MAY 2023

EVs - 100% ELECTRIC VEHICLE CAR FLEET BY 2027 AT THE BANK

Teachers Mutual Bank Limited (the Bank) owns a car fleet of 36 for staff to visit members at home or in their workplace. In 2022 the Bank stopped purchasing fossil-fuelled cars and committed to switching its national car fleet to 100% EVs by 2027, up from 6% in 2022.

\$2 million investment in a 100% EV corporate car fleet by 2027. Over six years, from 2022 to 2027, for 31 EVs and 10 charging stations at four Bank offices in Sydney (Homebush and Rooty Hill), Brisbane, and Perth, plus 2 EV utes.

EV spend more than doubles our previous climate investment. The \$2 million investment in EVs only for six years (2022-2027) is **250%** higher than that of the six years prior (2016-2021) \$0.8m for all climate reduction technologies (PVs, LEDs, energy efficiency).

\$2.8 million to cut emissions since the Paris Agreement in 2015. This is the Bank's total and committed investment to reduce its direct greenhouse gas emissions from offices, buildings, and cars, which to date has cut emissions by 56% with an 88% growth in assets.

Ban on purchasing fossil fuel cars. In 2022, the last petrol car was purchased by the Bank and fossil fuel fleet cars were down to 34 from a peak of 60 in 2018, largely due to COVID-19.

EVs more cost effective than Fossil fuel cars over 5 years. The business case for a 100% EV switch of 31 EVs is more cost effective with a phased fleet transition over five years. Whilst an EV is 1.7 times more than a petrol car, (\$63,298 vs \$38,233) running costs are far lower (\$7,000 vs.\$49,336).

EV powering home visits for members. By 2027, any member who receives a visit from a Bank representative that drives to their home or work, will only be driving an EV car.

100% green powered, but at the Bank's premises only. The EVs will run on 100% renewable electricity when charged at the office, however when charged at home or elsewhere it will be from the grid which is about 24% renewables.

Million Kilometre switch. By 2027, the EVs will have travelled 1.38 million kilometres (92x around Australia), and then travel 465,000kms per year. At its peak, pre-COVID-19, Bank staff were driving more than 1.2 million kms in petrol and diesel cars across NSW, Victoria, Queensland and WA.

30-fold increase of EV scale. This \$2 million EV investment is 31 times that made in an EV car in 2013.

The Bank's corporate car fleet

The Bank has 12 offices nationally and has always had fleet cars for its member facing teams to visit thousands of members around Australia in their homes, at schools, or at teaching conferences and events. One staff member noted that he had driven more than 1 million kilometres to hundreds of schools. In recent years with a shift to digital and online banking, the amount of travel has decreased.

In 2022 the bank committed to switching the car fleet to 100% EVs by 2027.

In 2022 the bank ceased buying petrol and diesel cars for its fleet. Two Kia EVs were purchased.

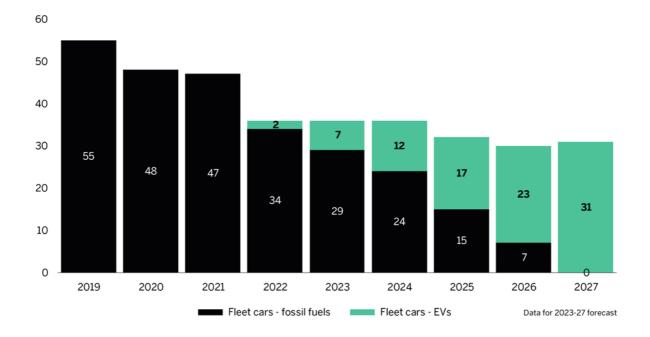
By 2027 the car fleet will be 100% EV with 31 EVs replacing 34 fossil fuel cars. The EVs will move to the second-hand car market after a lifespan of 7 years.

Four EV chargers will be installed at the Sydney Homebush HQ and the Bank's Rooty Hill office, four at the Brisbane office and branch and two in Perth. The NSW Government is offering a grant of 75% for installation of EV destination grants. The chargers will be free for use by the Bank's members.

All cars are Kia Nero EV model, offering up to 460km range and fast-charging capabilities. The whisper-quiet permanent magnet synchronous motor boasts outstanding performance with 150kW of power and 255Nm of torque.

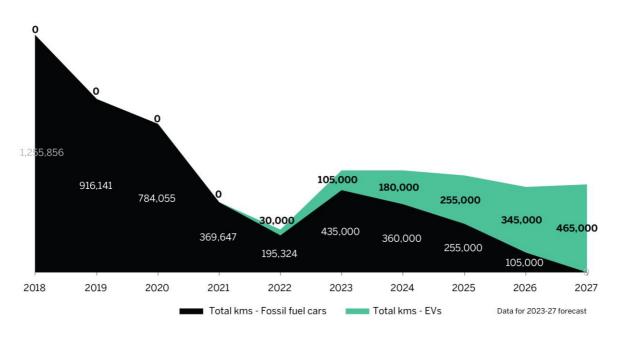
Progress to a 100% EV fleet by 2027 at the bank

Car Fleet type and numbers



Fossil fuel Vs EVs - cumulative kms driven and forecast

TMBL Corporate fleet



The business case and costs

The total investment in EV vehicles and charging stations is \$2 million. ¹ - \$1,944,000 for EVs and \$46,300 for charging stations.

As a mutual bank, subsidies by Government have been essential to reach this level of commitment.

The business case has been made over the medium term - five years, which mutual banks are able to do. This shows EVs are more cost effective, this is possible only with subsidies. EVs are exempt from FBT which is effective from July 2022 and subjected to review after three years.

COST ITEM	ELECTRIC VEHICLE	PETROL VEHICLE
Total one –off upfront (includes Govt rebate)	\$63,298 ¹	\$38,283
Annual expenses ²	\$1,400	\$9,867
Total 5 years expenses	\$7,000	\$49,336
Resale after 5 years ³	\$26,301	\$14,788

Notes

¹ Total cost of the car includes Government rebate

² Annual expense includes differential electricity/petrol and FBT

³ Resale is 40% of purchase price is assumed

¹ By way of comparison, \$2 million is a significant amount for the Bank, it is 6.7% of NPAT in FY2022

TEACHERS MUTUAL BANK LTD CAR CORPORATE CAR FLEET DATA									
	2022	2023	2024	2025	2026	2027	Total		
Petrol	185,558								
Diesel (kms)	9,766								
EV Electric Vehicles (kms)	7,900								
Total kms driven by fossil fuel cars	195,324	435,000	360,000	225,000	105,000	0			
Fleet car #-fossil fuel cars	34	29	24	15	7	0			
Fleet car size- EVs electric cars	2	7	12	17	23	31			
Total # all cars - fossil fuel and EVs	36	36	36	32	30	31			
Total kms drive by EVs	30,000	105,000	180,000	255,000	345,000	465,000	1,380,000		
% of company fleet that is EVs	6%	19%	33%	53%	77%	100%			
\$\$ invested in EVs	\$135,256	\$316,490	\$316,490	\$316,490	\$316,490	\$443,086	\$1,844,302		
\$\$ invested in EV infrastructure		\$6,040	\$6,040		\$3,020		\$15,100		
EV Charger annual fee		\$3,120	\$6,240	\$6,240	\$7,800	\$7,800	\$31,200		
2 EV utes	_					\$100,00	\$100,000		
EV investment over 6 years							\$1,990,602		

Notes

Investment figures in EVs and EV infrastructure excludes subsidies.

Assumes 15,000 km driven p.a. for all car types to 2027.

Fossil fuel cars is petrol and diesel

Models are Kia Nero at 2023 prices, assumes no change of price, model or subsidy, with 15 Kia model contracted.

EV Chargers - 4 in NSW 2023 (Rooty Hill and Homebush), 4 in Brisbane 2024, 2 in Perth in 2026.

75% EV charger subsidy in NSW, assumes this is extended to QLD and WA.

The corporate car fleet calculation does not include two utes as these are used for local maintenance and management purposes, and are not used by staff for member visits. The bank goal is to replace these with 2 EV utes in 2027.

The 2 EV utes to be purchased are in 2027 are estimate to be \$50,000, and this is added this to the total EV investment.

TMB Electric Fleet Cars

Niro EV 2023 version







EV facts and the importance of EVs in corporate car fleets

Fleet purchases account for approximately 50 per cent of new vehicle sales and with approximately 450,000 purchased for business, government and rental fleets annually. Fleet cars an act as a gateway to the establishment of a second-hand EV market which allows the Australian public to access more affordable electric vehicles faster.

If Australia's largest corporate fleets commit to only purchase electric vehicles by 2025, we could see an extra 1 – 1.5 million electric cars, utes and vans reaching the second hand market before 2030.

The NRMA supports increasing the supply of EVs through businesses, leases, government and private fleets as important measures to encourage early adoption and put downward pressure on purchase prices by stimulating new and used EV sales

The NSW Government's \$633m EV Strategy is expected to increase EV sales to 52% by 2030-31 and the NSW Government's objectives are to achieve that goal and see the vast majority of new car sales being EVs by 2035.

Climateworks states that 'Ambitious fleet targets such as the 100% EV fleet target set by the EV100 initiative will not only signal a major market shift but also normalise the use of EVs. The shift to EV fleets also presents opportunities for employee and community education, overcoming misconceptions and demonstrating the significant benefits of electric vehicles.

During the first three quarters of 2022 a total of 26,356 EVs were sold. The share of new vehicles sold in Australia that were EVs increased to 3.39% (YTD September 2022), compared to 2.05% in 2021.

The **Federal Government target** is 75% of new purchased and leased vehicles in the Commonwealth fleet to be EVs by 2025.

The ACT Government is aiming to achieve 80-90% of new light vehicle sales in the ACT being zero emissions vehicles in 2030.

Emissions from cars are **45 Mt CO₂-e**, about 10% of all Australian emissions.

The **Electric Vehicle Council** has set a national target of 1 million EVs by 2027.

The **primary barrier to EV** adoption in Australia remains a lack of vehicle supply.

'Eddie' the first EV car at the bank

In 2013, the bank purchased a Long Range Holden Volt Electric car, valued at \$65,000, for its HQ fleet use. A staff competition to name the new EV, recevied 150 entries and the winning entry resulted in the car being named 'Eddie', after Thomas Edison.

The car had an EV range of only 87Km, and at the time there were only 600 electric cars in Australia, out of 11 million.

- The Volt is a battery-electric car with an on-board generator not a hybrid.
- It's designed to spend most of its life being propelled by battery power alone.
- The Holden Volt is powered by General Motors' revolutionary electric propulsion system with a 16.5kWh lithium ion battery that provides an electric charge of 87km.
- An electric drive motor of 111kW and generator motor of 55kW on two wheels front drive.
- A 1.4 litre petrol engine extends the range by 600km by maintaining a charge in the battery to power the wheels. The fuel tank is 35.2 litres capacity.





Past emissions reductions and investments

In the seven years prior (2016-2022), the Bank's emissions reduced by 56% as the Bank grew by 88%.

The bank reduced its annual Scope 1 and 2 GHG emissions by nearly 1200 tCO2-e, from 2,093 tCO2-e in FY 2016 to 920 in FY 2022, a 56% reduction. Total assets increased from \$5.5 billion to \$10.4 billion (+88%), the number of offices occupied have doubled from six to 12. 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 77% from 0.38 to 0.09 tCO2-e per million \$ of assets.

For the six years (2016-2021)2 total climate investment by the Bank to reduce emissions is \$802,700 for PV, LEDS and Energy efficiency3.

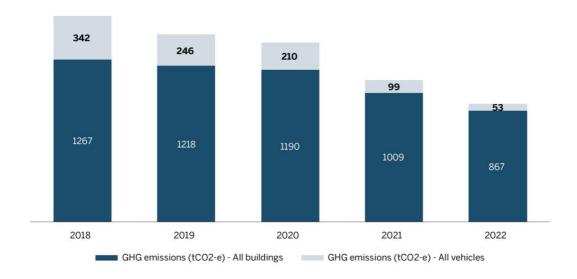
Historical car fleet emissions

From 2018 – 2022⁴, total Scope 1 and 2 emissions dropped from 1,463 tCO2-e to 920 tCO2-e.

Car fleet emissions as a proportion of emissions reduced from 21% to 6%, and emissions dropped 645% from 342 tCO2-e to 53 tCO2-e.

Banks Greenhouse gas emissions Scope 1 & 2(tCO2-e)

Car emissions dropped from 21% to 6% of total



² The data is for six years so as to exclude EV spend on FY 2022, and allow a direct comparison of the two periods

⁴ Separate car fleet data only starts in 2018

Sensitivity: External

TEACHERS MUTUAL BANK LIMITED

References

https://www.climateworkscentre.org/wp-content/uploads/2022/08/Accelerating-EV-uptake-report-Climateworks-Centre-August-2022.pdf

https://www.energy.nsw.gov.au/sites/default/files/2022-09/nsw-electric-vehicle-strategy-210225.pdf

https://consult.dcceew.gov.au/national-electric-vehicle-strategy/submission/view/341

Electrify-Fleets-Report.pdf (hubspotusercontent-na1.net)

Latest State of EVs report shows huge boom in EV sales, but Australia still miles behind due to policy - Electric Vehicle Council

Consultation hub | National Electric Vehicle Strategy - National Electric Vehicle Strategy: consultation paper - Climate Change (dcceew.gov.au)

NRMA Submission.7a97838f4eed8.pdf (storage.googleapis.com)

https://www.dcceew.gov.au/sites/default/files/documents/australias-emissions-projections-2022.pdf

https://www.dcceew.gov.au/about/news/australias-first-national-electric-vehicle-strategy

Various submissions: https://consult.dcceew.gov.au/national-electric-vehicle-strategy/submission/list

HPB Electric Fleet Cars Niro EV 2023 version





