased by reporting emissions at scope level, where:

- **Scope 1** is direct GHG emissions.
- **Scope 2** is indirect GHG emissions.
- **Scope 3** is all other indirect GHG emissions not included in scope 2. Scope 3 emissions can be further broken down into upstream and downstream emissions, often referred to as the value chain.

The charts highlight the importance of financed emissions reporting in comparison to operational emissions. Which further emphasises the need for improved data, measurement and reporting.





|                                   |                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CCC BNZ</b>                    | The Climate Change Committee's (CCC) Budgeted Net Zero (BNZ) strategy outlines specific carbon budgets and pathways to achieve net zero greenhouse gas emissions.                                                                                                                                                                                                                      |
| <b>CDP</b>                        | The Carbon Disclosure Project is a global environmental reporting system that enables companies, cities, states and regions to measure, disclose, manage and share vital environmental information.                                                                                                                                                                                    |
| <b>CRREM</b>                      | The Net Zero Scenario Carbon Risk Real Estate Monitor (CRREM) provides a methodology and framework for assessing and managing carbon risk in the real estate sector, aligning with net-zero emissions objectives.                                                                                                                                                                      |
| <b>CSRD</b>                       | The Corporate Sustainability Reporting Directive is a European Union initiative which builds on the existing Non-Financial Reporting Directive (NFRD). It aims to enhance transparency and accountability by requiring all large companies and listed SMEs to regularly report on their environmental and social activities.                                                           |
| <b>FSTF</b>                       | The financial services Taskforce is a subgroup of the SMI initiative that provides guidance on client generated emissions in line with the industry current view.                                                                                                                                                                                                                      |
| <b>GFANZ</b>                      | The Glasgow Financial Alliance for Net Zero provides a forum for leading financial institutions to accelerate the transition to a net-zero global economy covering over 450 financial firms across 45 countries responsible for assets of over \$130 trillion.                                                                                                                         |
| <b>IEA ETP</b>                    | The International Energy Agency's Energy Technology Perspectives report provides insights into emerging energy technologies and strategies to facilitate the transition to a sustainable energy future.                                                                                                                                                                                |
| <b>IEA NZE</b>                    | The International Energy Agency's Net Zero Emissions by 2050 scenario (IEA NZE Scenario) is a normative scenario that describes a pathway towards achieving net zero carbon dioxide emissions by 2050, for the global energy sector.                                                                                                                                                   |
| <b>IEA SDS NZE</b>                | The International Energy Agency's Sustainable Development Scenario aims to achieve a Net Zero Emissions future by outlining pathways for reducing greenhouse gas emissions and fostering sustainable energy systems.                                                                                                                                                                   |
| <b>Implied Energy Perspective</b> | The Implied Energy Perspective is a net zero scenario which outlines implicit assumptions and viewpoints regarding energy consumption, production and policies necessary to achieve a net zero emissions target.                                                                                                                                                                       |
| <b>ISSB</b>                       | International Sustainability Standards Board is shaping the future of sustainable reporting with global standards on the basis of the recommendation from TCFD. In particular for the UK, they will be endorsed to create the "UK Sustainability Disclosure Standards (SDS)". Developed by the Department for Business and Trade, the UK SDS are expected to be released by July 2024. |
| <b>MPP PRU</b>                    | The Net Zero Scenario Multi-Party Protocol PRU outlines a collaborative framework among multiple stakeholders to establish protocols and guidelines for achieving net-zero greenhouse gas emissions, particularly focusing on policies, regulations, and practices related to public relations and outreach efforts.                                                                   |



