Assessed Emissions of the Group's Business Lending Portfolio – FY18

As a major provider of lending services, the Commonwealth Bank plays a crucial role in supporting economic and social development. We recognise the role we play in addressing the challenge of climate change and in transitioning to a low carbon economy. The projects and industries we lend to have environmental impacts, and in accordance with our Environmental, Social and Governance Lending Commitments, we are committed to measuring and mitigating the impacts. As a result, we continue to assess the emissions arising from our business lending. These insights provide us with a robust quantitative basis to identify and act upon key opportunities to reduce the emissions of our business lending portfolio.

In this fifth iteration of assessment, the emissions intensity of the overall CBA business lending portfolio has continued its downward trend, and has decreased 7.4% from the previous year to 0.26kgCO₂-e/\$AUD of expenditure. This movement in emissions intensity has been experienced across the majority of sectors in FY18. The Agriculture, Forestry and Fishing and Electricity, Gas & Water Supply sectors continue to represent the most emissions intensive part of the CBA lending portfolio.

The Electricity, Gas & Water Supply sector shows a general downward trend over the past 5 years (see Figure 1). The discontinuation of a number of high emissions intensity exposures contributed to this result in FY18. CBA's exposure to renewables also increased 33% to \$3.7b in FY18. However, a portion of CBA's renewables exposure included projects under construction, which are typically initially more emissions intensive than operational renewable electricity assets.

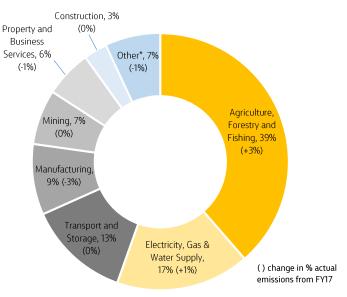
Figure 1.

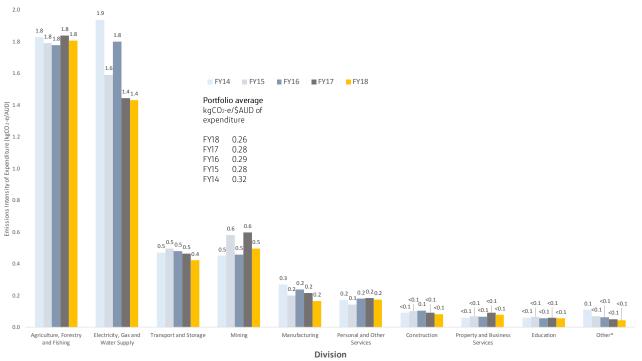
CBA Group Business Lending – Emissions Intensity of Expenditure (kgCO₂-e/\$AUD)

CBA's emissions profile (see Figure 2) shows the industry sectors that account for the majority of CBA's emissions arising from business lending. The Agriculture, Electricity, Transport, Manufacturing and Mining sectors account for approximately 85% of business lending portfolio emissions.

Figure 2.

CBA Group Business Lending – % of actual emissions in each sector (FY18)





^{*} Other (Figure 1) includes Wholesale Trade; Retail Trade; Accommodation, Cafes and Restaurants; Communication Services; Health and Community Services; and Cultural and Recreational Services. Other (Figure 2) includes all of Other (Figure 1), plus Education; and Personal and Other Services.

Weighted Average Emissions Intensity of Expenditure includes a double count of electricity Scope 1 emissions across sectors.

Sector classifications defined by ANZSIC main business activity.

The financed emissions analysis was conducted by EY, as informed by the principles set out in the GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

Financed emissions method

In estimating the emissions arising from its lending activities, the Group used client-specific emissions where available, and modelled sector-specific emissions intensity data for its remaining lending exposures.

Client-Specific Emissions - The Group focussed on identifying client-specific emissions for those clients to which the Group has a material exposure, and for emissions-intensive industry sectors. Emissions data were sourced from the Australian National Greenhouse and Energy Reporting scheme, the Australian National Greenhouse Gas Inventory, publicly available reports and other company disclosures and known performance measures. The proportion of CBA debt exposure for which client-specific emissions data was available differed by sector.

Sector-Specific Average Emissions – For each Australian and New Zealand Standard Industrial Classification (ANZSIC) code at the class level, an emissions intensity value was derived. This was calculated based on the emissions intensity of expenditure in the sector, through the use of the Eora multi-regional input-output model, owned by KGM & Associates. Input-output models use national economic data to model financial (and other) flows within the economy. The Eora model also includes country-specific emissions data to determine an emission intensity value at each ANZSIC class level. Our analysis utilised country-specific data for Australia, New Zealand and the United States of America, and region-specific data for Europe and Asia. Where clients were domiciled in countries other than these, Australia-specific intensity data was used.

Construction emissions - Where the Group's exposure is to a client engaged in construction activities (e.g. constructing a wind farm, road, LNG export facility, etc.), the results are based on the emissions arising from the construction activity itself, rather than the emissions arising from the ongoing operation of the facility or sector. Construction emissions were obtained from client publications (e.g. environmental impact statement), peer review publications (e.g. the Intergovernmental Panel on Climate Change), or were based on sector-specific average emissions for construction.

Allocation of emissions to the Group

For larger entities, and where emissions and financial data were available, client emissions were allocated in proportion to the Group's June 2018 debt exposure to the client, as a percentage of the client's total enterprise value (debt plus equity).

- The Group's debt exposure is defined as the committed exposure of the bank to the client, less adjustments for derivative exposures (which were not included in the debt exposure). This data includes CBA, ASB and Bankwest.
- Total enterprise value was calculated using the equity, and current and non-current borrowings, reported on the balance sheet and through available financial databases.

For construction activities, emissions were amortised over the period
of construction, with the annualised construction emissions allocated
to the Group on the basis of Group exposure to the client as a
proportion of client enterprise value (or if not available, the total
capital costs of the construction).

For other clients where emissions or financial data were not available, a debt-to-expenditure relationship was developed to relate the Eora emissions intensity of expenditure data to the CBA debt exposure data. This was carried out by using data from IBISWorld to establish average debt-to-expenditure relationships for key sectors, and across the economy. This dataset was supplemented with additional data obtained by CBA for high-emissions sectors; however, as publicly available information was utilised, there were different levels of data availability for different sectors. Agriculture in particular had a very low level of data availability. In this case, the debt-to-expenditure relationship was estimated using data from the FY18 Australian Agricultural and Grazing Industries Survey (AAGIS) and the FY18 Australian Dairy Industry Survey (ADIS).

Measures

 $kgCO_2e/$AUD$ expenditure: Emissions allocated to CBA per dollar of client expenditure. Client expenditure is the sum of capital and operating expenditure as reported or derived from financial databases.

Percentage of total portfolio emissions: CBA's allocated emissions for key sectors as a proportion of total estimated emissions.

Limitations and estimation

Each client loan is assigned to an ANZSIC code based on the main business activity of the client. As such, client-specific emissions and sector-specific emissions are applied against the entity's total financial data and are not further broken down, for example, by relative percentage contribution of products or services (which could sit within different ANZSIC codes). There were some cases where Group clients were not assigned to a specific ANZSIC code. An uplift amount has been applied to emissions arising from these clients, based on a weighted average emissions intensity of the total Group portfolio. Debt exposure to the Finance and Government ANZSIC divisions was excluded from the analysis

Eora sector-specific emissions intensity values are inclusive of both Scope 1 and Scope 2 emissions. As such, the Scope 1 emissions created by the electricity generation sector are included in the total Scope 2 emissions across all other sectors. In order to fairly present emissions arising within each sector, we have included this 'double-count' within our reporting.