TOOLKIT

PCAF data quality score worksheet for SME loan books

This worksheet gives every business loan a PCAF data quality score from 1 (best) to 5 (worst), computes the book's weighted score, and ranks which borrowers to ask for better data first. It also carries a one-page data-request letter, in English and Arabic, that moved a fictional 20-loan book from a score of...

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READ ONLINE	omarhamdy.com/toolkit/pcaf-data-quality-worksheet/

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Who uses it: climate and sustainability analysts building a lender's financed emissions inventory; credit officers who collect borrower data at annual review; non-bank lenders preparing for DFI reporting; and DFI staff reviewing a partner's first PCAF numbers.

01

Why the score matters

Two lenders each report 5,000 tonnes of financed emissions. One built the figure from borrowers' verified emissions reports. The other multiplied loan balances by sector averages. Both are legitimate under PCAF. Only one says much about the borrowers.

The score is how a reader tells them apart. PCAF has asked institutions to publish it, weighted by outstanding amount, or explain why not, since its second edition. The third edition, published in December 2025, keeps that rule: institutions "should publish a weighted score by outstanding amount of the data quality of reported emissions data or should explain why they are unable to do so". Scope 3 gets its own score, reported separately.

02

The ladder for business loans

Table 5.2-1 of the standard (page 60) sets the score by what the lender knows about the borrower. For listed companies, total equity plus debt is replaced by EVIC, PCAF's denominator for listed companies, which starts from market capitalisation.

SCORE	OPTION	WHAT THE LENDER HAS	TYPICAL SME EVIDENCE
1	1a	Outstanding amount and total equity plus debt known; "verified emissions of the company are available"	GHG report with a third-party verification statement; audited financials
2	1b	As 1a, but "unverified emissions calculated by the company"	Company GHG calculation
2	2a	Outstanding amount and total equity plus debt known; emissions from "primary physical activity data for the company's energy consumption", plus process emissions	12 months of electricity and fuel invoices (Scopes 1 and 2 only, note 87)
3	2b	As 2a, but from primary physical data on the company's production	Annual production records

SCORE	OPTION	WHAT THE LENDER HAS	TYPICAL SME EVIDENCE
4	3a	Outstanding amount, total equity plus debt and revenue known; sector emission factor per unit of revenue	Audited income statement
5	3b	Only the outstanding amount known; sector factor per unit of assets	Loan system
5	3c	Only the outstanding amount known; sector factor per unit of revenue and sector asset turnover ratio	Loan system

Source: PCAF, Part A, 3rd edition (2025), Table 5.2-1.

Read it from the bottom. Score 5 needs only a balance the lender already holds. Score 1 needs the borrower to measure its emissions and have them checked. Every score better than 5 also needs total equity plus debt: without a current balance sheet, a loan stays on the bottom rung whatever the borrower knows.

03

The three formulas

For a loan to a private company (pages 57 and 58):

Attribution factor = Outstanding amount / (Total equity + debt)

Financed emissions = Σ (Attribution factor × Company emissions)

For the book (Box 6.1-6, pages 167 and 168):

Weighted score = Σ (Outstanding amount × Score) / Σ Outstanding amount

Negative book equity is set to zero. If debt or equity cannot be read from the balance sheet, the standard allows total balance sheet assets as a transitional fallback. At score 5 (option 3b) the attribution factor drops out: Annex 10.1 gives financed emissions as outstanding amount times sector emissions per unit of sector assets.

04

The worksheet

One row per loan, per scope. Keep Scope 3 rows separate.

#	COLUMN	WHAT GOES IN IT	RULE
1	Loan ID	Internal reference	Never the borrower's name in shared extracts
2	Asset class	Business loan, project finance, CRE, mortgage, motor vehicle and so on	One class per exposure; record anything out of scope and why
3	Sector	Activity code from the trade licence	Maps the loan to a sector factor
4	Outstanding amount	Balance at the reporting date	Same date for every row
5	Balance sheet date	Date of the accounts used	Older than 18 months: flag it (my threshold)

#	COLUMN	WHAT GOES IN IT	RULE
6	Total equity plus debt	From audited or tax-filed accounts	Blank means score 5
7	Attribution factor	Column 4 / column 6	Above 1 means a data error: check both inputs
8	Data held	Verified emissions, company emissions, energy, production, revenue, none	The best item on file
9	PCAF option	1a, 1b, 2a, 2b, 3a, 3b, 3c	From Table 5.2-1
10	Score	1 to 5	Follows from column 9
11	Scope	1 and 2, or 3	Score each scope separately
12	Emissions basis	Company figure, or activity data × factor	Name the factor and its year
13	Financed tCO2e	Column 7 × company emissions, or the option 3 formula	tCO2e
14	Evidence reference	Where the source document sits	Findable in five minutes
15	Next request	What would move this loan up one score	Item number from the letter below

Asset-class map (chapter 5)

PCAF ASSET CLASS	SECTION	ATTRIBUTION FACTOR
Listed equity and corporate bonds	5.1	Outstanding / EVIC; bonds to private companies: outstanding / (total equity + debt)
Business loans and unlisted equity	5.2	Private: outstanding / (total equity + debt). Listed: outstanding / EVIC
Project finance	5.3	Outstanding / (total equity + debt of the project)
Commercial real estate	5.4	Outstanding / property valuation at origination
Mortgages	5.5	Outstanding / property valuation at origination
Motor vehicle loans	5.6	Outstanding / vehicle valuation at origination
Use of proceeds structures	5.7	Investor share of the structure × the structure's attribution to each asset
Securitisation and structured products	5.8	Look through to the collateral pool, then the investor's share of its tranche
Sovereign debt	5.9	Exposure / PPP-adjusted GDP
Sub-sovereign debt	5.10	Exposure / sub-sovereign PPP-adjusted GDP, capped at 1

05

Worked example 1 (fictional): a 10-loan book

The book and the emission factors are invented. Scopes 1 and 2 only; balances in EGP million.

LOAN	SECTOR	OUTSTANDING	SCORE	METHOD	FINANCED TCO2E
L1	Food processing	40	2	1b, company report	600
L2	Plastic packaging	30	3	2b, production	900
L3	Textile dyeing	25	4	3a, revenue	750
L4	Cold storage	20	4	3a, revenue	400
L5	Clay bricks	35	5	3b, assets	1,400
L6	Metal fabrication	30	5	3b, assets	600
L7	Commercial printing	15	5	3b, assets	150
L8	Vehicle repair	10	5	3b, assets	80
L9	Bakery	10	5	3b, assets	120
L10	Wholesale trading	15	5	3b, assets	75
	Total	**230**	**4.02**		**5,075**

Weighted score: 925 / 230 = 4.02. Half the book by balance sits at score 5. Seventy per cent of the emissions (3,575 of 5,075 tonnes) rest on sector averages, at scores 4 and 5.

Move three loans from 5 to 3. Rank the score-5 loans by attributed emissions and start at the top: L5, L6 and L7. Collect total equity plus debt and a year of production data, then apply a production-specific factor.

LOAN	ATTRIBUTION FACTOR	PRODUCTION	ILLUSTRATIVE FACTOR	TCO2E BEFORE	TCO2E AFTER
L5 Clay bricks	35 / 70 = 0.50	20,000 t	0.25 t per t	1,400	2,500
L6 Metal fabrication	30 / 100 = 0.30	1,500 t	1.0 t per t	600	450
L7 Commercial printing	15 / 45 = 0.33	800 t	0.6 t per t	150	160

The book now totals 6,035 tonnes, up 960 tonnes or 19%. The weighted score falls to 765 / 230 = 3.33. The share of emissions on sector averages drops from 70% to 24%. No loan was added and no borrower changed how it operates. The total rose because the sector average understated one brickmaker, and L6 went the other way. Better data can move the total either way; what it moves every time is the score.

06

Worked example 2 (fictional): one letter, 20 loans

Lender L has 20 SME loans worth EGP 114.0m. Before any request, the file holds a balance sheet and revenue for 17 borrowers (EGP 105.5m, option 3a, score 4) and only an outstanding amount for three (EGP 8.5m, option 3b, score 5). Weighted score: (105.5 × 4 + 8.5 × 5) / 114.0 = 4.07.

The lender sends the letter below to all 20. Seventeen reply, and fifteen send energy, production or emissions data.

REPLY	LOANS	OUTSTANDING (EGP M)	OPTION	SCORE
Verified emissions	1	6.0	1a	1
Company-reported emissions	5	42.0	1b	2
Electricity and fuel data	4	15.0	2a	2
Production data	5	33.0	2b	3
Balance sheet and revenue only	2	9.5	3a	4
No reply	3	8.5	3b	5

Weighted score: 299.5 / 114.0 = 2.63. Three cautions: the score-2 loans built on energy data cover Scopes 1 and 2 only, and the disclosure should say so; 15.8% of the outstanding amount still sits at score 4 or 5, and that share belongs in the report, not a footnote; and the letter moves the score, not the quality of a sector factor for Egypt.

07

Why SME books in this region start at the bottom

GAP	WHAT PCAF ASKS FOR	WHY IT IS THIN FOR SMES IN MENA
Denominator	Total equity plus debt, or EVIC for listed firms	An unlisted SME has no share price, so EVIC does not exist. The fallback is a balance sheet, which needs filed accounts
Numerator	Company emissions, or energy and production data	Small firms rarely measure emissions, and I found no emissions reporting duty that reaches them
Sector factors	Revenue- or asset-based factors	PCAF's database builds revenue-based factors on the CEDA input-output table, is open to signatories and partners only, and PCAF says it is working to improve Global South coverage

The scale is large. The CBE's Deputy Governor for Financial Inclusion put the banking sector's SME portfolio at about EGP 630bn in April 2026. The first two gaps close borrower by borrower. Only PCAF and the factor providers can close the third.

In Egypt, one group of borrowers now has better data by law. FRA Decision 36 of 2026 requires non-bank financial companies with issued capital or net equity above EGP 100m to file a verified Scope 1 and 2 carbon footprint report, with the first due by 31 December 2026 (extended by Decision 115 of 2026). If such a borrower shares its verified report, a lender holding its balance sheet can score those scopes at 1. See the FRA Decision 36 guide.

08

The data-request letter

One page, sent with the annual review. "[Lender]" is in the third person so any lender can adapt it.

English

Subject: Data request for greenhouse gas reporting, facility [reference]

Dear [contact name],

[Lender] reports the greenhouse gas emissions linked to its financing, following the PCAF standard. Data from your company makes that figure more accurate. Please send the items below by [date]. Send what you have; a partial reply is useful.

The data is used only to calculate [Lender]'s financed emissions. It is combined with other borrowers' data before any publication, and your company is not named.

1. Latest balance sheet: total equity and total debt.
2. Annual revenue for the last financial year.
3. Electricity used in the last 12 months (kWh, from bills).
4. Fuel used in the last 12 months, by type (diesel, petrol, natural gas, LPG), in litres or cubic metres.
5. Main products and the quantity made in the last 12 months, with units.
6. Any process emissions (for example cement, lime, chemicals, refrigerant leaks), described briefly.
7. If your company has calculated its own emissions: the figure, scopes, period and method.
8. If a third party has verified them: the verification statement.
9. Your main activity, as on your trade licence.

Contact: [name, role, email]. Thank you.

Arabic

الموضوع: طلب بيانات لإعداد تقرير غازات الاحتباس الحراري، التسهيل [المرجع]

السيد/ة [اسم المسؤول]،

تُعدّ [الجهة المموِّلة] تقريرًا عن الانبعاثات المرتبطة بتمويلها، وفق معيار PCAF. وبيانات شركتكم تجعل هذا الرقم أدق. يُرجى إرسال البنود التالية قبل [التاريخ]. أرسلوا ما لديكم؛ فالرد الجزئي مفيد.

تُستخدم البيانات لحساب الانبعاثات المموَّلة فقط، وتُجمَّع مع بيانات مقترضين آخرين قبل أي نشر، ولا يُذكر اسم شركتكم.

1. آخر ميزانية عمومية: إجمالي حقوق الملكية وإجمالي الديون.
2. إيرادات السنة المالية الأخيرة.
3. الكهرباء المستهلكة في آخر 12 شهرًا (كيلوواط ساعة، من الفواتير).
4. الوقود المستهلك في آخر 12 شهرًا بحسب النوع (سولار، بنزين، غاز طبيعي، غاز البترول المسال)، باللتر أو المتر المكعب.
5. المنتجات الرئيسية والكمية المنتَجة في آخر 12 شهرًا، مع الوحدات.
6. أي انبعاثات من العمليات الصناعية (مثل الإسمنت أو الجير أو الكيماويات أو تسرب غازات التبريد)، مع وصف موجز.
7. إن كانت شركتكم قد حسبت انبعاثاتها: الرقم والنطاقات والفترة والمنهج.
8. إن راجعها طرف ثالث: بيان التحقق.
9. نشاطكم الرئيسي كما في الترخيص التجاري.

للتواصل: [الاسم، الوظيفة، البريد الإلكتروني]. شكرًا لكم.

Field map

ITEM	ACCEPTED EVIDENCE	WHAT IT SUPPORTS	SCORE
1 Balance sheet	Audited or tax-filed statements	Denominator for every option above score 5	Needed for 1 to 4
2 Revenue	Same statements or tax return	Option 3a	4
3 and 4 Electricity and fuel	Bills and invoices	Option 2a, Scopes 1 and 2 only	2
5 Products and quantities	Production records	Option 2b, with matching factors	3
6 Process emissions	Short description	The "plus process emissions" part of option 2a	2
7 Own emissions figure	The company's report	Option 1b	2
8 Verification	Third-party statement	Option 1a	1
9 Main activity	Trade licence	Maps the loan to a sector factor	4 or 5

09

Disclosure: three figures, side by side

1. Absolute financed emissions, by scope.
2. The weighted data quality score, by asset class.
3. The share of emissions, and of outstanding amount, at scores 4 and 5.

A total without its score is half a disclosure. The IFRS S2 amendments of 11 December 2025 let an entity limit Category 15 to financed emissions, for periods beginning on or after 1 January 2027, and none of them touches data quality. The score stays the place to say how good the numbers are.

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Rules

1. Send the letter with the annual review, not as a separate project.
2. Keep every reply, with the date received and the period it covers.
3. Score each loan on the best option the reply supports.
4. Never fill a gap with a guess. Leave the loan at its fallback option and say so.
5. Review loans still at 5 once a year and note why: no reply, no accounts, no data.

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Sources

1. PCAF, The Global GHG Accounting and Reporting Standard Part A: Financed Emissions, 3rd edition, December 2025 (Table 5.2-1, pp. 30, 57 to 58, 167 to 168, Annex 10.1) (https://carbonaccountingfinancials.com/files/standard-launch-2025/PCAF-PartA-2025-Full-Document-Clean.pdf)
2. PCAF, "PCAF launches updated GHG accounting standard", 2 December 2025 (https://carbonaccountingfinancials.com/en/newsitem/pcaf-launches-updated-ghg-accounting-standard-2025)
3. PCAF Database information sheet, 3 September 2025 (https://carbonaccountingfinancials.com/files/database/PCAF-2025Database-2Pager-R2.pdf)
4. IFRS Foundation, "ISSB issues targeted amendments to IFRS S2", 11 December 2025 (https://www.ifrs.org/news-and-events/news/2025/12/issb-issues-targeted-amendments-ifrs-s2/)
5. FRA Board Decision 36 of 2026, Egyptian Gazette, issue 39 (b), 17 February 2026 (https://fra.gov.eg/wp-content/uploads/2026/02/alamiria_2026_36.pdf)
6. FRA Board Decision 115 of 2026 (deadline extended to 31 December 2026), Egyptian Gazette, issue 130 (a), 17 June 2026 (https://fra.gov.eg/wp-content/uploads/2026/06/alamiria_2026_115.pdf)
7. Business Today Egypt, "Egypt SME lending grows strongly as financial inclusion reaches 77.6%", 28 April 2026 (https://www.businesstodayegypt.com/amp/1/7375/Egypt-SME-lending-grows-strongly-as-financial-inclusion-reaches-77)

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Related pages

- PCAF for non-bank lenders omarhamdy.com/guides/pcaf-for-nbfis/
- FRA Decision 36 omarhamdy.com/guides/fra-decision-36-carbon-footprint/
- IFRS S1 and S2 readiness omarhamdy.com/guides/ifrs-s1-s2-readiness/
- Toolkit: working files omarhamdy.com/toolkit/
- ESDD checklist for lenders omarhamdy.com/toolkit/esdd-checklist/
- IFC vs EBRD exclusion list omarhamdy.com/toolkit/exclusion-list-reconciliation/
- Grievance mechanism template for borrowers omarhamdy.com/toolkit/grievance-mechanism-template/
- COP31 for lenders omarhamdy.com/toolkit/cop-to-credit-table/

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Glossary terms on this page

- PCAF omarhamdy.com/glossary/pcaf/
- Data quality score omarhamdy.com/glossary/data-quality-score/
- Financed emissions omarhamdy.com/glossary/financed-emissions/
- Attribution factor omarhamdy.com/glossary/attribution-factor/
- Emission factor omarhamdy.com/glossary/emission-factor/
- Scope 1 / 2 / 3 omarhamdy.com/glossary/scope-1-2-3/
- tCO2e omarhamdy.com/glossary/tco2e/
- Verification / validation omarhamdy.com/glossary/verification-validation/
- Greenhouse gases omarhamdy.com/glossary/greenhouse-gases/

Terms used in this document

FINANCED EMISSIONS	The emissions of the companies a bank lends to, counted in proportion to the bank's share of their funding.
PCAF	A common method banks use to count the emissions of the companies and projects they lend to.
DFI	A development finance institution: a lender backed by governments, such as EBRD or IFC, that funds projects for their development impact as well as their returns.
CBE	The Central Bank of Egypt, which licenses and supervises the country's banks and sets their rules, including on sustainable finance.
FRA	Egypt's regulator for finance outside banks: the stock market, insurance, leasing, factoring, microfinance and consumer finance.