Financed emissions methodology

NAB Group selected customer segments based on the following criteria for its initial attributable financed emissions estimate:

- Materiality of sectoral financing/exposure as a % of NAB Group Exposure at Default (EaD)
- Sectoral contribution to greenhouse gas (GHG) emissions
- Ready access to good quality company or industry level emissions data which can be applied in the emissions estimation methodology.

The industries selected for this Australian financed emissions estimate were agriculture, residential mortgages, commercial property (office and real estate), power generation and resources (coal, oil and gas) and represent 48.9% of the NAB Group’s EaD as at 31 August 2020.

NAB applied two approaches to estimating financed emissions based on the availability of data — (i) a bottom-up approach — based on individual company GHG data, and (ii) a top-down approach — based on industry level data where bottom-up information was unavailable.

Where individual company data was available (bottom-up approach), the NAB Group used customers’ reported emissions sourced from the National Greenhouse and Energy Reporting Act (NGER Act) was sourced from the Clean Energy Regulator under the NGER Determination applicable to the 2018-2019 reporting period (NGER Determination) and the National Greenhouse Accounts Factors (August 2019).

For customer segments where reported emissions were available, a bottom-up approach was applied, as described below.

Power generation and resources (including coal, oil and gas)

The Group estimated Australian emissions for power generation and resources based upon actual emissions reported to, and disclosed by, the Clean Energy Regulator under the NGER Act and the NGER Determination. These emissions were attributed to NAB Group in proportion to the Group’s EaD as at 31 August 2020 to the relevant customer as a percentage of that customer’s total listed market capitalisation as at 22 October 2020.

For unlisted companies or special purpose vehicles where market capitalisation was not available, the Group’s share of the global facility limit as at 31 August 2020 (measured as total committed exposure) was used to attribute the proportion of financed emissions.

Using this approach:

- 50% of NAB Group’s power generation customers in Australia had reported NGER emissions and company valuations to allow calculation of estimated financed emissions attributable to the Group.
- 56% of NAB Group’s resources customers (including coal, oil and gas) in Australia had reported NGER emissions and company valuations to allow calculation of estimated financed emissions attributable to the Group.

For the balance of power generation and resources customers, where the NGER emissions, market capitalisation or global facility limits were unavailable these were excluded from the assessment.

Commercial real estate (office and retail)

NAB Group calculated emissions for commercial real estate (office and retail) based upon actual reported emissions under the Commercial Building Disclosure Program for the period to 30 June 2019.

Where commercial real estate (office and retail) emissions were not available for financed buildings, an average state NABERS emissions intensity factor per sqm was sourced from the National Australian Built Environment Rating System (NABERS), and emissions were calculated from the building area to estimate emissions for the remaining 28% of commercial real estate (office and retail) exposures. These emissions were attributed to the Group in proportion to NAB Group’s EaD as a share of the relevant global facility limit as at 31 August 2020.

Using this approach, 100% of emissions associated with Australian commercial real estate (office and retail) were covered. For customer segments where reported emissions were not available, a top-down approach was applied, as described below.

Residential mortgages

The NAB Group estimated the GHG emissions for the residential mortgages for all states and territories in Australia by applying an average GHG intensity factor per dwelling to the number of dwellings financed by the Group in each state and territory.

As a financial institution is often the only provider of a mortgage, the Group attributed the emissions estimated per dwelling to itself in alignment with the Partnership for Carbon Accounting Financials (PCAF) framework. For this reason, a loan to valuation ratio was not applied.

The steps taken to estimate attributable emissions associated with residential mortgages were as follows:

- Total state and territory based residential energy consumption figures (gas and electricity) were sourced for the residential sector in each state and territory as disclosed in Table F of the Australian Energy Statistics – Australian Energy Update 2020.

Customer’s reported emissions

NAB Group focused on identifying customers’ reported GHG emissions in the industry segments selected for the attributable financed emissions estimate. Australian GHG emissions data (corporate emissions and energy data and designated generation facility data) reported under the National Greenhouse and Energy Reporting Act (NGER Act) was sourced from the Clean Energy Regulator’s website as applicable. Other emissions sources used for the NAB Group’s Australian financed emissions estimate included the National Inventory, the Commercial Building Disclosure Program, publicly available company reports and customer GHG emissions disclosures. Relevant emissions factors were sourced from the NGER Determination applicable to the 2018-2019 reporting period (NGER Determination) and the National Greenhouse Accounts Factors (August 2019).

For customer segments where reported emissions were available, a top-down approach was applied, as described below.

A more detailed description of the methodology applied to NAB Group’s attributable financed emissions estimate is set out below.
• State and territory electricity and natural gas emissions factors were sourced from the National Greenhouse Accounts Factors (August 2019).
• Total state and territory based residential GHG emissions were then calculated by applying the emissions factors to total residential energy consumption.
• The total 2020 number of dwellings for each state and territory was estimated by applying a correction factor of 5% to the number of dwellings reported by the Australian Bureau of Statistics (ABS) from the 2016 ABS census based on population growth per state and territory.
• The total emissions for each state and territory were then divided by the estimated number of dwellings per state and territory to provide an estimate emissions per dwelling figure for each state and territory.
• The emissions per dwelling for each state and territory were then multiplied by the total number of the Group mortgages for each state and territory to estimate the attributable financed emissions relevant to the Group’s Australian residential mortgages by state or territory.
• The state and territory GHG dwelling-related emissions totals attributable to the Group’s financing were then aggregated to provide a total figure attributable to the Group’s Australian residential mortgage portfolio.

Using this approach, 100% of emissions for Australian residential mortgages associated with NAB Group were covered.

Agriculture
Agricultural data availability was low compared to other sectors. NAB Group developed a top-down approach to estimating its attributable financed emissions from agriculture. The Group will work to refine this approach in future estimates as data availability and quality improves.

The Group estimated emissions associated with its agribusiness customers by attributing NAB Group with a share of 2018 total emissions disclosed in the National Inventory by Economic Sector relative to the Group’s market share for agriculture.

To support this approach, the Group applied an average debt-to-equity ratio of 11.2% provided in the survey data published under the Australian Bureau of Agricultural and Resource Economics and Sciences to attribute the Group’s share of total sectoral-based emissions relative to EaD.

Financed emissions were estimated for the following Australian agricultural sub-sectors: aquaculture, livestock (sheep, beef, poultry, pigs, and dairy), grains, cotton, cropping, horticulture, sugarcane and forestry.

As there was some uncertainty with respect to the estimation of dairy emissions, the NAB Group took a conservative approach and uplifted total emissions by 12% to ensure adequate coverage of dairy sector emissions. The Group’s estimate of emissions associated with dairy exposures (at EaD) was based on the following approach:
• Identifying total Australian dairy emissions from Dairy Australia’s survey (FY17 Australian Dairy Industry Survey (ADIS));
• Dividing the Dairy Australia sectoral emissions estimate by the number of dairy farms to get a per farm emissions figure; and
• Multiplying the per farm emissions figure by the number of dairy customers with lending provided by the NAB Group.

Using this approach, 100% of emissions for Australian agriculture associated with the NAB Group were covered.

Description of the disclosed emissions intensity ratio (EaD/tCO2-e)
Total EaD as at 31 August 2020 for all customers in the industries selected by the Group (as set out above) with tCO2-e for the period 1 July 2018 to 30 June 2019 was disclosed.

Customer EaD includes:
• Any on-balance sheet loans and lines of credit with unknown use of proceeds to businesses, non-profits, and any other structure of organisation.
• Revolving credit and overdraft facilities and business loans secured by real estate, such as commercial real estate-secured lines of credit.
• Business loans, short-term debt and line of credit.

Percentage of total attributable portfolio GHG emissions
The Group’s estimated attributable emissions for selected industry segments as a proportion of total estimated emissions per segment have been attributed to NAB Group based on a ratio of EaD (numerator) to equity or market valuation (denominator) – or in the case of project finance – to the Group’s share (as a percentage of committed funds) of the relevant global facility limit.

Overall limitations and assumptions
• Each customer is assigned an ANZSIC code based on their primary business activity. As such, estimated customer emissions and sector-specific emissions estimates are applied to each customer’s EaD with the assumption that the emissions are 100% attributable to the assigned primary business activity.
• Actual emissions and emissions intensity values are inclusive of both Scope 1 and Scope 2 emissions. As such, the Scope 1 emissions created by the power generation sector are included in the total Scope 2 emissions for all other sectors. In order to fairly present emissions arising within each sector, the NAB Group has included this ‘double-count’ within its attributable emissions estimate.

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