



Partnership for Carbon Accounting Financials

Enabling financial institutions to measure emissions associated with financial activities

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Prepared for the UAB titled Conference challenges of Achieving
SDGs, Geneva, June 2024

Agenda



PCAF INTRODUCTION



HOW PCAF CAN HELP BANKS



PCAF AND SDGS



Q&A



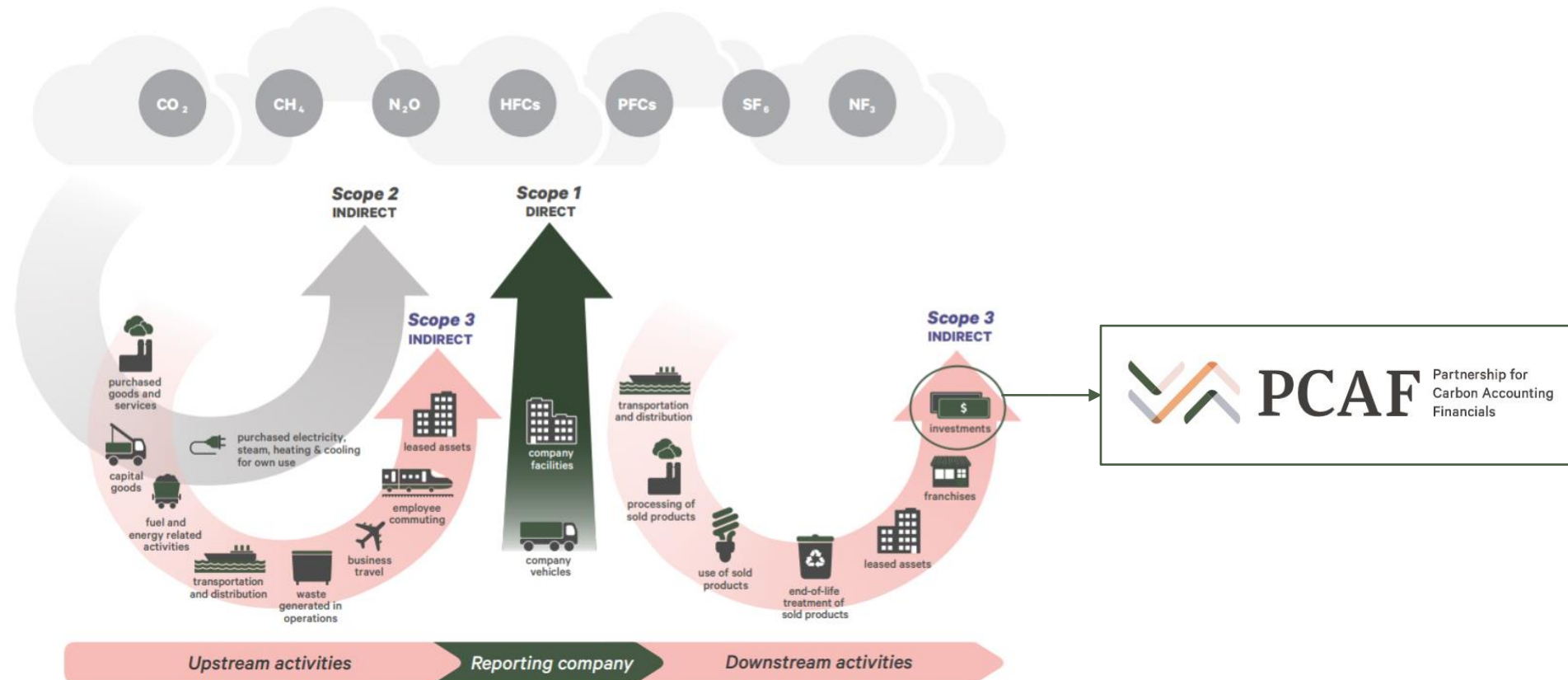
What is PCAF

Intro to GHG accounting for financial institutions

Greenhouse gas (GHG) accounting for financial institutions is the annual accounting and disclosure of **GHG emissions** associated with **financial activities** at a fixed point in time in line with financial accounting periods.

What gets measured gets managed

Financial institutions indirectly create a climate impact through their financial activities



Scope 3, Category 15 emissions are the largest component of the climate impact of a financial institution

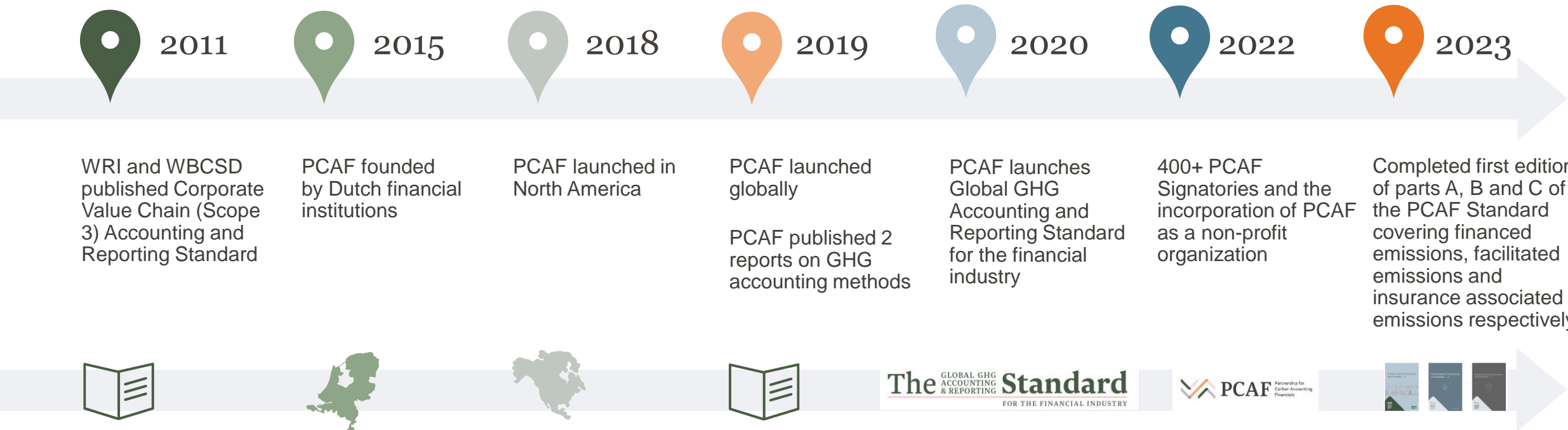
Portfolio emissions of global financial institutions are on average 700x larger than direct emissions.*



#TimeToGreenFinance
*Per organization reporting financed emissions



Since 2015, PCAF signatories have developed and tested GHG accounting methods, leading to a globally harmonized Standard



"This standard has been reviewed by the GHG Protocol and is in conformance with the requirements set forth in the Corporate Value Chain (Scope 3) Accounting and Reporting Standard, for Category 15 investment activities."

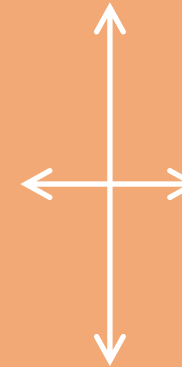
490+ financial institutions in 74 countries are part of PCAF,
180 have disclosed (as of June 2024)



PCAF OBJECTIVES



Develop the
Global GHG
Accounting and
Reporting
Standard for the
Financial Industry



Increase the
number of
financial
institutions that
use the PCAF
Standards and
disclose their
emissions to over
1,000 institutions
globally by year-
end 2025

CHECK THE FULL LIST OF PCAF SIGNATORIES [HERE](#)

DOWNLOAD THE GLOBAL GHG ACCOUNTING AND REPORTING STANDARD [HERE](#)

PCAF works with various global partners and collaborators

All Global Net-Zero Alliances and Net-Zero Initiatives



**Paris Aligned
Investment Initiative**

Reporting, Target-Setting and Sector Alignment initiatives



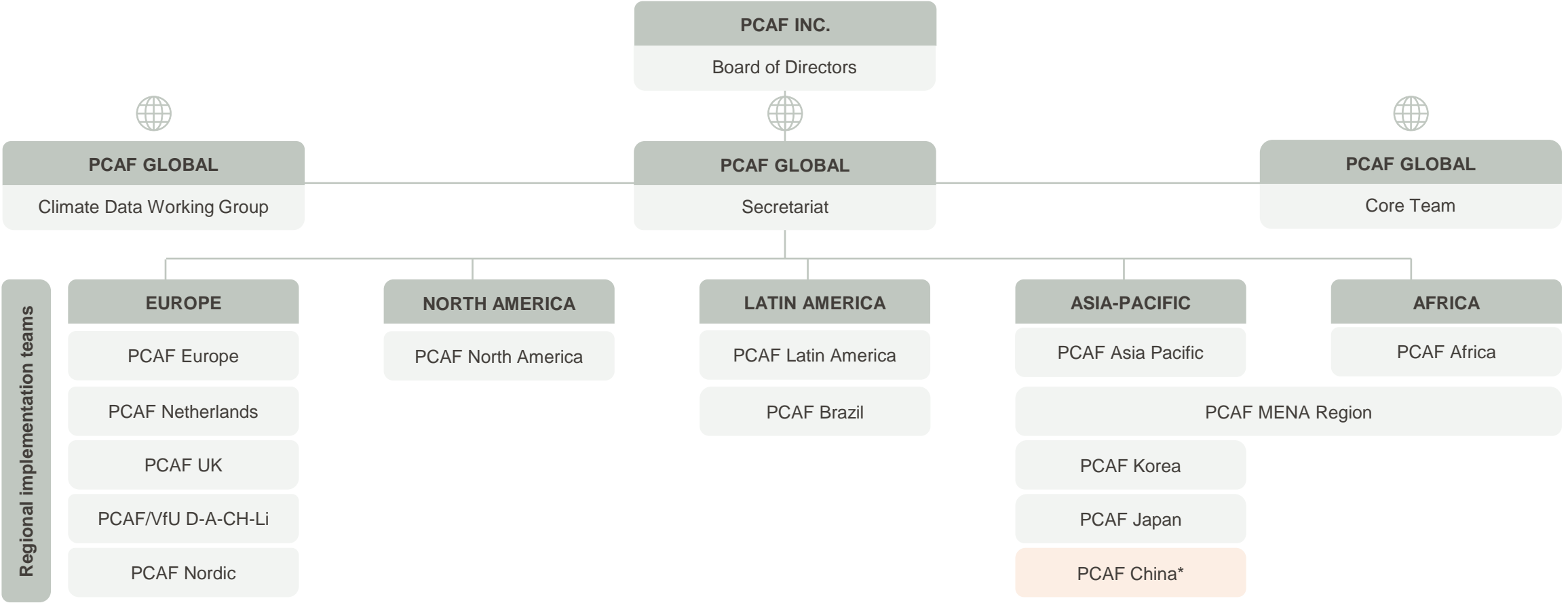
Leading local Sustainable Finance networks and actors



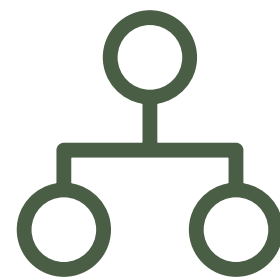
General Council for Islamic
Banks and Financial Institutions



PCAF drives implementation through regional and national collaborations



* Under consideration. Additional national chapters can be created if there is sufficient interest from signatories



**How PCAF helps
banks**

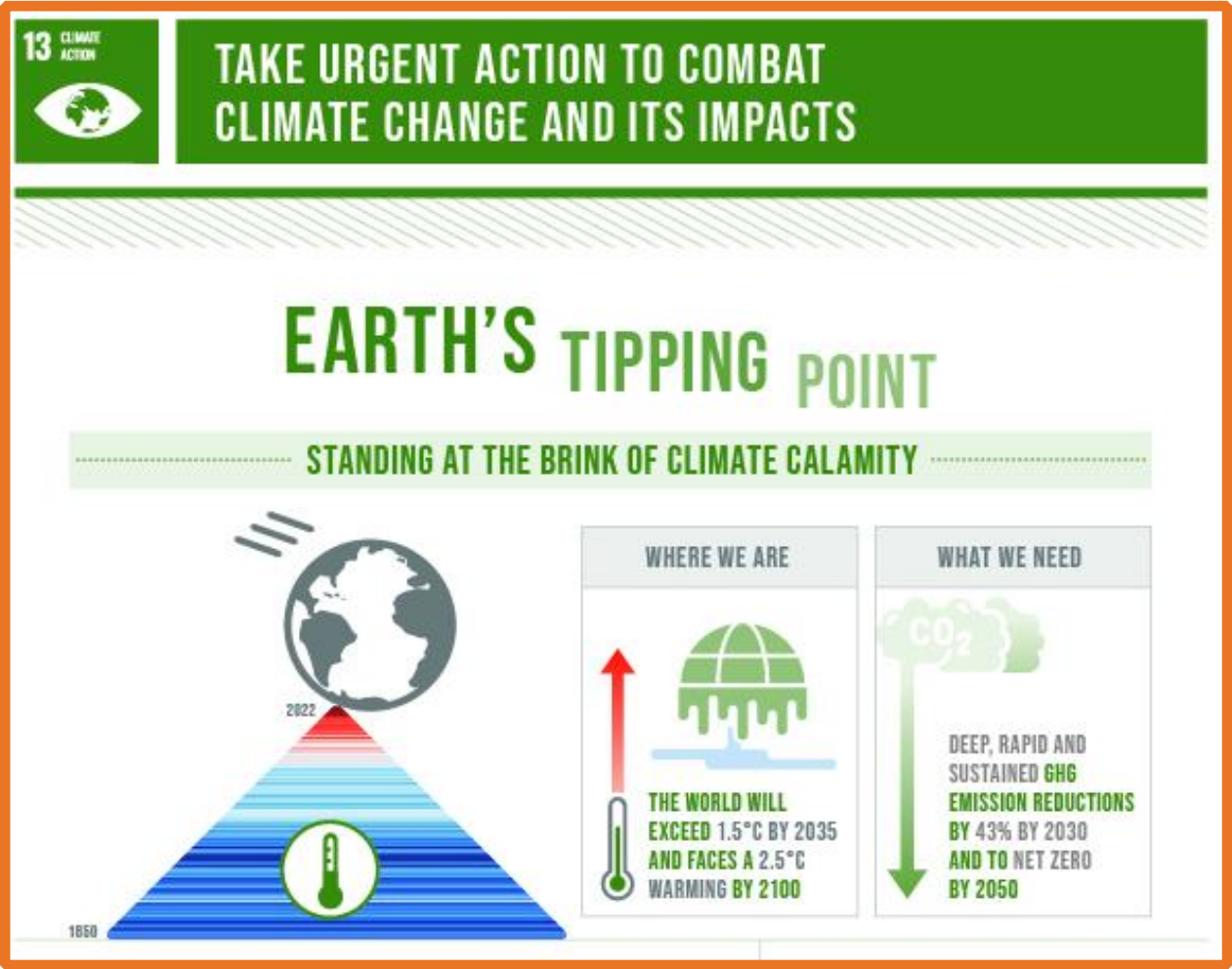
Measuring and disclosing emissions associated with financial activity furthers climate-related goals and aligns with other initiatives



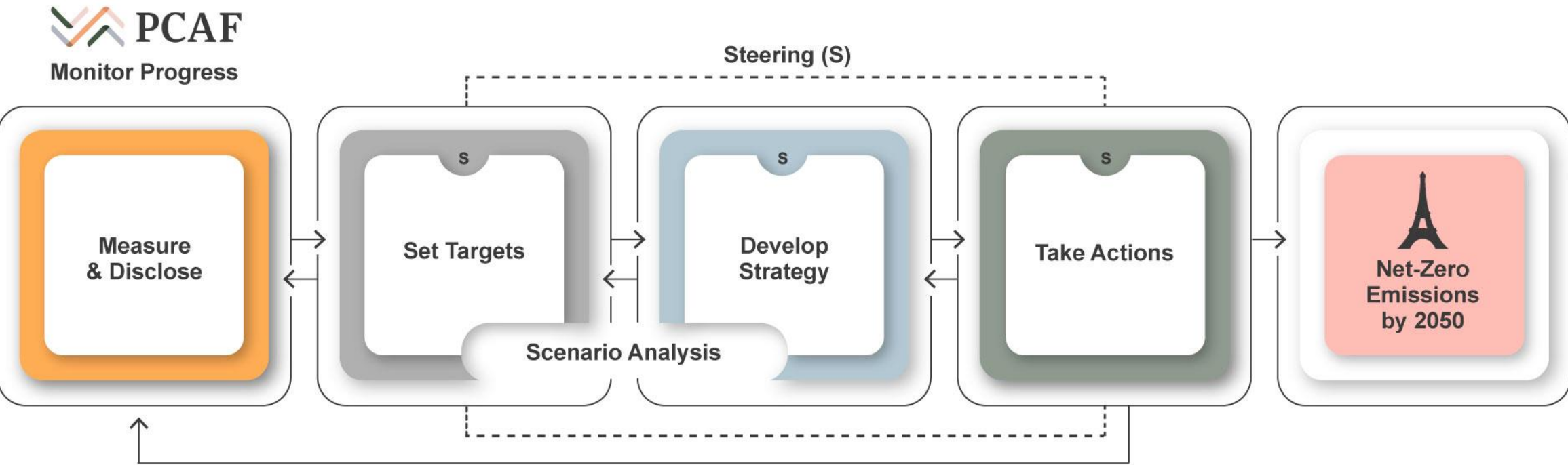
PCAF helps banks to directly achieve specific SDGs



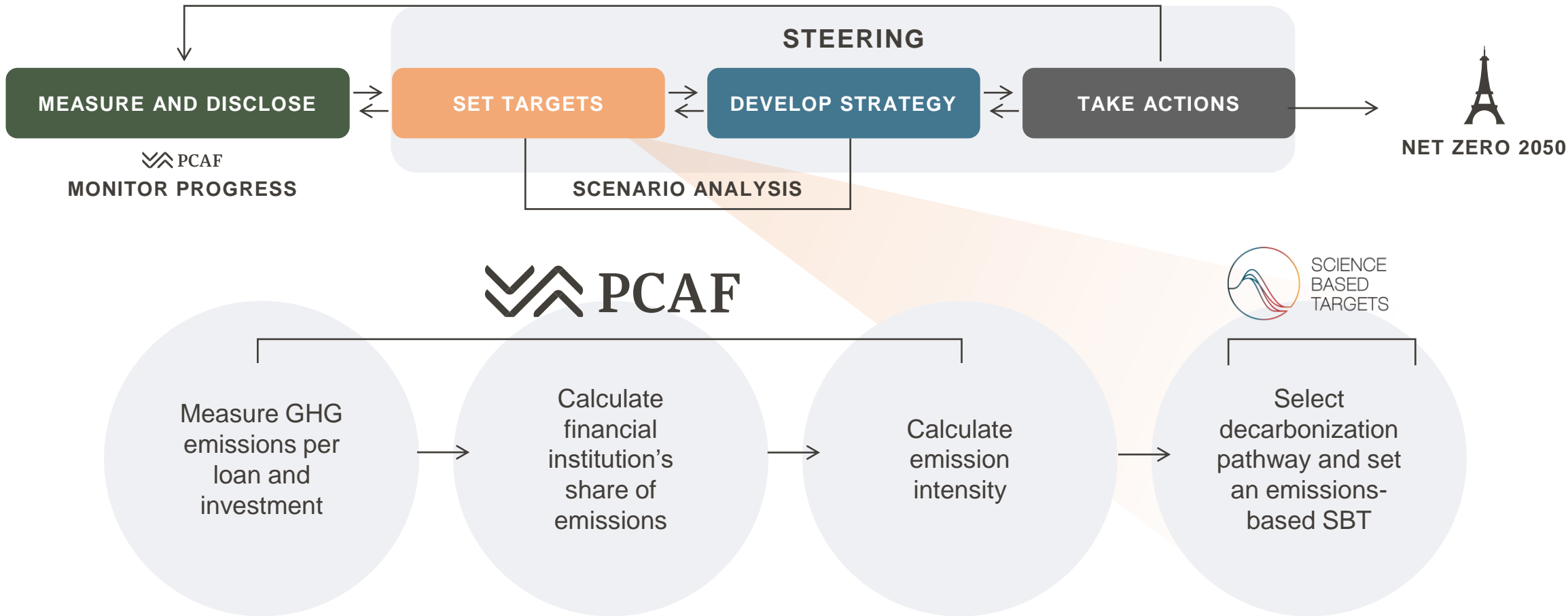
Helps banks to progress directly and achieve SDG goal number 13 focusing on climate actions to reduce the carbon emission.



GHG accounting exists as a discrete action in a sequence that allows banks and investors to measure, disclose and align

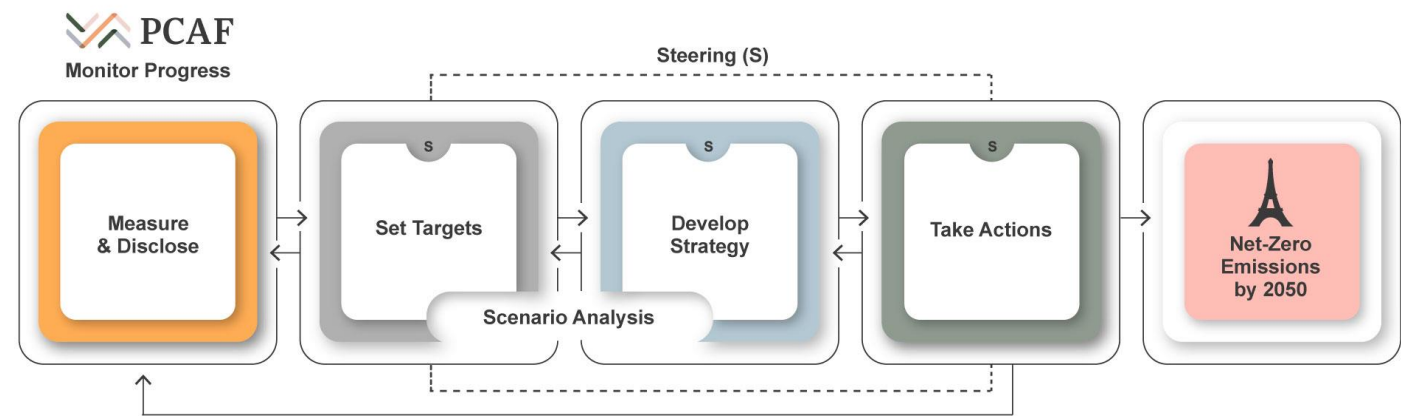


Measuring emissions associated with financial activity provides the baseline for science based target setting



Emissions associated with financial activity inform climate strategies and the development of climate-friendly products

Business Goal 3
Develop climate-friendly financial products



Triodos Bank

SPECIAL MORTGAGE TO IMPROVE THE ENERGY EFFICIENCY OF HOUSES

Triodos Bank developed a dedicated financial product with a lower interest to customers that renovate their homes and aim to improve energy efficiency (B, A, A+)

beneficial state bank

FUNDING AND AFFORDABLE FINANCING FOR CLEAN VEHICLES

The bank partnered with the State of California to provide grants and affordable financing to help income-qualified Californians purchase or lease a new or used hybrid or electric vehicle

BARCLAYS

GREEN LOAN TO FUND GREEN ENERGY AND SUSTAINABILITY PROJECTS

Barclays' SME clients can borrow up to £5 million to fund projects with positive climate impact or that help reduce climate impact. Including harnessing and storing solar and wind energy, or upgrading to eco-friendly machinery

ABN·AMRO

COMMERCIAL REAL ESTATE TOOLS TO IMPROVE BUILDINGS ENERGY EFFICIENCY

ABN AMRO enables real estate clients increase the energy efficiency of the buildings and associated carbon emissions. Through its Sustainable Investment Tool, the bank assesses the assets and recommends improvement measures along with special financing offerings

PCAF Signatories in MENA Region



Frist Bank of Abu Dhabi FAB

UAE



Commercial International Bank CIB

Egypt



Ahli United Bank

Bahrain



Emirates NBD

UAE



Bank ABC

Bahrain



National Bank of Kuwait *

Kuwait



Bank al Etihad

Jordan



Qatar National Bank

Qatar

NBK sent the commitment letter on 16.04.2024, the onboarding process has not yet been completed.



Thanks a lot.

For more info, please contact
PCAF

eslam.mahdy@guidehouse.com

info@carbonaccountingfinancials.com

Joining PCAF brings multiple additional benefits



COLLABORATION

PCAF offers you the largest global industry-led network of financial institutions, collaborating to measure and report on the GHG emissions associated with their financial activities.



STANDARD & GUIDANCE

PCAF offers you the chance to be part of specific working groups that develop updates to the Global GHG Accounting and Reporting Standard for the Financial Industry and work with peers on supplementary, technical guidance.



PCAF ACADEMY & TECHNICAL ASSISTANCE

The PCAF Secretariat's team of subject matter experts provide you with technical support. PCAF also offers signatories to participate in the PCAF Academy, i.e. professional e-learning modules on the PCAF Standard.



PCAF EMISSION FACTOR DATABASE

The PCAF emission factor database provides a set of emission factors which are aligned with the methodologies of the PCAF Standard, as well as detailed guidance on how to use them to calculate emissions associated with financial activities.



KNOWLEDGE SHARING

PCAF offers you the opportunity to join regional/national implementation teams to actively stimulate knowledge sharing and peer-to-peer learning. Meetings, workshops and webinars are organized on a regular basis.



GLOBAL RECOGNITION

As a global initiative, being a PCAF signatory helps communicate your commitment to providing solutions to climate change. Your organization is listed on the PCAF website and is granted the rights to use the PCAF logo.

Joining PCAF also brings multiple additional benefits

NETWORK EXPANSION

- Investors, banks and experts globally
- Link to SBTi, UNEP FI's NZAOA, NZBA, TCFD and CDP

DECISION-MAKING AUTHORITY

- The Global GHG Accounting and Reporting Standard (when joining the PCAF core team)
- Local-tailored guides
- Best practices

LEADERSHIP RECOGNITION

- Global and regional events on climate finance
- Social media via PCAF marketing channels

TECHNICAL SUPPORT

- Workshops and trainings
- Technical guides and case studies
- PCAF Academy



PCAF signatories commit to assess and disclose the greenhouse gas emissions of their financial portfolio

COMMITMENT IN SHORT:

Measure and disclose the portfolio GHG emissions within **three years** of signing the commitment letter (portfolio coverage is up to the institution)

Commitment letter

All financial institutions involved in the Partnership for Carbon Accounting Financials (“PCAF”) pledged and adhere to the following commitment. By joining PCAF, our financial institution also commits to adhere to this:

Addressing the urgent challenge of climate change, and decarbonizing our economy, is more pressing now than ever. That is why we have committed to measure and disclose the greenhouse gas (GHG) emissions associated with our portfolio of loans, investments, (re)insurance underwriting, and other financial products and services* within a period of three years using jointly developed GHG accounting methodologies, in order to ultimately enable the alignment of our portfolio with the Paris Climate Agreement.

We want to share and learn from credible GHG accounting practices to find solutions to shared challenges. We hope this will encourage and stimulate the adoption of GHG accounting and target setting in the financial sector on a larger and mainstream scale.

We will contribute to the overall objective of PCAF, which is to secure the public commitment (via signed commitment letters) of at least 1,000 participating financial institutions globally to measure and disclose the GHG emissions of their loans, investments, (re)insurance underwriting, and other financial products and services within a period of three years. Together we will collaborate to achieve transparency and uniformity in GHG accounting.

We will pay the PCAF signatory fee associated with our sector categorization on an annual basis per PCAF payment terms in effect at the time of signing this letter. Our contribution will support the inclusive growth and expansion of the initiative and the development of new methods, guidance, and other resources that can assist financial institutions on their GHG accounting journey.

We acknowledge that our commitment will be recognized on the PCAF website and social media accounts, as well as at other communication activities such as events where the initiative is showcased.

* Other financial products and services include for example capital market instruments. PCAF signatories will be able to measure emissions related to these products when the methodology becomes available.

The Standard consists of three parts for financial institutions to measure and report emissions from their financial activities



Part A – Financed Emissions

- Provides methodological guidance **to measure and disclose GHG emissions** associated with seven asset classes as well as guidance on emission removals. 2nd edition launched in 2022

Part B – Facilitated Emissions

- Provides methodological guidance for measuring and reporting the GHG emissions associated with **capital markets transactions**.
- Launched on 1st December 2023.

Part C – Insurance-Associated Emissions

- Provides methodological guidance for measuring and reporting the GHG emissions associated with **re/insurance underwriting for two segments**. 1st edition launched in 2022.
- **The two segments** are: 1) commercial lines, and 2) personal motor lines.

Part A: Financed Emissions – there are seven asset classes



Listed Equity and Corporate Bonds



Business Loans and Unlisted Equity



Project Finance



Listed Commercial Real Estate



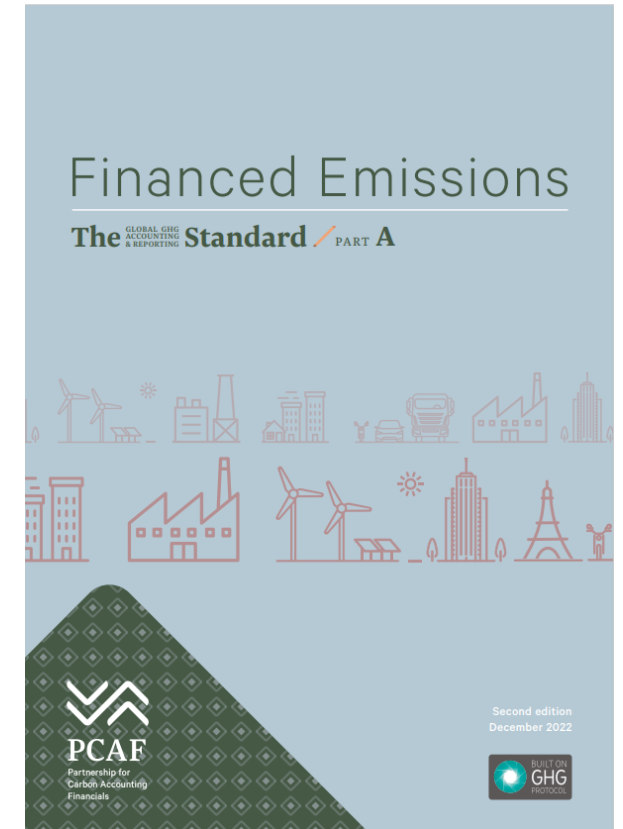
Mortgages



Motor Vehicle Loans



Sovereign Debt



Part B: Facilitated Emissions – covering capital market instruments and loan syndication



Standard released on December 1st 2023, **providing guidance to calculate emissions** associated with primary issuance capital market instruments and loan syndication



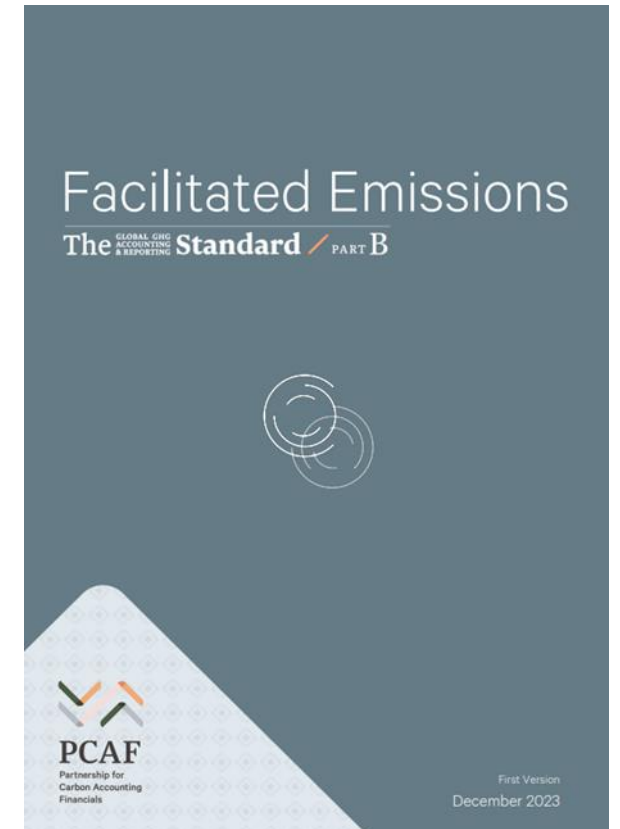
The Standard covers **general-purpose facilitated issuances** of new public debt and public equity, equity and debt investments in private companies, and syndicated loans



Total capital market issuance was 22.9 trillion USD in 2022. This methodology **increases transparency** in this globally significant market



PCAF engaged with stakeholders to solicit **feedback through public consultation** in October 2022. This feedback has been appropriately considered and incorporated



Part C: Insurance-Associated Emissions – first edition of the PCAF Standard for insurance-associated emissions



Property and Liability / Causality (Commercial Insurances)



Commercial Motor (Commercial Insurances)



Agriculture and Marine / Aviation (Commercial Insurances)



Trade Credit (Commercial Insurances)



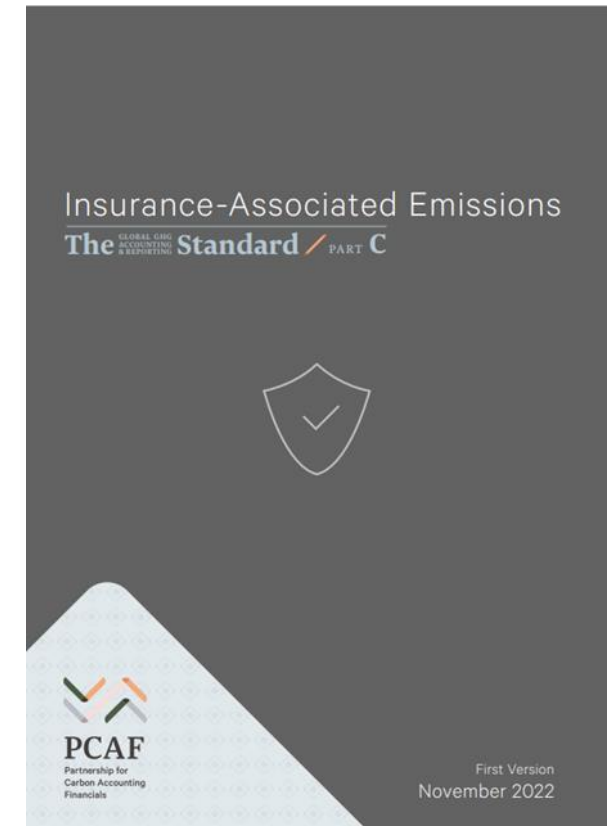
All Other Engineering Lines (Commercial Insurances)



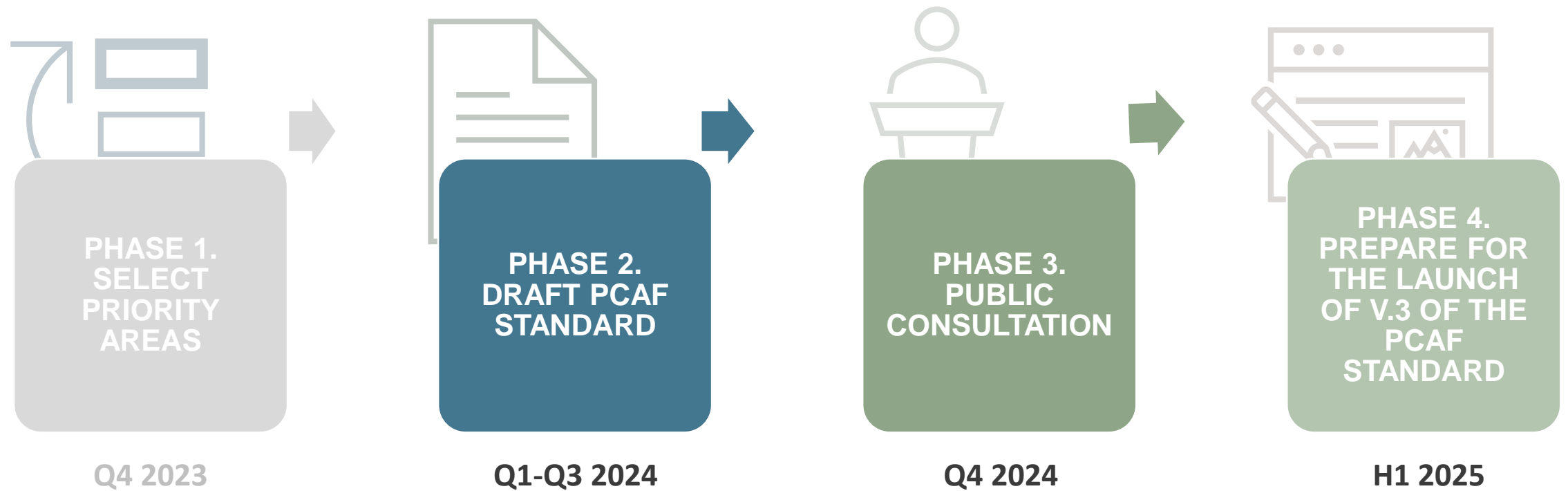
Other / Special Lines (Commercial Insurances)



Personal Motor Lines

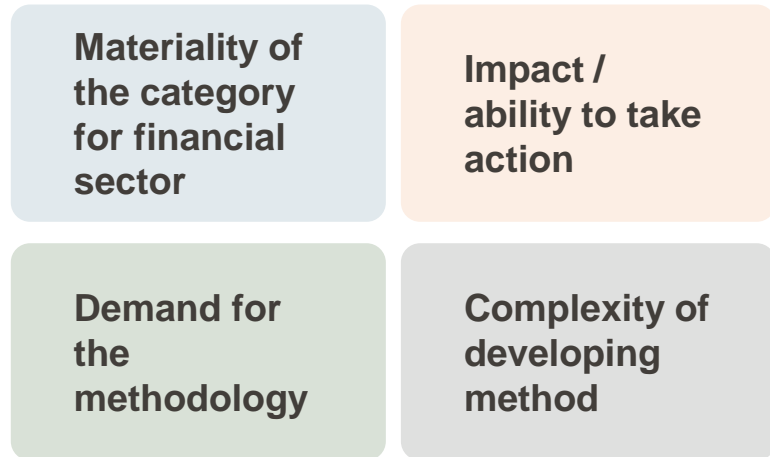


Standard development process as managed by the PCAF Core Team



PCAF's 2024 priority areas for Standard Development

A longlist of areas of interest, based on a signatory survey, were prioritised by the Core team based on the following criteria:



This process resulted in the selection of four **priority areas** for methodology development.

- **Transition finance** (including green finance, bonds, and avoided emissions)
- **Inventory fluctuation** (including EVIC)
- Additional **insurance products**
- **Securitized and structured products**

And four areas PCAF will be carrying out **exploratory work** to support future standard development cycles.

- Additional **consumer finance products**
- Additional **facilitated emissions products** including derivatives, hedge funds and others
- Embodied **carbon from real estate**
- **Municipal bonds / sub-sovereigns**

Update on PCAF Standard Development activity – June 2024



Working Groups are submitting interim draft methodologies to the Core Team for review in mid-June.



Working Groups have engaged with **PCAF accredited partners**, where applicable, in the development of methodologies.



The Working Groups are **on track** to deliver methodologies to the public for a **public consultation toward the end of 2024**.



The Core Team has begun **exploratory work** for Embodied Carbon, and Sub-Sovereigns & Municipal Bonds.

The methodologies being drafted are on:

- Transition and green finance
- Inventory fluctuations (including EVIC)
- Project and treaty insurance
- Securitized products

Emissions are attributed to financial institutions based on robust and consistent accounting rules

FINANCED EMISSIONS

$$= \sum_i \frac{\text{Investment}_i}{\text{Investee equity}_i + \text{Investee debt}_i}$$

x

Emissions of investee_i
(with i = investee)

Attribution Factor

- The attribution factor is used to show the FI's share of the borrow or investee's emissions
- A borrower or investee is a general term and could represent a company, property, project or motor vehicle (asset class dependent)

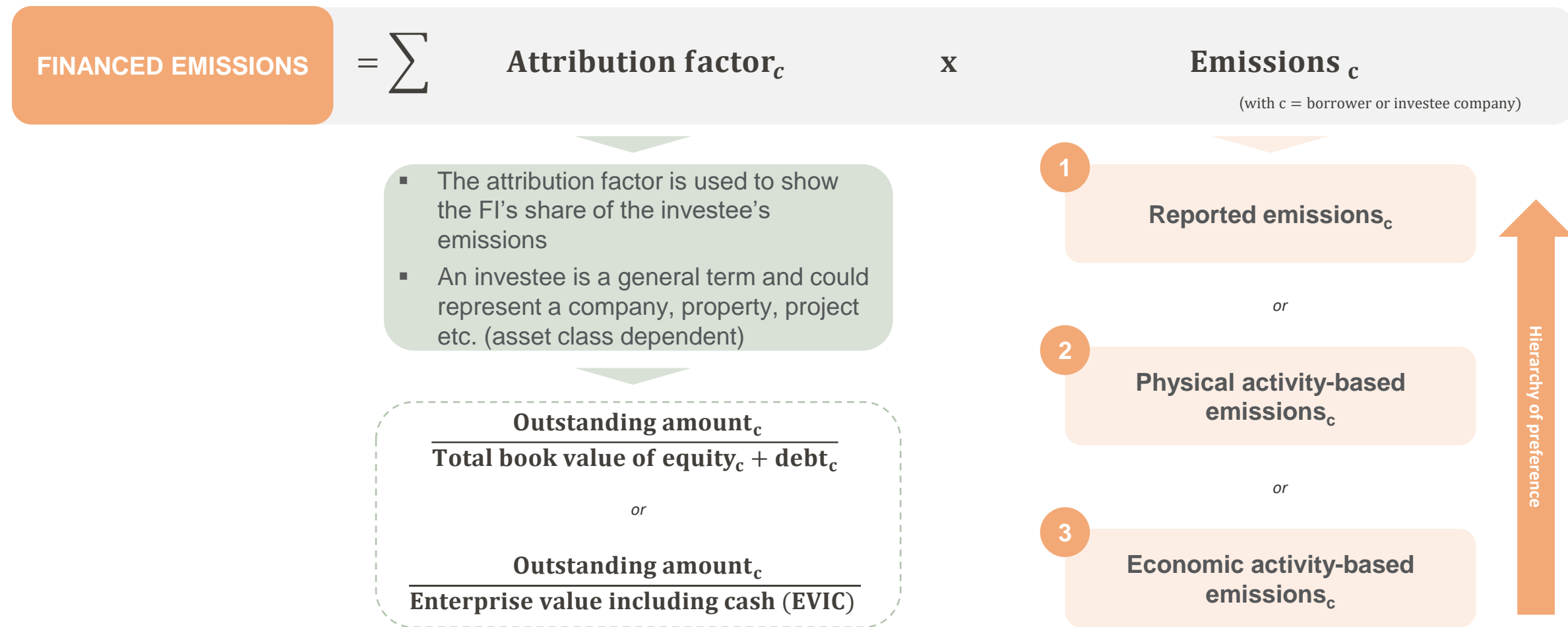
Reported emissions_i

Physical activity-based
emissions_i

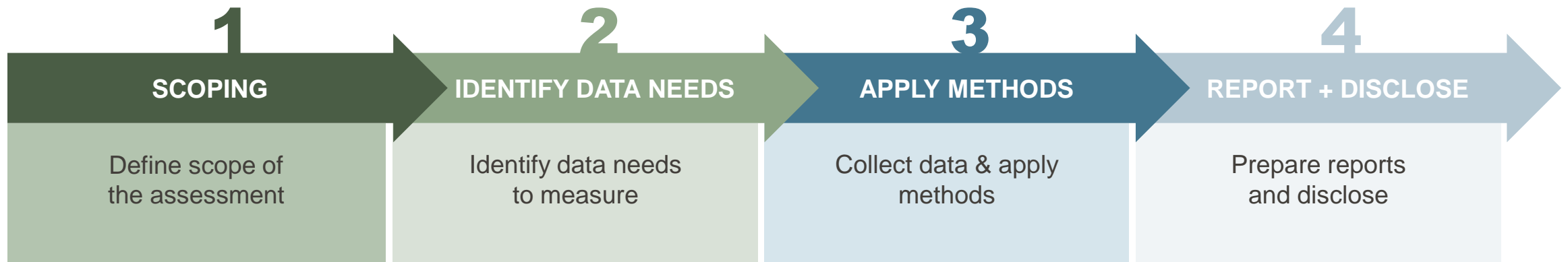
Economic activity-based
emissions_i

Hierarchy of preference

Availability of data determines the method of calculating financed emissions



High-level steps to measure and disclose financed emissions



General approach to calculate financed emissions:

FINANCED EMISSIONS

$$= \sum_i \frac{\text{Investment}_i}{\text{Investee equity}_i + \text{Investee debt}_i} \times \text{Emissions of investee}_i$$

(with i = investee)

The facilitated emissions equation holds two significant new elements: the facilitated amount and the weighting factor

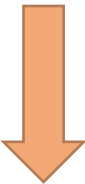
$$\text{Facilitated Emissions} = \sum_s \frac{\text{Facilitated amount}}{\text{Company value}} \times \text{Weighting factor} \times \text{Annual emissions}_c$$

2

3

1

- 1
- Annual emissions: time period over which the facilitation activity is captured
- 2
- Attribution factor (facilitated / company value): how are emission allocated between facilitators of an issuance
- 3
- Weighting factor: the 33% of responsibility of issuers emissions




(Facilitated amount = Total raised amount x League table credit)
c = The issuing company

For listed companies	$\text{Attribution factor}_c = \frac{\text{Facilitated amount}_c}{\text{Enterprise Value Including Cash (EVIC)}_c}$
For unlisted companies	$\text{Attribution factor}_c = \frac{\text{Facilitated amount}_c}{\text{Total equity} + \text{debt}_c}$

The emissions of the issuer shall only be accounted for in the year the facilitation occurs due to the temporary association with the transaction

<div>FINANCED</div> <div></div>	<div>Balance sheet exposure – more risk</div> <div>Where a financial institution lends funds, it puts capital at risk. This exposure remains on its balance sheet for the life of the loan/investment, leading to financed emissions over that period.</div>	<div>No balance sheet exposure – less risk</div> <div>Where a financial institution facilitates a capital market issuance, the financial institution likely doesn't put any of its own capital at risk, thus no transaction is recorded on their balance sheet.</div>	<div>FACILITATED</div> <div></div>
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<div>METHODOLOGY</div> <div></div>	<div>Timeframe of facilitated emissions reporting – only in the year of issuance</div> <div><ul style="list-style-type: none">▪ The temporary association ensures different treatment for ‘facilitators’ to lending and investing.▪ The association with the capital market transaction shall be accounted for in the year the facilitation occurs,▪ The estimated or reported emissions of the issuer in that year will be used for the calculation.▪ All the transactions during the year are aggregated to calculate the total facilitated emissions▪ The buyers of facilitated instruments report it as part of their financed emissions for each year invested.▪ Facilitated emissions and financed emissions need to be reported in the same timeframe.</div>
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The facilitator’s responsibility shall be split based on the proportion of the issuance that is allotted to each facilitator for each transaction

METHODOLOGY

Splitting responsibilities

- The attribution factor allocates the emissions based on the proportional share of facilitation to the issuer.

$$\sum_s \frac{\text{Facilitated amount}}{\text{Company value}}$$

- There is typically more than one facilitator in a transaction, thus it is important to split the responsibilities between the facilitators. This is reflected in the facilitation amount:

$$\text{Total raised amount} \times \text{League table credit}$$

League tables rank financial institutions based on their capital market activities

EXAMPLE

Using the league tables do execute a calculation

- The following example shows a situation with three facilitators – two lead bookrunners and one co-manager where 200 million USD was raised. It displays both options of using the league table based on fees or volume.

Financial Institution		Lead Bookrunner 1	Lead Bookrunner 2	Co-manager
1. Annual emissions of company		1,000 kt CO ₂ e		
2. League table credit	1. Based on fees	50%	45%	5%
	2. Based on volume	50%	50%	0%
3. Facilitated amount	1. Based on fees	\$200m x 50% = \$100m	\$200m x 45% = \$90m	N/A
	2. Based on volume	\$200m x 50% = \$100m	\$200m x 50% = \$100m	N/A
4. Attribution factor (facilitated amount/ Company value)	1. Based on fees	\$100m /\$2bn = 0.05	\$90m/\$2bn = 0.045	N/A
	2. Based on volume	\$100m/\$2bn = 0.05	\$100m/\$2bn = 0.05	N/A
5. Weighting factor		33%	33%	N/A
6. Facilitated emissions (kt CO ₂ e)	1. Based on fees	1,000 kt CO ₂ e x 0.05 x 0.33 = 16.5	1,000 kt CO ₂ e x 0.045 x 0.33 = 14.85	N/A
	2. Based on volume	1,000 kt CO ₂ e x 0.05 x 0.33 = 16.5	1,000 kt CO ₂ e x 0.05 x 0.33 = 16.5	N/A

Zooming in: reasoning for the selection of EVIC as the denominator metric in the attribution factor for listed companies

💡 Five reasons

- Includes both **equity and debt** in line with PCAF attribution principles and other asset classes, **ensuring alignment with similar asset classes (i.e., business loans)**
- It is a common metric in the financial sector of a company's total value and is expected to gain more dominance because of its adoption by the EU TEG and the benchmark regulation
- Is based on **company data** (market value and total book value of debt), which is generally **available to financial institutions and data providers**
- Includes **market valuation of equity**, which is the **most common approach in the financial sector** to determine company ownership
- Avoids issues with **negative enterprise values**

📄 Example company including and excluding cash

- The following example is a company with equity of \$50, debt of \$50, and cash of \$20.

Approaches	Enterprise value	Attribution to equity	Attribution to debt	Total
EV excl. cash	$\$50 + \$50 - \$20 = \80	$\$50 / \$80 = 63\%$	$\$50 / \$80 = 63\%$	> 100%
EV incl. cash	$\$50 + \$50 = \$100$	$\$50 / \$100 = 50\%$	$\$50 / \$100 = 50\%$	100%



An easy way to find EVIC data is to find the enterprise value from a data provider and add the cash back in.

Zooming in: PCAF's chosen attribution factor denominator is aligned to GHGP and EU Technical Expert Group (EU TEG):

GHGP on the attribution

- “Emissions from investments should be allocated to the reporting company based on the reporting company's proportional share of investment in the investee.”

EU TEG on the attribution

- “Enterprise Value Including Cash (EVIC) is defined as the sum of the market capitalisation of ordinary shares at fiscal year end, the market capitalisation of preferred shares at fiscal year end, and the book values of total debt and minorities' interests.”
 - EU TEG implies that, for listed equity, attribution has to be done over EVIC – e.g., total equity (market capitalization) and debt (book value of total debt)

For non-listed companies: $\frac{\text{Outstanding amount}}{\text{Total equity} + \text{debt}}$

How to find the right items on the balance sheet

LIABILITIES		
Current liabilities		
Notes payable	\$ 5,000	
Accounts payable	35,900	
Wages payable	8,500	
Interest payable	2,900	
Taxes payable	6,100	
Warranty liability	1,100	
Unearned revenues	1,500	
Total current liabilities	61,000	
Long-term liabilities		
Notes payable	20,000	
Bonds payable	400,000	
Total long-term liabilities	420,000	
Total liabilities	481,000	Total Liabilities
STOCKHOLDERS' EQUITY		
Common stock	110,000	
Retained earnings	220,000	
Accum other comprehensive income	9,000	
Less: Treasury stock	(50,000)	
Total stockholders' equity	289,000	Total Equity
Total liabilities & stockholders' equity	\$ 770,000	Total balance sheet (total equity + liabilities)

A weighting factor is included in the facilitated emissions equation due to the distinct role facilitators play in comparison to lending and investing

3

Weighting
factor

METHODOLOGY

Differentiate between the different activities



- Given that the role of financial institutions in facilitating capital market activities is different from its lender and investor role, a **33% weighting** was decided for all capital market issuances in scope to distinguish between the relative importance of a financing activity versus a facilitation activity.



APPLICATION

Apply the 33% to all transactions



- The weighting factor **should** be applied consistently across transactions, regardless of the use of proceeds.

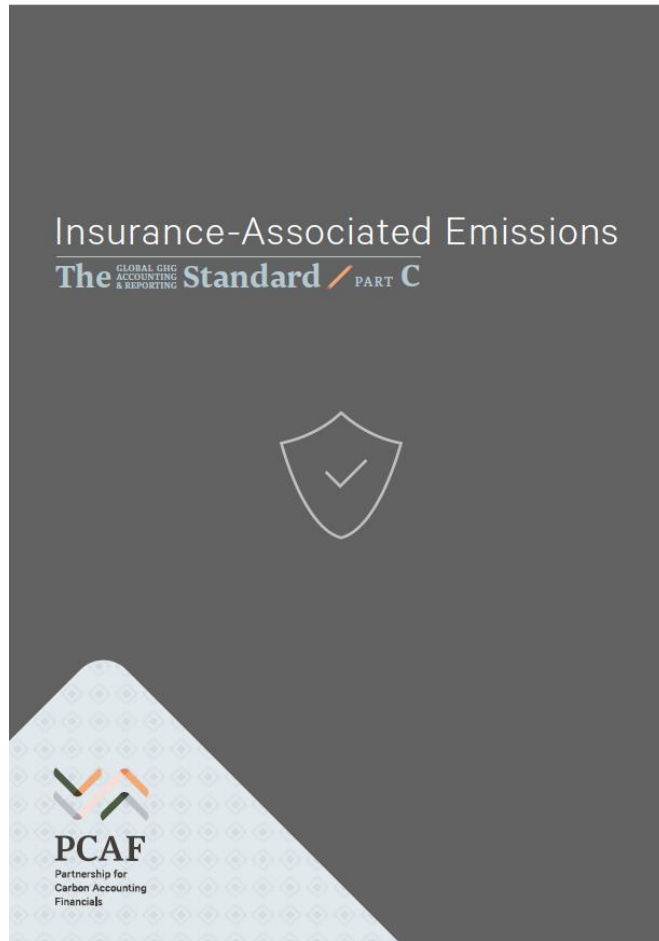


REPORTING

Optionally report without the weighting



- Financial institutions may additionally report their facilitated emissions **without weighting** if this is reported separately, and the rationale is clearly disclosed – this would be in addition to reporting the 33% weighting, not instead of.



Overview of the PCAF Insurance-Associated Emissions Standard

THE FIRST VERSION OF THE PCAF STANDARD INCLUDES THE FOLLOWING SEGMENTS:



COMMERCIAL LINES



PERSONAL MOTOR LINES

The detailed table on the following slide highlights which Lines of Business (LoBs) within commercial lines are covered by the Standard



The Standard was published on 16th November 2022

Following segments/LoBs are covered or not covered*

LoB	COVERED IN	LoB	COVERED IN
Property (e.g., fire, multi peril)	5.2 Emissions associated with commercial lines	Other/Special lines (e.g., Financial Lines)	5.2 Emissions associated with commercial lines
Liability/Casualty (e.g., General Liability, Product Liability)	5.2 Emissions associated with commercial lines	Statutory lines of businesses	5.2 Emissions associated with commercial lines
Commercial motor (all lines)	5.2 Emissions associated with commercial lines		
Marine (liability and hull)	5.2 Emissions associated with commercial lines	Structured trade credit (insurance of credit risk for bank loans, etc.)	Out of scope
Aviation (liability and hull)	5.2 Emissions associated with commercial lines	Surety	Out of scope
Agriculture (excl. government schemes)	5.2 Emissions associated with commercial lines	Engineering lines: Construction all-risk, erection all-risk only	Out of scope
Trade credit (insurance of credit risk for sold goods)	5.2 Emissions associated with commercial lines	Corporate life and pensions, personal accident	Out of scope
All other engineering lines (e.g., machinery breakdown)	5.2 Emissions associated with commercial lines	Public entities	Out of scope

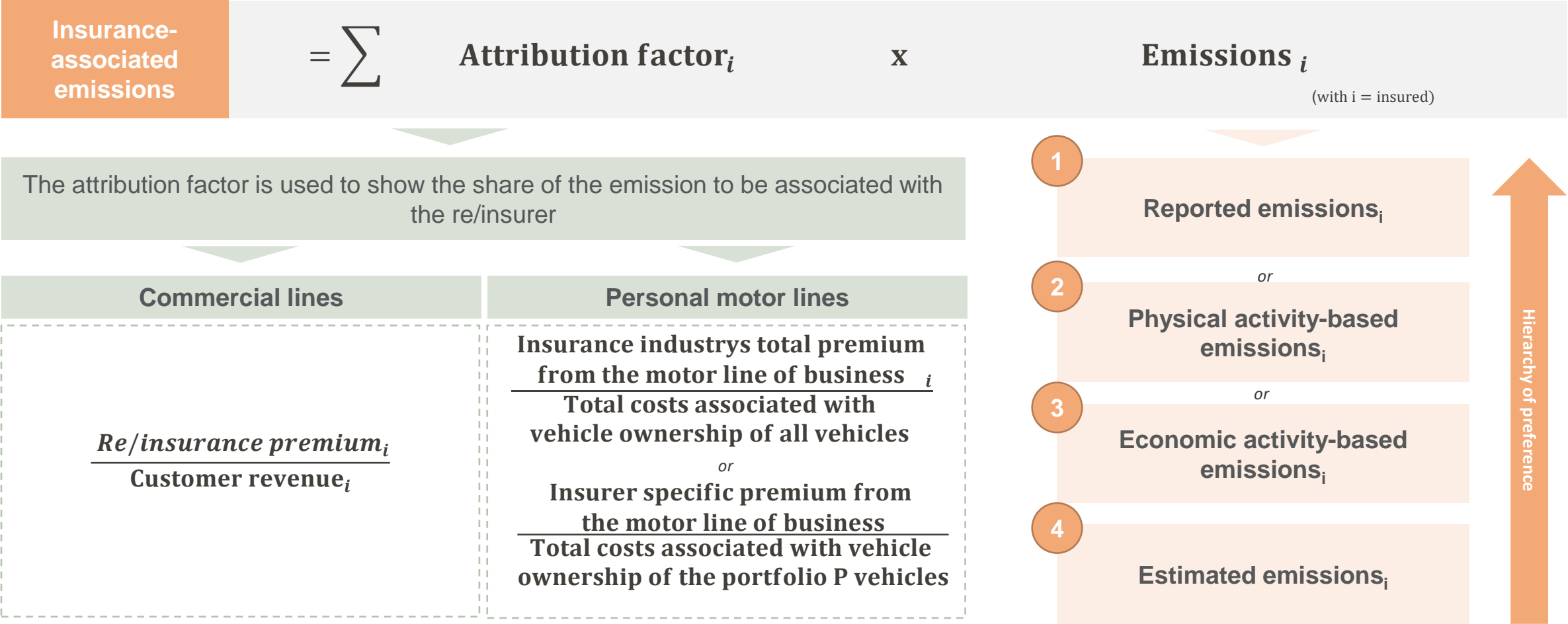
* See footnotes on page 30 of the [PCAF Standard Part C: Insurance-Associated Emissions](#) for more details.

Part C: Insurance-Associated Emissions – two Lines of Business covered

 Commercial lines	COMMERCIAL LINES		$\frac{\text{Re/insurance premium}_i}{\text{Customer revenue}_i} \times \text{Emissions}_i$
		(Industry) Attribution factor $p =$	$\frac{\text{Insurance industry's total premium from the motor line of business}}{\text{Total costs associated with vehicle ownership of all vehicles}} \times \text{Vehicle emissions}$ <p>or (for cases where risk carriers are unable to use the industry attribution factor above)</p>
 Personal motor lines	PERSONAL MOTOR LINES	(Individual) Attribution factor $p =$	$\frac{\text{Insurance specific premium from the motor line of business}}{\text{Total costs associated with vehicle ownership of the portfolio P vehicles}} \times \text{Vehicle emissions}$

More information on the **(Industry) attribution factor**, provided by PCAF, can be found in the [PCAF personal motor industry attribution factor approach](#) presentation.

Calculating insurance-associated emissions for commercial lines and private vehicle insurance



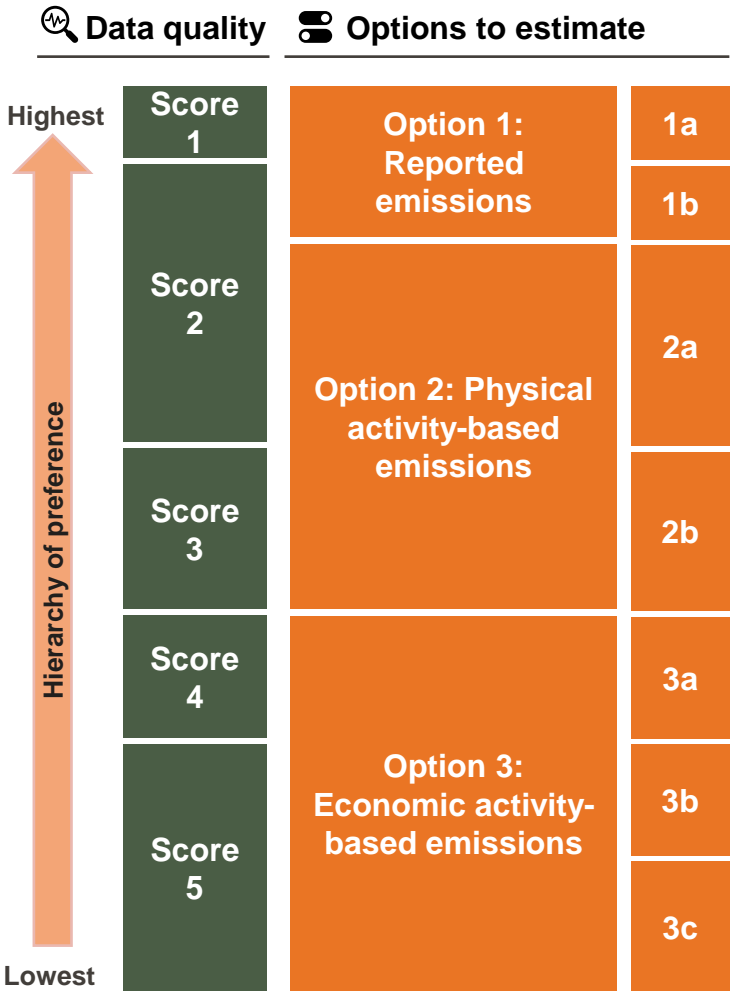
Reporting recommendations and requirements: Data and data quality

Data limitations should not deter financial institutions from starting their GHG accounting journeys

- Always aim for the highest data quality score
- If no data is available, start with data quality score 5
- Improve data quality over time by collecting more accurate measures

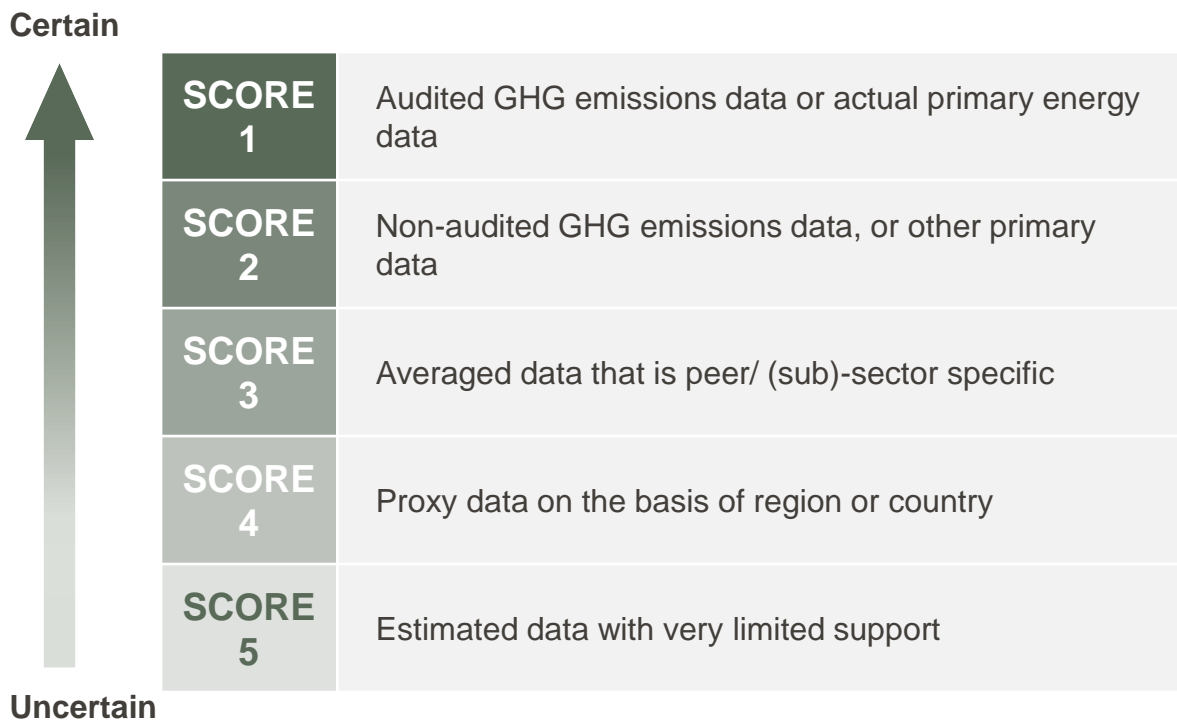
Requirements to keep in mind:

- FIs **shall** use the most recent or otherwise appropriate data available to them
- FIs **should** provide a description of the **types** and **sources** of data used to calculate emissions. Descriptions **should** be written to create transparency
- The **data hierarchy tables** provided in each asset class method in Chapter 5 **should** be used as a guide for disclosing data quality. Financial institutions **should** explain how data quality is assessed, acknowledging that it will improve over time

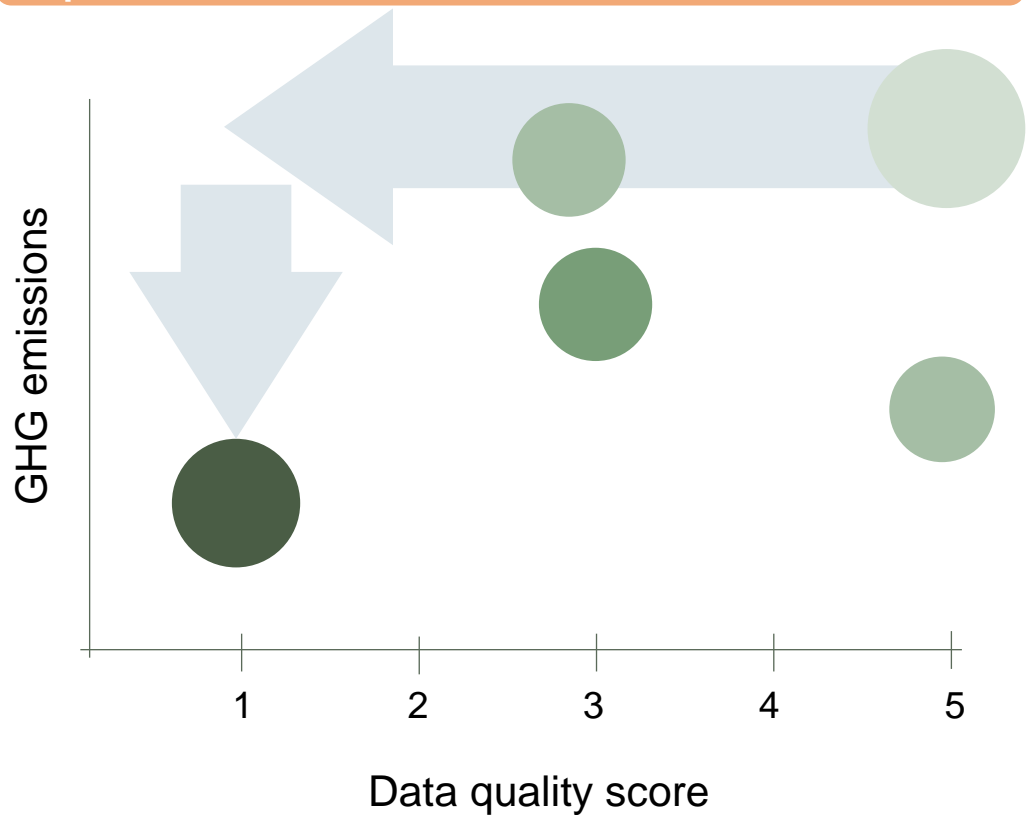


The Standard addresses data quality issues and advises on which data can give the most robust results for each asset class

Data quality scoring from 1 to 5....

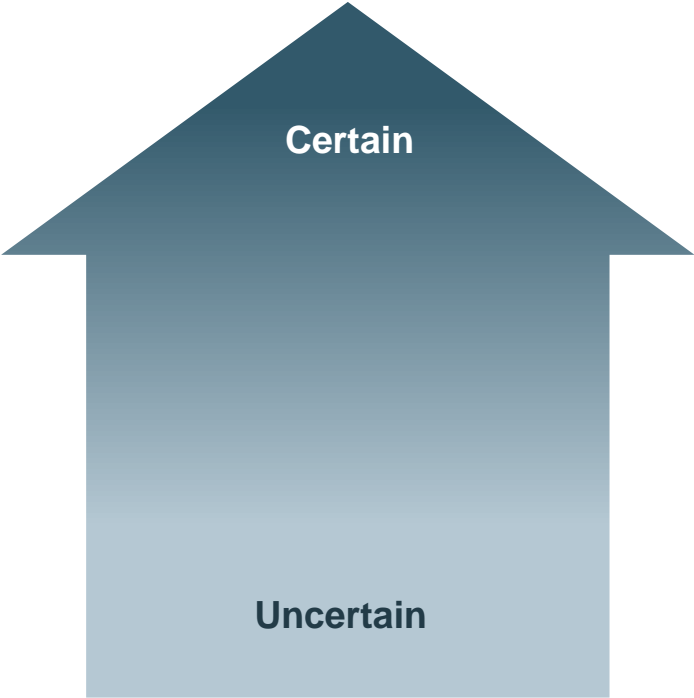


...enables financial institutions to develop a strategy to improve data over time



The Standard addresses data quality issues and advises on which data can give the most robust results for each asset class

DATA QUALITY SCORING FROM 1 TO 5....






SCORE 1	Audited GHG emissions data or actual primary energy data
SCORE 2	Non-audited GHG emissions data, or other primary data
SCORE 3	Averaged data that is peer/ (sub)-sector specific
SCORE 4	Proxy data on the basis of region or country
SCORE 5	Estimated data with very limited support

Reporting recommendations and requirements:

Data and data quality

- FIs **shall** use the most recent or otherwise appropriate data available to them.
- FIs **should** provide a description of the **types** and **sources** of data used to calculate emissions. Descriptions **should** be written to create transparency.
- The **data hierarchy tables** provided in each asset class method in Chapter 5 **should** be used as a guide for disclosing data quality. Financial institutions **should** explain how data quality is assessed, acknowledging that it will improve over time.

GENERAL DESCRIPTION OF THE DATA QUALITY SCORE TABLE FOR BUSINESS LOANS AND UNLISTED EQUITY

	 Data quality	 Options to estimate	 When to use each option	
<div>Hierarchy of preference</div> <div><div></div><div>Highest</div><div>Lowest</div></div>	Score 1	Option 1: Reported emissions	1a	<ul style="list-style-type: none">Outstanding amount in the company and EVIC are known.Verified emissions of the company are available.
			1b	<ul style="list-style-type: none">Outstanding amount in the company and EVIC are known.Unverified emissions calculated by the company are available.
	Score 2	Option 2: Physical activity-based emissions	2a	<ul style="list-style-type: none">Outstanding amount in the company and EVIC are known.Reported company emissions are not known.Emissions are calculated using primary physical activity data of the company's energy consumption and emission factors specific to that primary data.Relevant process emissions are added.
	Score 3		2b	<ul style="list-style-type: none">Outstanding amount in the company and EVIC are known.Reported company emissions are not known.Emissions are calculated using primary physical activity data of the company's production and emission factors specific to that primary data.
	Score 4	Option 3: Economic activity-based emissions	3a	<ul style="list-style-type: none">Outstanding amount in the company, EVIC, and the company's revenue are known.Emission factors for the sector per unit of revenue are known (e.g., tCO₂e per euro of revenue earned in a sector).
	Score 5		3b	<ul style="list-style-type: none">Outstanding amount in the company is known.Emission factors for the sector per unit of asset (e.g., tCO₂e per euro of asset in a sector) are known.
				3c



**PCAF Technical
Assistance**

PCAF Technical Assistance team hosts bi-weekly office hours



What is the Office hour?

- A chance for PCAF signatories to ask questions to the technical assistance team “live” to reduce response time for signatories via email communication
- More personalized interaction between signatories and the TA team
- Collaboration and knowledge sharing platform between signatories



Who will support?

- Each session will have 2-3 PCAF technical experts present in the call
- The sessions will be open to all participants that wish to attend at once, instead of one-on-one interactions as it offers opportunity to learn from peers' experience and challenges



How can you join?

- The sessions alternate between Tuesday 16:00 BST and Wednesday, 8:00 BST
- You can join by signing up via Zoom links below:

[Sign up for Tuesday sessions](#)

[Sign up for Wednesday sessions](#)

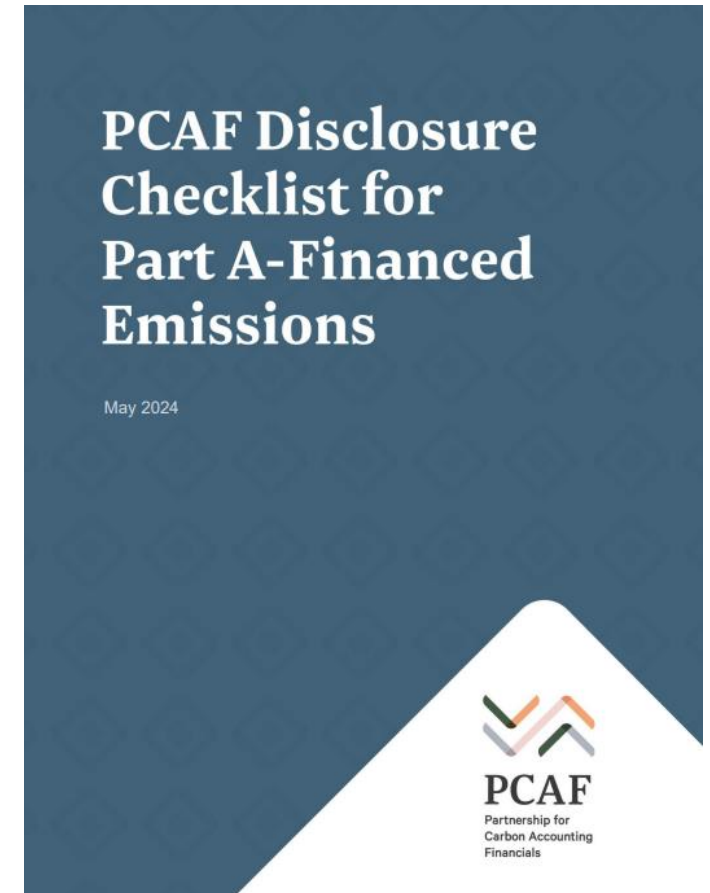
The PCAF Disclosure Checklist: further standardizing disclosures and growing the value-add of disclosing through PCAF

What is the Disclosure Checklist?

- A checklist to assess the alignment of financial institution's disclosure of emissions with the PCAF Standard.
- A tool developed with the aim of providing a holistic way to standardize and improve the quality of PCAF disclosures over time.
- A requirement for all financed emissions disclosures on the PCAF website from 1 January 2025. Completing the checklist and having it evaluated by PCAF's Technical Assistance team, will be part of PCAF's disclosure process from next year.

To embed the Disclosure Checklist in our Signatories' reporting processes we will be:

- Providing additional touchpoints (Q&A sessions and TA support) throughout the year
- Providing a training on filling in the Disclosure Checklist on the PCAF Academy
- Inviting Signatories to apply the Disclosure Checklist to previous disclosures for the TA team to review

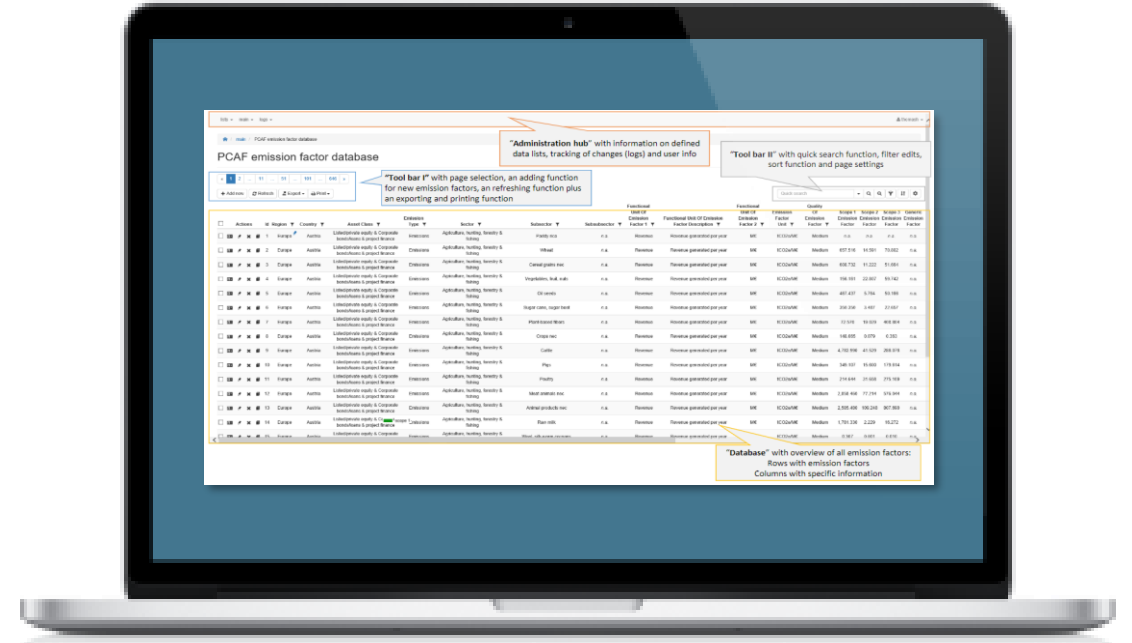




PCAF Database

PCAF's database enables financial institutions to start with GHG accounting at asset class level

- Directly based on the PCAF methods to kick-start the assessment of emissions associated with financial activities
- Including emission factors for the Insurance Associated Emission Standard Lines of Business
- Hotspots the most emissions intensive emissions attributed to bank, investor or re/insurer
- Link to register: <https://db.carbonaccountingfinancials.com/register.php>



Available for PCAF signatories

Set of publicly available emission factors across geographies and asset classes

Transparent

Includes data quality score card

PCAF Database updates planned for September 2024

Economic emission factors

- Add new economic emission factor dataset for use at a more granular (sub-sector, country) level.
- Formed sub-working group to support development of improved economic emission factor dataset.
- Development long-term plan.

Physical emission factors

- Current scope of production emissions provided in the Database is limited in its sector and geographic coverage.
- Expand dataset to cover emission factors for the most important categories.
- Starting with fossil fuel operations, materials, and mining of raw materials.

Motor vehicle loans

- Update and expand the motor vehicles dataset.
- Add other vehicle categories beyond personal vehicles, vans and trucks (i.e., airplane, ship, train, tram).
- Add emission factors for non-European vehicle brands (passenger cars).
- Update distance driven for emission factors with DQS 3, 4 and 5.

The PCAF Academy strives to deliver consistency, comparability and quality of financial institutions' accounting and disclosure of GHG emissions



The PCAF Academy aims to elevate the quality of financed, facilitated and insurance-associated emission accounting, driving standardized interpretation and application of the PCAF Standards, and enabling participants to take independent steps in their decarbonization journeys



What is the PCAF Academy?

The PCAF Academy is a **self-paced online learning program** providing multiple modules, examinations and more

The Academy also provides an optional official “**PCAF accreditation program**” – allowing individual learners to become PCAF certified



Online course self-paced



Learning modules



Examinations –
final exam



Helpdesk¹



Community & discussion
forum¹



Who is the PCAF Academy for?

All PCAF Signatories and Accredited Partners

The PCAF Academy is an e-learning for financial institutions platform to build expertise in greenhouse gas (GHG) accounting

The PCAF Academy aims to elevate the quality of financed emission accounting, driving standardized interpretation and application of the PCAF Standards, and enabling participants to take independent steps in their decarbonization journeys



What is the PCAF Academy?

The PCAF Academy is a **self-paced online learning program** providing multiple modules, examinations and more

The Academy also provides an optional official “**PCAF accreditation program**” – allowing individual learners to become PCAF certified

Coverage of All Three PCAF Standards: A, B & C



Online course self-paced



Learning modules



Exams – in-module and final exam



Helpdesk



Community & discussion forum

Learning content required for Certification*



All module learning content



Module-specific exams



Final exams

*This may vary across Standards



The PCAF Academy’s impact since its launch in September 2023



50+ Accredited learners



700+ Learners enrolled



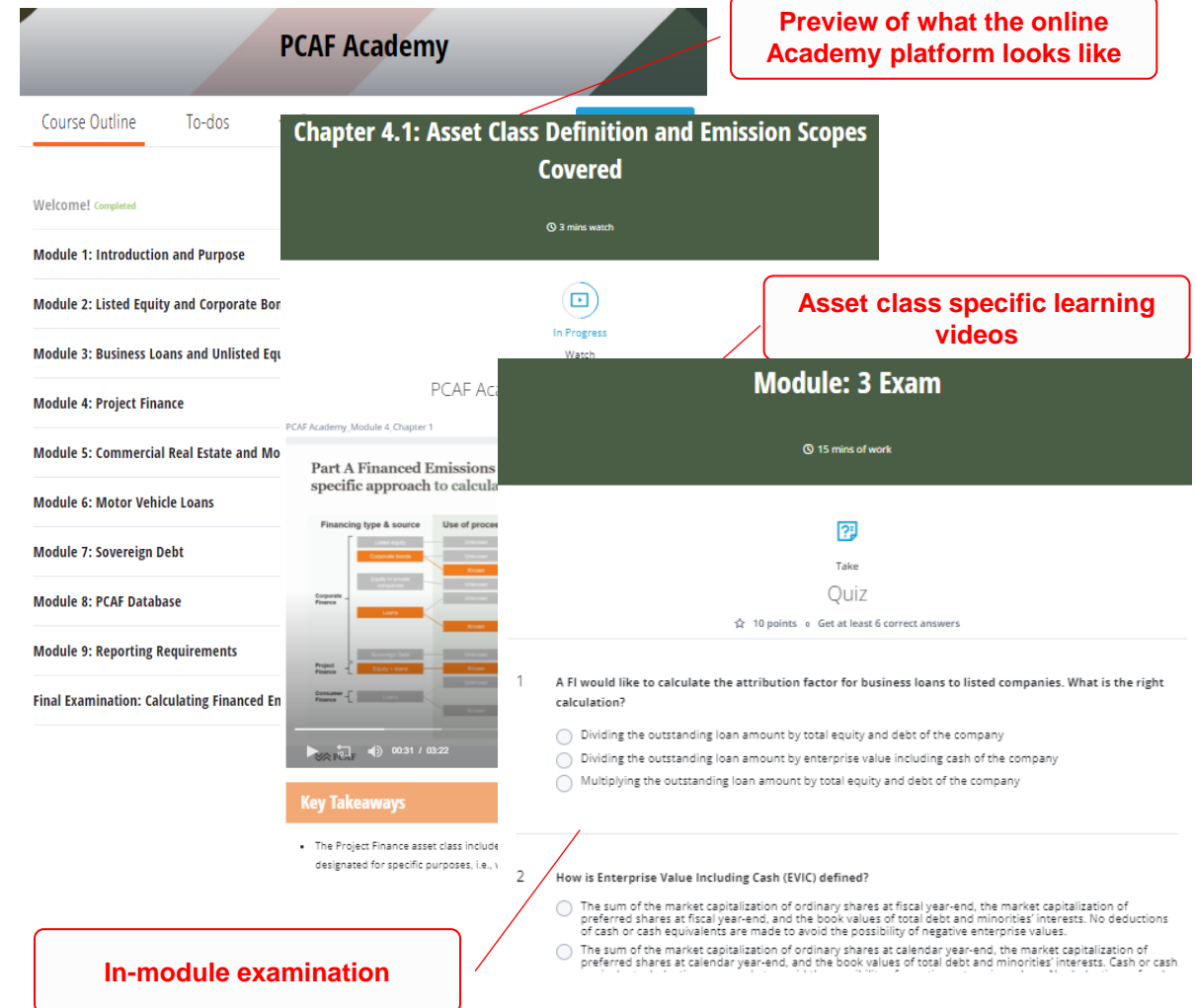
220+ Financial institutions

The PCAF Academy syllabus covers all aspects of the Standard¹ including additional downloadable documents and video content

SYLLABUS¹

- 1) Introduction to PCAF and its Purpose 📖
- 2) Listed Equity & Corporate Bonds 📖 📄
- 3) Unlisted Equity & Business Loans 📖 📄
- 4) Project Finance 📖 📄
- 5) Commercial Real Estate & Mortgages 📖 📄
- 6) Motor-Vehicle-Loans 📖 📄
- 7) Sovereign Debt 📖 📄
- 8) Database and Application of Emission Factors 📖 📄
- 9) Reporting Requirements as per the Standard 📖 📄
- Final examination

¹The first release of the PCAF Academy will be focused on Standard Part A – Financed Emissions



PCAF Academy

Course Outline To-dos

Welcome! Completed

Module 1: Introduction and Purpose

Module 2: Listed Equity and Corporate Bonds

Module 3: Business Loans and Unlisted Equity

Module 4: Project Finance

Module 5: Commercial Real Estate and Mortgages

Module 6: Motor Vehicle Loans

Module 7: Sovereign Debt

Module 8: PCAF Database

Module 9: Reporting Requirements

Final Examination: Calculating Financed Emissions

Chapter 4.1: Asset Class Definition and Emission Scopes Covered

3 mins watch

Module: 3 Exam

15 mins of work

Take Quiz

10 points Get at least 6 correct answers

1 A FI would like to calculate the attribution factor for business loans to listed companies. What is the right calculation?

- ☐ Dividing the outstanding loan amount by total equity and debt of the company
- ☐ Dividing the outstanding loan amount by enterprise value including cash of the company
- ☐ Multiplying the outstanding loan amount by total equity and debt of the company

2 How is Enterprise Value Including Cash (EVIC) defined?

- ☐ The sum of the market capitalization of ordinary shares at fiscal year-end, the market capitalization of preferred shares at fiscal year-end, and the book values of total debt and minorities' interests. No deductions of cash or cash equivalents are made to avoid the possibility of negative enterprise values.
- ☐ The sum of the market capitalization of ordinary shares at calendar year-end, the market capitalization of preferred shares at calendar year-end, and the book values of total debt and minorities' interests. Cash or cash equivalents are made to avoid the possibility of negative enterprise values.

Key Takeaways

- The Project Finance asset class includes loans designated for specific purposes, i.e., 1

The PCAF Academy now includes courses for Parts B and C of the Standard, including video content and additional resources

SYLLABUS – Part B

- 1) Introduction to PCAF and its Purpose 📖 🎥
- 2) Facilitated Emissions 📖 🎥
- Final examination

SYLLABUS – Part C

- 1) Introduction to PCAF and its Purpose 📖 🎥
- 2) Commercial Lines 📖 🎥
- 3) Personal Motor Lines 📖 🎥
- 4) Reporting Requirements 📖 🎥
- Final examination



Preview of what the online Academy platform looks like



Asset class specific learning videos

Welcome!

Module 1: Introduction ai

Module 2: Commercial lin

Module 3: Personal Moto

Module 4: PCAF Database

Final Examination: Calcul

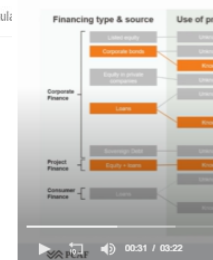


In Progress

Module: 3 Exam

15 mins of work

Part A Financed Emissions specific approach to calcul



Key Takeaways

- The Project Finance asset class includes designated for specific purposes, i.e.,



Take

Quiz

10 points • Get at least 6 correct answers

- 1 A FI would like to calculate the attribution factor for business loans to listed companies. What is the right calculation?
 - ☐ Dividing the outstanding loan amount by total equity and debt of the company
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 - ☐ The sum of the market capitalization of ordinary shares at calendar year-end, the market capitalization of preferred shares at calendar year-end, and the book values of total debt and minorities' interests. Cash or cash

In-module examination

What is the PCAF Academy Accreditation program?

The PCAF Accreditation Program¹ provides individual learners with the opportunity to showcase their deep understanding of PCAF, emission footprinting and disclosure.

How to get accredited:

If an individual learner chooses to become PCAF accredited, the PCAF Academy **learning journey** must be completed with a **success rate of ≥80%**. Upon completion of the learning journey, the individual learner will be issued an official PCAF certificate of completion – PCAF's way of honouring the learner's knowledge.



Learning Journey 1

For: Banks and Financial Services

In order to get accredited, signatories need to complete the following courses:

- Part A: Financed Emissions
- Part B: Facilitated Emissions
- *Optional: Part C: Insurance-Associated Emissions*

Learning Journey 2

For: Asset Managers/Owners and Export Credit Agencies

In order to get accredited, signatories need to complete the following courses:

- Part A: Financed Emissions
- *Optional: Part B: Facilitated Emissions*
- *Optional: Part C: Insurance-Associated Emissions*

Learning Journey 3

For: Re/Insurance Companies

In order to get accredited, signatories need to complete the following courses:

- Part A: Financed Emissions
- Part C: Insurance-Associated Emissions
- *Optional: Part B: Facilitated Emissions*



Financing towards
net-zero buildings

Ongoing project launched by PCAF launched in 2022: Financing towards net-zero buildings

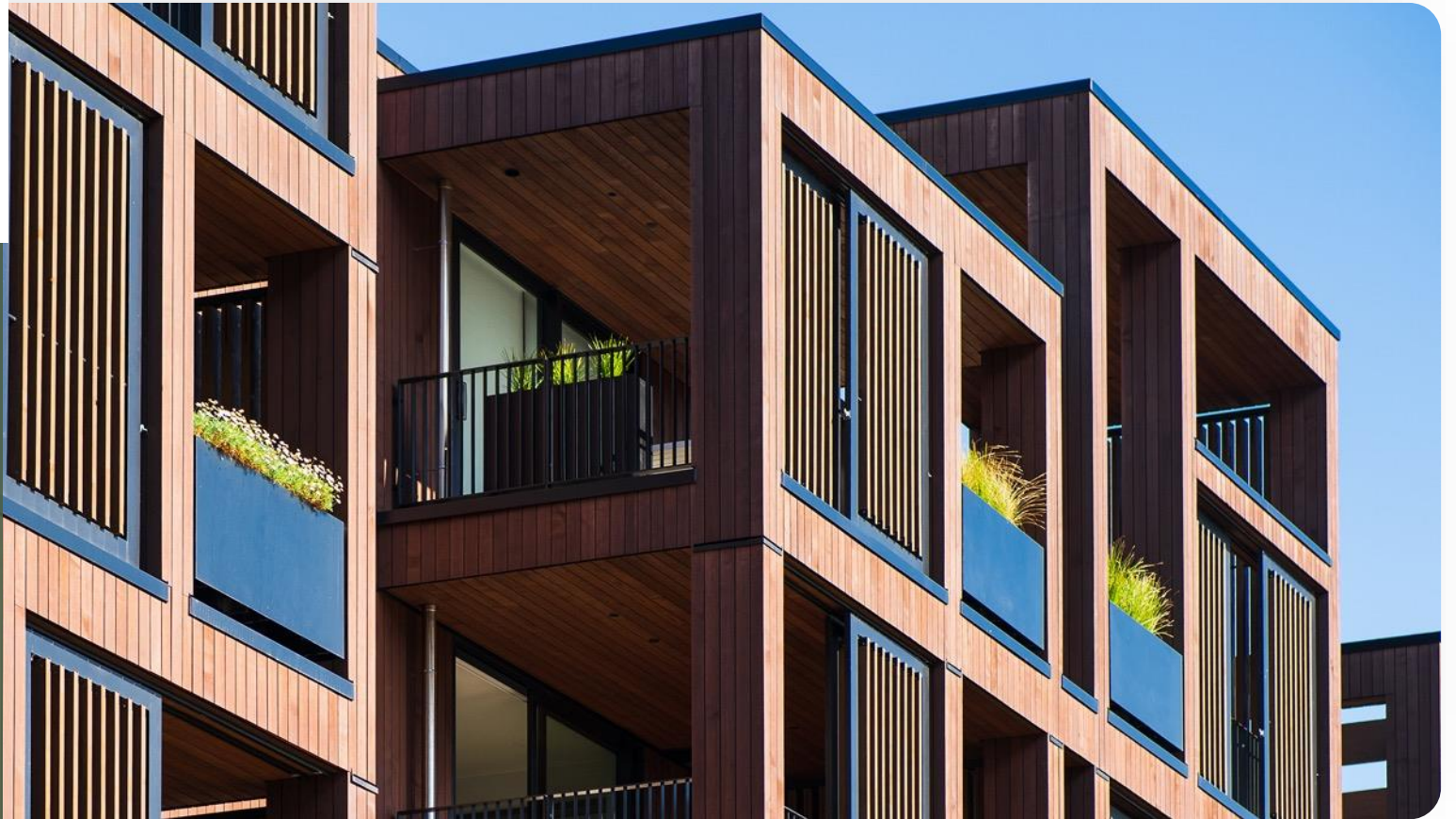
Financing towards net-zero buildings

 a PCAF project

Mobilizing the financial industry to accelerate their actions to transition European buildings (including mortgages and real estate portfolios) to net zero and make the impact of those actions transparent via clear carbon accounting

Developed a [European buildings emission factor database](#) (publicly available)

Read more on our [website](#)



Mobilizing the financial industry to decarbonize buildings in Europe

**Mobilizing the financial industry to accelerate their actions to transition
European buildings to net zero and make the impact of those actions transparent
via clear carbon accounting**

Establishing a core project team
and creating and implementing a
communication strategy

Enabling financial institutions to
measure and track the climate
impact of their mortgage and real
estate portfolios and their actions
towards net zero

Understanding the challenge
towards net zero and creating of a
good practice guideline on
financing the European building
transition to net zero

Financing towards net-zero buildings: key dates

2023

Date	Event	Description
May 15 th , 2023	Workshop financial institutions on sustainable finance products	During these workshops, sustainable finance products and non-financial products with a link to building performance will be discussed
June 30 th , 2023	Database update	The emission factors will be updated, even as the tools in the database (e.g. emission factor map)
July 31 st , 2023	Report on actual data measurement initiatives	Report that summarizes different ways to measure actual data
September 15 th , 2023	<ul style="list-style-type: none"> ▪ Workshop II on sustainable products ▪ GFI Roundtable I 	Share best practices within the financial industry

2024

February 15 th , 2024	GFI Roundtable II	Share best practices within the financial industry
April 15 th , 2024	Database update II	The emission factors will be updated, even as the tools in the database (e.g. emission factor map)
May 15 th , 2024	GFI Roundtable III	Share best practices within the financial industry

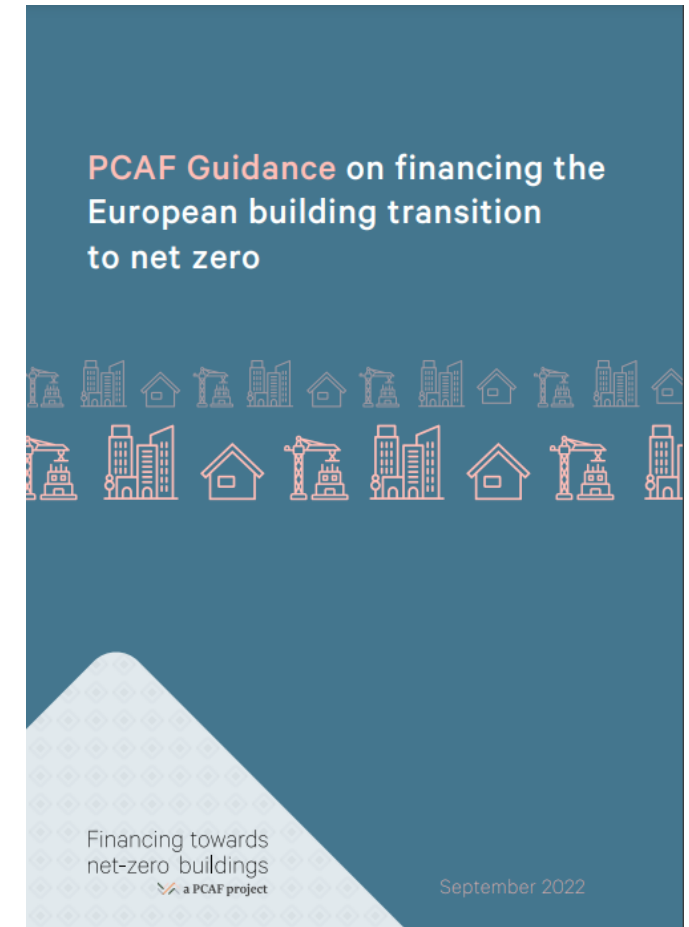
Guidance on financing the European building transition to net zero

Aim to provide clear guidance to financial institutions how to initiate the net-zero journey and decarbonize their building portfolios along a stepwise approach

Review by Core Project Team, Expert Advisory Group and further stakeholders

Launched in September 2022

[Link to the Guidance](#)



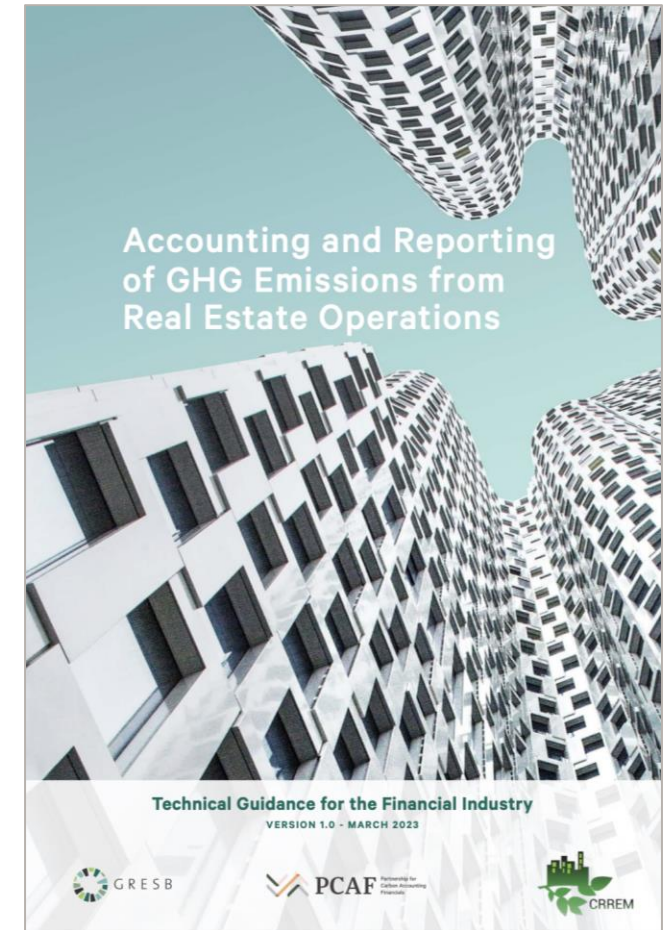
Technical Guidance by PCAF, CRREM and GRESB for Real Estate Operations

Aim to provide financial institutions and related stakeholders with transparent, consistent and harmonized guidance

Additional specifications to PCAF's Global GHG Accounting and Reporting Standard for the Financial Industry on a range of technical, data and standards issues relating to GHG from real estate

Launched in March 2023

[Link to the Technical Guidance](#)



PCAF's European building emission factor database

- Provides a diverse set of emission and energy factors for residential and non-residential building types
- Covers all countries in the European Union, Bosnia-Herzegovina, Kosovo, Norway, Serbia, Switzerland, Türkiye and the United Kingdom
- Link to register: <https://building-db.carbonaccountingfinancials.com/>

Asset Class: Commercial real estate

Export

Print

Search

records: 10/20

records selected: 0

			Emission factor type	Country	Data level 1 information	Data level 2 information	EPIC Rating	Emission factor functional unit (nominal)	Emission factor functional unit (LULU)	Emission factor (nominal)	PCAF data quality score	Emission factor	Emission factor methodology description	Emission factor source	
<input type="checkbox"/>	Active	id	10	Emissions	Bulgaria	Non-Residential buildings	Retail - Shopping Center	n.a.	Floor area	m²	Emission intensity per m²	0.0026	4	0.0026	The country-specific emission intensity per building type from CRREM Global Pathways
<input type="checkbox"/>		21	Emissions	Bulgaria	Non-Residential buildings	Retail - Strip Mall	n.a.	Floor area	m²	Emission intensity per m²	0.0026	4	0.0027	The country-specific emission intensity per building type from CRREM Global Pathways	CRREM Global Pathways
<input type="checkbox"/>		22	Emissions	Bulgaria	Non-Residential buildings	Hotel	n.a.	Floor area	m²	Emission intensity per m²	0.0026	4	0.0008	The country-specific emission intensity per building type from CRREM Global Pathways	CRREM Global Pathways
<input type="checkbox"/>		32	Emissions	Bulgaria	Non-Residential buildings	Industrial distribution warehouse	n.a.	Floor area	m²	Emission intensity per m²	0.0026	4	0.0026	The country-specific emission intensity per building type from CRREM Global Pathways	CRREM Global Pathways
<input type="checkbox"/>		33	Emissions	Bulgaria	Non-Residential buildings	Healthcare	n.a.	Floor area	m²	Emission intensity per m²	0.0026	4	0.0026	The country-specific emission intensity per building type from CRREM Global Pathways	CRREM Global Pathways
<input type="checkbox"/>		34	Emissions	Bulgaria	Non-Residential buildings	Leisure and sports facilities	n.a.	Floor area	m²	Emission intensity per m²	0.0026	4	0.0026	The country-specific emission intensity per building type from CRREM Global Pathways	CRREM Global Pathways

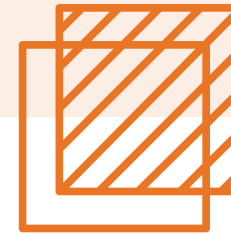
Available for free to all financial institutions



Based on publicly available sources (CRREM Global Pathways)



Transparent



Includes data quality score card





Q&A

PCAF Accredited Partner Program

PCAF has developed an accredited partner program to provide firms with access to:

- The PCAF Database for use with PCAF Signatories,
- Technical assistance from PCAF experts,
- The PCAF Academy, a self-paced online learning platform,
- And other benefits.

This partner program is open to **data providers**, **software providers** and **consultants/advisors** who support financial institutions in the reporting and disclosure of GHG emissions associated with financial activity.

If you, or a service provider you work with, are interested to learn more about the PCAF Partner Program, please reach out to info@carbonaccounting.com for more information.

Current partners include:



PERSEFONI

S&P Global



Watershed

PCAF Partnership Program update

S&P Global Sustainable1 announced as Principal Founding Data Partner to PCAF.

“Our collaboration with S&P Global represents a significant step forward in our efforts to standardize emissions measurement and reporting across the financial sector. By sharing our resources and expertise with this industry-leading organization, we aim to elevate transparency and comparability across the international financial sector.”

Angélica Afanador, Executive Director of PCAF

If you have potential PCAF Partners in mind (Consultancies, Data Providers or Software Providers), please ask them to contact info@carbonaccounting.com for more information.





Thanks a lot.

For more info, please contact
PCAF

info@carbonaccountingfinancials.com