

AN ASSESSMENT OF ENERGY AND EMISSIONS PERFORMANCE AT TEACHERS MUTUAL BANK LIMITED

SEPTEMBER 2021



Overview

Teachers Mutual Bank Limited, which includes Teachers Mutual Bank, Firefighters Mutual Bank, Health Professionals Bank, and UniBank, has invested significantly over the past six years in improving its environmental performance.

Each year the Bank undertakes an accounting of its environmental and greenhouse gas (GHG) data. This report provides an assessment of the environmental credentials of the Bank, with a focus on Scope 1 and 2 (electricity, gas and fuel use) GHG emissions performance and emissions reduction measures between FY 2016 – FY 2021.

Highlights

- In the six years between FY 2016 and FY 2021, Teachers Mutual Bank Limited (TMBL) has grown considerably:
 - + Total assets have increased from \$5.5 billion to \$9.7 billion (+76%)
 - + Members have increased from approx. 177,000 to 221,000 (+24%)
 - + Employees have increased from 461 FTE to 567 FTE (+23%)
 - + The number of offices occupied have doubled from 6 to 12
- Over this period, TMBL has reduced its annual Scope 1 and 2 GHG emissions by nearly
 1000 tCO₂-e, from 2,093 tCO₂-e in FY 2016 to 1,108 in FY 2021, a 47% reduction.
- Given the increased size and activity at TMBL, this means a significant reduction in emissions intensity over time:
 - + In terms of assets, the Bank's emissions intensity reduced by 70% from 0.38 to 0.11 tCO₂-e per million \$ of assets
 - + In terms of employee FTE, the Bank's emissions intensity reduced by 57% from 4.54 to 1.95 tCO₂-e per FTE
- The majority (88%) of TMBL's Scope 1 and 2 emissions are from electricity consumption at its offices, and the remainder are from employee vehicle use and natural gas consumption.
- Since FY 2016, TMBL has invested \$850,000 in emissions reduction measures at its buildings and these have contributed to reductions and avoidance of emissions.
 - + 67% (\$570k) of total expenditure has been on solar PV and LED installations
 - + \$300k to upgrade lighting in all owned offices with 3,000+ energy efficient LED lamps
 - + \$270k to install 641 solar PV panels in all of its owned offices, which have generated approx. 18% of the Bank's total electricity consumption
 - + Purchase of 2 Kia electric vehicles in FY 2021 for \$135k
 - + Commissioning of a new Building Management System at two of its largest offices to better manage energy consumption
- Given the Bank's growth in offices and employee numbers, emissions would have increased even more in a BAU scenario without these measures
- The Bank offsets its remaining GHG emissions and has been a net zero and carbon neutral bank for all Scope 1 and 2 emissions (electricity and fuel use) since 2012.
 - + 100% of electricity used by the Bank is sourced from renewable energy and all carbon offsets are purchased from an accredited provider.



Table 1 - Summary of Bank's performance over the six years

			% change between
Metric	FY 2016	FY 2021	FY 16 – FY 21
Bank's assets (\$ million)	\$5,543	\$9,750	+ 76%
Number of staff at the Bank (FTE)	461	567	+ 23%
Number of offices	6	12	+100%
Scope 1 and 2 GHG emissions (tCO2-e / \$ million)	2,056	1,108	- 47%
Emissions intensity, by assets (tCO2-e / \$ million)	0.38	0.11	- 70%
Emissions intensity, by staff numbers (tCO2-e / FTE)	4.54	1.95	- 57%

Emissions calculations

Teachers Mutual Bank Ltd's emissions footprint is created through Scope 1, Scope 2 and Scope 3 emissions:

- Scope 1 emissions are direct emissions generated through the consumption of natural gas in buildings and fuel use in staff vehicles.
- Scope 2 emissions are indirect emissions generated through the consumption of electricity in buildings owned or leased by the Bank.
- Scope 3 emissions are all other indirect GHG emissions generated from sources that are not owned or controlled by the Bank. For TMBL, this currently includes the emissions associated with the distribution of Scope 1 and 2 emissions (i.e. natural gas, electricity, vehicle fuel), employee air travel, waste and recycling, paper consumption, and water consumption.

This report considers the Scope 1 and 2 emissions generated by TMBL for the six-year period between FY 2016 and FY 2021, i.e. between July 2015 and June 2021.

This assessment is based on data provided directly by TMBL and its suppliers between August 2016 and August 2021. All emissions calculations are based on prevailing guidance from the <u>Department of Industry</u>, <u>Science</u>, <u>Energy and Resources</u> and <u>Environment Protection Authority Victoria</u>

Overall emissions

In FY 2021, the total GHG emissions for Teachers Mutual Bank Ltd were 1,108 tonnes CO₂-e.

This means that the Bank's annual GHG footprint is equivalent to just over 138 households¹.

The Bank's emissions have declined each year and the FY 2021 emissions are **985 tonnes or 47% lower than FY 2016**, when emissions were 2,056 tonnes CO₂-e.

The majority of emissions each year are generated from the buildings owned by the Bank across NSW, QLD, WA, VIC and the ACT. In FY 2021, emissions from buildings represented 91% of the Bank's emissions.



Figure 1 - Teachers Mutual Bank Ltd's GHG emissions for FY 2021, by source

¹ Based on an average household footprint in Australia of 8 tonnes in 2016, calculated using <u>this data on household GHG emissions</u> and <u>this data on number of households</u>



As can be seen in Figure 2, the Bank has reduced its overall emissions every year since FY 2016 at an average of 164 tonnes per year.

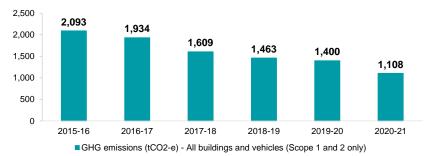


Figure 2 - Bank's Scope 1 and 2 GHG emissions between FY 2016 - FY 2021

The breakdown of emissions by source reveals the single largest declines were in energy consumption at buildings owned by TMBL in FY 2017 and vehicle fuel use in FY 2019.

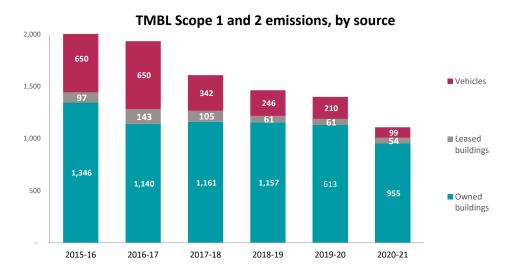


Figure 3 – Bank's Scope 1 and 2 GHG emissions between FY 2016 - FY 2021, by source²

These reductions were due to emissions reduction measures that are detailed in the next section.

Emissions reductions and offsets

Reduced and avoided emissions

The decline in the Bank's emissions reflects a series of emissions reduction measures undertaken by the Bank to reduce its footprint since FY 2016, most notably:

- 1. 641 Solar Photovoltaic (PV) panels installed on 5 owned offices with a total 216 kWp output³
- 2. Over 3,000 lights replaced with energy efficient LED lamps at all owned offices
- 3. The purchase of 2 Kia electric vehicles in FY 2021
- 4. The installation of a Building Management System at its Homebush and Parramatta offices to better manage and reduce energy usage associated with working hours

² It should be noted that accurate vehicle data was not available for FY 2020 so the previous year's figures were used.

³ In 2016, PV panels were installed at 4 buildings (Homebush, Rooty Hill, Parramatta, UniBank Perth). In 2018, solar PV panels were installed at a fifth building in Brisbane while the UniBank Perth building was sold in 2020.



5. The purchase of carbon credits annually from Verified Carbon Standard projects to offset the Bank's residual emissions⁴

In total, these measures represent an investment of \$850,000 over the past six years to reduce and offset GHG emissions generated by the Bank's energy use and travel.

Table 2 - Investment in emissions reduction measures and offsets since FY 2016

Reduction and offset measures	Total investment (\$)	% of total investment
LED replacements	\$299,778	35%
Solar panel installation	\$270,525	32%
Electric vehicles purchased	\$135,256	16%
New Building Management System	\$120,000	14%
Carbon offsets	\$25,000	3%
Total expenditure	\$850,559	100%

Two-thirds of the expenditure has been in LED replacements and solar panel installations while a further 30% has been in new electric vehicles and an improved building management system.

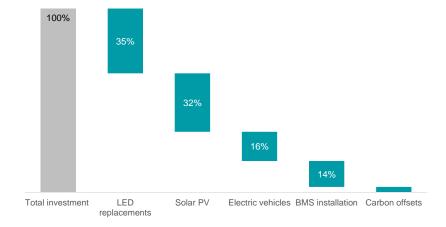


Figure 4 – Breakdown of emissions reduction and offset investment by the Bank between FY 2016 – FY 2021

In addition to these investments which can be quantified and linked to emissions reductions, the Bank has also pursued other measures that have indirectly reduced or avoided emissions:

- Procuring carbon neutral paper for most of its paper needs
- Switching staff vehicles to smaller cars, which reduces fuel consumption and associated GHG emissions, and reducing staff salary incentives for cars
- Upgrading the air-conditioning system at two of its main offices to improve energy efficiency

⁴ The Bank purchases accredited carbon offsets for its residual emissions annual and the most recent purchases have been renewable energy projects in India and Vietnam



Emissions intensity

It is common practice for organisations to track and report both their *absolute* emissions and their *relative* emissions over time. This enables an understanding of how emissions have changed in line with business activity and comparison across organisations of varying size and complexity. At an international level, for example, it is accepted practice for countries to use emissions per unit of GDP as an intensity metric. If GDP grows faster than emissions, this suggests that there are efficiency improvements in terms of emissions generated relative to economic activity.

TMBL's emissions reductions can be placed in context by considering the intensity of emissions, i.e. the rate of change in its emissions relative to change in business activity. The Bank uses its total assets as an emissions intensity metric (tCO₂-e per \$ million of assets). This includes all assets (e.g. cash, securities, loans, property, plant, etc.) owned by the Bank during the financial year and is a reflection of its size as an organisation.

Over the past six years, Teachers Mutual Bank has increased its assets each year while reducing emissions. Since FY 2016, Teachers Mutual Bank Ltd has increased total assets by 76% while reducing its underlying emissions by 47%.

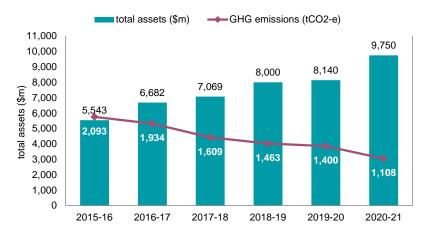


Figure 5 - Bank's Scope 1 and 2 GHG emissions compared to assets, by year

In other words, Teachers Mutual Bank Ltd has **more than halved its emissions intensity** from 0.38 to 0.11 tCO₂-e per million \$ of assets.

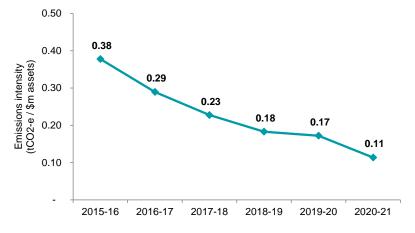


Figure 6 - GHG emissions intensity per assets, by year



Another way to look at the Bank's emissions intensity is to compare the change in emissions generated against the number of staff at the Bank. In this regard, the Bank's emissions intensity has also more than halved from 4.54 to 1.95 tCO₂-e per FTE.

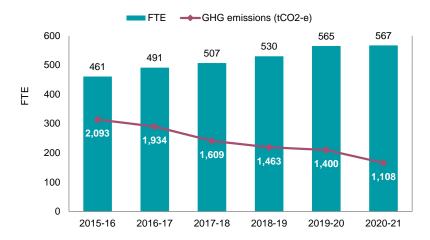


Figure 7 - Bank's Scope 1 and 2 GHG emissions compared to staff numbers (FTE), by year

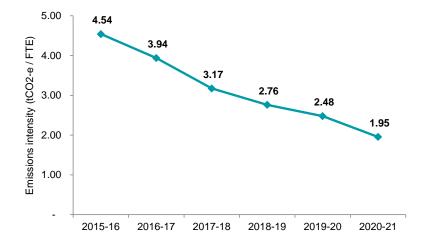


Figure 8 - GHG emissions intensity per FTE, by year

Report preparation

This report has been prepared by The Incus Group and is based on data provided to The Incus Group directly by Teachers Mutual Bank Ltd and data provided by its suppliers, Ilum-A-Lite and AGL. Teachers Mutual Bank Ltd includes Teachers Mutual Bank, Firefighters Mutual Bank, Health Professionals Bank, and UniBank.

All analyses were performed on data as made available by the Bank between August 2016 and August 2021 and no verification or audit of the underlying data was undertaken. The greenhouse gas emissions data reported here for Teachers Mutual Bank Ltd are based on calculations using best practice guidance from the <u>Department of Industry, Science, Energy and Resources</u> and <u>Environment Protection Authority Victoria</u>

This report was prepared in accordance with the scope of work agreed with Teachers Mutual Bank Ltd and is based on generally accepted practices and standards at the time it was prepared.

About The Incus Group

The Incus Group is a purpose-driven consultancy that guides organisations through the life cycle of understand, measuring and managing their impact. Our expertise extends from the development of strategy through to impact measurement and capacity building and we seek to work with organisations to measure what matters and convert best intentions into successful outcomes.

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