From averages to action: why building-level insight is essential for financed emissions reduction

Implications for Australian residential and commercial real estate portfolio pathways

For banking and real estate finance professionals

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Executive summary

As climate-related disclosure requirements evolve, financed emissions are increasingly expected to support transition planning, governance, and capital allocation, not just reporting.

In Australian real estate portfolios, banks have relied on portfolio-level averages as a pragmatic response to the current data landscape. While suitable for disclosure, averages are structurally limited in their ability to show where risk and opportunity sit within portfolios, how emissions may change over time, and which assets or clients warrant priority attention.

Building-level insight, derived from measured data or transparent modelling, enables a more decision-useful view of financed emissions. It supports segmentation, prioritisation, and credible transition pathways without requiring universal primary data coverage.

Three priorities emerge for banks with exposure to residential and commercial real estate: model building-level energy performance at a portfolio scale, create clear and costed pathways, and structure client engagement mechanisms. Together, these allow banks to move from reporting a financed emissions footprint to managing transition pathways with greater confidence and credibility.

From averages to action: why building-level insight is essential for financed emissions reduction

Australian banks have largely relied on portfolio-level averages to report financed emissions. This has been practical and appropriate given the national data landscape. However, averages can only take the sector so far. As climate-related disclosures evolve and transition plans become more central to supervisory and investor expectations, banks increasingly need insight that goes beyond portfolio averages. Building-level insight makes it possible to see where risk and opportunity sit within portfolios, prioritise engagement, and support credible, forward-looking transition pathways.

A financed emissions footprint is essential for disclosure, but it does not, on its own, constitute a transition strategy.

The regulatory context: APRA's expectations around governance and decision-useful metrics are tightening

Climate-related financial risk has become a core aspect of banking governance, reflecting its direct relevance to asset values, credit risk, and long-term financial stability. Although APRA does not prescribe a specific financed emissions methodology, it has been clear that disclosures must improve in terms of quality, transparency, and decision-usefulness. Additionally, banks must be able to explain how the data support governance and decisions. In its climate risk self-assessment survey, APRA found that use of more advanced metrics, such as Scope 3 and financed emissions, remains limited across the sector. In CPG 229, APRA therefore expects institutions to understand which data is needed to assess climate risks, how reliable that data is, and how its limitations affect risk management, governance oversight, and strategic decision-making.

The direction of travel is toward more robust, transparent and decision-useful metrics, placing greater emphasis on how data supports internal decision-making and forward-looking transition planning, even if APRA does not prescribe a single method.

Why will transition plans change what financed emissions data must deliver?

The Australian Government's Policy Impact Analysis – Climate-related Financial Disclosures makes transition plans a core element of the proposed mandatory climate-reporting framework. Under these proposed standards, organisations will need to disclose:

- their emissions-reduction targets,
- the strategies and actions planned to achieve them,
- the role of offsets in meeting those targets, and
- how these plans align with scenario analysis and the organisation's climate resilience assessment.

The purpose is to provide investors and regulators with transparency on how

organisations intend to adapt, allocate capital, and progress toward a low-carbon economy.

For banks, the implications are twofold. First, banks must disclose their own transition plans at the entity level, setting out how they intend to manage climate risk, allocate capital, and meet their emissions-reduction commitments over time. Second, banks increasingly rely on credible, decision-useful data from their lending portfolios to explain how financed emissions are expected to evolve.

At the portfolio level, transition plans struggle to credibly describe future pathways when financed emissions are based solely on high-level averages, with limited visibility at the individual asset or client level.

This strengthens the link between financed emissions modelling and forward-looking transition planning: data must not only describe today's portfolio, but also support a realistic view of how it can change over time, including which levers are available, at what pace, and under which assumptions.

No regulator is mandating building-level modelling today, but both APRA's focus on improved metrics and the Government's emphasis on credible transition plans both increase expectations around transparency, segmentation and the ability to explain assumptions. Financed emissions data increasingly needs to support prioritisation, client engagement, and the development of credible transition pathways, not just portfolio-level disclosure.

Why do averages limit visibility in Australian real estate portfolios?

Australia has world-class building-performance infrastructure in NABERS. However, unlike Europe or some APAC markets, Australia does not have a national energy performance framework with consistent coverage across all residential and commercial buildings.

In practice, this means that many lending portfolios include a mix of assets: some with validated NABERS ratings, others without an active rating, and others that fall outside the scope of existing certification schemes altogether. As a result, banks in Australia often have to work with incomplete and uneven building-level data within a single portfolio.

In this context, banks understandably rely on the DCCEEW Commercial Building Baseline Study, which provides average energy consumption and emission-intensity data by building archetype. This approach is practical and necessary in a national context where data availability varies, but it also introduces structural limitations that directly affect the usefulness of financed emissions results for transition planning:

1. **Limited differentiation**
   Buildings that look similar on paper can have significantly different energy performance. Averaged benchmark values mask this variation, reducing the ability to identify high-impact assets or priority client segments.

2. **Limited visibility for engagement**
   Client engagement strategies depend on understanding which properties present the largest emissions-reduction opportunities. Without building-level insight, it becomes harder to target conversations, structure green-lending propositions, or support customers through meaningful upgrades.

3. **Limited basis for action**
   Transition plans require understanding how emissions could change under different upgrade scenarios, including technical feasibility, indicative capex, sequencing, and timing. Portfolio averages cannot reliably reveal these dynamics, making it difficult to build credible forward-looking pathways or to assess how transition and climate risks are distributed across individual assets and clients.

Importantly, this is a system-level constraint, not an institutional one. The national data landscape shapes what banks can see today and supports the case for models that can approximate building-level performance when empirical data is unavailable, while transparently disclosing assumptions and data quality scores.

Why are portfolio averages insufficient for transition planning?

A financed emissions footprint is essential for disclosure - but it does not, on its own, constitute a transition strategy.

While portfolio averages are useful for measurement, they have inherent limitations when banks seek to understand risk concentration, performance variation, and the feasibility of future emissions reductions.

For leaders in Sustainable Finance, Risk and Real Estate Finance, the implications of relying solely on averages are material:

- **Harder to prioritise capital and lending strategies**

Without asset-level differentiation, it becomes difficult to identify where the most meaningful emissions reductions, or value preservation, could come from.

- **Harder to articulate credible transition progress**

Investors, supervisors and internal committees increasingly want to understand where reductions will come from, not just what the baseline is.

- **Harder to support clients**

Averages can describe the footprint of a building type, but clients need insight into the footprint of their building and what their realistic upgrade options are.

- **Harder to align internal decision-making**

Risk, Lending, ESG and Strategy depend on common insight. When underlying data rests on portfolio averages rather than building-level variation, alignment becomes more difficult.

In short, portfolio averages support disclosure, but they are structurally constrained in their ability to inform prioritisation, planning, and forward-looking assessment.

What this means in practice for banks

For banks, the shift toward more decision-useful financed emissions data does not imply a single methodological leap, nor a requirement to overhaul existing reporting frameworks. Instead, it calls for a more deliberate and structured use of data (quality) across portfolios.

This means three things:

1. **Be explicit about where averages are sufficient and where they are not**
Portfolio-level averages remain appropriate where exposures are small, data is sparse, and decisions are unlikely to differ at the asset level. Where exposures are material, assets are central to transition targets, or client engagement is required, reliance on averages becomes a governance risk rather than a technical limitation. Being explicit about these distinctions strengthens both internal governance and external disclosure.

2. **Use data quality as a management tool, not just a disclosure metric**
PCAF is a well-known framework that enables banks to speak the same language about data quality. PCAF data quality scores are often treated as a footnote in reporting. In practice, they can be used as a management lens, informing prioritisation, highlighting where deeper analysis may be warranted, and where improved data or modelling could strenghten insight. This positions data quality not only as a reporting consideration, but as an input into prioritisation and portfolio understanding.

3. **Reduce emissions through client engagement and transition pathways**
Financed emissions decline when the underlying assets improve. More granular emissions insight enables banks to move from generic portfolio narratives to targeted client conversations, linking emissions performance to feasible upgrades, indicative costs, and financing pathways. This is particularly relevant for real-estate portfolios, where building-level interventions are well understood but often disconnected from portfolio-level reporting.

Taken together, these steps enable banks to maintain comparability and consistency in disclosure, while progressively strengthening the link between financed emissions reporting, client strategy, and credible transition planning.

In practice, much of this convergence around data quality is shaped by the PCAF Standard, which was most recently updated in December 2025 to reflect growing expectations for transparency and decision usefulness.

What the updated PCAF Standard signals

The newly released edition of the PCAF Standard for the Financial Industry (Part A – Financed Emissions) expands and clarifies how financial institutions should measure and report Scope 3 Category 15 emissions.

While the core methodologies for Mortgages and Commercial Real Estate (CRE) remain unchanged, the update reinforces existing expectations around data quality, transparency, and methodological clarity in real-estate portfolios.

Several elements of the Standard are especially relevant for banks with large property exposures:

- **Clear expectations on data quality scoring**

The Standard reinforces the need for institutions to explicitly score and disclose data quality, including building-level data availability, assumptions applied, and the degree of estimation used.

This matters because the gap between averaged archetype assumptions and actual building performance becomes more visible and is expected to be transparently justified.

- **Stronger guidance on methodological transparency**

The PCAF standard emphasises transparency around modelling choices, including:

  - whether asset-level information was used or not,
  - why certain data sources were selected,
  - and how estimation approaches were applied where granular data was unavailable.

For residential and commercial real estate lending, this framing highlights the importance of explaining not only which emission factor are used, but also how credible and decision-useful the underlying data is.

- **Reporting recommendations that support transition planning**

The updated Standard includes new reporting guidance (e.g., on inventory fluctuations) that encourages institutions to explain changes in financed emissions trajectories, rather than just reporting figures. This aligns financed emissions disclosure more closely with transition planning responsibilities emerging in Australia's climate reporting framework.

- **Increasing alignment with global disclosure frameworks**

PCAF explicitly connects its guidance to IFRS S1 & S2, ISSB reporting expectations, and other international standards. In Australia, this direction is reinforced by AASB S2, which embeds these principles into mandatory climate-related financial disclosures for large financial institutions. For real estate portfolios, this alignment implies growing expectations around the granularity and traceability of emissions data within broader climate disclosure frameworks.

Although the PCAF Standard does not mandate universal asset-level data, it clearly raises expectations around how institutions explain, justify, and improve the quality of their financed emissions data over time.

For residential and commercial real estate, the emphasis is no longer solely on selecting an appropriate emission factor, but on demonstrating methodological transparency, data quality distribution, and a credible pathway toward more granular inputs where feasible.

In this context, data quality becomes a strategic capability rather than a reporting constraint, particularly in markets like Australia, where structural data gaps are well understood.

> *"Financed emissions are increasingly expected to inform real decisions, not just satisfy disclosure requirements. Under PCAF, the focus is not simply on calculating a footprint, but on understanding the quality and limitations of the data, and how those limitations affect transition planning. For property portfolios, improving insight beyond portfolio averages where it materially influences decisions is an important step toward more credible, forward-looking emissions strategies."*
> — Partnership for Carbon Accounting Financials

Illustrative comparison: how methodology choice shapes portfolio decisions

To illustrate how different financed-emissions methodologies shape the insight available to banks, consider a typical Australian commercial office building within a diversified lending portfolio.

Under an archetype-based approach, such as those drawing on the DCCEEW Commercial Building Baseline Study or the PCAF emission-factor database, emissions are estimated using average intensity factors by building type and location. These approaches typically rely on regional or national averages applied at the portfolio level, offering consistency and coverage but limited differentiation between individual assets. Under PCAF, this would

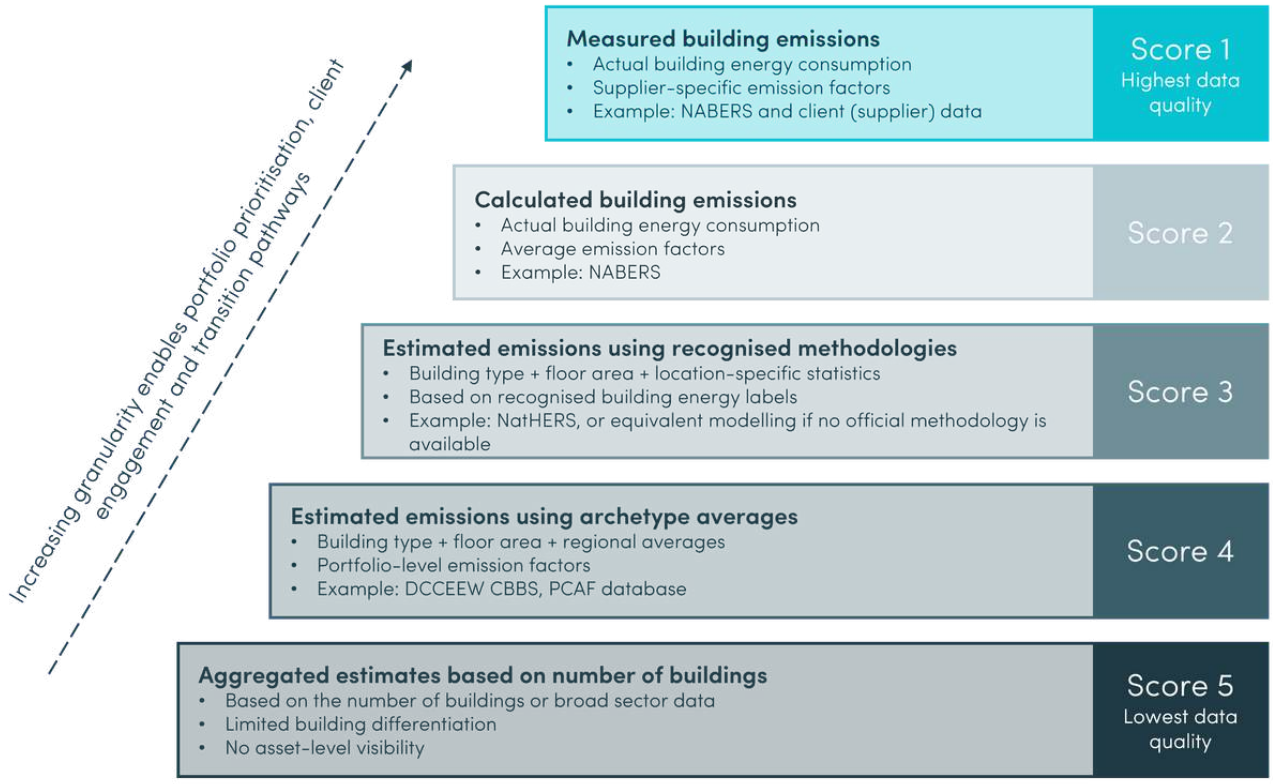
generally correspond to data quality scores 4 or 5.

Where building-level energy data is available, such as through measured energy consumption in NABERS ratings or directly from energy bills, emissions can be estimated using actual energy-intensity information, combined with standard emission factors. This introduces asset-level differentiation and improves transparency around performance variation across the portfolio, typically aligning with PCAF data quality score 2.

In the absence of measured energy data, building-level modelling approaches can be used to estimate energy consumption based on observable building characteristics, such as use type, floor area, climate zone, and construction attributes. While still modelled, this bottom-up approach provides asset-specific estimates and transparent assumptions, generally corresponding to PCAF data quality score 3 or 4.

Finally, where actual metered energy consumption and supplier-specific emission factors are available, for example, through direct client data sharing and/or validated NABERS Energy submissions, emissions can be calculated using primary data. This represents the highest level of data quality under PCAF (score 1) and provides the strongest foundation for both disclosure and forward-looking transition planning.

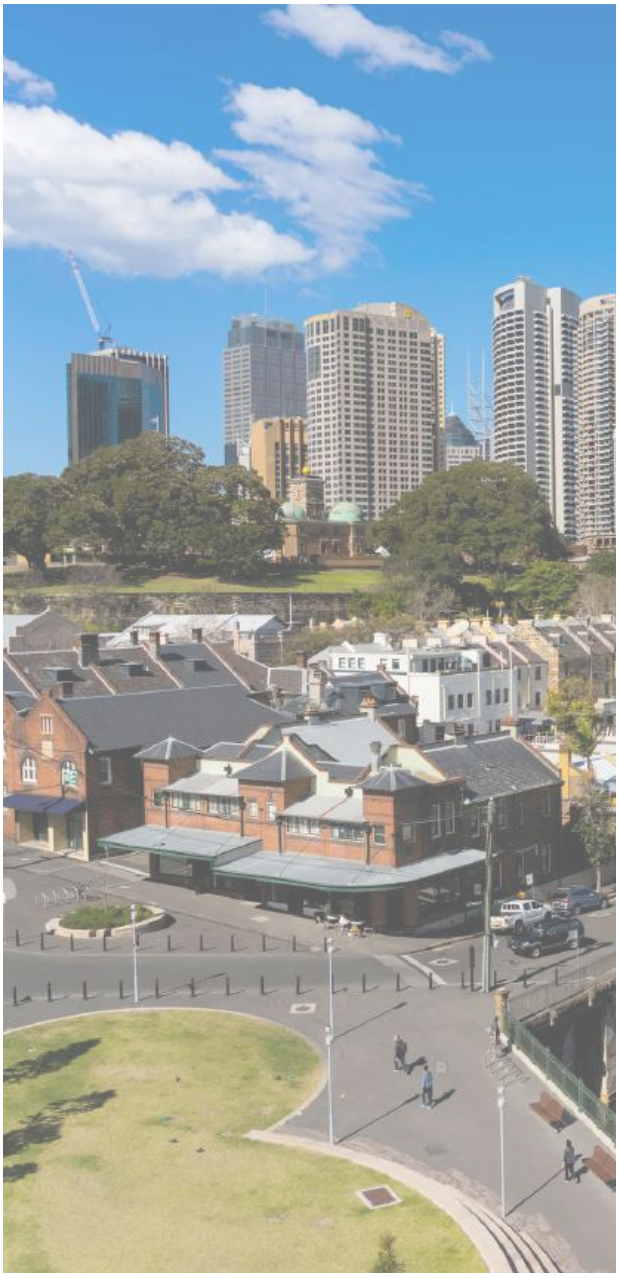
From aggregated estimates to decision-useful insight: How PCAF data quality enables portfolio action



CFP supports progression toward higher data quality
Including transparent modelling where empirical data is unavailable

The key distinction across these approaches is not compliance, but how much decision-useful insight they enable. As data granularity increases, banks gain greater ability to prioritise assets, engage clients, and assess how financed emissions could realistically evolve.

In practice, this difference in insight leads to materially different decisions. Using archetype averages, a bank may identify parts of its commercial offices as a high-emissions segment in aggregate, but has limited ability to distinguish which assets or clients warrant priority engagement. With building-level estimates, the same portfolio can be segmented to identify underperforming assets, assess whether performance gaps are structural or behavioural, and target client conversations accordingly. Where measured data is available, banks can go further: testing upgrade pathways, sequencing levers, and linking emissions trajectories to lending and risk strategies.



These approaches reflect methodologies already used by Australian banks today, differing primarily in the degree to which they support prioritisation, client engagement, and credible transition planning.

How banks globally are approaching financed emissions

Across markets, banks are taking different approaches to financed emissions disclosure and transition planning, shaped by local data availability, regulatory expectations, and portfolio composition. Rather than representing best practice or performance rankings, the examples below highlight how institutions are navigating data quality, methodological transparency, and the link between emissions measurement and transition strategy in practice.

The examples below are illustrative rather than exhaustive, highlighting how different banks address data quality and transparency within their local context.

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Institution	Region	Relevance
Aareal Bank	Europe	Discloses financed emissions for commercial real estate with explicit data quality scoring, illustrating how asset-level transparency can be incorporated into portfolio reporting.
Lloyds Banking Group	UK	Uses building-level energy performance data where available, demonstrating how existing certification schemes can be integrated into financed emissions methodologies, improving data quality scores and through innovative financial products.
ING Group	Global	Links financed emissions to sectoral pathways and client engagement strategies, showing how reporting can be connected to forward-looking transition planning.
TD Bank Group	Canada	Shows how financed emissions disclosure can move beyond portfolio-level disclosure for commercial and residential real estate.
OCBC Group	APAC	Explicitly discloses data gaps and an improvement roadmap, offering a relevant example for markets with mixed data availability.
ANZ	Australia	Discloses financed emissions using portfolio-level approaches, reflecting the practical constraints of the current Australian data landscape.

These examples reflect an emerging global pattern: **Financed emissions reporting is evolving from footprinting toward actionable transition planning.**

What Australian banks need next: from footprint to pathway

Australia has strong ingredients for progress: a sophisticated real-estate sector, the NABERS system, and banks committed to transparent reporting. To strengthen finance-emissions strategies that support both disclosure and real emissions reduction, banks benefit from these three elements:

1. **Model building-level energy performance at portfolio scale**
   To differentiate asset performance, identify levers, discover hotspots and understand potential reduction trajectories.

2. **Create clear, costed pathways for all building types**
   Including feasible interventions, sequencing, and expected emissions impact.

3. **Structure client engagement mechanisms**
   Financed emissions fall only when clients take action. Banks need a way to translate insight into tailored, practical guidance.

Together, these elements enable banks to progress from a single emissions footprint to a credible transition pathway aligned with supervisory expectations and global trends.

From reporting to readiness

Australian banks have made meaningful progress in financed emissions reporting under constrained and uneven data conditions. Portfolio-level averages have been a necessary and pragmatic starting point, enabling early disclosure and comparability across large books.

But the context is changing.

As transition plans become a formal disclosure requirement and supervisors place greater emphasis on decision-useful climate metrics, financed emissions data need to do more than describe a portfolio's footprint. It should support prioritisation, client engagement, and credible forward-looking pathways that help banks future-proof portfolios, protect asset value, and manage financial risk over time.

This does not require perfect data across every asset. It requires clarity on data quality, transparency on assumptions, and a deliberate approach to improving granularity where it materially affects decisions. In real-estate portfolios, this means understanding where archetype averages are sufficient, where building-level estimation adds value, and where

measured data can fundamentally change the picture. The banks best positioned for the next phase of climate reporting will be those that treat financed emissions data not as a static reporting exercise, but as an evolving management tool; one that links disclosure, risk assessment, and transition planning coherently.

Moving from aggregated estimates to decision-useful insight is not about compliance alone; it is about the analytical foundation needed to prioritise action, engage clients credibly, and allocate capital with confidence in a decarbonising economy.

Summary and recommendations

As transition plans become a core element of climate-related financial disclosure, financed emissions data needs to do more than describe a portfolio footprint. It needs to support prioritisation, engagement, and credible forward-looking decision-making.

Portfolio-level averages remain a necessary starting point in the Australian data landscape. On their own, however, they are structurally limited in their ability to inform transition pathways, capital allocation, and client strategy. Building-level insight, whether derived from measured data or transparent modelling, is increasingly critical to bridge this gap.

Three practical priorities emerge for banks with residential and commercial real estate exposure:

- Model building-level energy performance at portfolio scale
- Create clear, costed pathways for all buildings
- Structure client engagement mechanisms

Together, these priorities enable banks to move from reporting financed emissions to managing transition pathways, maintaining consistency in disclosure while strengthening decision usefulness, governance, and credibility over time.

About the author

CFP Green Buildings supports banks and financial institutions in understanding, managing, and reducing the climate impact of their real-estate portfolios. CFP combines building-level data, advanced modelling, and portfolio analytics to help banks move from financed-emissions measurement toward credible transition planning and future-proof decision-making.

In Australia, CFP collaborates with leading financial institutions to deliver asset-level insights across commercial and residential portfolios, enabling prioritisation, targeted client engagement, and transparent reporting aligned with evolving regulatory and supervisory expectations. These frameworks are designed to operate in mixed-data environments, combining empirical data such as NABERS with robust bottom-up modelling where data is incomplete.

CFP Green Buildings operates internationally, supporting financial institutions across Europe, APAC, and beyond. As a certified B Corporation, CFP is committed to combining commercial rigour with positive environmental and societal impact.

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