magenta ADVISORY

September 2025

BUILDING A SELF-SUSTAINING AUSTRALIAN EV MARKET

ELECTRIC VEHICLE COUNCIL

NALSPA

CONTENTS

BACKGROUND

This work was commissioned by the Australian Finance Industry Association (AFIA), the Electric Vehicle Council (EVC), and the National Automotive Leasing & Salary Packaging Association (NALSPA) to Magenta Advisory to provide an independent assessment of the Electric Car Discount (also known as EV Fringe Benefits Tax exemption (FBT)) introduced in 2022.

The analysis was undertaken to give policymakers and stakeholders an evidence-based view of the exemption's broader value, particularly as the Productivity Commission has raised questions about its cost-effectiveness. The findings presented in this report are based on independent analysis conducted by Magenta Advisory.

The findings are intended to inform ongoing policy discussions, including the scheduled review of the exemption in the context of the New Vehicle Efficiency Standard (NVES) and other complementary measures.

ABOUT MAGENTA ADVISORY

Magenta Advisory is an independent economic research agency specialising in modelling the economic impacts of policies across diverse sectors. The organisation focuses particularly on identifying and analysing the unintended consequences that often emerge from government policy interventions—secondary effects that prove critical to understanding the full implications of policy decisions.

The organisation employs advanced analytical techniques combined with extensive industry experience to develop comprehensive economic models. These methodologies enable Magenta Advisory to assess policy impacts, generate evidence-based insights, and provide strategic intelligence that supports informed decision-making for both public and private sector clients.

Magenta Advisory's research team comprises highly skilled economists and data scientists with deep expertise in quantitative analysis. The organisation's core strength lies in developing custom economic models specifically designed to address each client's unique analytical requirements and policy questions.

Magenta Advisory's leadership team brings over five decades of combined experience spanning economic forecasting, policy development, and regulatory analysis at the highest levels of government and industry. The team includes:

- Former senior Treasury officials who led economic modelling and forecasting functions
- Chiefs of Staff to Federal Treasurers and the Deputy Prime Minister
- Policy advisers with extensive experience at major financial institutions, including J.P. Morgan and BlackRock

This expertise encompasses direct involvement in significant policy initiatives across financial services regulation, fiscal policy development, climate policy and carbon pricing mechanisms, banking sector transformation, and economic reform programmes. The team's unique combination of Treasury-level economic modelling expertise, senior political advisory experience, and international financial markets background enables Magenta Advisory to deliver comprehensive impact assessments that account for both policy mechanics and implementation realities across diverse economic sectors.

EXECUTIVE SUMMARY

In 2022,

the Australian Government launched the Electric Car Discount to accelerate the decarbonisation of road transport, and to meet its climate goals for 2030 and 2050

CONTEXT

- Australia has positioned itself ambitiously within the global climate action framework through its commitment to reducing emissions by 43% below 2005 levels by 2030 and achieving Net Zero by 2050.
- Current projections indicate the nation is on track to achieve its 2030 goals.
- Prior to 2022-23, Australia’s sustainable transport policies lagged behind those of many comparable economies, even as the country made ambitious progress in energy policy.
- However, **the transport sector presents a significant challenge, projected to become Australia's largest greenhouse gas emitter by 2030.** This projection underscores the critical importance of transport decarbonisation in meeting Australia's 2050 climate targets.
- In response to this challenge, the Australian Government implemented strategic EV adoption policies in 2022, including the Electric Car Discount policy (also known as the Fringe Benefit Tax Exemption policy) designed to address financial barriers to electric vehicle ownership.
- Recent commentary has questioned the Electric Car Discount’s cost-effectiveness, focusing through the narrow lens of abatement costs.
- This narrow view overlooks the Government’s stated purpose of the Discount and the broader economic and social benefits delivered by the policy.

REPORT’S OBJECTIVE

- This report examines the Electric Car Discount policy against its original intent, evaluates the extensive benefits it offers alongside the associated costs, and synthesises key insights derived from international best practices by examining the following:
  - Transport's role in meeting Australia's emissions targets, analysing potential impacts of removing the Electric Car Discount and re-introducing the exemption for Plug-in Hybrid EVs (PHEVs)
  - Broader economic and social benefits from accelerated EV adoption through a comprehensive cost-benefit analysis
  - Beneficiary demographics, and projected second-hand EV market growth
  - International demand-side incentives and their pathways to phasing out.
- Our report combines secondary research with deep economic modelling.

The Electric Car Discount is achieving its legislative objectives, offers a wide range of societal benefits and is in line with global best practices

KEY FINDINGS

1

The Electric Car Discount contributed to an estimated **105,500 additional EV** purchases between 2022 and 2024 – over and above what would have occurred had the market followed its previous trend. This uptake comprised of estimated 87,000 Battery EVs (BEVs) and ~18,500 Plug-in Hybrid EVs (PHEVs), **increasing the EV market share (BEV and PHEV) by total sales from ~2% in 2021 to ~10% in 2024**.

2

Continuing the Electric Car Discount for Battery EVs (BEVs) until 2035 could put **1.5 million additional BEVs** on Australia's roads (compared to ending the discount in 2027). If the discount for PHEVs is reinstated in 2026, it is likely to add around **200,000 additional PHEVs** between 2026 and 2035.

3

Continuing the Electric Car Discount for BEVs and PHEVs until 2035 is likely to contribute 50% lower carbon emissions (~4.1 Mt CO2-e) compared to a scenario where the current discount ends in 2027. **An early removal could jeopardise the timeline for meeting Australia's climate goals**. Since vehicles imported today remain in the fleet for 20 plus years, current policy choices will lock in transport emissions for decades, making sustained incentives critical.

KEY FINDINGS

4

The Discount **yielded $2.25 in environmental, economic and health benefits for every $1 in cost*** incurred in implementing the policy between 2022-2025. When projected for the 2026 to 2030 period the **benefits are expected to increase to $3 per $1 cost incurred**.

5

Maintaining the discount through 2035 for BEVs and reinstating 100% PHEVs exemption would result in approximately **870,000 additional second-hand EVs** (760,000 BEVs and 110,000 PHEVs) entering the market by 2035 (compared to ending the discount in 2027).

6

Australia still lags far behind global leaders on EV uptake. Despite recent gains**, Australia's EV share of new car sales was 10% in 2024** —well below Norway (91%), China (48%), Sweden (54%), France (24%), the UK (28%), and Germany (20%). **In every successful case overseas, governments paired demand-side incentives with supply-side measures**, **signaling a clear role for government and the need for continued, targeted policy support in the near term** to ensure momentum is sustained and the market continues to mature.

7

EV adoption is tracking below AEMO's most conservative "Slower Growth" scenario, which suggests a 152% increase in EV sales from 2024–25 to 2025–26. Q2 2025 data suggests this projection may have been too optimistic, regardless of existing purchase incentives.

8

The top 10 postcodes by State EV share are located in the outer suburbs of Melbourne, Sydney and Brisbane with an average distance to the city centre of 44 kms, 37 kms and 31.2 kms, respectively.

KEY FINDINGS

9

The **most common EV buyers using the discount are working Australians,** including teachers, nurses and government employees.

10

The Discount is expected to drive annual charging infrastructure investment (private and public) by **$189 million in 2025** and **$114 million in 2035**; without it, investment is likely to be **41% lower (around $47 million less)**, slowing the rollout of the network. *This investment not only accelerates charging access but also supports more efficient use of Australia's electricity grid, with most EV charging occurring at home and off-peak, helping households lower running costs and reinforcing the uptake of rooftop solar and home batteries.*

11

Support for EVs advances multiple national priorities as it accelerates the renewable energy transition (82% target), lowers household transport costs, reduces emissions and pollution, improves productivity of electricity and charging infrastructure, supports the Future Made in Australia (FMIA) agenda through downstream battery value-add, enhances road safety, and reduces reliance on global oil and gas markets.

We make five key policy recommendations

5

Retain the Electric Car Discount for BEVs until the market matures:

The Electric Car Discount is a major driver of BEV uptake, removing it could reduce 2035 BEV sales by up to **40%**. This will hinder emissions reductions, and delay investment in EV charging infrastructure. The policy has worked as intended and withdrawing it at this stage risks undermining progress by substituting a tested solution with a speculative one.

Reinstate the Electric Car Discount to include PHEVs:

Consider a consultative approach to find a better solution that fits clean car discount requirements without added complexity. Solutions could include consumption or battery range thresholds for full exemptions like BEVs. This would encourage better PHEV development and consumer choices.

Set clear national targets for BEVs and PHEVs:

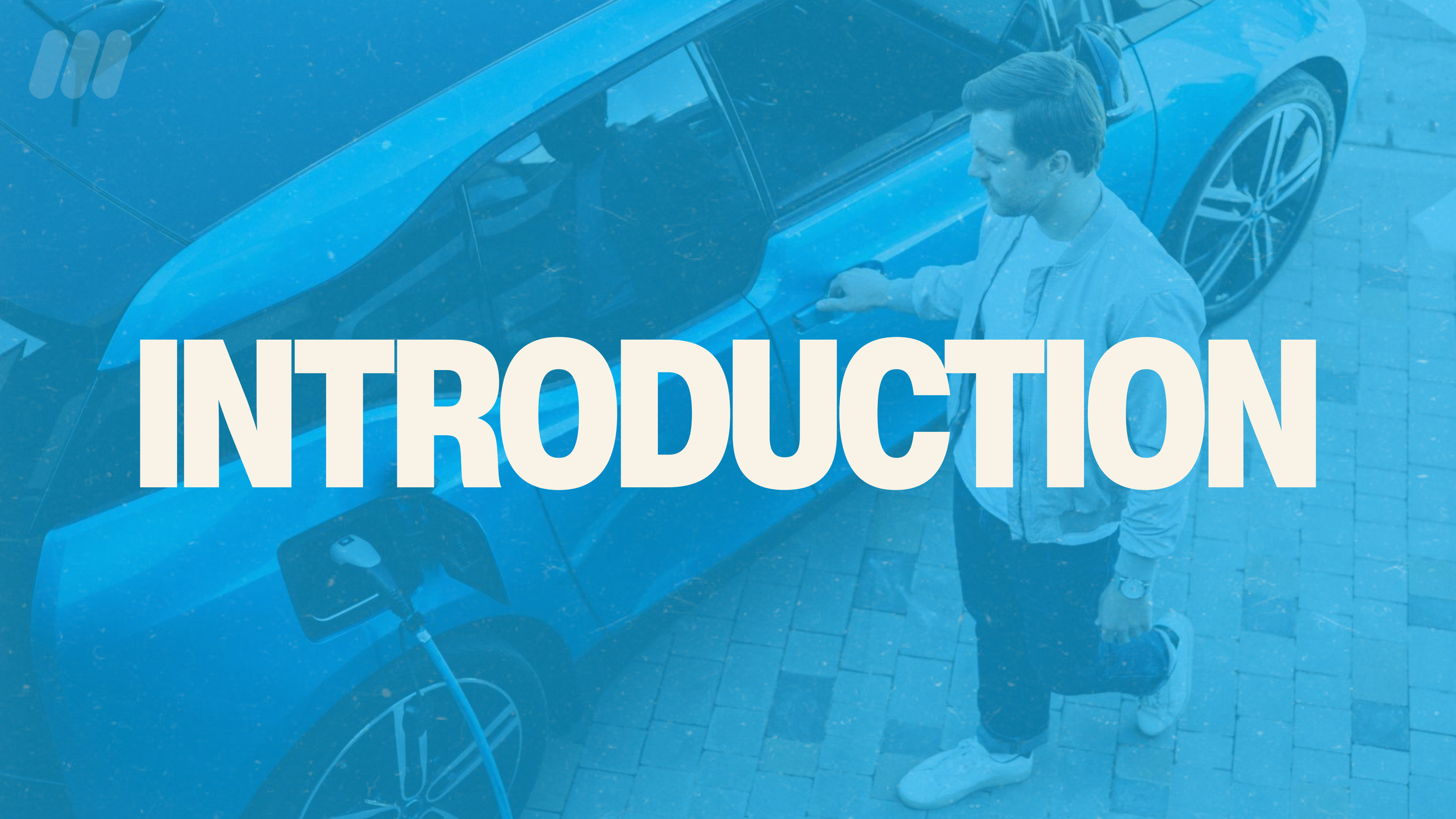
Clear EV targets provide businesses and investors with predictable demand signals, enabling confident long-term investment decisions in manufacturing, infrastructure, and supply chains.

Continue + increase investment in EV charging infrastructure:

Expanded charging infrastructure eliminates range anxiety, a key barrier preventing EV adoption, while creating market confidence that attracts automakers and accelerates uptake. Robust networks enable the transition across all vehicles and create a positive feedback loop where better infrastructure drives higher adoption.

Government-funded consumer information:

Clear and direct information from trusted government sources can counter myths while educating consumers about available incentives, total cost of ownership benefits, and the growing charging network across Australian cities and regions.

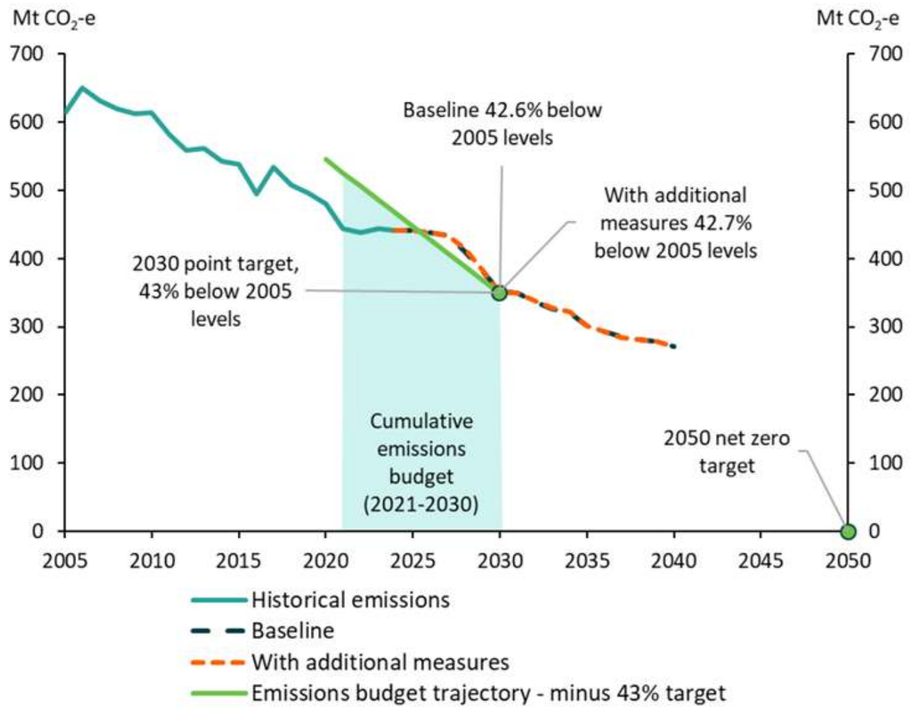


INTRODUCTION

Australia is on track

to meet its 2030 target but 2050 remains uncertain

Figure 1 Tracking against the 2030 target, 2005 to 2050, Mt CO_2-e



Australia's Net Zero Commitments

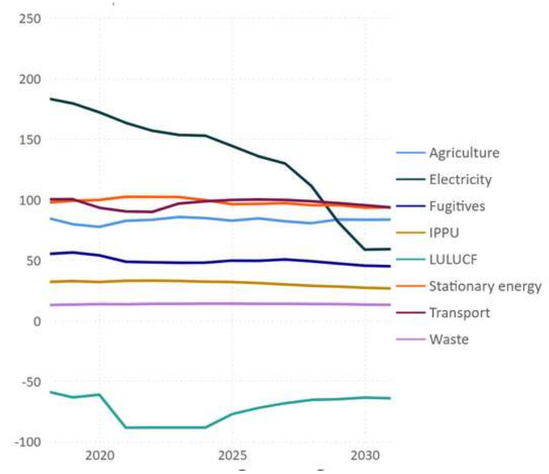
- Australia has committed to reducing emissions by **43%** below 2005 levels by 2030 and achieving **Net Zero** by 2050, positioning the nation ambitiously within the global climate action framework.[1]
- Australia appears to be on track to meet its 2030 target with Government projections showing it may achieve a 42.6 - 42.7% reduction by 2030.[2]
- However, the assessment for 2050 is more concerning. Climate Analytics concluded in May 2024 that ***"Australia is unlikely to achieve its net zero target"*** due to its continued support for fossil gas beyond 2050, reliance on ***"unrealistic technological fixes and emissions offsets,"*** and because its 2030 target is insufficient.[3]
- Equally relevant is the **challenge of reaching the Government's 82% renewables target by 2030**[5], which will require greater system flexibility. Here, EVs have a critical role to play through smart charging to absorb excess solar generation and, in the longer term, vehicle-to-grid (V2G) capability to provide balancing services.

[1] Net Zero – DCCEEW
[2] Australia on track to meet 2030 43% emission's reduction target, on latest figures
[3] Climate Analytics | Sleight of hand: Australia's Net Zero target is being lost in accounting tricks, offsets and more gas
[4] Australia's emissions projections 2024
[5] Go green with Australia | Austrade International

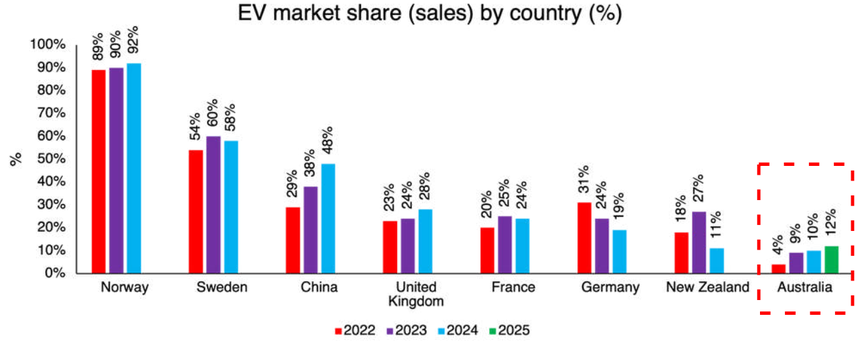
Transport sector

is projected to be the largest greenhouse gas emitter by 2030 and its decarbonisation is key to achieving Net Zero by 2050

Chart 1: Emissions (Mt CO2-E) by sector from 2021-2030[4]



EV market share (sales) by country (%)



Role of the transport sector in meeting the emission targets

- **Transport projected to be the highest emitter by 2030:** The transport sector accounts for **22%** of Australia's emissions, making it the third largest source of emissions nationally. Passenger cars and light commercial vehicles make up **60%** of transport emissions.[1]
  - Transport sector is projected to be the largest greenhouse gas emitter in Australia by 2030, with its contribution projected to be 26% of all direct emissions without further action.[2]
  - EV transition is crucial in the decarbonisation of the transport sector.

- **More work to do:** While EV sales improved to just over 12% of total new car sales in the first half of 2025,[3] Australia still lags well behind international benchmarks e.g. Norway (92%), Sweden (58%), the UK (28%), China (48%) and France (24%).

Some reasons for Australia lagging are identified in the literature:

1. Unlike New Zealand, which implemented multiple policies since 2016, limited policy support in Australia for EVs as meant uptake lags,
2. Surveys have frequently found concerns about EV affordability, limited infrastructure and limited battery range for slow EV uptake.

[1] Reducing transport emissions | DCCEEW
[2] Towards net zero for transport and infrastructure | DITRDCSA
[3] EV sales power ahead in 2025 - Electric Vehicle Council
[4] Australia's emissions projections 2024 | DCCEEW

Government implemented the EV Car Discount

to help decarbonise transport and reduce the financial barrier to owning an EV

Government Objective

- The Australian Government set out **three rationales** when the Electric Car Discount[1] was announced in 2021 and subsequently implemented in 2022:
  - **Encourage greater EV uptake**
  - **Reduce transport sector emissions**
  - **Support the second-hand EV market**[6]
- These objectives align with Australia's National Electric Vehicle Strategy (NEVS).[2]
- The policy framework incorporated these objectives by including a structured review mechanism after three years to assess electric car uptake.
- The Productivity Commission is examining the FBT exemption for electric vehicles as part of their major inquiry "Investing in cheaper, cleaner energy and the net zero transformation," which was launched in December 2024 as one of five inquiries under the Government's "five pillars of productivity" agenda, with the final report due in December 2025.

Government Action

- In accordance with this strategic framework, the Government introduced the Electric Car Discount to align with its commitment to increase EV adoption across the country:
  - Fringe Benefits Tax (FBT) exemption specifically targets EVs provided through novated leases or company fleets, if the vehicle's value is below the Luxury Car Tax (LCT) threshold for fuel-efficient vehicles (currently $91,387). The current FBT tax rate is 47%.
  - FBT exemption allows employees to lease EVs via pre-tax salary payments without paying FBT. Businesses account for around 40% of light vehicle sales.
- In addition, the Government also removed the 5 per cent tariff for eligible electric cars with a customs value below the luxury car tax threshold.
- Australia's FBT exemption mirrors global best practice, e.g., United Kingdom's Benefit-in-Kind (BiK)[3], Germany's BEV tax incentives[4], and Netherlands' Bijtelling[5].

[1] Treasury Laws Amendment (Electric Car Discount) Bill 2022 | Parliament of Australia
[2] National Electric Vehicle Strategy | DCCCEEW
[3] Electric Car Benefit in Kind (BiK): Tax Implications and Examples 2025 | The Electric Car Scheme
[4] Can tax incentives boost the German new-car market? | Autovista24
[5] Future of tax incentives and subsidies in the Dutch automotive sector | RSM
[6] https://pmtranscripts.pmc.gov.au/release/transcript-45776

The Productivity Commission

has called into question the need for the Electric Car Discount, but its analysis is narrow and incomplete

The Productivity Commission (PC)[1] has raised concerns about cost of carbon abatement, the efficiency of tax breaks, and rapid technological advancement.

- **Cost of abatement:** PC estimates the policy's carbon abatement cost at **$987-$20,084 per tonne**, which it says is higher than alternative abatement measures.
- **Efficiency of tax breaks:** PC argues that the exemption primarily benefits high-income earners who can access salary packaging arrangements.
- **Policy Overlap:** PC questions whether government intervention is still necessary given rapid EV technology improvements and declining battery costs.

These concerns reflect a limited perspective

1

PC doesn't evaluate the policy against the Government's original intent:

- Encourage greater EV uptake
- Reduce transport sector emissions
- Support the second-hand EV market

2

PC overlooks wider impacts and does not reflect global learnings

- **Wider benefits:** EV adoption offers wider economic, social and health benefits.
- **Global experience:** Evidence shows premature policy withdrawal will erode Australia's gains, particularly as infrastructure, affordability, and consumer confidence are still maturing.

This report examines the Electric Car Discount policy against its original intent, evaluates the extensive benefits it offers alongside the associated costs, and synthesises key insights derived from international best practices.

[1] Updated Submission to National Electric Vehicle Strategy Consultation | Productivity Commission

PC's abatement cost estimates are assumption-driven with limited policy context

PC's methodology to calculate cost of abatement

- **Policy cost:** Estimated as foregone FBT revenue (about $18,800 per EV over a lease).
- **Abatement:** Measured as the emissions difference between an ICE car and an EV over a 15-year life, adjusted for grid decarbonisation.
- **Adjustments:** Abatement is scaled by assumptions about *additionality* (how many EVs are truly policy-induced) and *bring-forward* (how early adoption occurs).
- **Result:** Cost per tonne of CO_2-e avoided is presented as a wide range (**$987–$20,084/t**), depending on these assumptions.

Challenges

- **Assumptions dominate results:** The wide $987–$20k range is driven almost entirely by **additionality** and **bring-forward** settings.
- **Narrow abatement definition:** Counts only tailpipe emissions avoided and excludes broader gains such as better air quality, lower household fuel costs, quieter streets, and future energy system benefits from smart charging.
- **Static fiscal cost assumption:** Fiscal cost per EV could be overstated or understated depending on actual fleet mix.
- **Treatment of bring-forward:** Treats eventual 2035 uptake as inevitable, so only counts abatement as "earlier emissions saved." This downplays the value of **meeting near-term 2030 targets**, when early abatement is most critical.
- **Industry based-modelling lower costs:** Applying industry-based modelling that reflects real-world fleet usage, data and market trends produces much more realistic results and significantly lowers the estimated cost of abatement.
- **Limited policy context:** The analysis doesn't account for the broader policy precedent where federal schemes have successfully channelled ~$29 billion into renewable energy targets, helping drive renewable energy from 1% to 39% of NEM supply since 2000.[1]

[1] Counting the Cost: Subsidies For Renewable Energy - The Centre for Independent Studies


IMPORTANCE OF
DECARBONISING
ROAD TRANSPORT

Australia has among the world's highest number of vehicles per person

Road Transport Plays a Significant Role in the Australian Economy

- In 2022-23, the transport sector contributed $125 billion in Gross Value Added (GVA), accounting for about 5% of Australia's total GDP[1].
- Australia had **21.7 million vehicles**[2] in 2024, of which 72% were passenger vehicles, 18% light commercial vehicles (LCVs), 4.5% motorcycles, 3.5% trucks, 0.4% buses and 0.6% others. With around **0.77 vehicles per person**, this is one of the highest person-to-car ratios in the world.
- 67% of the registered vehicles (Jan 2024) were petrol powered, followed by diesel powered vehicles (28.9%).
- Road transport is a major and growing source of emissions, contributing **22.3%** of Australia's total Green House Gas (GHG) output[3] - of which passenger and light commercial vehicles emitted **58** million tonnes of carbon dioxide equivalent **(Mt CO_2-e) in 2024**. It is projected to drop to **37 Mt by 2040**, mainly driven by improved **vehicle efficiency** and **EV and hybrid uptake**.

Australian Remains Reliant on Private Vehicles

- Australia's reliance on **private vehicles is shaped by geography, urban design, and limited public transport** (only 7% of Australian passenger trips)[2], makes decarbonising road transport essential for meeting climate targets.
- In **2024**, Sport Utility Vehicles (SUVs) and LCVs —including dual-cab utility vehicles (utes) —dominated new car sales, making up approximately **57%** and **22%** of the market, respectively. In contrast, traditional passenger cars (like sedans and hatchbacks) comprised just **17%**.[4] The problem is twofold - SUVs and LCVs are more polluting than smaller vehicles[5], but the market lacks compelling electric alternatives to match the popular combustion engine models in these categories.[6]

Australians Still Need Encouragement to Buy EVs

- Surveys find people are hesitant to make the switch due to:
- Limited availability of public and fast-charging stations, especially in regional and remote areas[7].
- Rising electricity demand from EVs could stress local grids if charging is uncoordinated[8].
- Drivers remain concerned about EV range and availability of long-distance charging[7].

1. 2024 Sector Pathways ReviewTransport.pdf
2. Road vehicles Australia, January 2024
3. National Greenhouse Gas Inventory Quarterly Update: December 2024 – DCCEEW
4. Australians are obsessed with SUVs and huge utes, but experts say they are making our roads deadlier | Transport | The Guardian
5. Road hogs: what is Australia's love of big cars costing us all? | Transport | The Guardian
6. Electric Utes in Australia | Advice and How-to | Open Road | The NRMA
7. Road vehicles Australia, January 2024
8. Tayri, A., & Ma, X. (2025). Grid Impacts of Electric Vehicle Charging: A Review of Challenges and Mitigation Strategies. Energies, 18(14), 3807. https://doi.org/10.3390/en18143807

Electric Car Discount builds on the success of highly-effective demand-side measures like rooftop solar

Australian demand and supply-side incentives implemented for EV uptake

Demand side incentives (consumer incentives)	Supply side incentives (producer/regulatory)
Direct Incentives: • **Purchase incentives:** Several Australian states and territories offer rebates or subsidies for buying new EVs, often worth thousands of dollars. • **Tax and fee reductions:** Many states provide discounts on vehicle registration and stamp duty for EVs. At the federal level, there is the Electric Vehicle Discount. • **Interest-free loans:** E.g. the Australian Capital Territory (ACT) offers interest-free loans to help with the purchase of an EV. • **Access perks:** Some regions allow EVs to use transit lanes or provide discounted parking and tolls.	**Regulatory Mandates and Standards:** • **New Vehicle Efficiency Standard (NVES):** The Federal Government is introducing the NVES, which will set CO_2 emissions targets for new vehicles, pushing manufacturers to supply more efficient (including electric) models. • **Government fleet targets:** Some states have set targets for their own vehicle fleets to transition to electric.
Awareness programs Government and Non-Governmental Organizations (NGOs) promote EV awareness and education.	**Fiscal and Manufacturing Support** There are some R&D and local manufacturing grants, but compared to other regions, Australia is still developing direct supply-side support for EV manufacturing.
Infrastructure Support (Demand and Supply Overlap) • **Charging networks:** Significant federal and state investments are going into building a national network of public EV fast chargers (through the "Driving the Nation Fund" and other programs). • **Home and business charger support:** Some programs support installing chargers in homes, workplaces, and apartment blocks. • **Grid upgrades and future tech:** Investment is also going into preparing the electricity grid for more EVs and enabling new tech like vehicle-to-grid charging.	

Australia has successfully implemented other demand-side incentives

Australia's Rooftop Solar: A Policy-Driven Success Story

Australia's approach to rooftop solar is widely regarded as a leading global example of how targeted government support can drive rapid and sustained uptake of clean energy technologies. By introducing generous subsidies and feed-in tariffs in the early 2000s, the Government successfully reduced the upfront cost of solar photovoltaic (PV) systems for households and small businesses. These financial incentives, combined with clear policy signals and ongoing public engagement, created a strong market for rooftop solar.

Outcome:

- Over **3.7 million** rooftop solar systems have been installed across Australia, covering around **one in three homes**[1].
- By 2023, installed rooftop solar capacity exceeded **20 GW**, accounting for nearly **one-third of the country's total renewable generation**[2].
- In some states, such as South Australia and Queenland are than **40% of households** have adopted rooftop solar.[3]

Benefits:

- **Rooftop solar can reduce energy bills by 40–60%,** saving the average household more than AUD1,500 per year.[4]
- Rooftop solar's contribution to total electricity generation was as high as **9.3%**" on specific days in the National Electricity Market.[5]

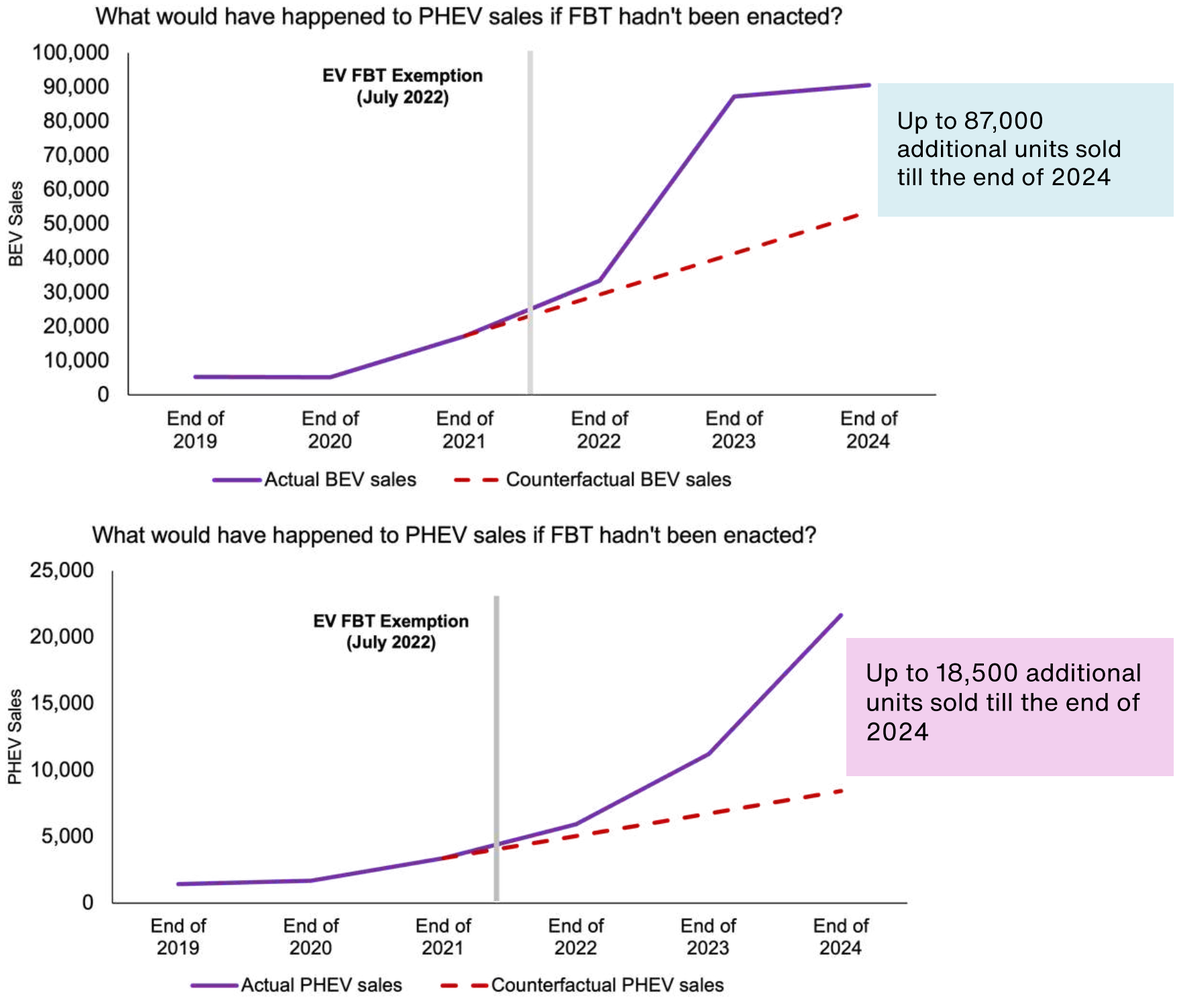
Demand-side incentives are key to change behavior

Incentives for EV adoption are often designed to influence consumer behaviour toward options that may not yet be immediately viable but are important for the greater good. Outlined below is the role of these incentives in accelerating adoption and triggering knock-on effects:

- **Overcoming Market Inertia:** Early adopters often face psychological and financial barriers, making initial market growth sluggish (“inertia”). Demand-side incentives are crucial for overcoming these barriers, as seen in Norway, where financial incentives led to EVs surpassing 80 % of new car sales in ca
- **Building Consumer Confidence:** Widespread early adoption builds consumer trust and normalises the technology, setting the stage for mass-market uptake. In California, rebates and purchase incentives helped drive EV market share from under 2% in 2015 to over 23% by Q1 2025[1].
- **Infrastructure Utilisation and Network Effects:** Early EV adoption creates a critical mass that supports charging network expansion and utilisation. In the UK, the number of public chargers increased more than fivefold between 2016 and 2025, closely tracking EV fleet growth[3]
- **The "Good Enough" Principle:** Current EVs already offer significant emissions reductions over Internal Combustion Engine (ICE) vehicles. Even accounting for upstream emissions, average lifecycle CO_2 emissions from EVs in Europe are 2–3 times lower than comparable petrol cars (ICCT). Incremental advancements, not disruptive breakthroughs, characterise most technology improvement, ensuring today's EVs remain environmentally valuable throughout their lifespan.
- **Learning-by-Doing and Cost Declines:** Demand-side incentives accelerate industry learning, driving down costs and improving products. For example, global battery pack prices fell to US $115/kWh in 2024, a 20 % drop in a single year and 84 % lower than around 2014[4], thanks largely to market scaling supported by policy.4 While EV batteries pose challenges around replacement and recycling. Ongoing advances in durability, second-life use, and recycling technologies aim to address these concerns.[7,8]
- **Long Asset Lifespan:** Vehicles typically remain on the road for 10–15 years, ensuring that every EV purchased now abates emissions over a significant period[5].
- **Broader Societal Benefits:** Every EV on the road, regardless of model year, contributes to improved urban air quality, reduces oil imports, and supports grid stability through smart charging—benefits that are both immediate and cumulative.[6]

1. www.energy.ca.gov
2. Electric vehicle public charging infrastructure statistics: January 2025 - GOV.UK
3. Global Electricity Review 2025 | Ember
5. https://iea.blob.core.windows.net/assets/a9e3544b-0b12-4e15-b407-65f5c8ce1b5f/GlobalEVOutlook2024.pdf?
6. Electric Vehicle Adoption: A Comprehensive Systematic Review of Technological, Environmental, Organizational and Policy Impacts
7. What happens to EV batteriesat the end of their useful life in a vehicle? - Electric Vehicle Council
8. https://www.csiro.au/-/media/Science-Connect/Futures/Minerals-to-materials/CMRDD_Battery-Recycling_FINAL.pdf

Electric Car Discount drove additional uptake of ~105k EVs through 2024



Source: EVC and Magenta/PPG calculations.

Impact of the Electric Car Discount on EV uptake*

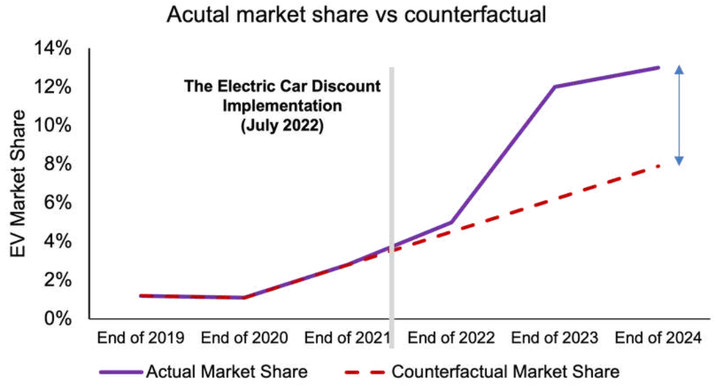
- Our analysis compares the actual EV sales since 2019 with what the sales would have been had the pre-EV discount trend (2011-2021) continued to estimate the EV uptake likely due to the Discount.
- Two complementary effects are driving the change in EV adoption:
  - **First order effects (incentive-driven demand):** The Electric Car Discount through novated leases is increasing EV uptake as people move away from ICE vehicles.
  - **Second order effects (Market maturation):** Growing acceptance as the EV market becomes more established.
- The Electric Car Discount significantly expanded EV market adoption, contributing an estimated **105,500** additional electric vehicles to the market. This included up to an estimated **87,000** battery electric vehicles (BEVs) and up to an estimated **18,500** plug-in hybrid electric vehicles (PHEVs).
- Projecting forward to Q1 2025 (shortly before the PHEV discount was discontinued), an estimated 12,500 additional EVs (1,500 BEVs; 11,000 PHEVs) were added.

***Assumption and caveats**: This analysis benchmarks observed sales against the projected pre-discount trajectory. While we start from the simplifying assumption that the pre-policy trend would have continued, the counterfactual path could plausibly have been either steeper or softer. Because multiple factors (e.g., concurrent policies, GDP and wage growth, inflation, EV prices, new model launches) can influence the extrapolated baseline, these estimates should be interpreted as directional rather than precise. Some variables may confound the relationship and others may act as mediators; isolating their individual effects would require a dedicated econometric analysis.

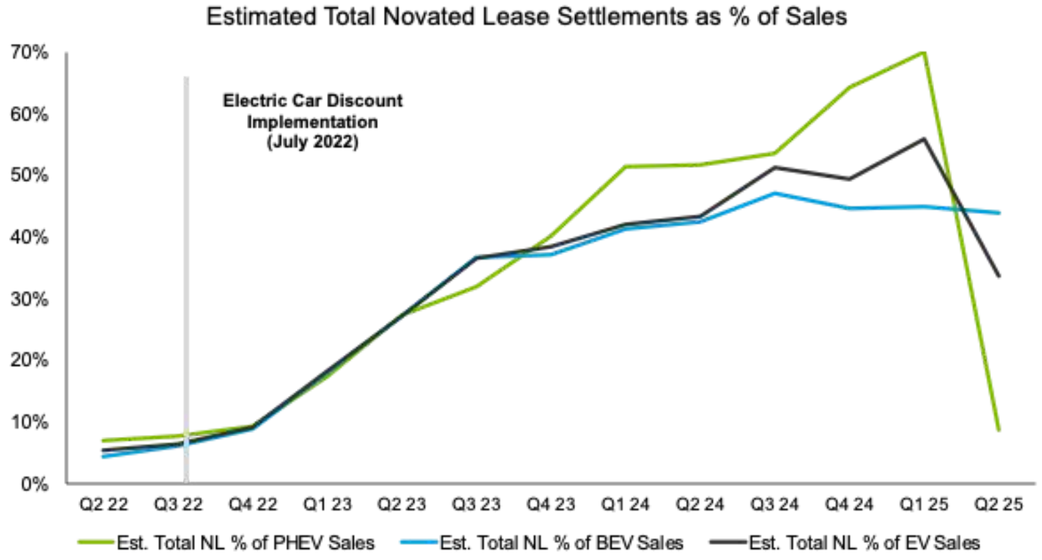
Electric Car Discount has been instrumental in increasing EV market share, largely driven by novated leases

Impact of the Electric Car Discount on the EV market share*

- EV market share increased from **1.95%** in 2021 to **10%** in 2024 to 12% in 2025 Q2.
- Actual market share started breaking away from the counterfactual trend significantly in 2023, with both 2023 and 2024 reporting a **5-percentage point** difference between the actual and the pre-discount trend.



A difference of up to 5 percentage points as of 2024.



Source: NALSPA

Growth in novated leases of electric vehicles post-policy implementation

- The Electric Car Discount works through novated leases, making it a cost-effective option for salaried employees.
- As of Q4 2024, about an estimated **50%** of the EV settlements were via novated leases.
- Settlements via novated leases grew from an estimated **4%** for BEVs and **7%** for PHEVs in Q2 2022 (just before the policy was launched) to an estimated **44%** for BEVs and **64%** for PHEVs in Q4 2024.
- After the PHEV exemption ended on 1st April 2025, the % of NL settlements for PHEVs dropped to just under an estimated 10% in Q2 2025, returning to pre-policy levels – suggesting that policy-driven improvements can be somewhat unwound within a single quarter.

***Assumption and caveats**: This analysis benchmarks observed sales against the projected pre-discount trajectory. While we start from the simplifying assumption that the pre-policy trend would have continued, the counterfactual path could plausibly have been either steeper or softer. Because multiple factors (e.g., concurrent policies, GDP and wage growth, inflation, EV prices, new model launches) can influence the extrapolated baseline, these estimates should be interpreted as directional rather than precise. Some variables may confound the relationship and others may act as mediators; isolating their individual effects would require a dedicated econometric analysis.

Salary-packaging supported by the Electric Car Discount is a significant pathway for EV adoption

How does the Discount help?

- **Tax savings:** The FBT exemption is designed so that salaried employees do not pay the fringe benefits tax that would normally be incurred.[1]
- **Cost parity with conventional vehicles:** The fringe benefits tax exemption removes the tax for EVs under $91,387 (luxury car tax threshold for fuel-efficient vehicles), which makes EVs affordable and attractive. This policy helps reduce the cost of an EV to be at parity with an equivalent petrol or diesel car.[2]
- **Pre-tax income benefits through novated leasing:** The exemption enables employees to access EVs through novated lease arrangements using pre-tax income creating substantial tax savings for both employers and employees.[3]
- **Benefits lower income employees more in relative terms:** The Discount exemption provides proportionally greater financial relief to middle-income workers (in terms of % savings of their salary), making EVs more accessible relative to their earning capacity despite higher earners receiving larger absolute dollar savings.[4]

Outcome

Novated leases are pushing EVs beyond the central business districts.

- The majority of novated lease-enabled EV drivers live outside city centres: **~77%** of EV/PHEV adopters live beyond 10km from cities.
- EV adoption is highest in outer suburban areas (10-30km) where families drive furthest and over **44%** drivers reside.
- Only **~22%** of drivers are in inner cities.

Novated leases are driving EV uptake in the suburbs and regions.

The exemption extends to operating expenses—charging, registration, insurance, servicing and tyres—making the overall cost of EV use much lower under salary packaging.

- Proprietary NL data shows that suburban areas (10-30km) represent **~30%** electrification (adoption of BEVs and PHEVs), compared to **~34%** electrification in city centres (0-10km).
- Even regional areas (100km+ away from cities) show **13%** electrified adoption.

Data source: Large novated lease providing entity.

[1] Electric cars exemption | Australian Taxation Office
[2] What is the FBT Exemption and how does it reduce the cost of an EV? - Electric Vehicle Council
[3] Driving value: how do EVs really stack up financially? | BMW: Driven by the future | The Guardian
[4] For example, if two consumers earn A$90k and A$200k respectively, the higher-income earner would save more in absolute terms (A$8k). However, the relative benefit is smaller: the lower-income earner's total tax bill falls by nearly 29%, compared with just 12.8% for the higher-income earner. This translates to a 14.6% increase in net income for the lower-paid worker, versus only 7.9% for the higher earner.

Scenario analysis is essential to understand the likely trajectory of EV uptake under different policy options

Background

- Scenario analysis is a strategic forecasting methodology used to explore and quantify the impact of uncertain future events by modelling a range of plausible outcomes. Rather than relying on a single-point forecast, it enables decision-makers to assess the sensitivity of results to varying assumptions.
- In the context of this analysis, uncertainty around the timing and scope of Electric Car Discount policy changes creates a clear need for scenario-based modelling.
- By simulating different policy cessation dates and corresponding impacts on EV adoption, we can better understand the range of potential market trajectories

Scenarios

1. **Current policy continues (baseline)** – BEVs remain exempt till 2035, PHEVs remain non-exempt. This is AEMO slower growth scenario, which is the most conservative of all the AEMO scenarios. EVs are likely to achieve 53% market share by 2030.[1]
2. **BEVs exemption ends in 2030** – BEVs remain exempt till 2030, PHEVs remain non-exempt.
3. **BEVs exemption ends in 2027** - BEVs remain exempt till 2027, PHEVs remain non-exempt.)

Under 1 and 2 above, we also consider a sub-scenario of re-instating PHEVs exemption in 2026 until 2035.

Modelling brief and assumptions

Our modelling is based on forecasts provided by AEMO, which already incorporates a wide range of factors in its projections. To assess the impact of the cessation of the FBT exemption on EV, we isolated the specific effects of this policy change. Essentially, we adjust AEMO's existing trends by either adding to or subtracting the likely effect based on the assumed date of policy cessation. The AEMO forecasts we use as our baseline already incorporate the effects of the New Vehicle Efficiency Standard (NVES). Given the interconnected and uncertain ways in which NVES may influence the novated lease channel for EV uptake, we maintain our assumption: the novated lease share of EV sales remains constant at observed 2024 levels.
Two key assumptions underpin our modelling:

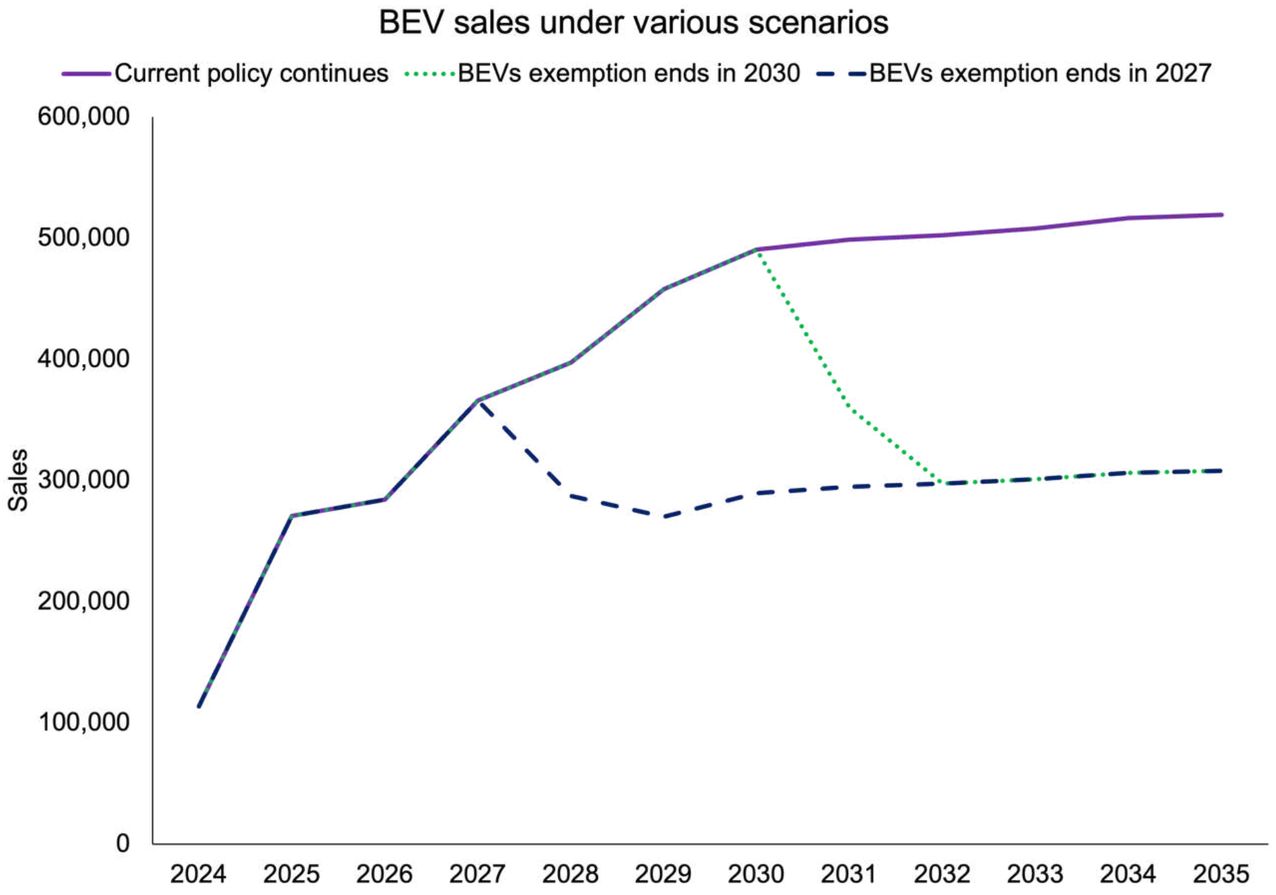
- **Proportion of Sales via Novated Leasing:**
  Based on 2024H2 and 2025H1 data, we assume that 45% of BEV sales and 50% of PHEV sales occur through novated leases and will maintain the same percentage if they stay exempt. These shares have shown an increasing trend and holding them constant results in a less aggressive scenario.

- **Rate of Decline in Sales Post-Policy Cessation:**
  The recent removal of FBT exemption for PHEVs provides limited but evolving data. **Early indications suggest a noticeable decline in novated lease settlements within a short time frame.** For the purposes of our modelling, we assume that the effect of the policy phase-out will taper off within two years. This is an optimistic assumption, particularly given preliminary evidence indicating the impact may materialise within a year.

Given these assumptions, our scenarios are positioned at the conservative end of the forecasting spectrum.

[1] aemo.com.au/-/media/files/major-publications/isp/2025/stage-2/electric-vehicle-projections-2024.pdf

Keeping the discount for BEVs and reinstating it for PHEVs could increase annual EV sales to 540k by 2035



Source: AMEO and Magenta/PPG calculations. Hybrids are excluded from the modelling. Analysis focuses only on PHEVs and BEVs.

Current policy continues (baseline)

- The baseline scenario (AEMO based) suggest that the annual sales of EV will reach **~520k** by 2035.
- If PHEVs 100% exemption is reinstated in 2026, it is likely to add **~20k** PHEV annually and about **200k** additional cars between 2026 and 2035.

BEVs exemption ends in 2030

- Compared to the baseline, if BEVs are made non-exempt in 2030, it could lead to a fall in annual update – reducing from **~490k** in 2030 to 300k in 2035.
- Reinstating 100% PHEVs exemption could increase uptake until 2030 (~94k additional PHEVs on road), but removal would again lead to fall in sales compared to the baseline.

BEVs exemption ends in 2027

- Removal in 2027 could change the trajectory of EV sales significantly, leading to a much lower number of EV cars on road
- **The projected fall in the EV fleet is about 1.5mn fewer EV cars on road between 2027 and 2035.**

Depending on how the policy changes, Australia's EV fleet trajectory could vary significantly—ranging from 3.5 to 5 million vehicles by 2035

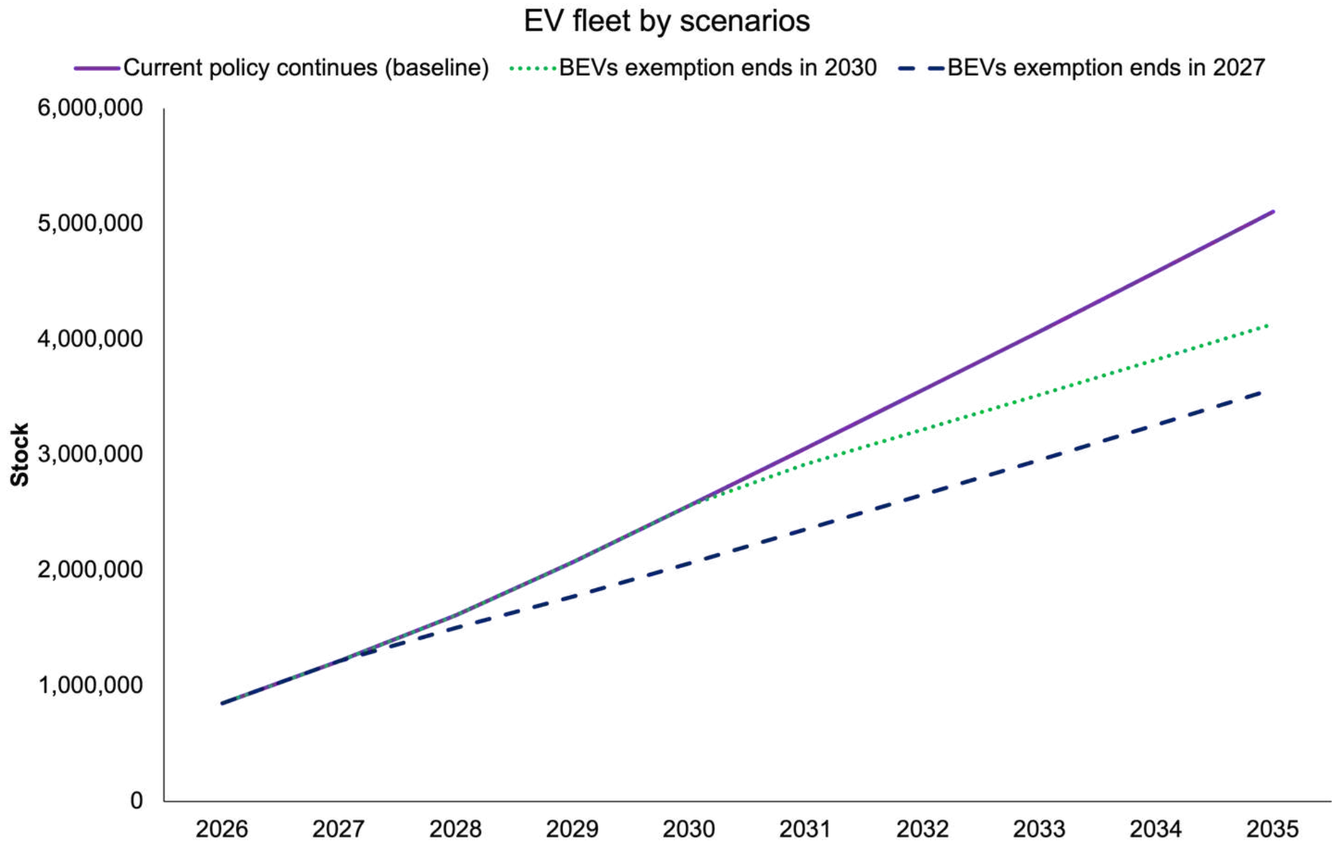
Importance of EV fleet

As the stock of EVs on the road grows over time, the overall emissions from the transport sector continue to decline—year after year—amplifying the long-term environmental benefits.

In contrast, delaying the transition prolongs the presence of high-emitting internal combustion vehicles in the fleet, locking in avoidable emissions for years to come.

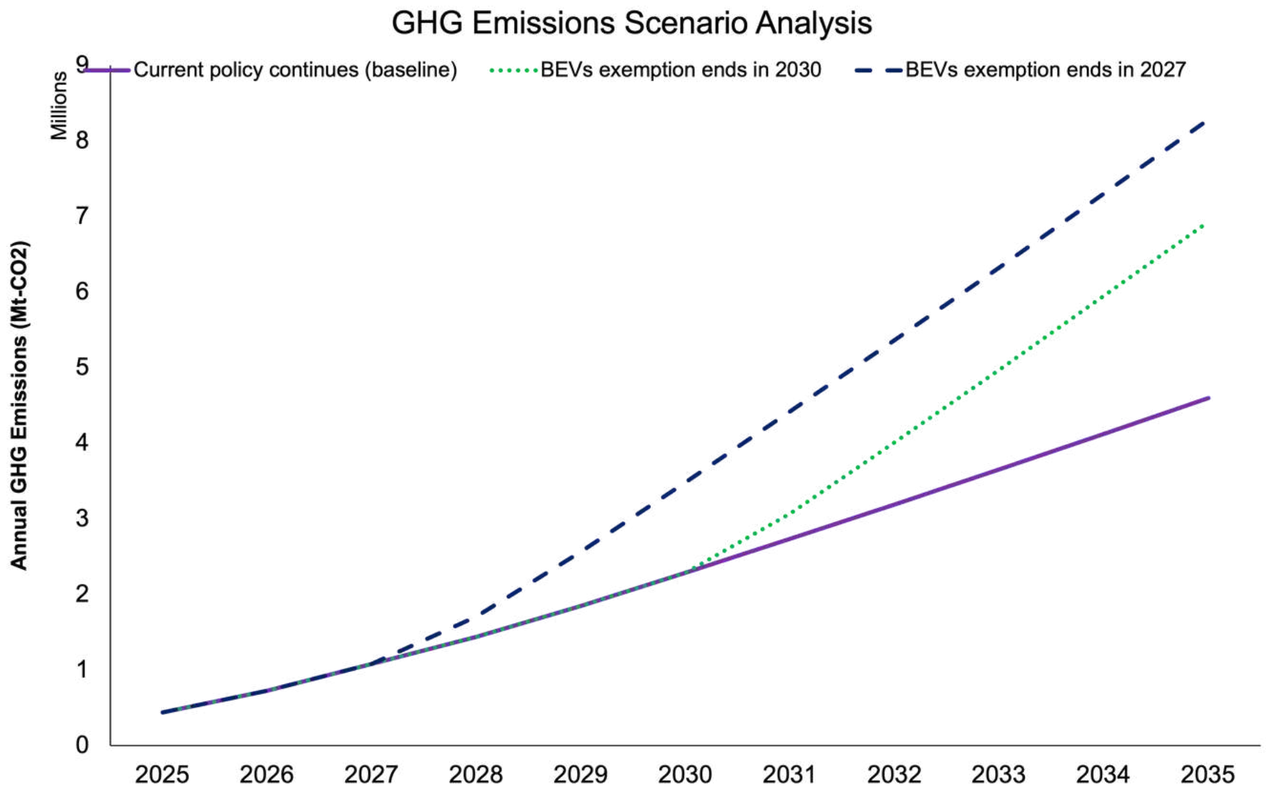
Potential impact on EV fleet

- In the Baseline scenario, the total fleet of EVs reach 5.1 million by 2035 (and could reach 5.3 million if PHEV exemption is reinstated). This would mean fewer ICE vehicles on road and lower emissions as the benefits would multiply.
- If PHEVs (after 100% exemption reinstatement in 2026) and BEVs are made non-exempt in 2030, the trajectory changes as the growth slows down. **Removal as early as 2030 could reduce the EV fleet by ~1 million.**
- **Removal in 2027 could lead to ~1.5 million fewer EV vehicles on Australia's roads by 2035.**



Source: AMEO and Magenta/PPG calculations

Unwinding the Electric Car Discount risks increasing carbon emissions by 44% compared to current policy settings...



Source: AMEO and Magenta/PPG calculations

Importance of reducing GHG emissions

Reducing greenhouse gas (GHG) emissions is critical to mitigating the impacts of climate change, which include rising global temperatures, more frequent and severe weather events, sea level rise, and long-term damage to ecosystems and human health.

Impact of EVs on GHG emissions

GHG emissions closely follow the trend of EV fleet growth, as greater adoption of EVs leads directly to more substantial emissions reductions over time. While EVs produce GHG emissions, they have lower GHG emissions compare to ICE vehicles. For this analysis we assume that consumer choose ICE vehicles over EVs if they substitute.

- In BEVs exemption ends in 2027, annual emissions reach **8.2 Mt CO2-e** as EV uptake slows and consumer continue to use ICE vehicles.
- If BEVs exemption ends in 2030, it could take annual emissions to **6.9 Mt CO2-e**, a reduction of **1.3 Mt CO2-e** compared to when the exemption ends in 2027. Reinstating PHEVs exemption could further reduce the emissions by 4%.
- The current trajectory (Baseline) could limit annual emissions to 4.6 Mt CO2-e, a reduction of **44%** from the abrupt removal scenario. Reinstating PHEVs exemption could further reduce the emissions by 6 percentage points.

...and risks lower infrastructure investment which could further limit the EV adoption

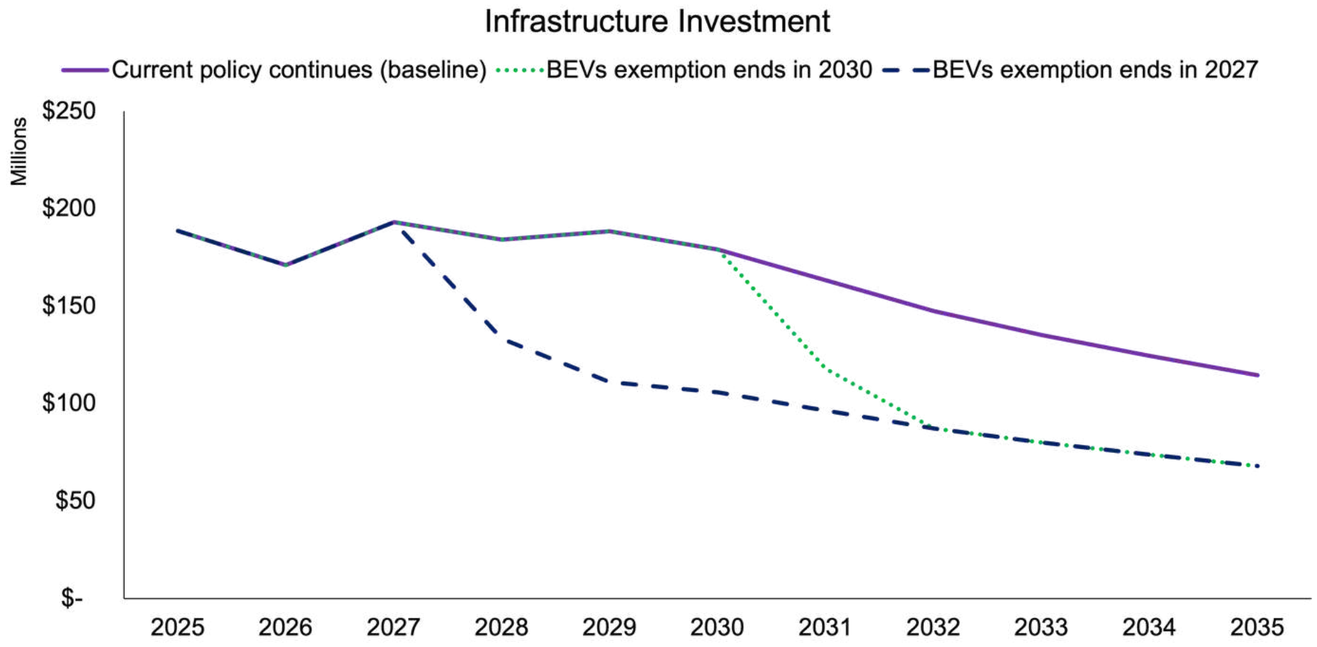
Importance of building infrastructure

A lack of sufficient EV uptake is likely to hinder both public and private investment in charging infrastructure. **Without clear and growing demand, particularly from consumers, both government bodies and — more notably — the private sector are likely to adopt a more cautious approach.**

A slowdown in EV sales inevitably affects the pace of charging network expansion. As adoption slows, so does the incentive to invest in infrastructure, which in turn further dampens consumer confidence and uptake. This dynamic risks creating a negative feedback loop: weak EV demand limits infrastructure investment, and limited infrastructure further suppresses EV adoption.

Potential impact on EV infrastructure

- In the baseline scenario, as growth continues with sustained support, annual investment sustains to accommodate new EVs (assuming a constant charger density of 32 EVs per charger and falling costs for building charging stations), averaging around **$184 million** from 2025-2030, and going down to **$114 million** by 2035.
- In other scenarios, annual investment drops more rapidly as EV growth slows down, slowing the rollout of the network.
- In the scenario when BEVs exemption ends in 2027, the investment could be lower by **$47 million** (or **40%**) compared to the current policy scenario.



Source: AMEO, NALSPA, Magenta/PPG calculations

ELECTRIC CAR DISCOUNT OFFERS WIDER BENEFITS

The EV Car Discount generates significant societal benefits for Australians

Context

- Cost of abatement, which looks at the dollar spent per tonne of carbon avoided, ignores the larger picture.
- EV uptake has wider benefits in terms of health, the economy and the environment.
- We prepared a long-list of such benefits based on economic literature and then shortlisted those that are most quantifiable and likely to be significant.
- In addition to these benefits, the Electric Car Discount is likely to have some additional costs – especially revenue lost due to lower GST and Excise collections on account of lower petrol sales. We include such costs in our analysis, too.

Our Approach

- We conduct a two-part Fiscal Cost-Benefit Analysis (CBA) by looking at two periods:
  - *Backward-looking (2022–2025)* – Evaluate how the accumulated benefits compare against program costs to date.
  - *Forward-looking (2026–2030)* – Projected benefits and costs using conservative assumptions.
- This analysis examines only those EV purchases directly resulting from the policy intervention, measuring their benefits against a counterfactual scenario in which consumers would have purchased ICE vehicles.
- The benefits and costs are cumulative. As additional EVs enter the market, they generate sustained environmental benefits throughout their entire operational lifecycle.
- This analysis models only first-order impacts. Second-order (e.g. induced innovation) and third-order (e.g. labour mobility) effects are not captured.

Societal Benefits

- **Health Benefits** - EVs produce less air pollution, especially harmful fine particles (PM2.5), which means fewer illnesses and early deaths[1,2].
- **Environmental Benefits** - Switching to EVs cuts carbon emissions from transport, protecting communities from the growing costs of climate change
- **Noise Benefits** - EVs are quieter than ICE vehicles, translating to less traffic noise, calmer streets and a better quality of life.[3]
- **Economic Benefits** - EVs are cheaper to run than traditional ICE vehicles putting real savings back into household budgets and in turn into economy.

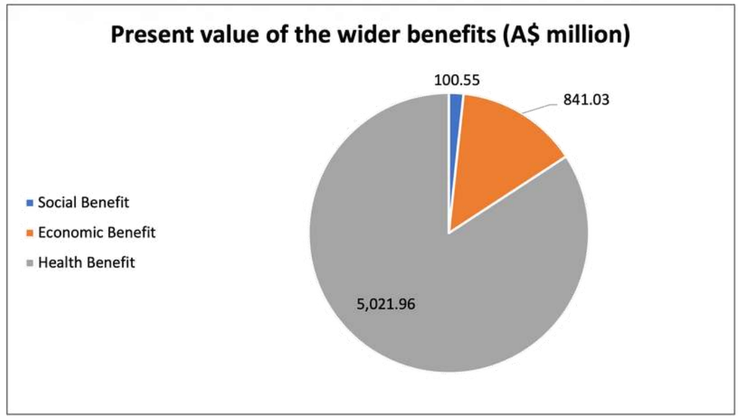
Electric Car Discount's benefits were 2.25x its cost between 2022 and 2025

Net Benefits of the Electric Vehicle Discount (2022–2025)

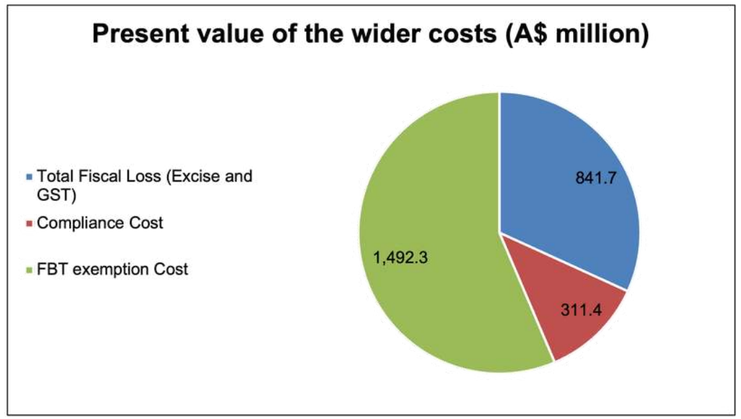
- Over the period **2022 to 2025**, the total **present value of benefits** from the policy is estimated at **AUD $5.9 billion**.
- These benefits include savings across **environmental**, **economic**, and **health** categories.
- Against these, the **total present value of costs** (including foregone fuel excise, GST, compliance costs, and the FBT exemption) is estimated at **AUD $2.6 billion**.
- Providing a net benefit of about **AUD $3.3 billion**.
- The **Benefit to Cost Ratio (BCR)** stands at **2.25**, indicating that every dollar spent delivers **AUD $2.25** in societal return.

Benefit to Cost Ratio → **2.25**

Breakup of the Wider Costs and Benefits



Total: $5,963 million



Total: $2,645 mn

Source: Magenta/PPG calculations

All values are expressed in present value terms, in constant 2022 dollars,discounted at 7%. Sensitivity testing with discount rates of 3% and 10% produced negligible changes given the short horizon and the temporal alignment of costs and benefits.

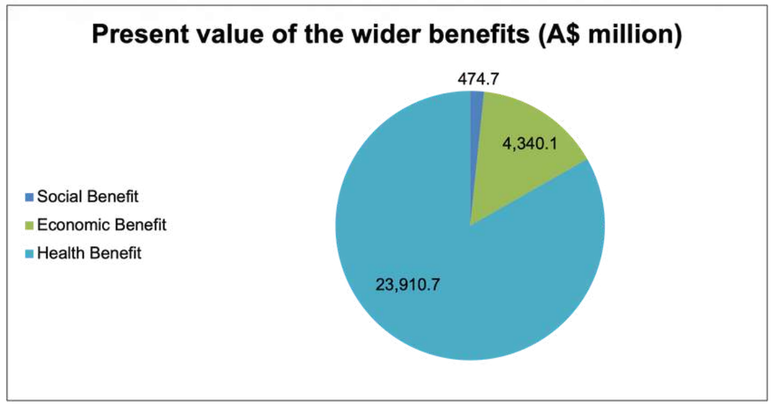
Electric Car Discount's benefits out to 2030 are likely to be 3x the cost

Net Benefits of the Electric Vehicle Discount (2026–2030)

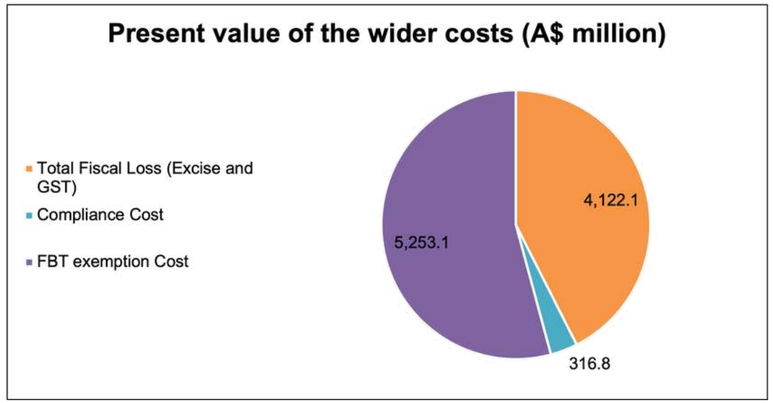
- **Environmental and economic benefits grow significantly** due to higher EV penetration.
- The costs incurred on society (compliance cost) and government (fiscal and FBT exemption cost) also grow due to greater EV uptake, totalling a present value of **AUD $9.6 billion** combined.
- **Despite rising costs**, the net present value **(NPV) is AUD $28.7 billion**, and the **BCR improves to 2.96**, meaning **every dollar spent yields AUD $2.96 in return**.
- Hence delivering **an additional 71 cents of value for every dollar invested** compared to the 2022-2024 period.

Benefit to Cost Ratio → **2.96**

Breakup of the Wider Costs and Benefits



Total: $28,725 million



Total: $9,692 million

Source: Magenta/PPG calculations

All values are expressed in present value terms, in constant 2022 dollars,discounted at 7%. Sensitivity testing with discount rates of 3% and 10% produced negligible changes given the short horizon and the temporal alignment of costs and benefits.

Broader benefits—though harder to quantify—are critical to the overall value proposition of EV adoption

- **Grid Efficiency & System Optimisation** - EVs are often wrongly assumed to be a grid burden but can in fact **enhance grid efficiency**.
  - Recent Australian evidence shows most home EV charging happens **overnight or midday**, with **relatively little during the network peak (5–9pm) period (EVC, 2024)**.
  - Night charging spreads demand but currently relies on coal and gas. Until more storage and wind come online, greater benefits come from daytime charging, which soaks up excess solar, eases minimum demand, and supports renewable integration. In either case, this avoids the need to build extra power capacity unless EV numbers go beyond 900,000, saving money and making the grid more efficient.
  - Even under high uptake, electricity demand increases (in Victoria, for example) would remain modest: only **5.72%–9.79% at peak** (Khoo et al., 2014)[2].
  - At scale, EVs with **V2H + G2V potential** can act as **distributed storage**, flattening demand curves, and improving renewable utilisation.
  - Families can benefit directly, with research showing V2H can reduce **monthly electricity bills by about 11.6%** (Datta et al., 2019), which, when scaled to the broader fleet, represents a substantial system-wide benefit.

- **Energy Distributed Resilience** - Bi-directional EVs (vehicle to grid or V2G) act as distributed storage, **reducing pressure during peak or low-renewables periods**.
  - **Vehicle to grid (V2G) reduces microgrid electricity costs by up to 5.7%** (O'Neill et al., 2022)[3].
  - Vehicle to load (V2L) can act as backup power system to power appliances. With research showing that 3/4th of Australians tend to experience power outages, such capability is increasingly valued and demonstrated during the aftermath of Tropical Cyclone Alfred
  - By 2050, EV batteries could make up ~ 80% of the gross storage capacity in the National Energy Market (NEM).

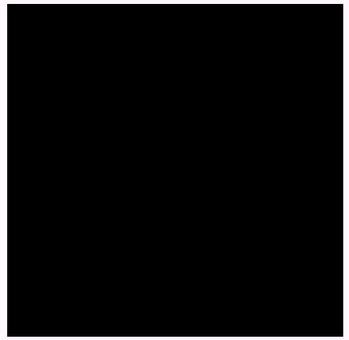
- **Societal Benefit** - Transport noise has a measurable negative effect on urban wellbeing and asset value.
  - Property value drops by 6% per 10 dB(A) increase in road noise in Melbourne, and 3.5% in Victoria (Hinze & Ward, 2025)[4].

- **Jobs, Industry & Regional Development** - The EV transition is tightly coupled with clean energy infrastructure growth.
  - According to McCoy et al. (2024)5, net-zero policies will create about **210,000 to 490,000 new domestic energy jobs** and **350,000 to 510,000 clean energy export-related jobs**. These include roles in solar, wind, battery systems, and electricity transmission — especially in regional areas.

IMPROVEMENT IN ACCESSIBILITY AND AFFORDABILITY

The Discount is the main reason for purchase for many PHEV and BEV users

Troy's Story: A Family-Friendly PHEV Enabled by the FBT Exemption



e & Occupation
[redacted] Power Systems Control Room Operator

[redacted]

Vehicle
2024 Mitsubishi Outlander PHEV

Favourite Features:
- Fuel efficient
- Comfortable
- Quiet to drive

Charging Location:
- Charges mostly at home

"We needed a car that suited our growing family... The FBT exemption was the main reason we could afford a PHEV."

Rob's Story: A Firefighter Making the Switch for Savings and Sustainability

e & Occupation
[redacted] Firefighter

[redacted]

Vehicle
BYD Sealion 6

Favourite Features:
- Lower fuel costs
- Better for the environment

Charging Location:
- Charges primarily at home

"We wanted to save money on fuel... The FBT exemption was a big factor—it was one of the main reasons we bought our EV."

Brendan's Story: From Amarok to EV for Lower Costs and a Business Mission

& Occupation
[redacted]Electrician

[redacted]

Vehicle
Tesla Model Y RWD

Favourite Features:
- Low running cost - "Costs less than a coffee a week to drive 400kms."
- Practicality and space - "Can fit so much in it for work"
- Long-range capability

Charging Location:
- At home and work

"It [FBT] was a huge factor in my decision to purchase the car. I'm not just another guy with a Tesla. I'm a small business owner. It helped reduce the up-front capital costs."

Suburban postcodes (~30 kms from city) dominate EV uptake and solar integration - leading the transition to a complementary clean energy ecosystem

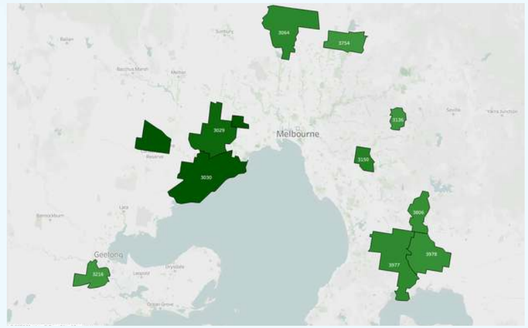
Novated Leasing Insights – EV Uptake in Key Cities

Major Cities - Top 10 Postcodes for EV Settlements

- Data reflects Q2 2022 – Q2 2025 inclusive
- Top ten postcodes are ranked in order of EV Share, with those postcodes listed at the top having the highest # of EV settlements
- Where possible, postcodes that overlap a state or territory have been classified under their primary state/territory
- Postcode are categorised as (M) = Metro, (R) = Regional Postcode (Rural or Remote) based on the ABS definition
- Solar Density is calculated as the # of residential solar systems (<10kW) divided by estimated dwellings * 100
- Green denotes postcodes above the state/national average being referenced

Melbourne

Postcode	Key Suburb	Electorate (Party)	Dist. to City[3]	State EV Share[1]	Solar Density[2]
3030 (M)	WERRIBEE	Corio/Lalor (ALP)	31km	3.02%	34%
3029 (M)	HOPPERS CROSSING	Lalor (ALP)	31km	2.47%	47%
3150 (M)	GLEN WAVERLY	Chisholm Hotham (ALP)	30km	1.56%	32%
3064 (M)	CRAIGIEBURN	Calwell Suclin (ALP)	38km	1.45%	39%
3977 (M)	CRANBOURNE	Holt (ALP)	50km	1.34%	42%
3978 (M)	CLYDE	Holt (ALP)	56km	1.17%	43%
3806 (M)	BERWICK	Bruce (ALP), La Trob (LP)	46km	1.12%	39%
3754 (M)	DOREEN	MceWen (ALP)	37km	1.01%	34%
3216 (M)	BELMONT	Corio (ALP)	85km	0.98%	28%
3136 (M)	CROYDON	Deakin (ALP)	33km	0.94%	26%



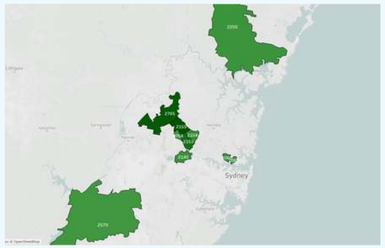
VIC Top 10 EV Postcode Map

The outer western suburb of Werribee (3030) has the highest concentration of EV settlements, with a moderate solar density (34%). Overall, eight of the top ten suburbs for EV uptake have higher solar density than the state average, distributed across the west, north and east of the CBD.

Due to climate, VIC has a much lower solar density than national average (30% vs 41%).

Sydney

Postcode	Key Suburb	Electorate (Party)	Dist. to City[3]	State EV Share[1]	Solar Density[2]
2155 (M)	BEAUMONT HILLS	Mitchell (LP)	43km	2.25%	52%
2765 (M)	MARSDEN PARK	Chifley (ALP)	48km	2.09%	57%
2153 (M)	BAULKHAM HILLS	Mitchell (LP)	30km	1.65%	42%
2154 (M)	CASTLE HILL	Berowra (LP), Mitchell (LP)	34km	1.02%	42%
2066 (M)	LANE COVE	Bennelong (ALP)	11km	1.00%	32%
2145 (M)	WENTWORTHVILLE	Parramatta (ALP)	27km	0.99%	32%
2250 (R)	GOSFORD	Robertson (ALP)	84km	0.92%	34%
2570 (M)	CAMDEN	Hume (LP)	49km	0.91%	36%
2768 (M)	GLENWOOD	Greenway (ALP)	37km	0.86%	61%
2065 (M)	ST LEONARDS	Bennelong (ALP) Bradfield (IND)	7km	0.80%	21%



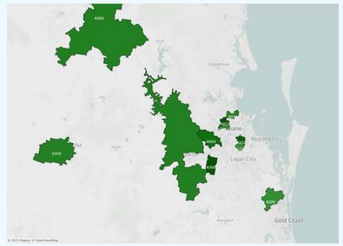
NSW Top 10 EV Postcode Map

The outer western, north and southern suburbs of Sydney have both a high concentration of EV settlements and solar panel installations.

Five of the top ten suburbs for EV uptake have higher solar density than both the state and Australian average. NSW has a slightly lower solar density than national average (38% vs 41%).

Sydney

Postcode	Key Suburb	Electorate (Party)	Dist. to City[3]	State EV Share[1]	Solar Density[2]
4300 (M)	AUGUSTINE HEIGHTS	Oxley Blair (ALP)	34km	2.23%	56%
4053 (M)	EVERTON PARK	Brisbane Lilley (ALP)	10km	2.13%	44%
4152 (M)	CAMP HILL	Griffith (ALP)	9km	1.95%	47%
4069 (M)	BROOKFIELD	Ryan (GRN)	15km	1.82%	60%
4306 (M)	MOUNT CROSBY	Blair (ALP)	29km	1.66%	78%
4034 (M)	ASPLEY	Lilley Petrie (ALP)	16km	1.63%	45%
4350 (M)	TOOWOOMBA	Groom (LNP)	126km	1.58%	34%
4051 (M)	NEWMARKET	Brisbane (ALP)	5km	1.46%	43%
4209 (M)	COOMERA	Fadden (LNP)	58km	1.42%	42%
4122 (M)	MOUNT GRAVATT	Bonner (ALP)	10km	1.40%	49%



QLD Top 10 EV Postcode Map

The outer western Brisbane suburbs have a high concentration of EV settlements with some concentration in southern Brisbane.

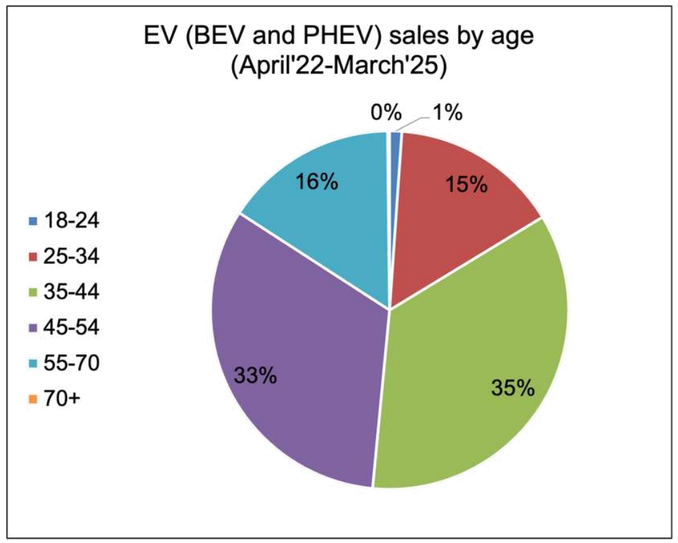
Nine of the top ten suburbs for EV uptake have higher solar density than the Australian average. Only three suburbs are above the state average solar density. Based on climate suitability, QLD has the highest solar panel density of any state (53%).

Source: (1) NALSPA Data Collection, (2) Australian PV Institute – Updated 31st March 2025, (3) Google Maps – Driving Route

The Discount has broad appeal across demographics

The demographic data presented is based on EV owners who chose to buy their vehicles via Novated Lease.

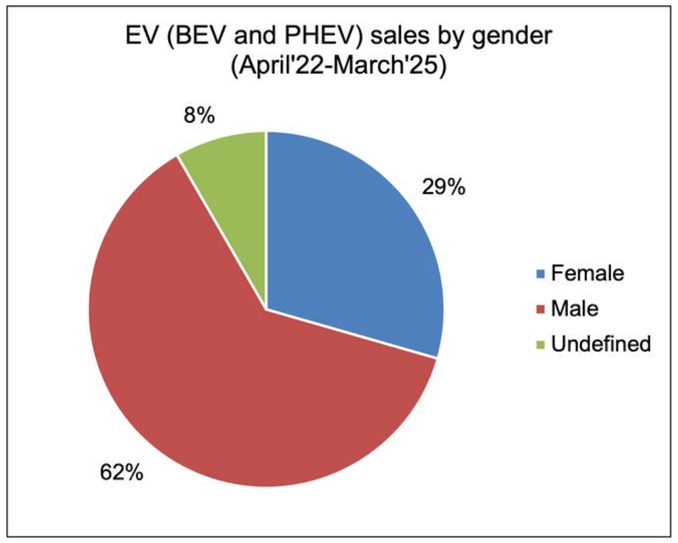
Age Profile



Source: NALSPA

68% of the individuals belong to age group 35-54, with **16%** between 55-70, **15%** from 25-34.

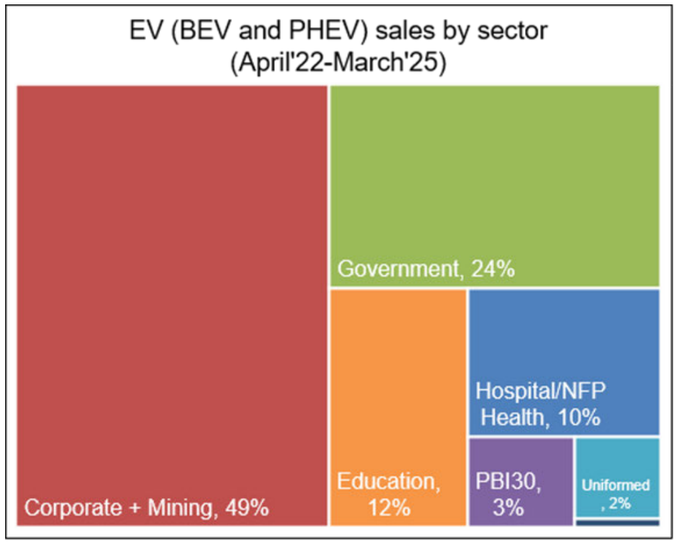
Gender



Source: NALSPA

The majority of individuals who bought EV via novated lease were males (**62%**) and **29%** were females.

Sector Profile

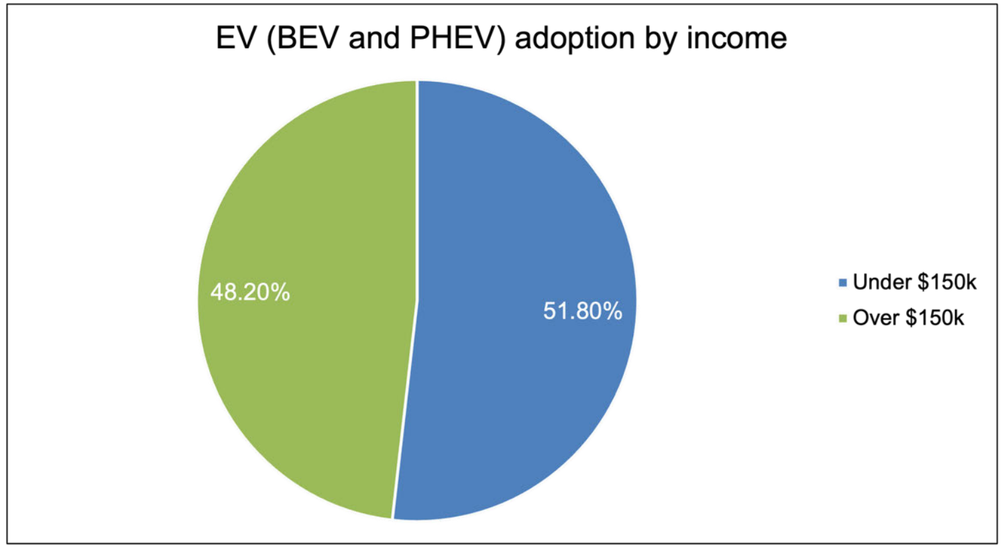


Source: NALSPA

49% individuals belong to Corporate and Mining, 51% belong to the non-corporates (Government, Education, Hospital, PBI30 and others). The appeal of the Electric Car Discount is across the sectors.

EV buyers are working Australians, not wealthy elites

Income Profile



Source: Large novated lease providing entity.

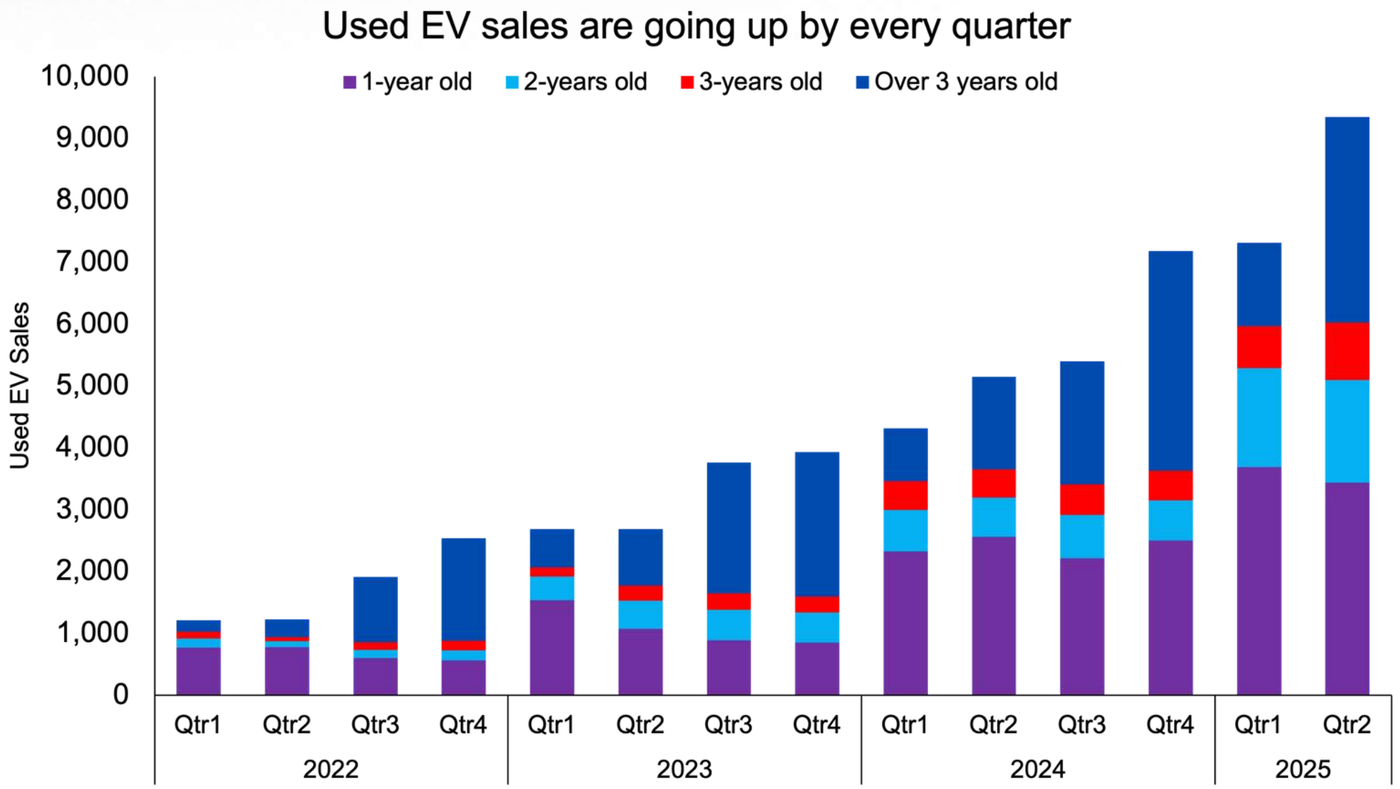
About **52%** of EV/PHEV adopters earn under $150k. Among them, the $90k-$120k bracket has the highest absolute EV uptake numbers, accounting for over **19%** of purchases.

- **The group of most common EV buyers is working Australians**
  - The $90k-$120k income group essentially represents teachers, nurses, government workers, and corporate professionals.
- **EV buyers increasingly mirror "Middle Australia".**
  - **65%** of Australian drivers are under the $150k income threshold, compared with **52%** of EV/PHEV purchasers.
- **EVs are cost-saving tools for suburban working families.**
  - Suburban areas (10-30km) show a **~30%** electrification rate.
  - Healthcare workers (**~15%** of the novated lease customer base) are actively adopting EVs.
  - Government employees (**~19%** of the novated lease customer base) are using salary packaging.

Post the Discount, the used EV sales has grown significantly year-on-year

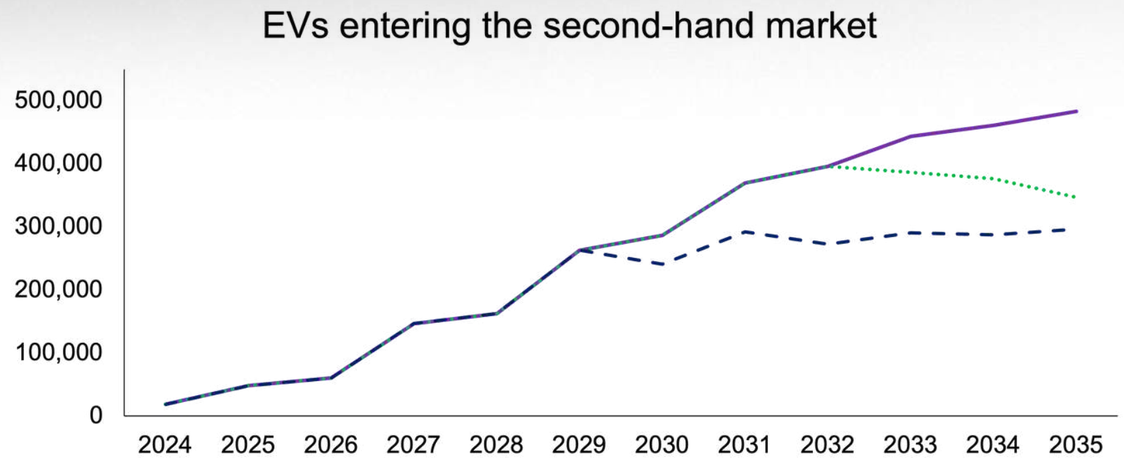
Exemption drives a pipeline into the second-hand market

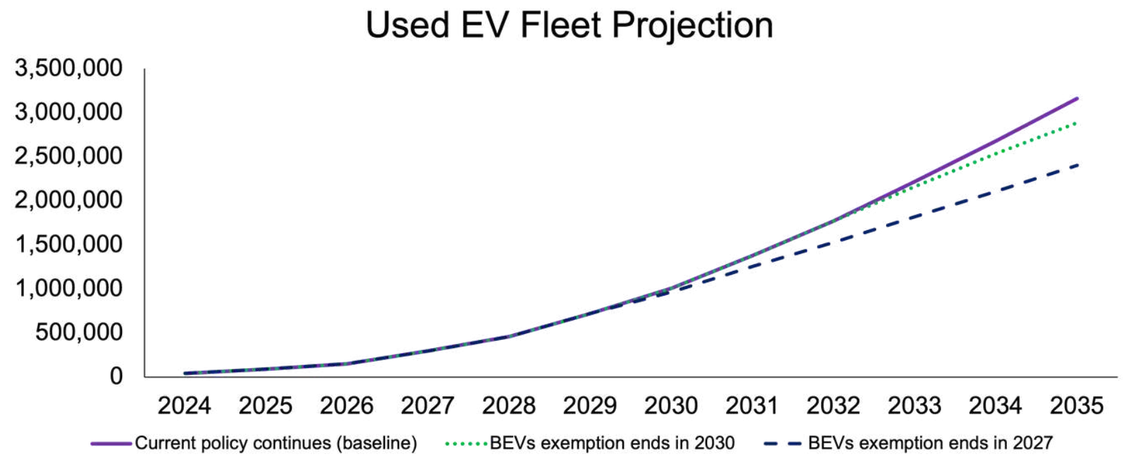
- A thriving new car market is instrumental for the second-hand market because it provides a continuous pipeline of future used vehicles.
- The Discount, as mentioned earlier, brought many new electric cars into the market, which is a precursor for a strong used EV market.
- From Q1 2022 to Q2 2025, used EV sales have increased by **157%**.
- From 2022, over **61,000** EVs have entered the second-hand market, flowing into a pool of affordable used EVs.
- Without the exemption, this pipeline of used EVs would have been materially smaller, slowing affordability gains and uptake beyond early adopters.



Source: Industry data and Magenta/PPG calculations

Electric Car Discount is projected to stimulate the second-hand car market





Source: Industry data and Magenta/PPG calculations

Importance of the second-hand EV market

A strong second-hand EV market is key to making EVs more affordable and accessible. It lowers the entry cost for consumers, helping widen adoption, while also extending the life of EVs — displacing older petrol and diesel cars and reducing overall transport emissions. The EV exemption for second-hand vehicles requires proof that LCT wasn't paid on the original purchase, creating verification difficulties that could be resolved through simplified eligibility criteria to strengthen the used EV market.

Current data on the second-hand EV market

As per the data, over **40%** of BEVs enter the second-hand market within 2 years, **37%** in 3-4 years, **14%** in 5-6 years.

Potential impact on the used car market

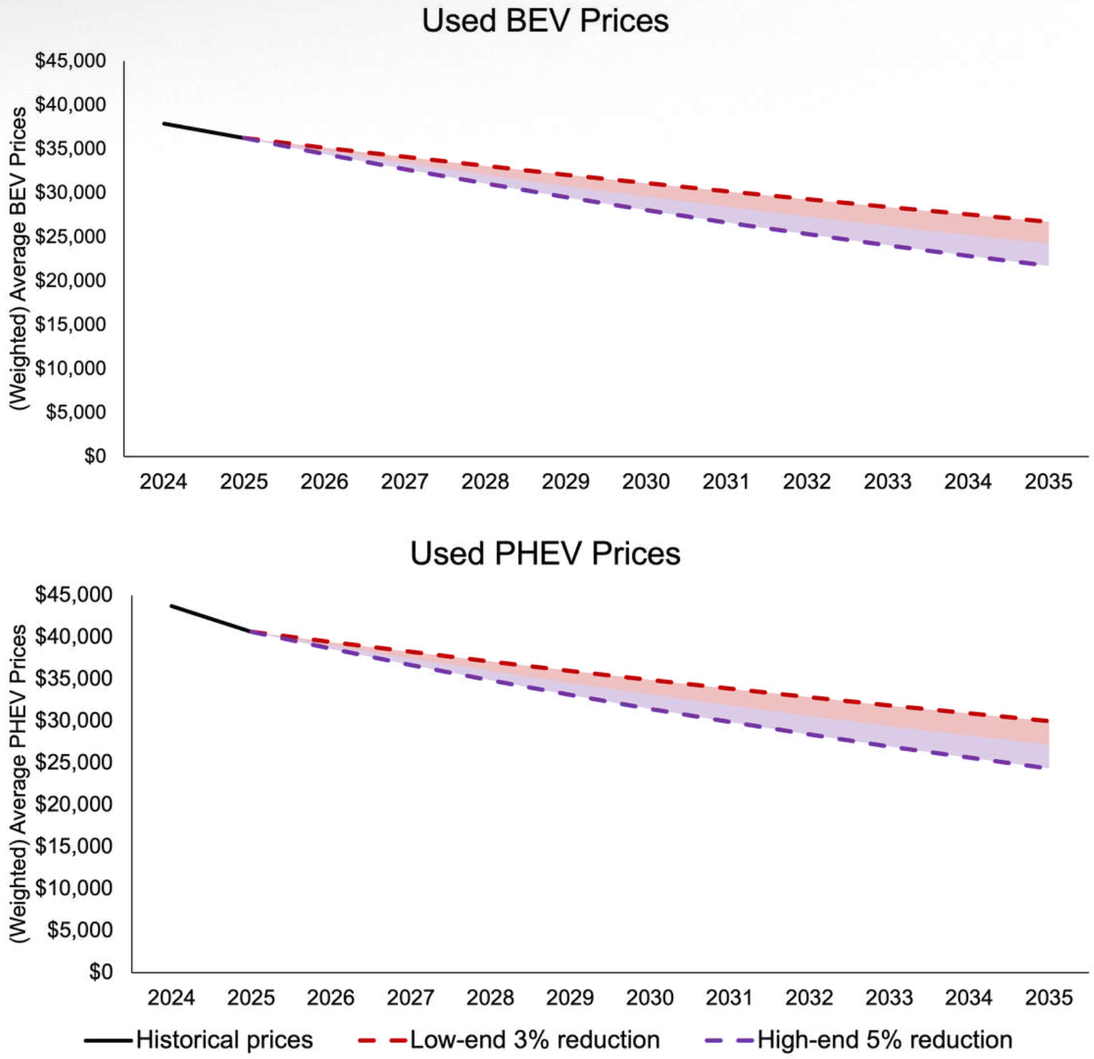
- Continued policy (Baseline) could lead to **~480k** EVs entering the used car market by 2035 annually, which could fall by **~28%** to about **~350k** if the BEVs and PHEVs (after reinstated) become non-exempt in 2030.
- If BEVs exemption ends in 2027, the stock of EVs by 2035 market could fall by **~36% compared to the current policy scenario.** There could be **870k** fewer EVs in the fleet if policy is abruptly ended in 2027 compared to the baseline scenario.

As more EVs enter the used car market, they become more affordable, further encouraging uptake.

Evolution of EV prices in the Used Car Market

- Future EV prices are likely to vary depending on how **demand and supply dynamics** unfold.
- Key factors include technology cost reductions, policy interventions, second-hand market development, and raw material prices.
- The used car prices experienced a 4% depreciation in 2025 (as of now). With wide variability in prices between 2018 to 2024, we assume a depreciation rate of **3%** to **5%** annually to project how EV prices may evolve.
- Figures shown are illustrative market projections, based on weighted averages of used EV prices in the past, segmented by vehicle age, to provide a realistic view of market trends across the fleet.
- EV prices are expected to fall by 26-40% to between 2025 and 2035, making them increasingly competitive with ICE vehicles.

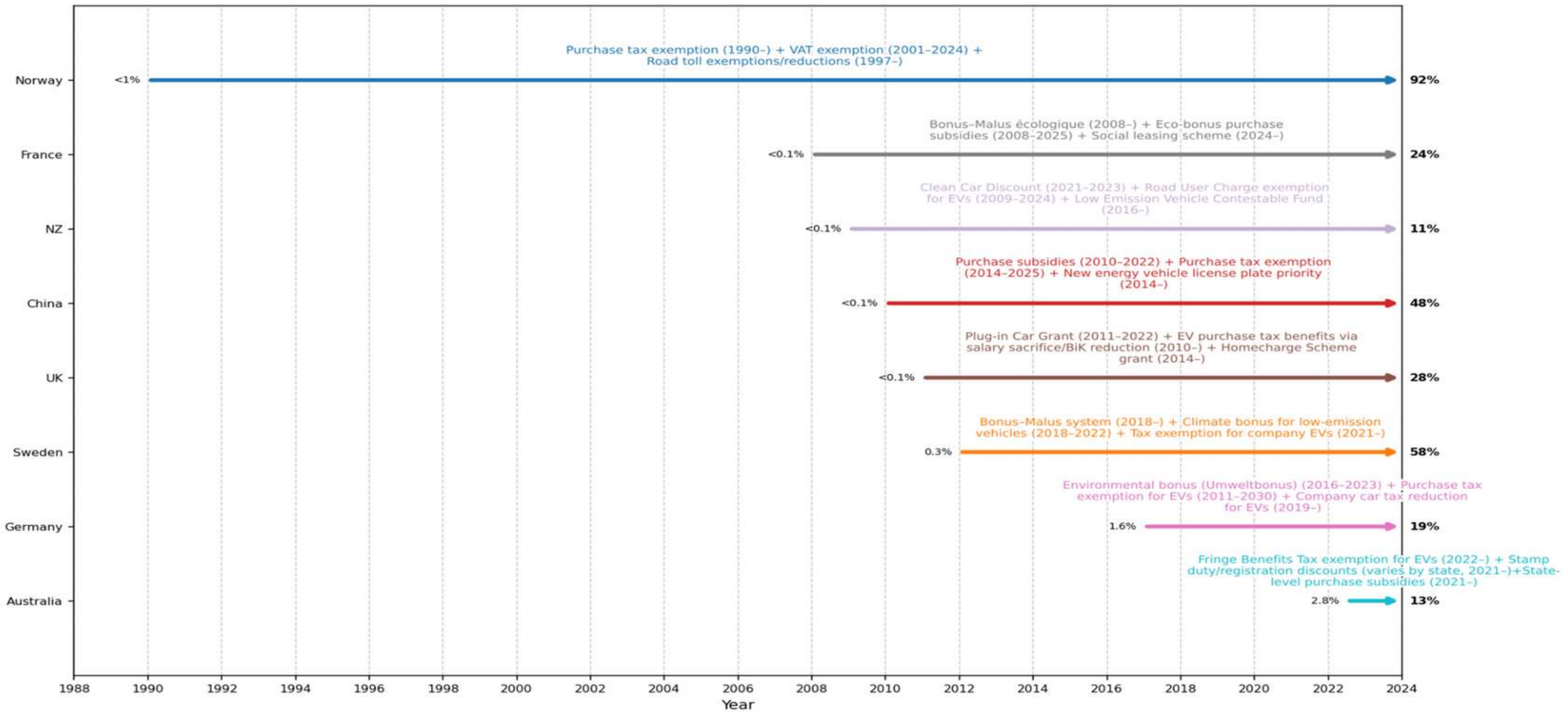
Source: Industry data and Magenta/PPG calculations




GLOBAL
LEARNINGS

Global leaders in EV adoption started offering incentives a decade or more ago. Australia's Electric Car Discount is in its infancy by comparison

Key EV policy timelines by countries, and reported shared before and after the policy



Australia introduced its first significant federal EV incentive policy relatively late in the global context. The Electric Car Discount for eligible EVs came into effect on July 1, 2022, and has been in effects for 3 years now compared to other jurisdictions where the subsidy-related policies have been in place for 10 years or more.

Source: Tracking global data on electric vehicles - Our World in Data

Demand and supply incentives are both critical to increase EV adoption

Demand and supply side incentives are used in conjunction to encourage EV adoption[1]

Demand side incentives (consumer incentives)	Supply side incentives (producer/regulatory)
Direct Incentives *Purchase subsidies, tax or registration fee reductions, rebates, lower tolls/parking for EVs.* These lower upfront prices and convenience barriers for consumers.	**Regulatory Mandates and Standards** *Requirements like* Zero Emission Vehicle (*ZEV) sales quotas, emissions or fuel economy standards, phase-outs of fossil fuel vehicles.* These ensure automakers shift toward electric models.
Procurement-related *Government fleets required to go electric; contracts favour EVs (e.g., buses, municipal vehicles).* Builds early demand and normalises use.	**Fiscal and Manufacturing Support** *Tax credits for clean vehicle production, R&D grants for EV tech, domestic supply chain incentives (e.g., batteries).* Strengthens industry capability and local manufacturing.
Infrastructure Support (Demand and Supply Overlap) *Public charging networks, incentives for home chargers, or transport infrastructure upgrades.* Essential to unlock practical EV use.	

Global Insights

International Policy Approaches:

- Countries worldwide have implemented a variety of demand- and supply-side incentives to promote EV adoption, tailoring measures to national characteristics, public preferences, and net zero commitments.

Policy Duration and Adjustment:

- Such policies are typically sustained over long periods and are often replaced or scaled down as the market matures.

Uncertain Self-Sustaining Threshold:

- There is no clear consensus in the literature regarding the exact EV market share at which adoption becomes self-sustaining, though some studies suggest this point can be up to 30%.

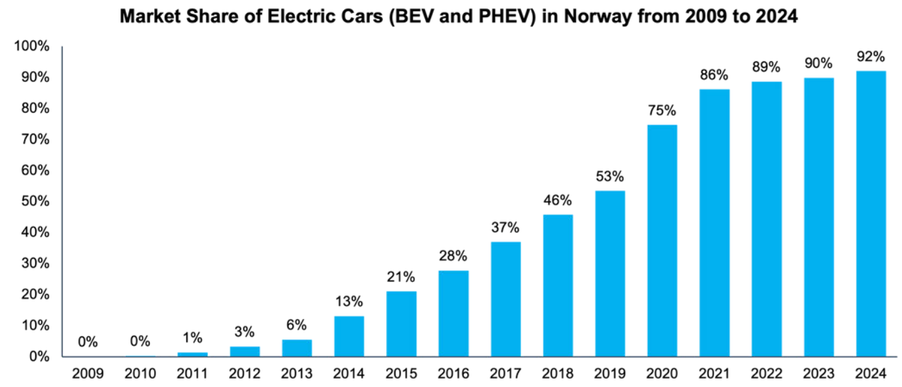
1. IEA: Global EV Policy Explorer
2. Bonus Slopus: Examining the Effect of Removing Bonus Incentives for Electric Vehicles on Adoption
3. New Zealand EV sales could spring to life next year, BMI suggests | interest.co.nz
4. Germany: BEV market share at 13,5% | European Alternative Fuels Observatory
5. EV registrations in Europe decrease by 5.9% in 2024

Successful countries set clear long-term goals and work steadily toward achieving them

Both Norway and the UK show that long-term, consistent policy frameworks create stable conditions for EV adoption, allowing markets to sustain growth.

Norway – The Global Leader

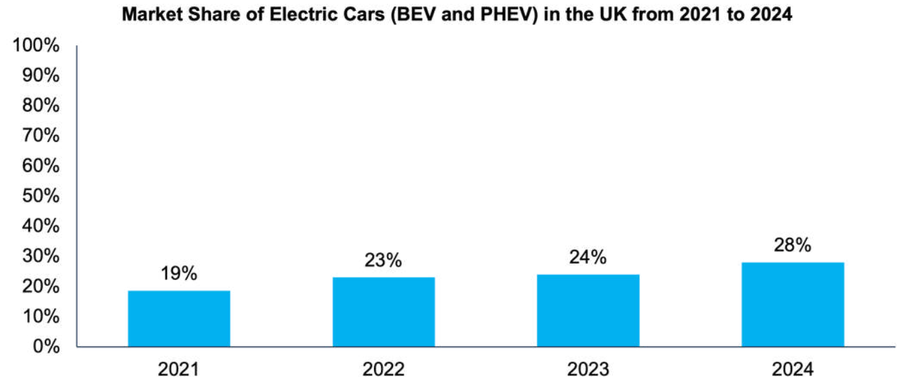
- **Approach:** Incentives sustained from the 1990s → today; demand-focused, consumer-facing benefits; clear 100% ZEV target for 2025.
- **Key Levers:** VAT & registration tax exemptions, toll/ferry/parking benefits, urban integration measures.
- **Impact:** Maintained growth momentum for over 15 years, **92%** of new passenger car sales are fully electric in 2024.



Data source: Statista and Deloitte

The UK – Transitioning Without Losing Momentum

- **Approach:** Shift from direct grants to regulatory measures (Vehicle Emissions Trading Scheme, 2030 ICE ban).
- **Key Levers:** Workplace/home charging grants (phased), manufacturer compliance obligations.
- **Impact:** Clear long-term targets maintain industry certainty, preventing sales collapse despite subsidy removal in 2022. EV market share grew from **19%** (2021) to **28%** (2024), as subsidies were replaced by a **£1.6 billion** UK Electric Vehicle Infrastructure Strategy to support mass EV adoption, and continued focus on very low company-car tax (BiK) on EVs.



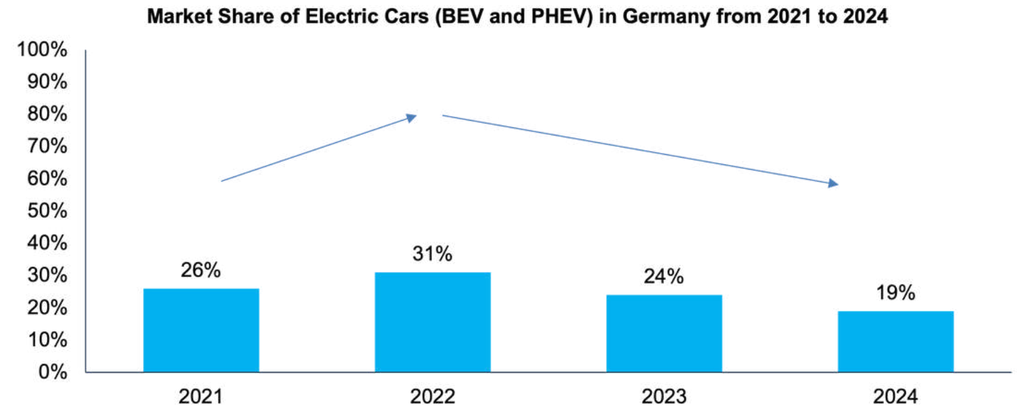
Data source: Car Sales Statistics and Deloitte

Recent evidence suggests that early policy pullback risks EV market decline

Germany and New Zealand illustrate the risk in withdrawing or sharply reducing incentives before the market is mature – often leading to steep declines in EV market share.

Germany – Subsidy Cuts Reversed Momentum

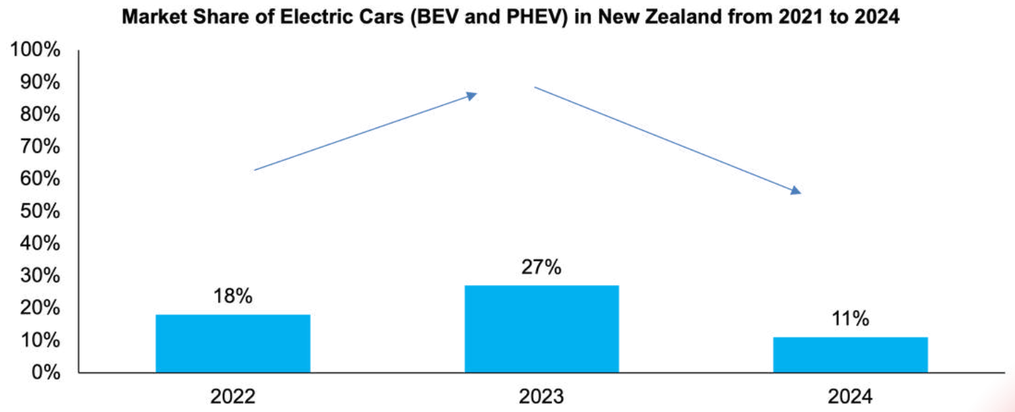
- **Key Levers (Before Cuts):** Strong company car tax breaks, vehicle tax exemptions, corporate depreciation incentives.
- **Shift:** Reduction/phase-out of €6,000–€9,000 Environmental Bonus (Umweltbonus) and corporate subsidies; tighter eligibility.
- **Impact:** Sales drop as incentives shrink faster than market self-sufficiency. Market share peaked at 31% (2022) → fell to 19% (2024).



Data source: Car Sales Statistics and Deloitte

New Zealand – Rebate Removal Stalled Growth

- **Key Levers (Before Removal):** Clean Car Discount rebates for low-emission vehicles, Road User Charge (RUC) exemption for EVs, supportive fuel economy standards, and charging infrastructure grants.
- **Shift:** Repeal of Clean Car Discount and end of RUC exemption; pivot toward regulatory measures without equivalent consumer price offsets.
- **Impact:** Market share jumped from 18% (2022) to 27% (2023) but fell sharply to 11% (2024).



Data source: Deloitte

Countries leading EV adoption have kept their industry support policies in place over a sustained period

- **Leading countries have maintained incentives for at least 10 years: with proven track records:** Norway (since 1990), Sweden/UK/Germany/France (since 2010), and China (since 2020). When programs are eventually scaled back, they're replaced with gentler incentives rather than abrupt withdrawal, ensuring smooth market transitions.

- **Successful countries deploy a strategic mix of demand and supply incentives:** On the demand side, these included purchase discounts, tax exemptions, bus lane access, free parking, and ferry discounts. Supply-side measures encompassed government support for R&D expansion and infrastructure investment. Crucially, sustained government backing proved essential across both approaches.

- **No country has achieved EV success through Internal Combustion Engine (ICE) efficiency improvements alone. Demand incentives remain in place until markets reach self-sustaining levels.** Norway only began reducing incentives after hitting **90%** EV market share. Supply-side restrictions, including ICE phase-outs/bans, are introduced only after EV market maturity is established.

- **Abrupt removal of incentives can unwind the gains quickly:**

  - In Germany, EV market share dropped from 18.4% in 2023 to 13.5% in 2024 after a sudden end to government subsidies.
  - After the New Zealand Government ended the Clean Car Discount scheme in late 2023, EV registrations in the year to March 2025 plummeted by 62.4% compared to the year to March 2024.

APPENDIX

Methodology

Workstream 1

Impact Analysis:

- We find the impact of the FBT exemption by quantifying and comparing EV sales trends from 2020 to 2024 with the projected EV sales if the pre-FBT exemption trend had continued post - 2022.
- The projections relies on pre-2022 trends using only the past two years of data to account for increased adoption driven by 2021 state policies. This approach captures the EV adoption trend likely attributable to state-level policies. Additionally, novated lease figures, which serve as the main mechanism through which the FBT (Fringe Benefits Tax) policy operates, show comparable sales numbers, though these numbers are not precise estimates they are directionally around the right magnitude

Scenario Analysis:

- We take AEMO's most conservative EV-uptake path as our baseline (BEVs exempt; PHEVs not exempt), then model policy variants:
    - **Current policy continues (baseline)** – BEVs remain exempt till 2035, PHEVs remain non-exempt. This is AEMO slower growth scenario, which is the most conservative of all the AEMO scenarios. EVs are likely to achieve **40%** market share by 2035.
    - **BEVs exemption ends in 2030 (scenario 1)** – BEVs remain exempt till 2030, PHEVs remain non-exempt.
    - **BEVs exemption ends in 2027 (scenario 2)** - BEVs remain exempt till 2027, PHEVs remain non-exempt.
- Under scenarios 1 and 2, we also consider a sub-scenario of re-instating PHEVs exemption in 2026 until 2035.
- We use proprietary industry data on NL shares to attribute part of today's demand to the FBT exemption. In "exemption ends" years, we revert the NL shares to pre-exemption levels to estimate lost sales.
- We translate the projected EV uptake in all scenarios to find the "foregone" infrastructure investment. We assume that Australia aims to improve its EV-to-charging-station ratio to the world average (currently, it has one of the highest EV-to-charger ratios globally*).
- For each scenario, annual emissions savings were calculated by multiplying the difference in emissions between ICEVs and EVs by average annual driving distances and the projected number of EVs on the road. Further, for scenarios that project a decline in EV uptake, we assume that ICEs replace the forgone EV uptake.

Additional details about our methodology are available upon request.

Methodology

Workstream 2

Our methodology followed a two-pronged strategy:

- First, we conducted a comprehensive literature review of academic papers, government reports, and industry publications to identify a range of benefits and costs associated with EVs in the Australian context.
- In the second step, we applied relevant methodologies, coefficients, and projections, alongside data collection, to calculate and model these benefits and costs. We focus on measurable, quantifiable benefits and costs, categorized into Health, Economic, Social, Energy, and Environmental areas. We use the **discount rate of 7%** as recommended by **Australian Government's Cost–Benefit Analysis guidelines** (OBPR, Treasury, Finance).
- We have not included personal income tax or company tax foregone in the fiscal cost because, under the counterfactual, the treatment is the same. Whether employers provide salary, an ICE vehicle, or an EV, remuneration expenses remain deductible for company tax and personal income tax outcomes are unchanged. Since there is no incremental difference between the policy and the counterfactual, these effects cancel out and do not form part of the fiscal cost.
- We conducted a two-part Fiscal Cost-Benefit Analysis (CBA) by looking at two periods:
    - Backward-looking (2022–2025) – Evaluates how the accumulated benefits compare against program costs to date. This is based on the additional EVs that the FBT exemption incentivised.
    - Forward-looking (2026–2030) – Projected benefits and costs using conservative assumptions on AEMO forecasts (progressive change).
- The analysis is conducted on only those vehicles that are/will be likely the result of the Electric Car Discount.

Additional details about our methodology are available upon request.

Methodology

Workstream 3

- We estimate how many EVs will enter the used-car market each year to 2035, and their likely resale values, based on turnover timings and residual value (RV) benchmarks.
- We start from our EV sales projections in Workstream 1.
- We then apply typical replacement cycles (informed by proprietary industry reports and dealership data) to see when each cohort reaches the used market.
- Used EV prices were forecasted using the average price reduction impact factor informed by historical data and industry reports. To remain conservative, price projections are done within a range.

Additional details about our methodology are available upon request.

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