ESG

YE 23 Financed Emissions| PwC Benchmarking

June 2024

pwc

Executive summary – Overview

What is it?

The PwC Financed Emissions Benchmark is a **comprehensive analysis of the financed emissions metrics** disclosed by financial institutions (FIs) as part of their **2023 sustainability disclosures**.

This paper is supported by in-depth analytics and comparisons of peers across the market. Please do reach out if you would like further details.

This is the **third iteration of this exercise** focused on 2023 sustainability disclosures. This edition includes **more market participants** (26 to 47 FIs) as well as an **increased coverage of metrics in scope** (e.g. facilitated emissions, sustainable finance, restatements). The FIs covered include the following:

- **25** Global Wholesale, Retail and Investment Banks.
- **22** Asset managers and Life insurance companies.
- Asset coverage **totaling £25tn** on balance sheet.
- Geographical reach spanning the **UK, US, Europe, Middle East, and Asia-Pacific region.**

The increased coverage and global reach not only **reflect the increasing level of transparency of sustainability disclosures** within the financial services sector but the **growing expectations from local regulators around world** on companies operating within their jurisdictions to adhere to implied sustainability disclosure requirements.

The analysis primarily focuses on the **carbon footprint metrics** disclosed by the aforementioned FIs, specifically covering the **lending activities** of Banks and **investment activities** of Life insurers and Asset managers (i.e. financed emissions). Additional data included on operational emissions, target setting, forecasting and sustainable finance activities.

Why is it important?

The **sustainability reporting landscape is rapidly evolving and complex,** with an increasing number of sustainability frameworks and standards to navigate and comply with, such as TCFD, ISSB, CSRD and SEC.

With **increasing scrutiny from management, investors and regulators** it is imperative that FIs produce robust sustainability disclosures.

The emission metrics produced not only ensure alignment with sustainability reporting standards but also impacts the strategic direction that institution will undertake from **transition planning**, impact of **decarbonisation levers to use** to **balance sheet optimisation** as FIs looks to achieve their net zero ambition.

What are we seeing?

From our benchmarking exercise and in scope participants, we note the following trends:

1. **Increasing demand for assurance with 70% of participants having done so:** We observe that this **trend is more prevalent for Banks** (83%) **compared to Life insurers and Asset managers** (50%).
2. **40% of FIs needed to restate previously disclosed numbers**: 19 out of the 47 FIs restated their emission metrics **highlighting the ongoing challenges in initial disclosures** and the **need to adopt clear and robust restatement policies** to ensure greater comparability, accuracy and transparency of disclosures.
3. **Navigating the data challenge:** The **use of proxies continues to prevail especially for certain industry sectors and asset classes** highlighting the uncertainty that persists in sourcing and integrating data within the business which **ultimately feeds into sustainability reporting and will drive decarbonisation strategies**
4. **Whilst PCAF continues to be the most widely used industry standard on financed emissions with 89% adoption, there persists nonetheless ongoing variation in approach:** We continue to observe deviations around key assumptions such as **value chain and choice of scenarios** to track against net zero alignment highlighting need for ongoing refinement of industry guidance.
5. **Sustainable finance and lack of global taxonomy:** We observe that Banks have been more ambitious in their publicly disclosed commitments to providing sustainable finance compared to life insurers and asset managers. Nonetheless, the **adoption of a globally accepted taxonomy proves to be an ongoing challenge**.

In the following sections, we bring out the key insights from the benchmarking exercise across 4 key areas: **Disclosure, Scope, Data and Target setting and forecasting.**

Our benchmarking exercise covers 47 FIs split across:

25 **Banks** corresponding to

£21Tn total assets on balance sheet

22 **Asset managers and Life insurers** corresponding to

£4Tn total assets on balance sheet

Executive summary – Key insights

Despite existing **guidance** on scoping and measuring the carbon footprint of financial institutions' lending or investment activities, it is not always prescriptive and often requires judgment. This leads to variations in sustainability reports and carbon footprint figures. Our analysis highlights key findings and considerations for FIs, categorised into the four pillars below: disclosure, scope, data, and target setting and forecasting.

Pillars	Thematic insights
1. Disclosure	**Need for transparency:** An increasing number of financial institutions (FIs) are seeking **assurance on emission numbers**, but **variations in disclosure levels** persist. Upcoming ISSB and CSRD regulations will improve **consistency** and **transparency.** As emissions data availability, asset scoping and model design improve, many FIs are revisiting and **restating** their previous disclosures. We have identified **19 FIs** restating their figures, often citing improved **data quality, updated scope**, and **error correction**. Additionally, more FIs are investing in and disclosing targets for **sustainable finance** indicating a growing commitment to accurate and responsible environmental reporting.
2. Scope	**Variations in scope across FIs:** Similarly to last year we have noted variations in the scope of carbon footprint numbers in terms of **asset classes, scope 3 emissions of borrowers and investees and sector level value chain inclusions / exclusions**. **Lack of monitoring of net zero commitment over time:** We also note that there continues to be an absence in the disclosure of monitoring emissions numbers and portfolio coverage as institutions take a phased approach to include more asset classes and sectors over time.
3. Data	**Data availability and transparency:** There is a **gap in the availability of emissions data** with institutions having to use **proxies to fill these gaps** as set out by the guidance. This is reflected in PCAF data quality scores which have not significantly improved from YE 22. We note that for asset managers and life insurers, 13 participants have either **committed to PCAF or disclosed in line with PCAF** but have **not reported a PCAF data quality score**. Please refer to the 'Financed emissions: Navigating the data challenge' paper for further insights on the data considerations in emissions modelling.
4. Target setting and forecasting	**Evolving approach to forecasting:** Key **decisions and assumptions on target setting and forecasting** are still evolving and hence FIs are looking to make **bespoke assumptions** to allow for this. For example, the choice of **reference pathways for forecasting purposes**. **18 out of 47 FIs** (38%) disclosed interim targets at YE23, highlighting a variation in target setting compared to YE22 where **20 out of 26 FIs** (77%) disclosed interim targets. We note that some FIs **have clearly disclosed these bespoke assumptions** as well as how these will be **monitored going forwards**.

Financed Emissions: Key insights – Disclosure

FIs are increasingly disclosing the emissions associated with their operation and their lending and / or investment activities. In this section, we summarise key findings from the overall level of disclosures including the adopted guidance and level of assurance over these disclosures.

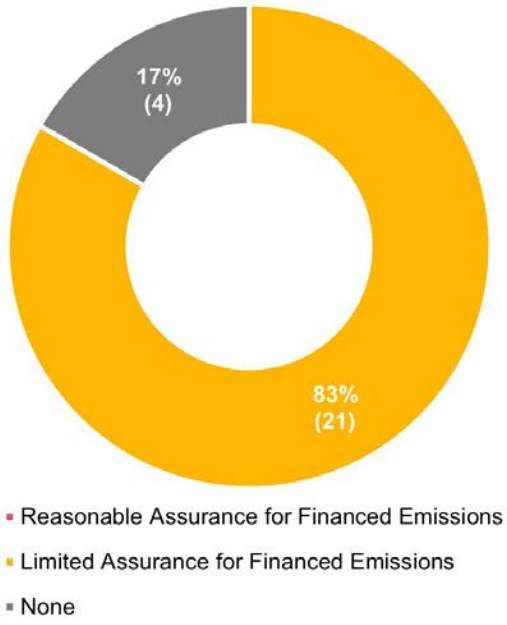
1 1.1: Disclosure – Assurance over emission disclosures

> **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 – Financed Emissions GHG Standards Part A

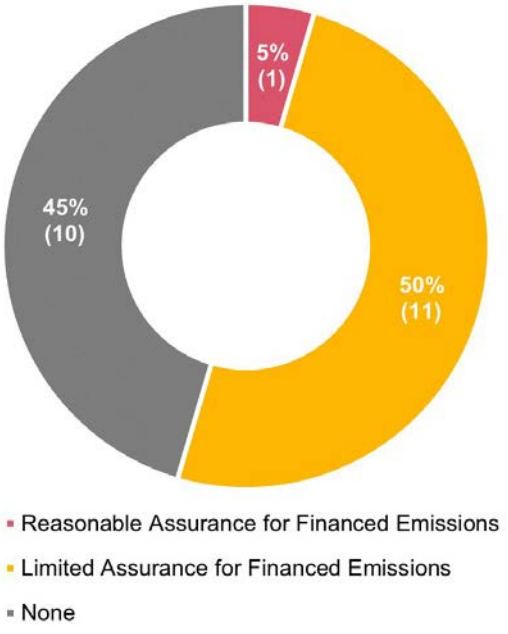
Key insights:

- **33 out for the 47** FIs analysed have had **at least limited assurance** on the data underpinning the financed emissions disclosures.
- Interestingly, **only one FI** sought **reasonable assurance** on their financed emissions.
- We note that the EU's **Corporate Sustainability Reporting Directive** (**CSRD**) will require companies to obtain limited assurance on a number of material metrics.

Banks – Assurance distribution



Life insurers and Asset managers – Assurance distribution



We note the following **deviations in scope of assurance across FIs**:

- **Level of assurance:** Only one FI (Insurance company) sought reasonable assurance on their financed emissions disclosures with the majority opting for limited assurance from external providers.
- **More FIs seeking assurance:** 83% of Banks and 55% of Life insurers and Asset managers sought assurance in 2023 compared to only 35% of Banks and 42% of Life insurers and Asset managers in 2022.
- **Metrics in scope of assurance:** Some FIs included absolute emissions, emission intensities, PCAF scores or a combination of the above.
- **Year of emissions reporting**: Some FIs obtained assurance over the baseline year only, while others included both baseline and reporting years. Please note where a baseline year has not been set, assurance is provided over the reporting year values only.
- **Out of scope:** As of yet, no FIs have included targets and projections in their assurance scope.

Financed Emissions: Key insights – Disclosure

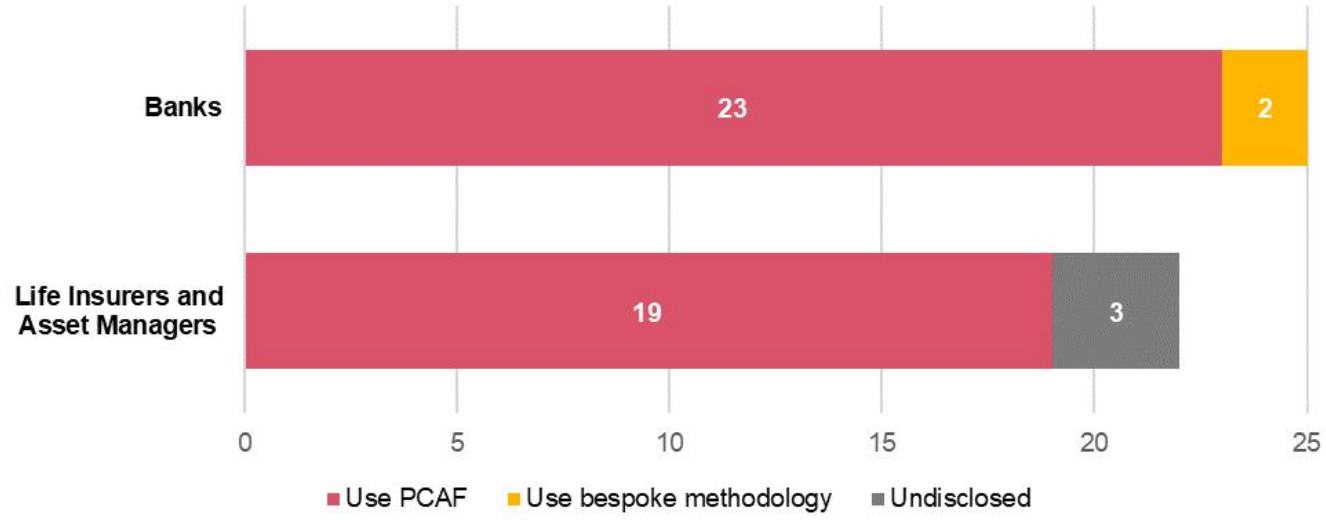
1.2: Disclosure – Use of PCAF (Partnership for Carbon Accounting Financials)

Key insights:

- **23 of the 25 Banks (92%)** and **19 of the 22 Life insurers and Asset managers (86%)** analysed **have measured their financed emissions baseline and reporting metrics in line with PCAF guidance**. For Banks, this marks an increase from 86% in YE22. In contrast, all 12 Life insurers and Asset managers surveyed in YE22 already used PCAF methodologies.
- All the **Banks** analysed have aligned with PCAF methodologies, with 2 exceptions that are leveraging i**n-house bespoke methodologies** and have PCAF-aligned calculations in their appendices for ease of comparison. 1 of these Banks also disclosed its plans to fully **align to PCAF over time**.
- **3 Life insurers and Asset managers did not disclose** whether the calculation methodology used was bespoke or aligned to PCAF.

- The Partnership for Carbon Accounting Financials (PCAF) is a **global industry-led initiative** to develop a **methodology for measuring financed emissions, and it aligns with GHG protocol for Scope 3 Category 15**.
- As at June 2024, globally over **490 institutions** corresponding to **$86.2tn** of assets have committed to measure their financed emissions in line with the approach developed by PCAF[1]. This allows for **comparability of the emission disclosures by stakeholders**.
- While PCAF provides **guidance** on the approach, the framework is **not always prescriptive**. This paper hence also aims **to summarise the industry practice across the assumptions underpinning industry standards**.

[1]Source: PCAF



Financed Emissions: Key insights – Disclosure

1.3: Disclosure - Need for restatement

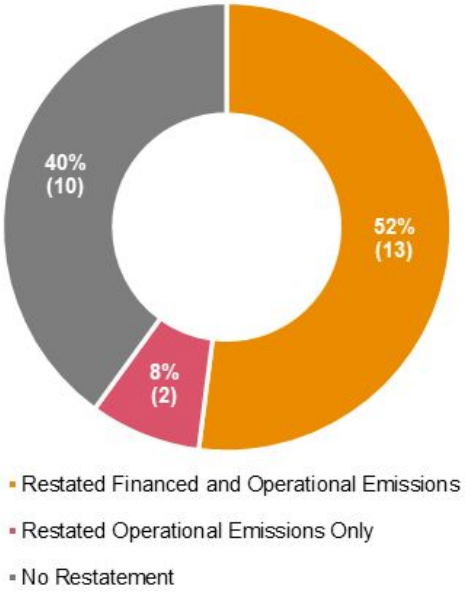
Companies are increasingly being held **accountable** by regulators and investors for their carbon footprint disclosures. As part of this accountability, having robust **restatement policies** relating to greenhouse gas emissions has become essential.

> Financial institutions (FIs) **shall** … establish a baseline recalculation policy to define under which circumstances a recalculating of (base year) financed emissions is necessary to ensure consistency, comparability, and relevance of the reported GHG emissions data over time."
>
> PCAF – Financed Emissions GHG Standards Part A

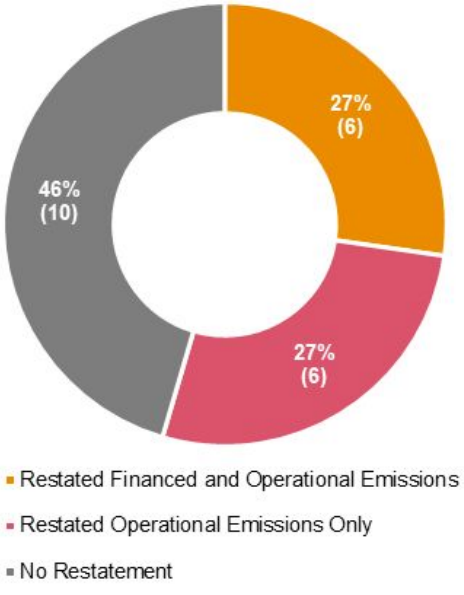
Key insights:

- We have identified **19 FIs** that have **restated both** their **financed and operational emissions** in their 2023 disclosures. Most have provided narratives explaining the reason for restatement, with the primary reason being **changes in methodology** or **improvements in data quality.**
- From the u**nderlying data,** we have observed **2 Banks** and **6 Life insurers and Asset managers** which restated **operational emissions** but **not** their financed emissions.

Banks – Restatement



Life insurers and Asset managers – Restatement



Financed Emissions: Key insights – Disclosure

1.4: Disclosure - Sustainable finance

Sustainable finance involves directing financial resources towards **supporting economic growth** while having **positive environmental** and **social impacts**.The aim is to **align financial decision-making with sustainable development goals**. This means integrating ESG criteria into investment strategies and risk assessments, and ensuring portfolios support sustainable projects and minimise negative impacts on society and the environment. Banks typically participate in sustainable lending, such as environmental project finance or low carbon mortgages, whilst Life insurers and Asset managers participate in sustainable investing, such as green bonds.

Banks – Total sustainable finance lending to date

£2.5Tn

Banks – Sustainable finance future commitments

£5.5Tn

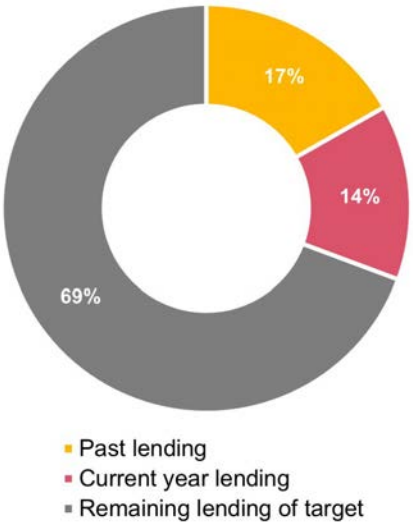
Life insurers and Asset managers – Total sustainable finance investment to date

£1.0Tn

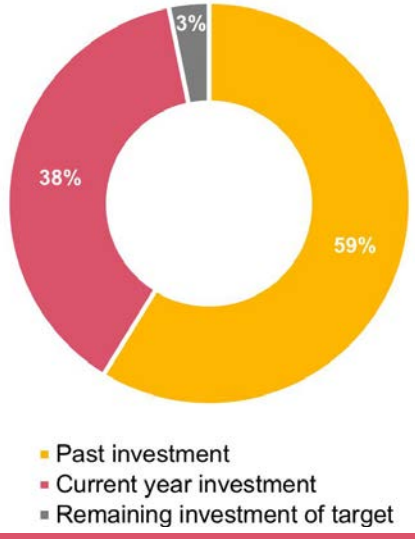
Life insurers and Asset managers – Sustainable finance future commitments

£0.03Tn

Banks – £bn lending to date



Life insurers and Asset managers – £bn investment to date



Key insights:

- We have observed **33 FIs (20 Banks and 13 Life insurers and Asset managers)** focusing on sustainable finance, with **20 FIs (15 Banks and 5 Life insurers and Asset managers)** also **setting targets** for future commitments.
- For those FI have have disclosed this information, we note that Banks have set far **more ambitious targets** than Life insurers and Asset managers. We have observed Banks making progress towards their targets, whereas some Life insurers and Asset managers have already nearly met their targets (based on commitments to date). 1 Life insurers and Asset managers has already met their sustainable finance commitment to date, suggesting that the targets set were not challenging enough.
- We have observed that, on average, Banks have already invested 46% of their future targets and Life insurers and Asset managers 30%.
- Note that only 5 Life insurers and Asset managers disclosed a target investment figure hence the significantly smaller proportion observed.

Financed Emissions: Key insights – Disclosure

1.5: Disclosure – Variations in disclosures

Key insights:

- **Metrics disclosed:** We noted a deviation between the metrics disclosed by participants. Some included absolute metrics while others included intensity metrics. Furthermore, this deviation was also noted between sectors/asset classes for selected participants (for example reporting intensity for Sovereign debt but not other asset classes).
- **Level and transparency of disclosures vary between participants.** Examples include:
  - Disclosing the % of assets under management (AUM) as part of emissions for each asset class and clear narrative on exclusions.
  - Disclosure of the size of book analysed and the data coverage of financed emissions calculations has **significantly decreased** compared to prior year disclosures. We have observed that a number of FIs, most notably several major Banks, have moved away from disclosing the size (£) and proportion (%) of portfolio covered from their disclosures this year.
  - Disclosure of emissions by PCAF asset class is common, noting where different methodologies have been applied.
  - Disclosing multiple reporting years in addition to baseline year has increased as expected compared to prior year disclosures given the additional years worth of data available. The % difference between reporting and baseline year were also commonly included.
  - Disclosing scope of emissions numbers such as value chain or counterparty emissions included.

Financed Emissions: Key insights - Scope

While guidance exists around measuring financed emissions, we note that this is not prescriptive and there are areas which are open to interpretation. This leads to variations in the scope of the disclosed numbers between FIs. This section summarises these deviations across key scoping decisions.

2 2.1: Scope - Asset classes and sectors

The PCAF methodology provides an approach at asset class level. Institutions are hence expected to calculate the baseline emissions for each asset class separately.

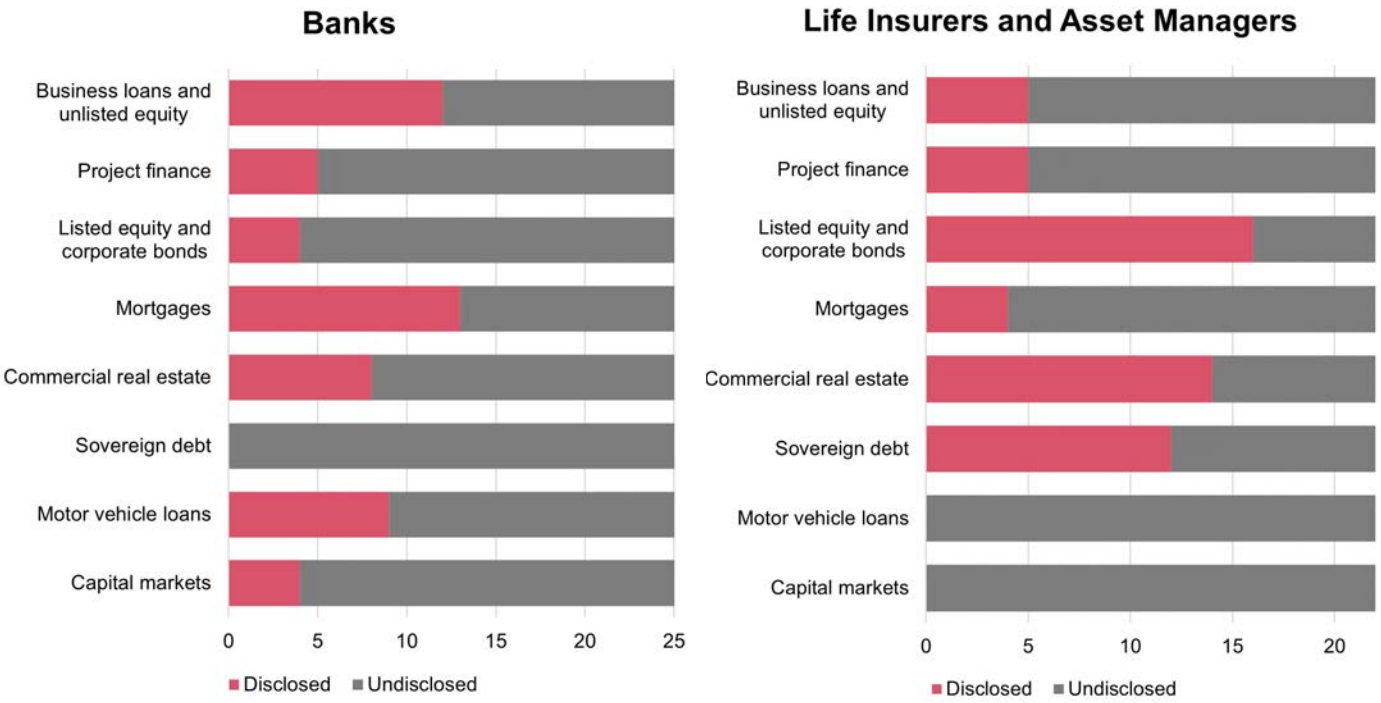
Key insights:

- Remaining consistent with the prior year disclosures, **business loans** and **mortgages** were the most reported by Banks. While **commercial real estate** and **listed equity remain** the most reported by **Life insurers and Asset managers**.

From the disclosures we also noted the following:

- FIs are taking a **phased approach** to disclosing financed emissions, focusing on the most **material asset classes** first.
- **Life insurers and asset managers'** disclosures continue to be **at asset class level** while most **Banks** disclosed at **sector level covering different asset classes** where relevant (e.g. loans, project finance). However, for the first time we have observed **2 Life insurers and Asset managers** disclosing at **both asset class and sector level**.

PCAF Asset Class Distribution



Please note, **certain asset classes are more relevant to a lending book activities** (i.e Banks) **compared to investments activities** (i.e Life insurers and Asset managers) and vice versa. Therefore, motor vehicle loans and capital markets asset classes are not reported on by Life insurers and Asset managers, whilst sovereign debt is not reported by Banks (lending book lens).

Financed Emissions: Key insights - Scope

2.2: Scope – Baseline and reporting years

Key insights:

Overall

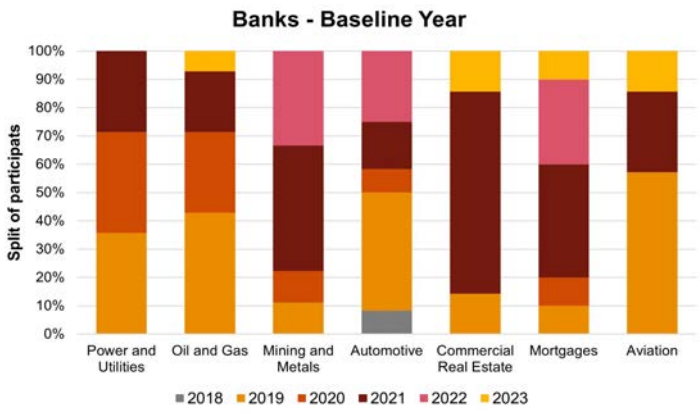
- Participants reported varying baseline years across asset class or sector, representing variations in the data available and phased-in approach taken by institutions whereby new sectors are added in scope of emissions over time. Furthermore the Net Zero Banking Alliance (NZBA) require the baseline year to be at least 2 years from first reporting.
- For reporting years, we noted that the FIs are reporting emissions over multiple years from the baseline.

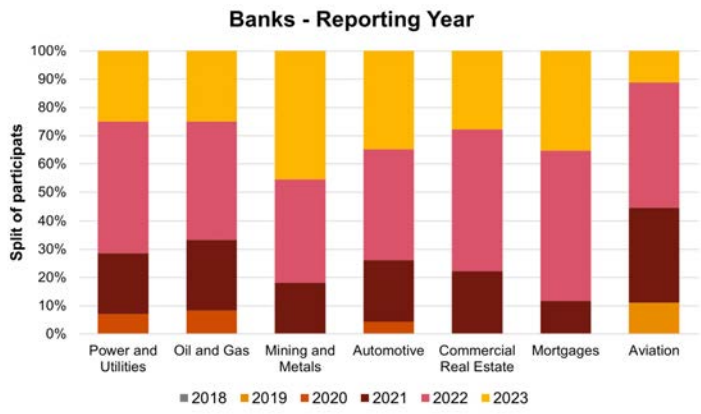
Banks

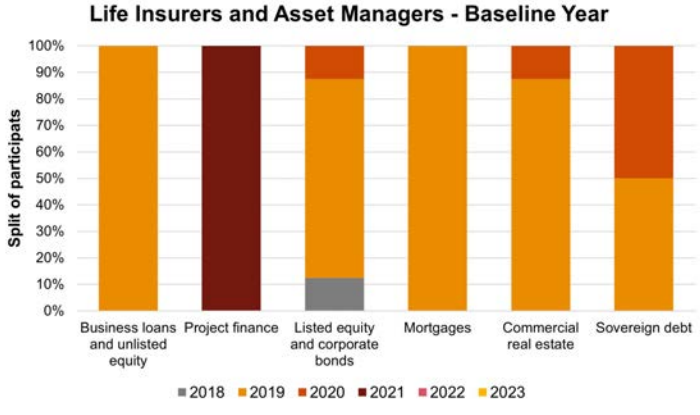
- From the underlying data, we noted that for some Banks, the **chosen baseline year is not consistent between sectors** due to the phased approach. To ensure comparability, we have included only those sectors/asset classes which are covered by most, namely Oil and Gas, Power and Utilities, Automotive, Mining and Metals, Mortgages, Commercial real estate and Aviation.
- For Mining and Metals 4 Banks out of the 9 use a **baseline year of 2021.** For the **Automotive** sector, 5 out of the 12 use a **baseline of 2019**. For the more established sectors such as **Oil and Gas and Power and Utilities**, we note that the **majority** of Banks are using a **2019 baseline year**. Whereas for typically less material sectors, such as **Commercial real estate and Mortgages,** we see **greater variation** in baseline years and even **1 bank using 2023** as a baseline in both cases.

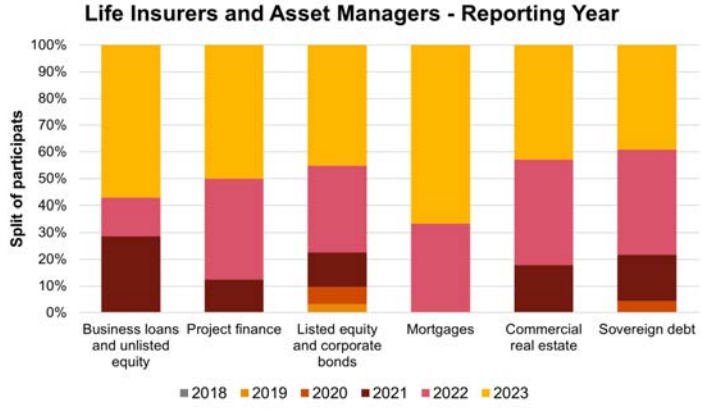
Life insurers and asset managers.

- The majority of participants have selected a 2019 baseline year and have noted the impact of Covid-19 on their 2020 emissions numbers.
- We have observed a number of participants disclosing emissions without setting a baseline year, reflecting the lack of target setting seen by asset wealth managers. This is observed through 14 disclosing listed equity during 2023, whereas only 8 baseline years have been set.







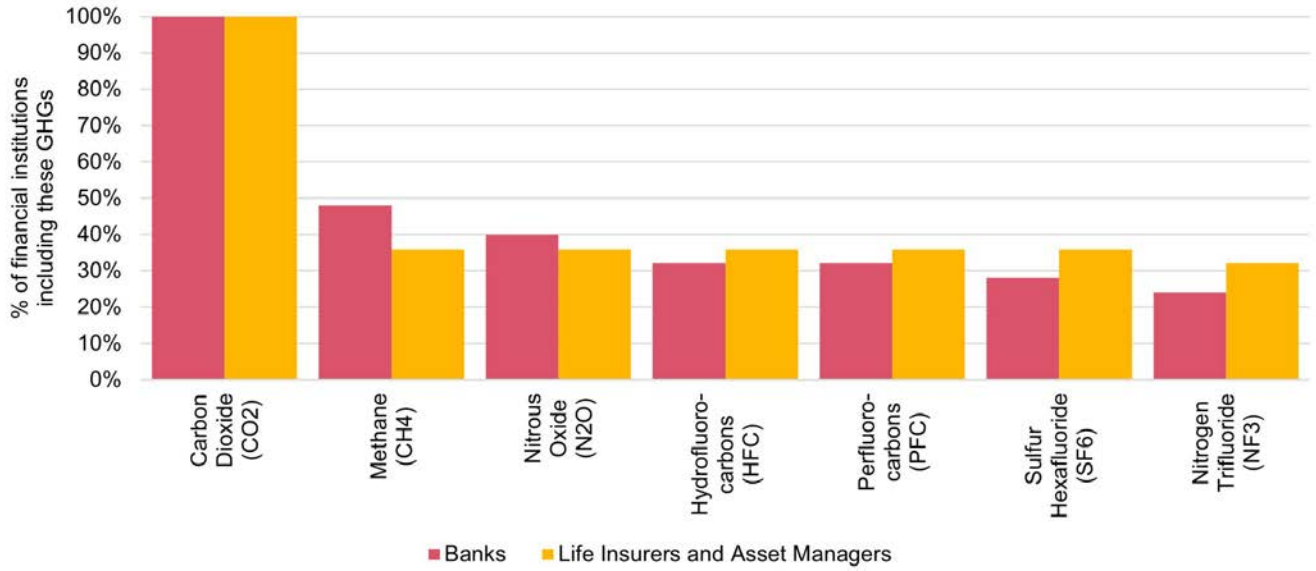


Financed Emissions: Key insights - Scope

2.3: Scope - Greenhouse Gases (GHGs)

Key insights:

- All participants which **disclosed absolute emissions** reported in either **CO2 or CO2 equivalent (CO2e)** in line with last year's disclosures.
- **Less than half of** both **Banks** and **Life insurers and Asset managers** are **disclosing which GHGs are within scope** of their GHG measurement. Hence only CO2 or CO2 equivalent (CO2e) is included in their disclosures.



There are **seven greenhouse gases mandated under the Kyoto Protocol** and to be included in national inventories under the United Nations Framework Convention on Climate Change (UNFCCC).

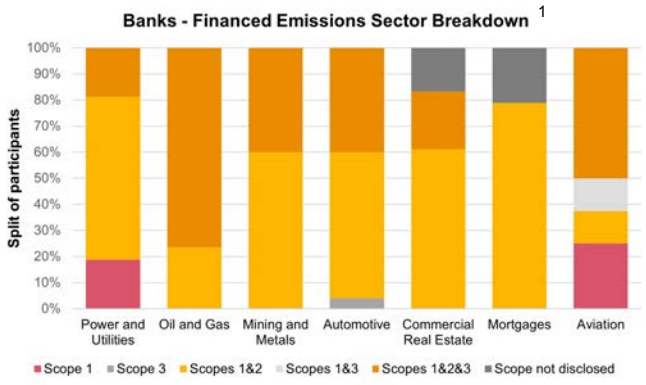
Accounting for all greenhouse gases in the emissions calculation is helpful to capture the broader climate impact, particularly in **sectors where emissions other than CO2 are significant**, such as **methane emissions in Agriculture** or **Oil and Gas**. The Portfolio Alignment Team suggests portfolio tools that cover all seven GHGs mandated by the Kyoto Protocol. In the immediate term, gases may be aggregated using the GWP framework detailed by the GHG Protocol.

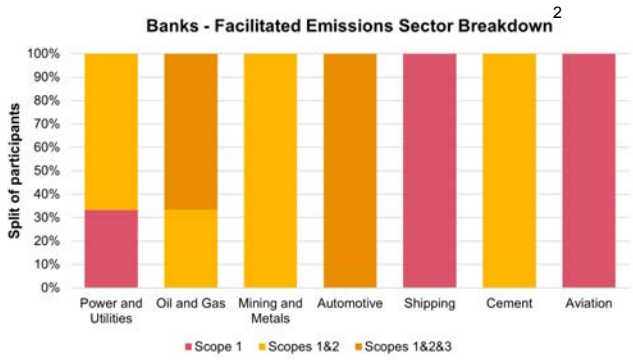
Financed Emissions: Key insights - Scope

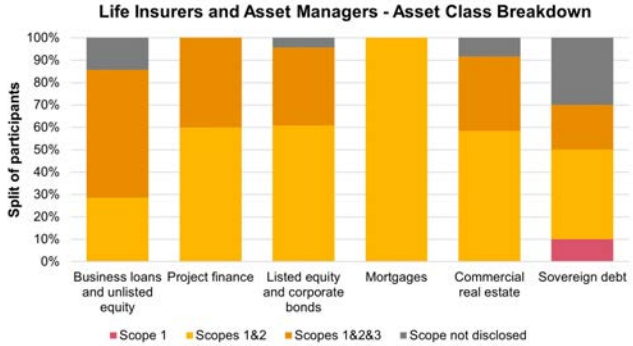
2.4: Scope - Borrowers and investees scope of emissions

> 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 – Financed Emissions GHG Standards Part A

All **Banks** have disclosed financed and facilitated emissions at a **sector level**, with most also including CRE and Mortgages asset classes. While **all Life insurers and Asset managers** have disclosed financed emissions at an **asset class level**, with **2** choosing to additionally disclose emissions at a **sector level**. The below graphs summarise the scope of emissions for Banks by sector and for insurers by asset class. To ensure comparability, we have included sectors covered by most Banks, such as Oil and Gas, as well as Mortgages and Commercial Real Estate asset classes, which have seen a rise in number of disclosures.







Key insights:

- All **Banks** have disclosed emissions at a **sector/asset class level**, while **Life insurers and Asset managers** have disclosed at **an asset class level,** with 2 also disclosing at **a sector level**.
- There is a **great deviation** among FIs regarding the inclusion **of scope 3 emissions**.

Banks - Financed emissions

- Banks show variations in sector level reporting for **Mining and Metals**, with some reporting emissions at a **granular level** for each **individual metal** and others reporting on metals in **aggregate**.
- The **Aviation** sector shows the **greatest variation**, with some Banks excluding scope 2 and/or 3 emissions and only a small proportion including all 3 scopes.
- For the **Oil and Gas** sector, the majority of Banks have **included scope 3** emissions.

Banks - Facilitated emissions

- For the **Oil and Gas** and **Automotive** sectors, the majority of Banks have included **all scopes of emissions**, while the remaining 5 sectors consistently **excluded scope 3 emissions**.
- The **Aviation** and **Shipping sectors** only include **scope 1 emissions,** noting that only one bank has reported facilitated emissions for these sectors.

Life insurers and Asset managers

- All institutions have reported **scope 1** and **scope 2 financed emissions**.
- Some participants **have not disclosed the scope of emissions** included in their in-scope asset classes.
- Only **2** participants have included **scope 3 emissions** across all asset classes.

1 Across all graphs on this slide if all emissions scopes are disclosed both on an individual and combined basis, we include this in the graphs on a combined basis to avoid double counting.
2 Given facilitated emissions is not calculated for for mortgages and commercial real estate we have included cement and shipping sectors instead.

Financed Emissions: Key insights - Scope

2.5: Scope - Sector level value chain considerations

As part of scoping, FIs look to avoid double counting and as such apply value chain exclusions across sectors. This exclusion is also based on the investee and borrower emissions scope included which was detailed in the previous section.

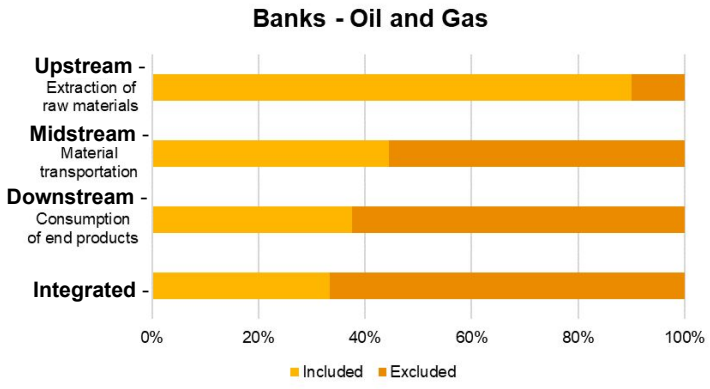
Key insights:

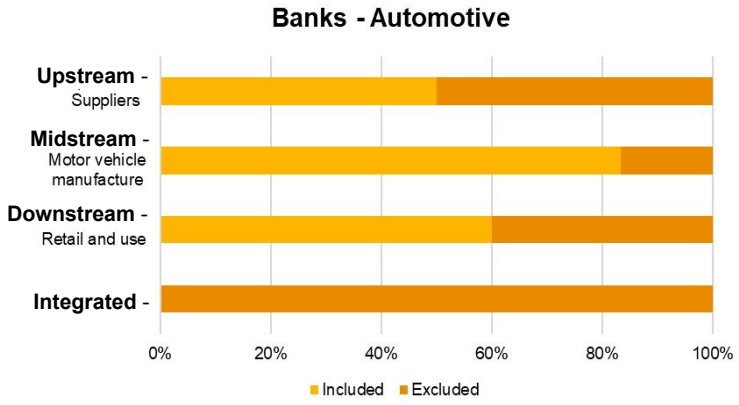
Banks

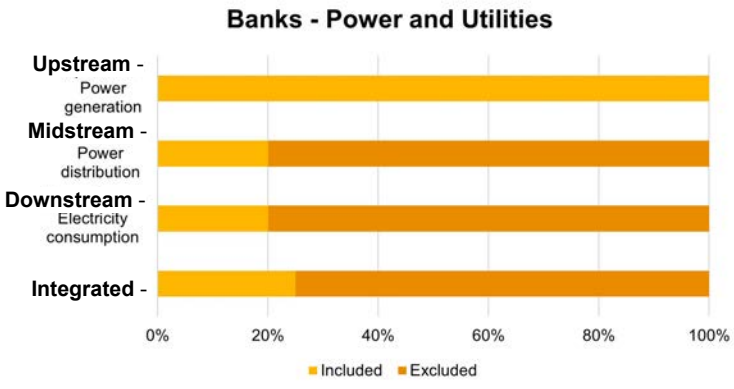
- This year we have seen a high **proportion** of participants including **upstream companies** in the **Oil** and **Gas** and **Power and Utilities sector** continuing to dominate over other areas of the value chain reflecting the higher emitting part of the value chain for those industry segments. Similarly for the **Automotive sector more upstream companies** were included, whilst **upstream** companies remain consistently **excluded** for the M**ining and Metals sector**.
- For the **Automotive and Mining and Metals sectors** we note that the **midstream** companies are almost always **included** since these correspond to **manufacturing** and is **the most carbon intensive area** of the value chain.

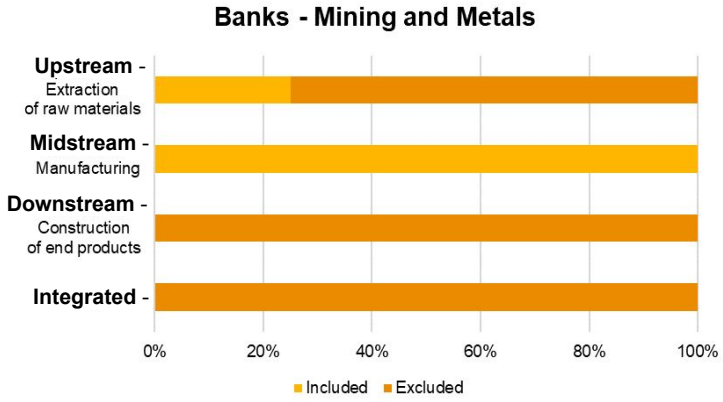
Life insurers and Asset Managers

- We note that the **value chain information is not disclosed by Life insurers and Asset managers** since most of them have not disclosed sector level information.









To ensure comparability, we have included only those sectors which are covered by most of the Banks, namely Oil and Gas, Power and Utilities, Automotive and mining and metals sectors, which are also the highest emitting sectors. Additionally, we note that the concept of value in the context of financed emissions does not apply to mortgages and CRE.

Financed Emissions: Key insights - Data

3 3.1 Data – PCAF score

Data availability is a **known challenge** for institutions measuring their carbon footprint and institutions are using proxies to fill these gaps. This is reflected in the data quality scores disclosed by institutions which leverage PCAF as guidance. This section summarises the key insights from the disclosed PCAF score (score of 1 corresponding to the best data quality and a score of 5 corresponding to the lowest data quality). Please refer to the Appendix for further details on the PCAF data quality score and the 'Financed emissions: Navigating the data challenge' paper for more details on data challenges and considerations.

Data quality score – Banks

22 of the 25

Of the selected Banks **disclosed a PCAF data quality score**. Except for 2 Banks, all other Banks which have stated they are leveraging a PCAF approach have also disclosed a PCAF score as per the guidance.

3.50 and **3.66**

Are the **exposure weighted average Scope 1 & 2** and **Scope 3 PCAF** data quality scores respectively across the selected Banks.

Data quality score - Life insurers and asset managers

9 of the 22

Of the selected Life insurers and Asset managers **disclosed a PCAF data quality score.** This score is mandated by PCAF guidance and allows for comparability.

2.94 and **3.68**

Are the **exposure weighted average Scope 1 & 2** and **Scope 3 PCAF** data quality scores respectively across the selected of Life insurers and Asset managers.

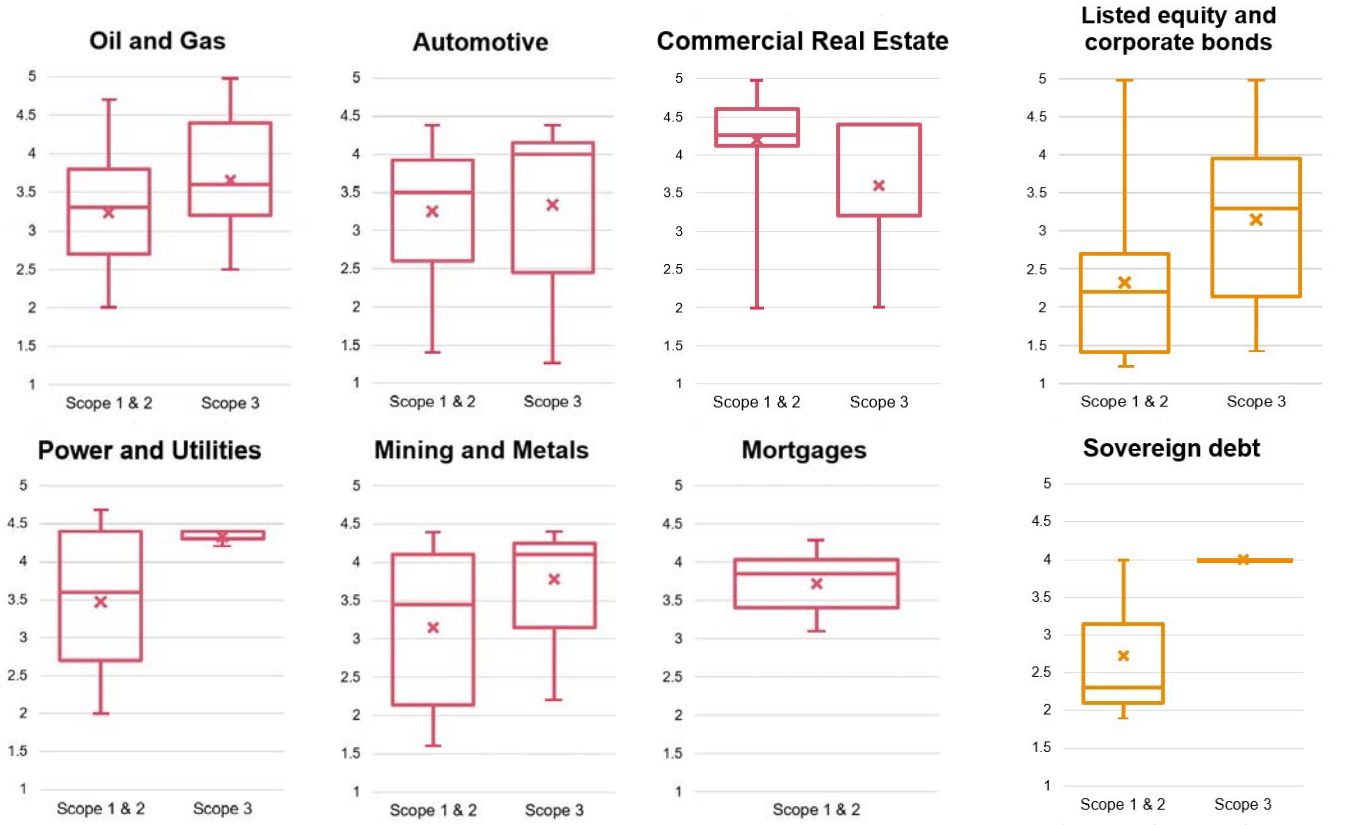
Financed Emissions: Key insights - Data

Key Insights:

- For the majority of sectors and asset classes we have observed a large **range** of PCAF scores, this outlines that FIs are using **different sources and types of data** to calculate their financed emissions i.e. proxies versus the use of verified emissions. However, within the **Mortgages** asset class we observe a more compressed range of PCAF scores reflecting the use of proxies approaches primarily, such as publicly available EPC data for UK properties.
- For both Banks and Life insurers and Asset managers we observed that **scope 1&2** on average **has lower PCAF scores compared to scope 3**. This is aligned to expectations, as this is due to the limited number of data sources available as well as inherent uncertainty for scope 3 emissions. We expect this to improve in the future.

Banks

Life insurers and Asset managers



To ensure comparability, we have focused on sectors and asset classes which are widely covered by most institutions, namely Oil and Gas, Power and Utilities, Automotive and Mining and Metals sectors. Additionally we have considered the Commercial Real Estate and Mortgages asset classes, which have seen a growing number of disclosures. For Life insurers and Asset managers we have included the Listed equity and corporate bonds and Sovereign debt asset classes [1].

1 Please note, some FI are disclosing scope 1, 2 and 3 on a combined basis. This lack of differentiation in emissions scope results in some larger than expected ranges for the scope 3 data quality scores in the graphs above.

Financed Emissions: Key insights - Target setting and forecasting

4 **4.1: Target setting and forecasting – Interim and Net Zero Targets**

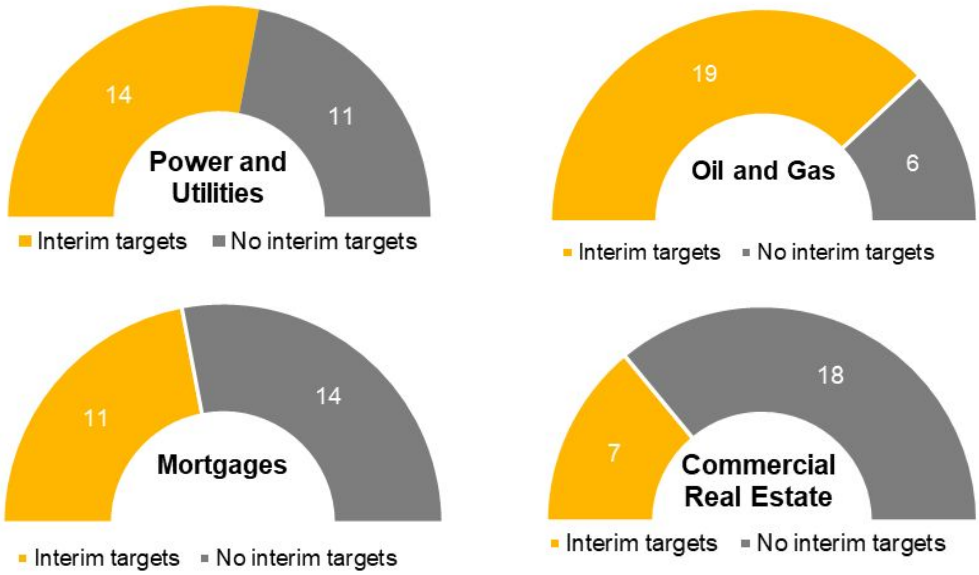
With the advent of new regulation, such as **TPT**, **ISSB** and **CSRD**, FIs are expected to disclose **future targets** for reducing carbon emissions as well as their current carbon footprint. FIs set two kinds of targets to demonstrate their commitment to addressing climate change, namely **Interim Targets** and **Net Zero Targets**. Net Zero targets are usually set to reflect the FI's overall ambition to **decarbonise** their **operations** and **finance portfolios**. Interim targets are set for specific sectors/asset classes to track FI's progress against their **overall ambition**. In this section, we aim to summarise the key insights on these interim targets as well as the basis by which they are determined, if available.

Key Insights:

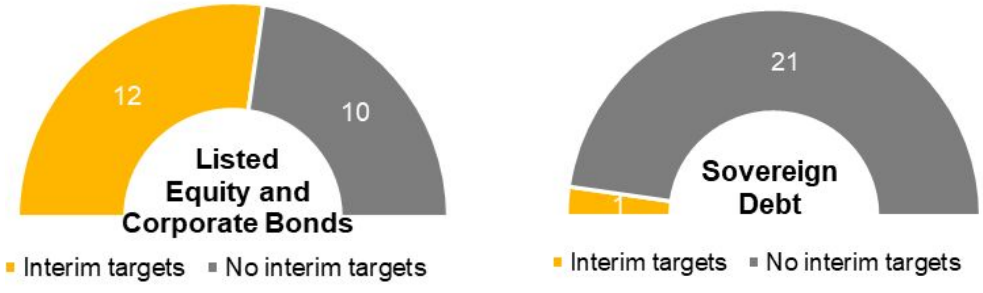
- Overall, **37 of the 47** FIs analysed have **disclosed interim targets**.
- We note that **Banks are disclosing targets at sector** level, while some **Life insurers and Asset managers** are disclosing a **single target as opposed to multiple sector-specific targets**.
- **23** out of **25** Banks and **18** of **22** Life insurers and Asset managers have **Net Zero Targets** for their financed emissions.

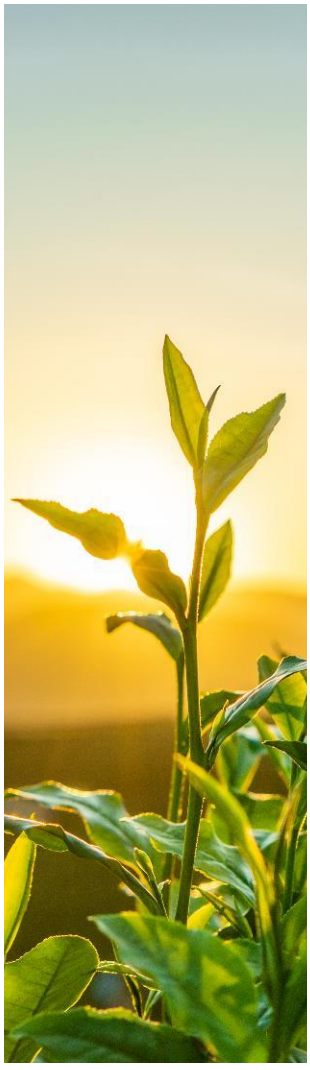
Interim targets

Banks



Life insurers and Asset managers





To ensure comparability, we have focused on sectors and asset classes which are widely covered by most institutions.

Financed Emissions: Key insights - Target setting and forecasting

4.2: Target setting and forecasting – Benchmark scenario selection

FIs have used benchmark scenarios which are reference pathways set by relevant industry bodies (IEA or regional / UK) to determine both their interim and net zero targets. This section summarises the scenarios used by Banks across sectors and Life insurers and Asset managers and overall book level. To ensure comparability, we have included only those sectors and asset classes for Banks which are covered by most of the institutions, namely the Oil and Gas, Power and Utilities, Mortgages and Commercial Real Estate.

Key Insights:

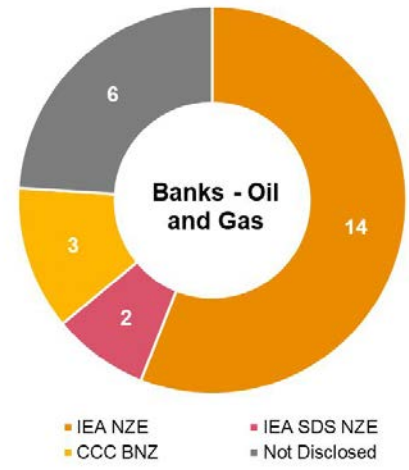
Banks

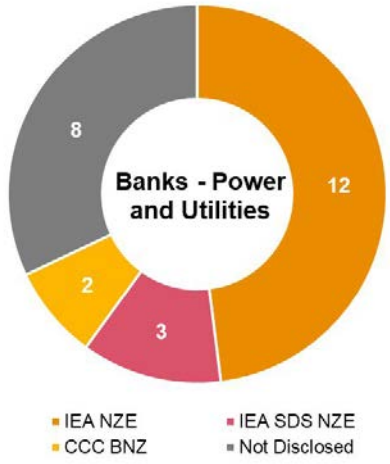
- For both **Oil and Gas** and **Power and Utilities** sectors, 3 different scenarios are being used across **Banks** with the **IEA NZE** being the **most common**.
- Fewer banks disclosed reference pathways for Mortgages and Commercial Real Estate compared to Oil and Gas and Power and Utilities, with IEA NZE and CCC BNZ being the most common among those that did.
- Other sectors/asset classes include far **fewer** reference pathways. This reflects Banks that have not set targets for other sectors/asset classes as well as Banks that have not used reference pathways to set their targets. We note, in some cases reference pathways do not yet exist for specific sectors/asset classes.

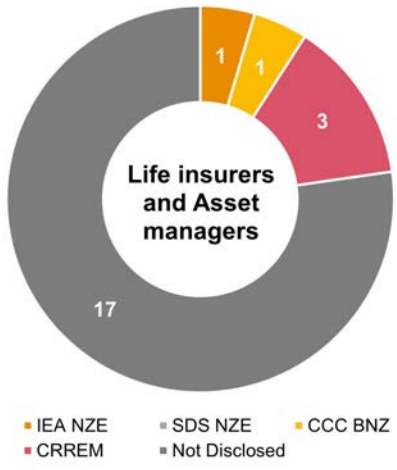
Life insurers and asset managers

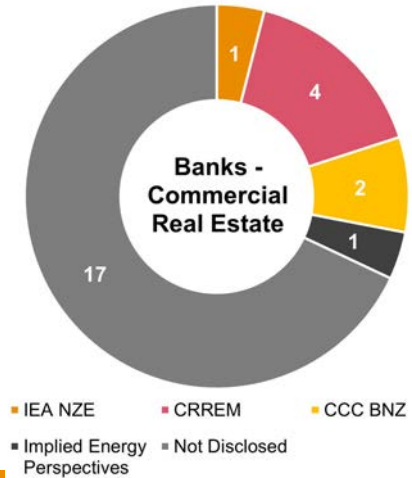
- Only 5 Life insurers and Asset managers have disclosed the benchmark scenarios they have adopted and not necessarily for all of their asset classes. The most common reference pathway used was **CRREM**.

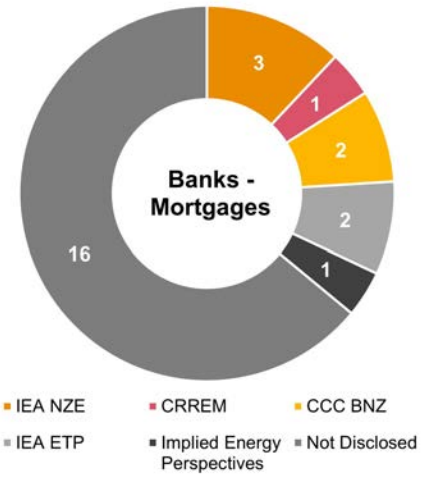
Banks | **Life insurers and Asset managers**

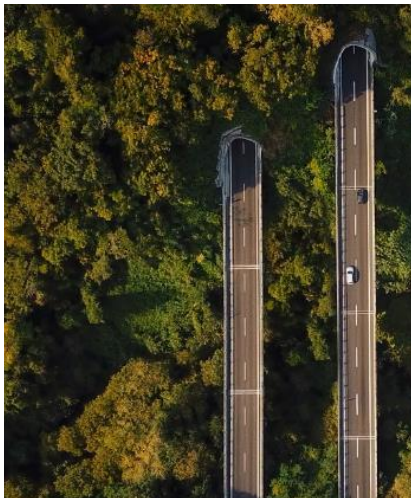












How can PwC help?

We have extensive experience supporting our clients in the **Financial Services** sector navigating the various challenges around **sustainability reporting and strategic implications** of what this means, including **emissions modelling and measuring climate related risks.** This includes:

1. **Data sourcing and processing -** selecting appropriate data based on defined criteria, sensitivity and benchmarking analysis, use of proxies when data not available.
2. **Emissions modelling** – model design, development, validation and implementation.
3. **Governance and monitoring** – defining and embedding, risk appetite, governance and monitoring framework.
4. **Portfolio and counterparty management using analytics and insights** - support active portfolio and counterparty management.
5. **Decarbonisation strategy and optimisation** - including dynamic balance sheet and credibility assessment considerations.
6. **Embedding financed emissions output into the business** – sustainability reporting, transition planning.

Across all these offerings, we have a set of **digital assets** including a **cloud-based tool (Portfolio Emissions Manager – PEM)** which supports financial services in **quantifying their carbon footprint and forecasting their decarbonisation pathway**.

Please reach out for a demo of the tool and how it can help your institution in the net zero journey.

Other publications

- *Calculating your baseline carbon footprint: Facilitated emissions for capital markets 2023.*
- *YE22 Financed Emissions: PwC Benchmarking*
- *Financed emissions: Navigating the data challenge.*

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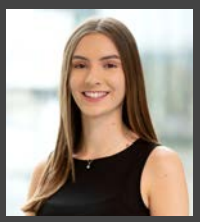

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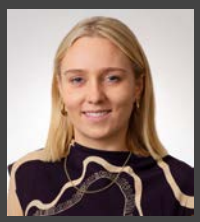

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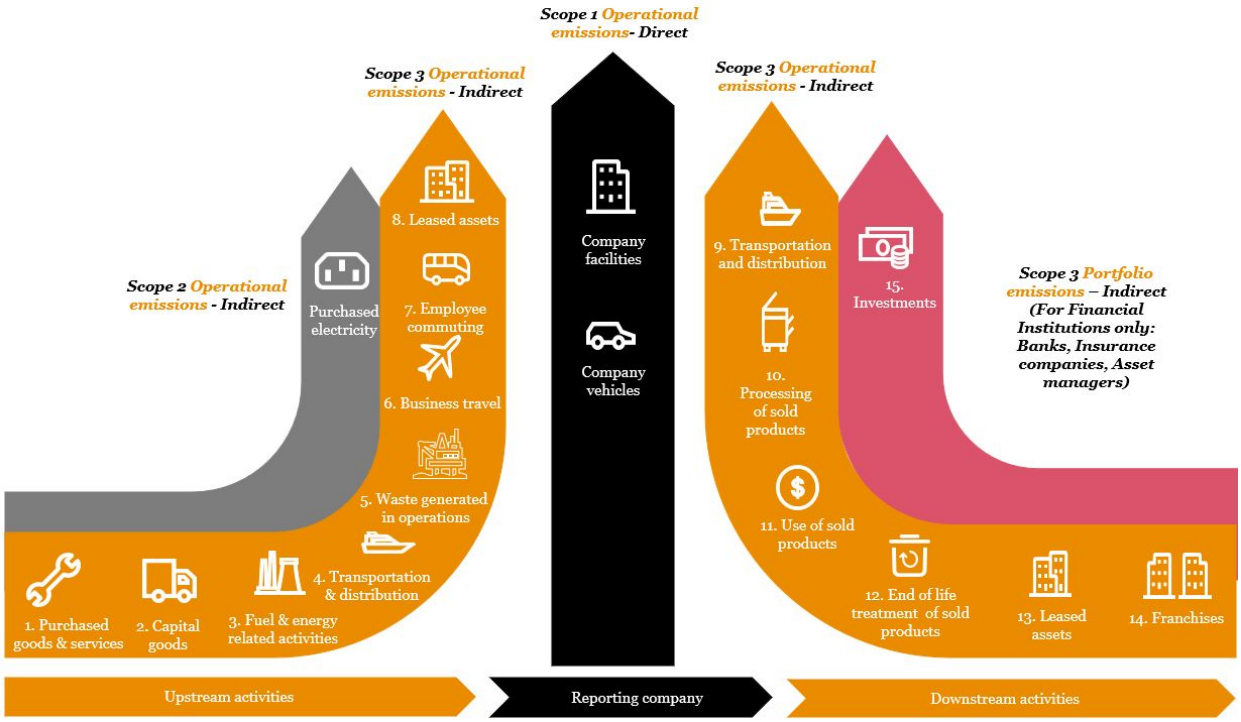
Appendix

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.



Brief description

IEA NZE	The 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.
TCFD	The Financial Stability Board created the Task Force on Climate-related Financial Disclosures (TCFD) to improve and increase reporting of climate-related financial information. TCFD guidance recommends that financial institutions report financed emissions in line with PCAF as it provides the granularity required to contribute to a consistent implementation of TCFD and comply with UK government requirements.
ISSB	International Sustainability Standards Board (ISSB) 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 in the first quarter of 2025. Source: gov.uk.
CSRD	The Corporate Sustainability Reporting Directive (CSRD) is an 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.
NZBA	The Net-Zero Banking Alliance (NZBA) is the banking member of the Glasgow Financial Alliance for Net Zero (GFANZ). It compromises leading international Banks dedicated to funding ambitious climate initiatives, aiming to transition the economy to net-zero greenhouse gas emissions by 2050.
SEC	The US Securities and Exchange Commission (SEC) has issued new rules that require disclosure of climate-related risks that could materially impact business or financial statements. The gathering and reporting may require significant changes to a registrant’s systems, processes and controls.
Portfolio Alignment Team	The Portfolio Alignment Team is responsible for aligning an organization's projects and initiatives with its strategic objectives to maximise performance and resource allocation.

Appendix

Illustrative PCAF data quality score table for listed equity and corporate bonds.

Source: PCAF (2023). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition.

LISTED EQUITY AND CORPORATE BONDS – DETAILED SUMMARY OF DATA NEEDS AND EQUATIONS TO CALCULATE FINANCED EMISSIONS

Table 10.1-1. Detailed description of the data quality score table for listed equity and corporate bonds[194]

Option	Description					Data quality
	Attribution		Emission factor		Financed emissions calculation	Highest to lowest
	Financial data		Emission data		Equations	
Option 1a	Outstanding amount in the company	EVIC for listed companies and total equity plus debt for bonds to private companies	Verified GHG emissions data from the company in accordance with the GHG Protocol		For listed companies: $\sum_c \frac{Outstanding\ amount_c}{EVIC_c} \times Verified\ company\ emissions_c$ For bonds to private companies: $\sum_c \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \times Verified\ company\ emissions_c$	Score 1
Option 1b			Unverified GHG emissions data calculated by the company in accordance with the GHG Protocol		For listed companies: $\sum_c \frac{Outstanding\ amount_c}{EVIC_c} \times Unverified\ company\ emissions_c$ For bonds to private companies: $\sum_c \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \times Unverified\ company\ emissions_c$	Score 2
Option 2a[195]			Primary physical activity data for the company's energy consumption by energy source (e.g., megawatt-hours of electricity) plus any process emissions	Emission factors specific to that primary data (e.g., energy source-specific emission factors)[196]	For listed companies: $\sum_c \frac{Outstanding\ amount_c}{EVIC_c} \times Energy\ consumption_c \times Emission\ factor$ For bonds to private companies: $\sum_c \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \times Energy\ consumption_c \times Emission\ factor$	Score 3
Option 2b		EVIC for listed companies and total equity plus debt for bonds to private companies	Primary physical activity data for the company's production (e.g., tonnes of rice produced)	Emission factors specific to that primary data (e.g., emission factor per tonne of rice)	For listed companies: $\sum_c \frac{Outstanding\ amount_c}{EVIC_c} \times Production_c \times Emission\ factor$ For bonds to private companies: $\sum_c \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \times Production_c \times Emission\ factor$	Score 3
Option 3a		Revenue of the company	GHG emissions per sector	Revenue per sector[200]	For listed companies: $\sum_c \frac{Outstanding\ amount_c}{EVIC_c} \times Revenue_c \times \frac{GHG\ emissions_s}{Revenue_s}$ For bonds to private companies: $\sum_c \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \times Revenue_c \times \frac{GHG\ emissions_s}{Revenue_s}$	Score 4
Option 3b		N/A	GHG emissions per sector	Assets per sector	For listed companies and bonds to private companies: $\sum_c Outstanding\ amount_c \times \frac{GHG\ emissions_s}{Assets_s}$	Score 5
Option 3c		Asset turnover ratio per sector	GHG emissions per sector	Revenue per sector	For listed companies and bonds to private companies: $\sum_c Outstanding\ amount_c \times Asset\ turnover\ ratio_s \times \frac{GHG\ emissions_s}{Revenue_s}$	