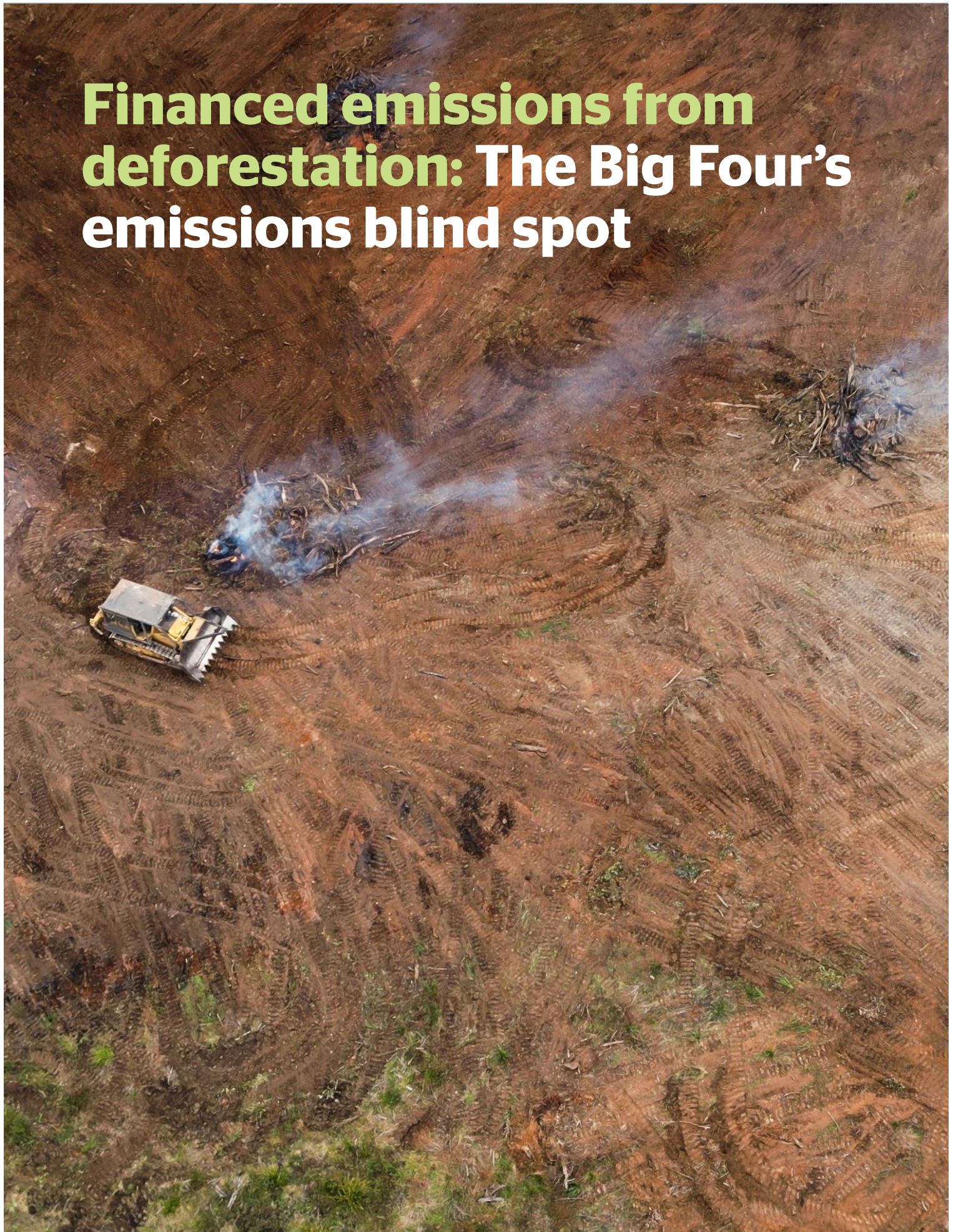# Financed emissions from deforestation: The Big Four's emissions blind spot

AUSTRALIAN CONSERVATION FOUNDATION

Nature needs us, now

We acknowledge the Traditional Owners of Country and their continuing connection to land, waters and community. We pay respect to their Elders past and present and to the pivotal role that First Nations Peoples continue to play in caring for Country across Australia.

Contents

Cover. Aerial photo of bulldozer and cleared land and burning piles of trees, Yarrowitch

North-east Tasmania Landclearing

Executive summary

Australia's largest banks are failing to track, manage and disclose the extent of deforestation occurring in their loan portfolios. As a result, they are blind to the emissions from the deforestation linked to their finance.

The analysis conducted by the Australian Conservation Foundation (ACF) exposes this blind spot by estimating emissions from a snapshot of land-clearing events linked to ANZ (including Suncorp), NAB, Commbank and Westpac finance over the four years to 2024.

The analysis found more than 7.5 million tonnes of greenhouse gas emissions were released from these events, which destroyed protected species habitat and resulted in the loss of carbon sinks. These emissions were produced from 19,286 hectares of clearing - a small sample of the hundreds of thousands of hectares cleared every year in Australia.

Emissions from deforestation are generally not included in the big four banks' climate reporting, with ANZ the only bank to incorporate an estimate into their agriculture sector emissions. This is primarily because the banks were likely unaware of these clearing events but also because the datasets used by most banks for agriculture emissions have never included emissions from deforestation.

The banks' agriculture sector financed emissions reporting relies on datasets from Australia's National Greenhouse Accounts (NGA) for agriculture. For certain datasets produced by the Australian government, emissions from land-clearing are reported separately to agriculture emissions, and as a result most banks have simply left out substantial emissions from deforestation in Australia's agriculture sector.

While government is co-ordinating efforts with industry to improve on-farm emissions reporting, which should incorporate these emissions, Australia's largest banks cannot sit idly and continue to avoid measuring, reporting and acting on emissions from deforestation.

Australia's largest banks must fill in the emissions reporting gap from financed deforestation. To do this, they should:

1. **Assess their exposure to high-risk commodities and high-risk regions for deforestation** to focus efforts on measuring emissions for these customer segments

2. **Engage with agribusiness customers, data providers, research organisations and government to ensure emerging standards and tools for on-farm emissions reporting include land-use change** and can be used by financial institutions to assist with climate-related financial reporting.

The banks could address this issue by setting a strategy to eliminate financed deforestation and require customers to be deforestation-free to obtain finance. This would mitigate the need to report on financed emissions from deforestation and should be considered first in the mitigation hierarchy for tackling emissions from financed deforestation.

Koala *Photo*. moisseyev / iStock

Introduction

Deforestation in Australia is decimating one of our greatest natural assets in combatting climate change, our forests.

In the same instant carbon is released from a forest being bulldozed or burnt, an often-irreplaceable terrestrial carbon sink is lost, delivering a dual blow to the climate. Australia has a long history of deforestation, with more than half of Australia's forest and woodlands degraded or destroyed since the arrival of Europeans in the 1700s.[1]

Evidence shows that rates of deforestation remain concerningly high in New South Wales[2] and Queensland.[3] In recent data, 77% of land clearing in New South Wales was attributed to agriculture[4] and 86% of Queensland's clearing was attributed specifically to pasture expansion for livestock.[5]

In Australia, the clearing of forests for beef production is rapidly driving animal and plant species to extinction. It's also a significant contributor to Australia's greenhouse gas emissions. The scale of climate harm is somewhat obscured by the national and corporate emissions reporting on agriculture. The Australian government splits its National Greenhouse Accounts (NGA) emissions reporting into Agriculture and separately Land Use, Land Use Change and Forestry (LULUCF). The former was the source of 18.1% of domestic emissions for the year to March 2025, while the latter was a net carbon sink, reducing the total inventory by 16.7%.[6]

Hidden in the total LULUCF figure is 8.69 million tonnes of climate pollution emitted from the conversion of forests to agricultural land.[7] While this is likely a conservative estimate, it is still significant. If unmanaged these emissions will make it hard for Australia to meet its national reduction targets and for Australian agricultural companies and the banks that finance them to meet their own climate targets.

The hidden emissions from deforestation have been neglected by financial institutions despite emissions reporting guidance requiring this.

To date, ANZ (including Suncorp), NAB, Commbank or Westpac have only voluntarily reported on the emissions from their customers' operations – known as financed emissions. These disclosures have generally excluded the financed emissions from deforestation by agriculture sector customers. This is despite these emissions being in scope for financial institutions according to accepted guidance. This is an emissions reporting gap and one the banks must fill if they are to accurately understand the climate risk posed to their agribusiness customers and their entire lending portfolio.

While obtaining accurate emissions reporting directly from all agribusiness customers is not currently feasible, estimation methods are a starting point to understand the emissions exposure from this sector. The Australian Conservation Foundation (ACF) has applied one such method to estimate the emissions from cases of deforestation linked to the Big Four banks via loans through security on title.

As banks gain a fuller understanding of deforestation linked to their lending, the true extent of underreported emissions from deforestation will undoubtedly be higher than the conservative estimates applied in this analysis.

Emissions from deforestation linked to banks

Using data from ACF's 2024 crowd sourced investigations project, *ACF Investigates*, we collated data on clearing events by Big Four bank customers across Australia between 2020 and 2024.

We identified loans through security on title provided by ANZ (including Suncorp), NAB, Commbank and Westpac to customers with properties where deforestation occurred during this four-year period. In many cases these loans were obtained or re-issued just prior to land clearing occurring.

We selected a small sample of 77 properties and modelled the resulting carbon losses (carbon dioxide equivalents) from the land clearing using the Australian Government's Full Carbon Accounting Model (FullCAM), which is used to estimate Australia's national LULUCF emissions.[8]

The total figure for each bank over the four-year period is presented in the table below, as well as the number of clearing events used for the analysis. Further detail on the methodology is provided in the appendix.
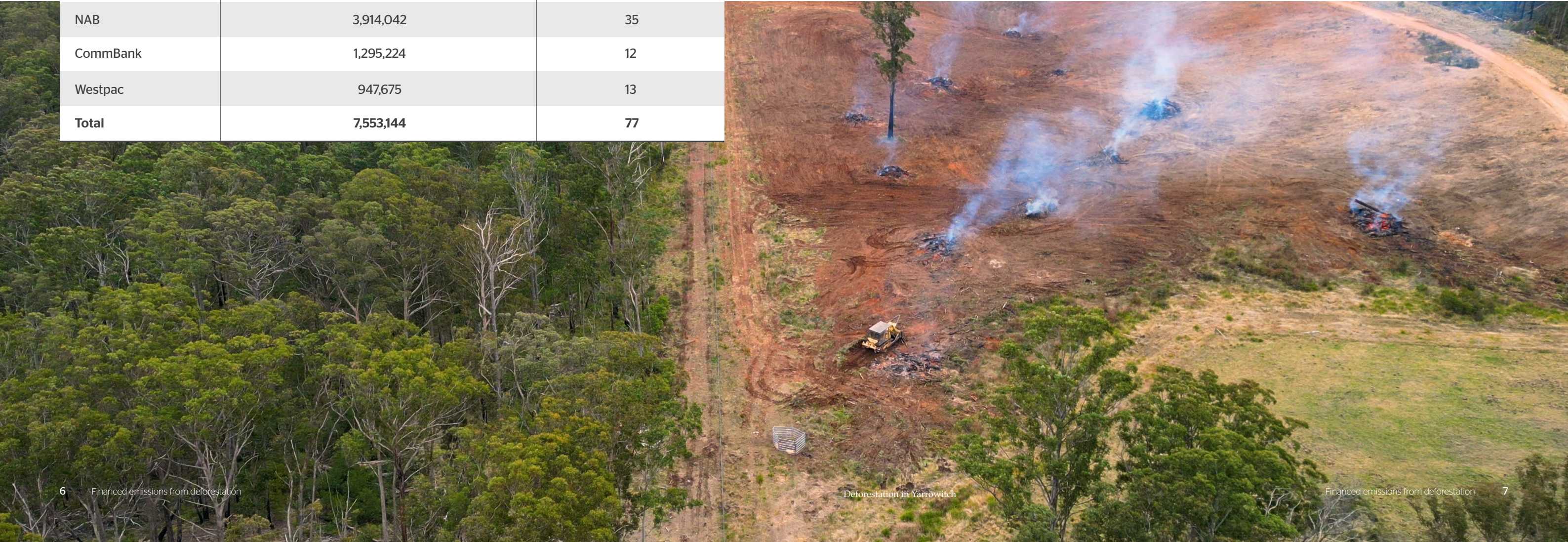
It's important to note these figures are not a calculation of financed emissions, which are generally attributed to a bank from the value of its loan proportional to a customer's total equity and debt. However, the millions of tonnes of carbon dioxide equivalents linked to the Big Four banks in this analysis shows the scale of emissions that are largely absent from the banks' reporting.

To illustrate, emissions linked to ANZ at 1.39 million tonnes CO_2-e (Mt CO_2-e) are marginally below ANZ's financed emissions reported for the agriculture sector over the last three reporting periods at 1.52 Mt CO_2-e.[9]

For NAB, an agribusiness specialist, the nearly four million tonnes of estimated emissions from deforestation eclipses the bank's estimated financed emissions for the entire agriculture sector from the past two years combined at 2.9 Mt CO_2-e.[10]

Furthermore, the clearing events collated for this analysis are just those identified by ACF through public data sources. We know from state-level data that deforestation is occurring to a much larger extent across Australia than what is covered in this report. For example, 332,015 hectares of woody vegetation was affected by clearing activity in Queensland from 2022-2023.[11] Contrastingly, our analysis assessed emissions for 19,286 hectares of clearing over a four-year period. Given the market share held by the Big Four banks in Australia, the figures reported above are the tip of the iceberg.

Bank lending to Australia's agriculture sector continues to grow[12] as does the imperative for financial institutions to measure, manage and reduce the emissions from deforestation to make sure their climate transition plans are credible.

Figure 1. Total carbon emissions from deforestation linked to Big Four

Bank	Tonnes of Carbon Dioxide Equivalents (tCO2-e)	Number of clearing events
ANZ (incl. Suncorp)	1,396,204	17
NAB	3,914,042	35
CommBank	1,295,224	12
Westpac	947,675	13
Total	**7,553,144**	**77**

Deforestation in Yarrowitch

Guidance for financial institutions on reporting emissions from deforestation

The GHG Protocol is the widely accepted source of credible sector frameworks to measure greenhouse gas emissions.

As such, it is the prescribed emissions standard under Australia's mandatory sustainability reporting regime. The GHG Protocol Agricultural Guidance lists CO2 emissions from land-use change as a required Scope 1 emissions source.[13] Importantly, land-use change emissions include emissions from deforestation as well as other kinds of land-use change, such as conversion of natural ecosystems to agricultural land.

The Partnership for Carbon Accounting Financials (PCAF) is built on the GHG protocol and utilised by the Big Four banks as a standardised approach to financed emissions reporting. PCAF's Global GHG Accounting and Reporting Standard for the Financial Services Industry requires banks and other financial institutions to report on their Scope 3 Category 15 emissions, commonly known as financed emissions. These are the attributable Scope 1 and Scope 2 emissions of customers financed by a bank, such as through loans or project finance.[14]

Despite this, many companies with deforestation in their value chains, including financial institutions, have not prioritised the measurement and disclosure of these emissions.

> **Emissions from land-use change are therefore in scope for banks' reporting of financed emissions from agriculture sector customers.**

This is problematic for financial institutions in Australia given the impending risk of failure to report on Scope 3 emissions mandated under climate-related financial reporting in Australia. The Australian Accounting Standards Board's (AASB) AASB S2 Climate-related disclosure is effective now for the Big Four and will be reflected in FY26 reporting. In providing an overview of the requirements for Scope 3,[15] the AASB has stated that:

- An entity is required to use all reasonable and supportable information that is available at the reporting date without undue cost or effort when selecting the measurement approach, inputs and assumptions used in measuring its Scope 3 GHG emissions.

- An entity's measurement of Scope 3 GHG emissions is expected to include the use of estimation.

- An entity should prioritise inputs (such as data from specific activities in the value chain) that are most likely to enable a faithful representation of the measurement of the entity's Scope 3 GHG emissions.

These requirements reinforce the need for financial institutions to make reasonable efforts to explore options to report on emissions from deforestation.

Risks arising from non-compliance will likely increase after the concessions given to Group 1 entities around assurance are phased out, with limited assurance from year two and reasonable assurance from year four.[16] Companies that do not meet best practice standards will be exposed, leading to regulatory intervention from the Australian Securities and Investment Commission (ASIC) or litigation from other parties.

Beyond the matter of compliance, the climate-related and nature-related risks facing banks and their customers from agriculture emissions are significant, including credit risk, reputational and systemic risk from nature's decline and global warming. Where no attempt is made to measure and tackle emissions from deforestation, these risks cannot be managed effectively.

Big Four bank approaches to estimating agriculture sector financed emissions

Notwithstanding the accepted emissions reporting guidance, our understanding is that only one of the below estimated figures for financed emissions from agriculture by the Big Four include emissions from land-use change. ANZ are the only bank that use a dataset from Australia's NGA emissions estimates that attributes a portion of national LULUCF emissions to the agriculture sector. This top-down approach does not consider the bank's exposures to different deforestation-linked commodities or regions. The approach used by the other banks to estimate financed emissions do not appear to include emissions from land-use change given LULUCF emissions are reported separately to agriculture in the datasets they use.

> **For example, in its 2025 Climate Report, NAB refers to the below formula to estimate emissions:**
> **Paris Agreement inventory emissions = national sector total * Farms with debt (%) * NAB market share * average debt/equity ratio)**

The most recent financed emissions figures from each bank's climate or sustainability reports are provided below. Their exposure to the agriculture sector is also displayed, for which different metrics are reported by each bank.

Figure 2. Most recent Big Four reporting of financed emissions from agriculture

	ANZ	Commonwealth Bank	nab	Westpac
Agriculture sector financed emissions (MtCO2e)	0.7* (CY23)	1.9 (FY24)	1.5 (FY24)	5.7** (FY24)
Source	ANZ ESG Data Pack	CBA 2025 Climate Report	NAB 2025 Climate Report	WBC 2025 Sustainability Report
PCAF score[i]	Not provided	5	5	4.1
Inclusive of land-use change	Yes	No	No	No
Exposure to agriculture sector	3.5% Outstanding Lending	1.8% In-Scope Drawn Lending	5.9% Exposure at Default	1.9% In-Scope Drawn Lending

*For 'Total Australian Lending Portfolio' excluding Suncorp   **Inclusive of forestry and fishing
[i]PCAF guidance includes a data quality scoring approach ranging from 1 (highest quality) to 5 (lowest quality).

While NAB and ANZ produce their estimate by attributing a proportion of Australia's total agriculture sector emissions, Commbank and Westpac use commodity-based emissions factors which may better reflect actual emissions exposure. However, what is consistent across each of these banks is the absence or underestimation of emissions from land-use change in their estimates.

How can Australia's agriculture emissions data be improved?

Scattered efforts to improve the accuracy of emissions reporting from the Australian agriculture sector have meant stakeholders, including banks, are still highly reliant on NGA estimates.

These estimates have attracted scrutiny in the past due to inconsistencies with state-level data[17] and frequent revisions that improve the outlook for Australia achieving its near-term emissions reduction targets.[18]

To improve the accuracy of emissions reporting, the Australian Government committed in the 2024-25 budget to develop voluntary emissions estimation and reporting standards for the Agriculture, Fisheries and Forestry (AFF) sectors, and incorporate these into calculators and tools for farmers. This is a foundational area for Australia's Agriculture and Land Sector Plan to reach net zero in this sector.[19]

The standards are currently in development, with a reference group consisting of representatives from industry, research organisations, government and the finance sector, including Commbank and Rabobank. The first iteration of the standards is proposed to include 'carbon stock changes in woody biomass due to land clearing, planting or regeneration, farm or plantation forestry and savanna fire management' and 'soil organic carbon (SOC) losses from land clearing'.[20]

The banks should engage, and in the case of Commbank continue to engage, with this process to ensure the standards and associated tools are accessible for financial institutions given their need to understand and verify financed emissions reporting from farmers in the future.

Crops under irrigation at Kununurra *Photo.* JohnCarnemolla / iStock

How could the banks address this emissions gap?

The GHG Protocol is set to release its Land Sector and Removals Guidance (LSRG) imminently which will provide more detailed standards for Agriculture companies to use in measuring land-based emissions.

Large companies, with significant resources focussed on climate reporting may gradually integrate this guidance, but many bank customers will not have the capacity to do so.

Considering this alongside the fact that mandatory climate-related financial reporting is now phased in, and the mounting risks from deforestation that each bank has acknowledged in disclosure, the Big Four should be proactively taking steps to measure financed emissions from deforestation.

A potential first step in developing this capability would be to conduct a comprehensive analysis of deforestation exposure from finance provided to the agriculture sector. An assessment of exposure to high-risk commodities and high-risk regions for deforestation in Australia would allow banks to focus on measuring emissions for the segment of customers where deforestation is known to be occurring.

To conduct such an assessment, the banks would need be able to map the boundaries of customer properties using geospatial data and tools. The Big Four have all disclosed that they have access to some form of geospatial analysis, with Westpac and NAB's capabilities seemingly the most advanced. Their geospatial data and tools could be used to periodically identify clearing events through changes to forest extent throughout an emissions reporting period. These events could be investigated through customer engagement to confirm if deforestation had occurred or not and then modelled following a similar method to the one used by ACF in this report.

The resources required for this work would be small relative to the costs for each bank should they fail to comprehend their actual emissions exposure. If an environmental organisation, with a fraction of the resources available to a large financial institution, can produce these emissions estimates, the Big Four should be capable of conducting this work and disclosing emissions from deforestation.

There is no indication from public disclosure that any Big Four bank is seeking to address this financed emissions gap at present.

These banks could also utilise their significant resources to support their agribusiness customers through investment in tools to assess on-farm emissions, including from land-use change. While Commbank is trialling a tool to assist customer reporting on agricultural emissions, this does not include an estimate of emissions from land clearing.[21]

The Big Four banks could otherwise mitigate the need to expend resources on emissions measurement by committing to a strategy to eliminate financed deforestation. If a bank sets deforestation-free standards for its provision of finance and could ensure customer compliance, the bank's financed emissions from deforestation would be zero from the year the commitment begins.

Conclusion and next steps for banks

Deforestation by bank customers and the associated planet-warming emissions can no longer be ignored by the Big Four banks. Financed emissions reporting for the agriculture sector that does not include land-use change is simply incomplete.

Australia's largest banks must fill in the emissions reporting gap from financed deforestation. To do this, they should:

1. **Assess their exposure to high-risk commodities and high-risk regions for deforestation** to focus efforts on measuring emissions for these customer segments.

2. **Engage with agribusiness customers, data providers, research organisations and government to ensure emerging standards and tools for on-farm emissions reporting include land-use change** and can be used by financial institutions to assist with climate-related financial reporting.

Banks could address this issue by setting a strategy to eliminate financed deforestation and successfully enforcing a requirement that customers must be deforestation-free to obtain finance. This would mitigate the need to report on financed emissions from deforestation at all and should be considered first in the mitigation hierarchy for tackling emissions from financed deforestation.

Mallee landclearing

Appendices

1. Methodology

To estimate emissions from land clearing, we modelled changes in total ecosystem carbon using the Australian Government's FullCAM model. Each site was simulated from 1 January 1930 to allow forests and woodlands to reach a near-equilibrium state before clearing began.

Clearing events were introduced using the "Initial clearing: No product delivery" setting, which assumes all biomass remains on site and decomposes over time rather than being removed or processed. This represents a conservative, internally consistent way to estimate committed on-site ecosystem emissions under an "all debris left to decay" scenario.

Initial and secondary tree species were chosen on a case-by-case basis by determining the state mapped vegetation and using the associated vegetation description to create an accurate representation of the cleared forests.

Simulations were extended to at least clearing_end + 100 years, or until the model reached convergence (defined as a change in C mass complete < 0.1 tC/ha over the previous decade, with a minimum extension of 80 years). We then used the 10-year mean at the end of the run as the post-clearing value for comparison against the pre-clearing equilibrium.

Reported results reflect the loss of total ecosystem carbon stocks (C mass complete, tC/ha) within each clearing footprint. These values capture the combined carbon stored in living biomass, deadwood, litter, and soil organic matter. Because the "no product delivery" assumption leaves all material to decay on site, it slightly underestimates total emissions, as real-world clearing often involves burning or off-site removal that releases carbon more rapidly. Where operational evidence indicated such activities, a post-processing adjustment was applied to re-time a portion of emissions.

Once the net change in total ecosystem carbon stocks was determined, the figures were converted to their carbon dioxide equivalents (tCO2-e/ha). Finally, to determine the total carbon dioxide equivalents emitted from each clearing event, the aforementioned figure was multiplied with the number of hectares cleared at each site.

Overall, the results represent conservative lower-bound estimates of total clearing emissions.

While this analysis provides a consistent, conservative estimate of emissions from land clearing, several caveats apply, including the following:

Fire history: Fires prior to clearing were **not included** in the simulation setup unless specifically identified in the CSI 2024 dataset. All cases were modelled as **remnant forests** unless known to be regrowth. In cases confirmed as regrowth, an earlier clearing event was added to simulate the recovery period leading up to the most recent clearing.

As a result, locations such as the **Northern Territory**, where fire is a more frequent disturbance, may have **lower actual emissions** than modelled here, since our analysis assumes forests were intact, remnant, and unaffected by prior burns.

Model assumptions: FullCAM's "no product delivery" setting assumes all cleared biomass decomposes on site. In practice, much of this material is **burned or removed off-site**, releasing carbon faster. Therefore, our results should be interpreted as a **lower-bound estimate of total committed emissions** rather than an exact measure of immediate atmospheric release.

Vegetation mapping: Vegetation types were interpreted from the best available state datasets (e.g. *QLD Globe, NSW SEED, NT Natural Resources Map, WA Locate V5*). While these tools provide detailed information, inconsistencies between jurisdictions and differences in classification systems may introduce **minor uncertainty** in species composition and biomass estimates.

Temporal resolution: Simulations ran from 1930 to at least 100 years beyond the clearing event, capturing long-term soil and litter carbon dynamics. However, real-world carbon responses can vary due to **climate variability, site disturbance, and post-clearing land-use**, which are not explicitly modelled here.

Convergence threshold: The model was assumed to have reached post-clearing equilibrium when the change in *C mass complete* fell below 0.1 tC/ha over the preceding decade. While this is a widely accepted threshold, small ongoing changes in soil carbon could continue beyond this horizon.

Footnotes

[1] Bradshaw, C.J.A. *Little left to lose: deforestation and forest degradation in Australia since European colonization.* Journal of Plant Ecology 5, no. 1 (2012):109–120. Available online at: https://academic.oup.com/jpe/article/5/1/109/1294916

[2] WWF Australia (2025), *Disturbing 40% Jump in NSW Land Clearing.* Available online at: https://wwf.org.au/news/2025/disturbing-40-jump-in-nsw-land-clearing

[3] Queensland Government (2025). *2022-23 SLATS Report Key findings.* Available online at: https://www.qld.gov.au/environment/land/management/mapping/statewide-monitoring/slats/slats-reports/2022-23-slats-report/key-findings

[4] NSW Government (2025). *SLATS Dashboard.* Available online at: https://www.seed.nsw.gov.au/slats-dashboard

[5] Queensland Government (2025). 2022-23 *SLATS Report Key findings.* Available online at: https://www.qld.gov.au/environment/land/management/mapping/statewide-monitoring/slats/slats-reports/2022-23-slats-report/key-findings

[6] Department of Climate Change, Energy, the Environment and Water (2025). *Quarterly Update of Australia's National Greenhouse Gas Inventory: March 2025.* Available online at: https://www.dcceew.gov.au/sites/default/files/documents/quarterly-update-australia-national-greenhouse-gas-inventory-march-2025.pdf

[7] Department of Climate Change, Energy, the Environment and Water (2025). *Quarterly Update of Australia's National Greenhouse Gas Inventory: Figures and Tables for the March Quarter 2025.* Available online at: nggi-quarterly-update-march-2025-data-sources.xlsx

[8] Department of Climate Change, Energy, the Environment and Water (2025). *Australian National Greenhouse Accounts Factors.* Available online at: https://www.dcceew.gov.au/sites/default/files/documents/national-greenhouse-account-factors-2025.pdf

[9] ANZ Group (2025), *ANZ ESG Data Pack.* Available online at: https://www.anz.com/content/dam/anzcomau/about-us/anz-2025-esg-data-frameworks-pack.xlsx

[10] https://www.nab.com.au/content/dam/nab/documents/reports/corporate/2024-climate-report.pdf

[11] Queensland Government (2025). *2022-23 SLATS Report Key findings.* Available online at: https://www.qld.gov.au/environment/land/management/mapping/statewide-monitoring/slats/slats-reports/2022-23-slats-report/key-findings

[12] Department of Agriculture, Fisheries and Forestry (2025), *Trends in farm debt: Agricultural lending data 2023–24.* Available online at: https://daff.ent.sirsidynix.net.au/client/en_AU/search/asset/1037221/0

[13] Greenhouse Gas Protocol (2022), *GHG Protocol Agricultural Guidance.* Available online atL https://ghgprotocol.org/sites/default/files/2022-12/GHG%20Protocol%20Agricultural%20Guidance%20%28April%2026%29_0.pdf

[14] Greenhouse Gas Protocol (2011), *Corporate Value Chain (Scope 3) Accounting and Reporting Standard.* Available online at: https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporing-Standard_041613_2.pdf

[15] Australian Accounting Standards Board (2025), *Overview of ASRS.* Available online at: https://aasb.gov.au/media/xpilzp2e/overviewofasrs_04-25.pdf

[16] Grant Thornton (2025), *Final phasing for mandatory sustainability assurance released.* Available online at: https://www.grantthornton.com.au/insights/blogs/final-phasing-for-mandatory-sustainability-assurance-released/

[17] Australian Institute (2007) *The National Greenhouse Accounts and Land Clearing: Do the numbers stack up?* Available online at: https://australiainstitute.org.au/wp-content/uploads/2020/12/WP93_8.pdf

[18] K. Joshi (2024), *Australia's land-use emissions data revisions are an engine of climate delay.* Available online at: https://ketanjoshi.co/2024/06/02/australias-land-use-emissions-data-revisions-are-an-engine-of-climate-delay/

[19] Department of Agriculture, Fisheries and Forestry (2025), *Agriculture and Land Sector Plan.* Available online at: https://www.agriculture.gov.au/agriculture-land/farm-food-drought/climatechange/ag-and-land-sector-plan

[20] Department of Climate Change, Energy, the Environment and Water (2025), *GHG Standards Reference Group meeting 6 Communique.* Available online at: https://www.dcceew.gov.au/sites/default/files/documents/ghg-standards-reference-group-meeting-6-communique.pdf

[21] Commonwealth Bank of Australia (2025), *2025 Annual Report.* Available online at: https://www.commbank.com.au/content/dam/commbank-assets/investors/docs/results/fy25/2025-annual-report.pdf

Deforestation in Nandewar Armidale

Nature needs us, now 🌱

60 YEARS AUSTRALIAN CONSERVATION FOUNDATION | Nature needs us, now