

CYCLING AND WALKING AUSTRALIA AND NEW ZEALAND (CWANZ)

[Cycling and Walking Australia & New Zealand
\(cwanz.com.au\)](https://www.cwanz.com.au)

[Resources Page](#)

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CWANZ acknowledges the Traditional Owners of the land on which we meet and work, and all Traditional Owners of country throughout Australia and New Zealand. We recognise Aboriginal and Torres Strait Islander peoples' continuing connection to land, place, waters and community. We pay our respects to their cultures, country and elders past and present. We also recognise the Māori as tangata whenua and Treaty of Waitangi partners in Aotearoa New Zealand.

Charging forward

Understanding and growing
electric bicycle use in Queensland



Overview

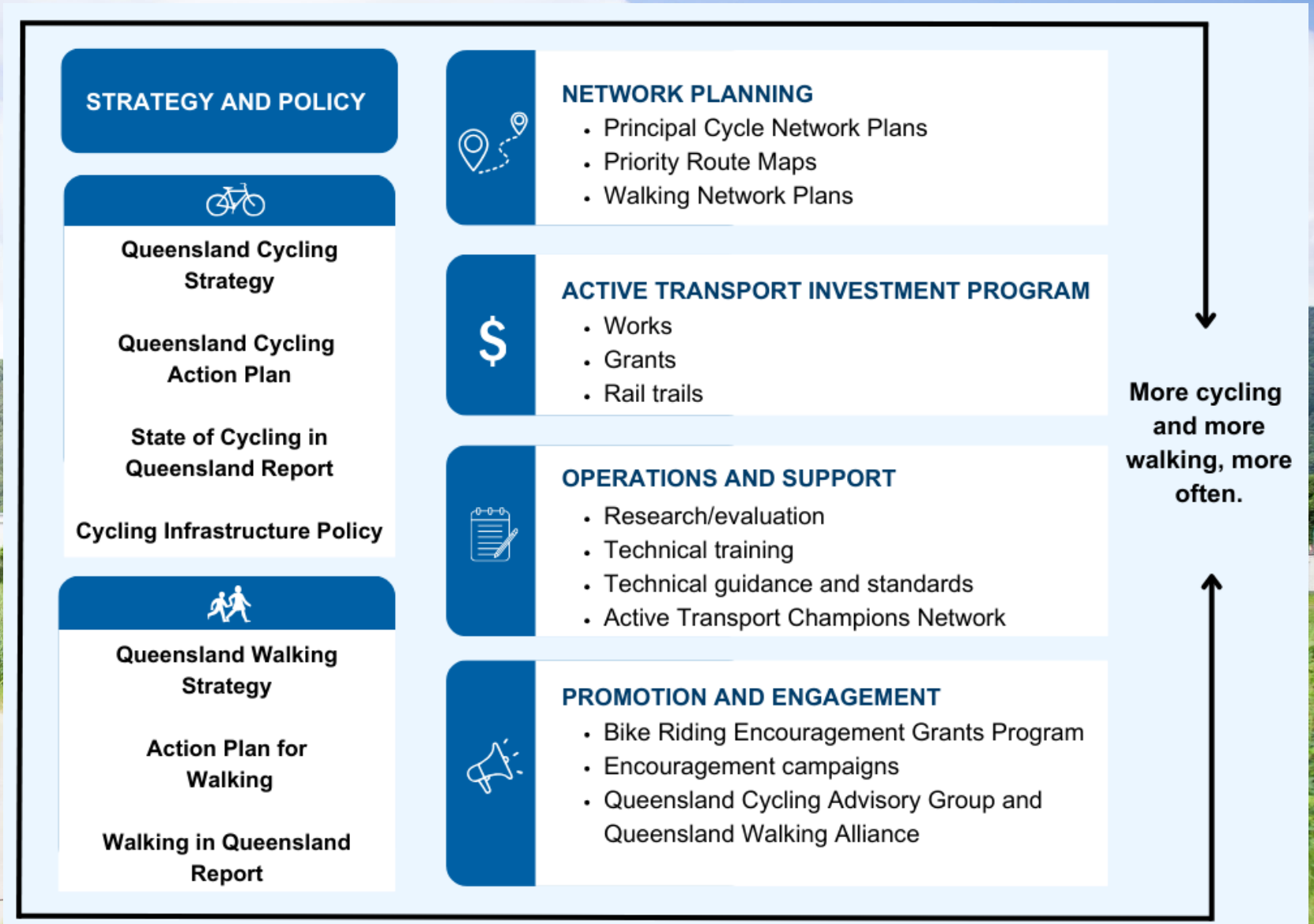
Queensland Electric Bicycle Rules:

For an electric bike to be legally used on the road, it must have an electric motor and be one of the following:

- 1. A bicycle with an electric motor or motors capable of generating no more than 200 watts of power in total, and the motor is pedal-assist only.*
- 2. An electrically power-assisted cycle is a bicycle with an electric motor capable of generating up to 250 watts of power, but the motor cuts out at 25km/h and the pedals must be used to keep the motor operating. Electrically power-assisted cycles must comply with the European Standard for Power Assisted Pedal Cycles (EN15194) and must have a permanent marking on it that shows it complies with this standard.*



Queensland's active transport ecosystem



Our strategy suites

10-year strategies:
Set the direction



Two-year action plans:
List the practical actions



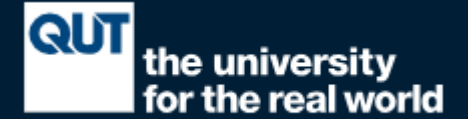
Progress reports:
Track progress against objectives



Our e-bike research



Queensland
Government



Queensland Cycling Action Plan

2017-2019

Using e-bikes for travel to and from work

Good practices in E-bike charging at workplaces

Survey of Australian e-bike owners, national (Part 1)

2020-2022

Survey of Australian e-bike owners, QLD (Part 2)

Initiatives and incentives to encourage uptake

2023-2025

Messages to encourage use and purchase

Evaluation of E-Mobility Rebate Scheme

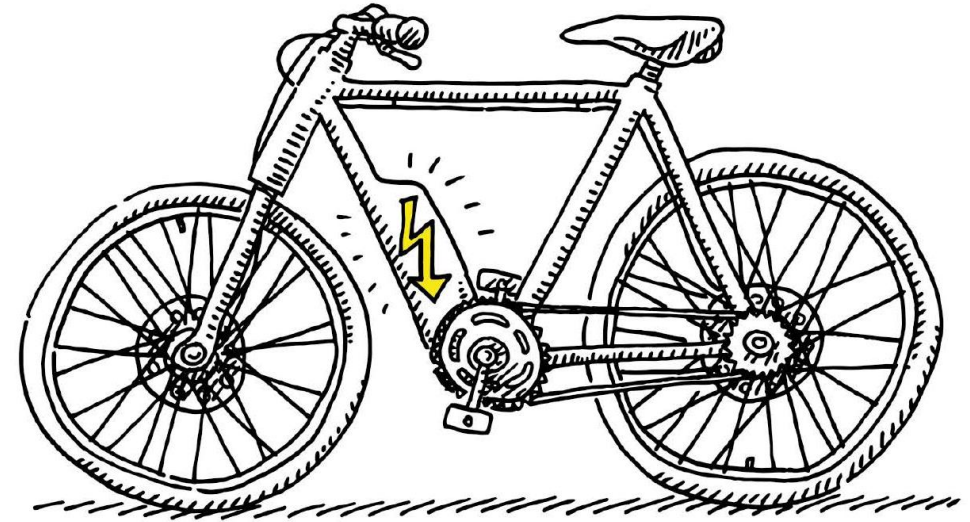
Phase 1, Survey of e-bike owners (2019)

Objective: Understand e-bike ownership and usage patterns and perceived challenges

Methodology: Nationwide survey with a focus on Queensland

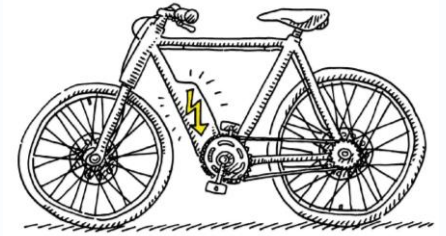
N=1,598

Tell us about you and your e-bike!



Contribute to e-bike research and go in the draw to win a \$50 VISA gift card!
Complete our survey here: qut.to/ebikesurvey

Phase 1, Key findings



- Most riders use e-bikes for transport rather than just recreation
- More than half of e-bike riders (58%) would have used a car for work trips without the e-bike
- High substitution rates for other trips – shops (75%), recreation (73%), social visits (68%)
- E-bikes enable riders to tackle hills, travel further, and visit more locations compared to standard bicycles

Phase 2, Analysis of Queensland data

Objective: Identify gender and urban/regional differences among Queenslanders regarding e-bike motivators, barriers, and experiences

N=567



“ by <https://unsplash.com>

Phase 2, Key findings

- More women than men are riding for transportation
- Men are riding more often for transport and for recreation
- Increase in overall usage of bicycles, more so in women than in men

Table 2. Trip purpose in Brisbane and rest of Queensland

| In Brisbane | Outside of Brisbane |
|---|--|
| Ride for transport | Ride for recreation |
| Ride to workplace | Ride to shops, appointments, recreation venues, socialise, eat |
| Replace <u>some</u> motor vehicle trips | Replacing motor vehicle trips |

Phase 3, Initiatives and incentives (2021)

Objective: Explore perspectives of non-owners/users and initiatives and incentives to encourage e-bike trial or purchase

Methodology: Queensland-focused study

Focus Groups: N=21

Survey: N=1,001



“ by <https://unsplash.com>”

Phase 3, Key findings

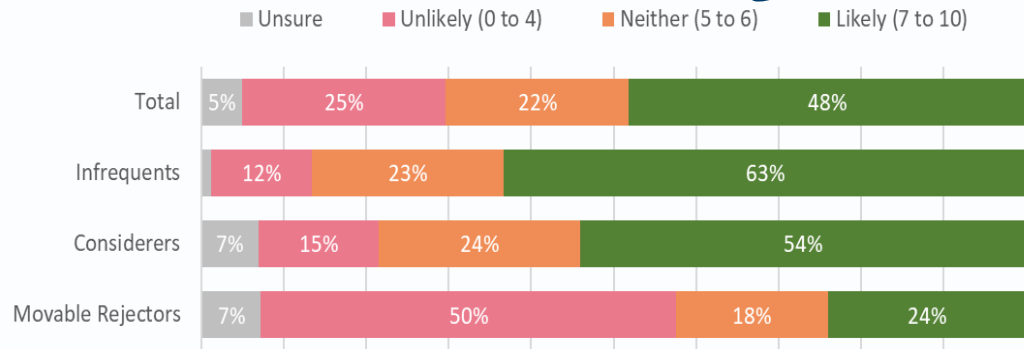


Figure 1. Likelihood of **trialling** an e-bike after exposure to the trial initiatives

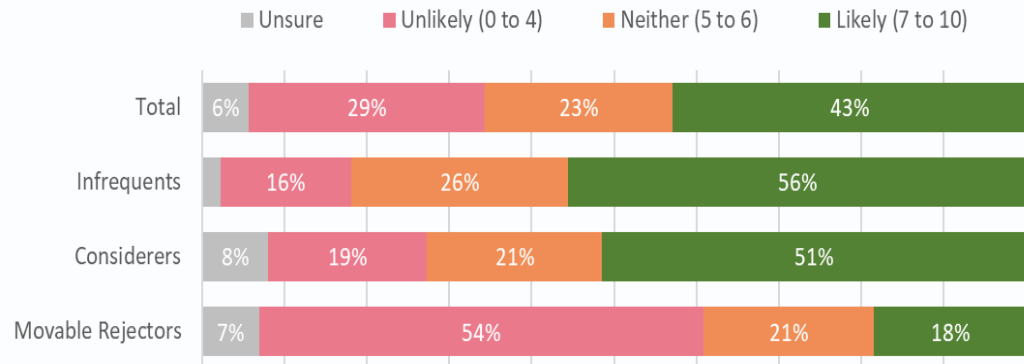


Figure 2. Likelihood of considering **buying** an e-bike after exposure to the purchase incentives

- Awareness of e-bikes is high but notable gap in fundamental knowledge about safety and benefits is less well understood
- Barriers to e-bike ownership include the high cost, safety in traffic and the parking and storing of the e-bike
- Preferred Initiatives: Trial an e-bike through an e-bike loan (lending library)
- Preferred Incentives: A rebate at point-of-sale (\$300 - \$500)

Phase 4, Targeted messaging (2023)



“  by <https://unsplash.com>”

Objective: Investigate messaging strategies for potential e-bike users and owners

Methodology: Discourse Analysis and Queensland-focused survey (50% in SEQ and 50% rest of QLD)

Attention, Interest, Desire, and Action (AIDA) framework underpinned the design of the survey

Survey: N=1,009

Phase 4, Key findings

Social Media Discourse:

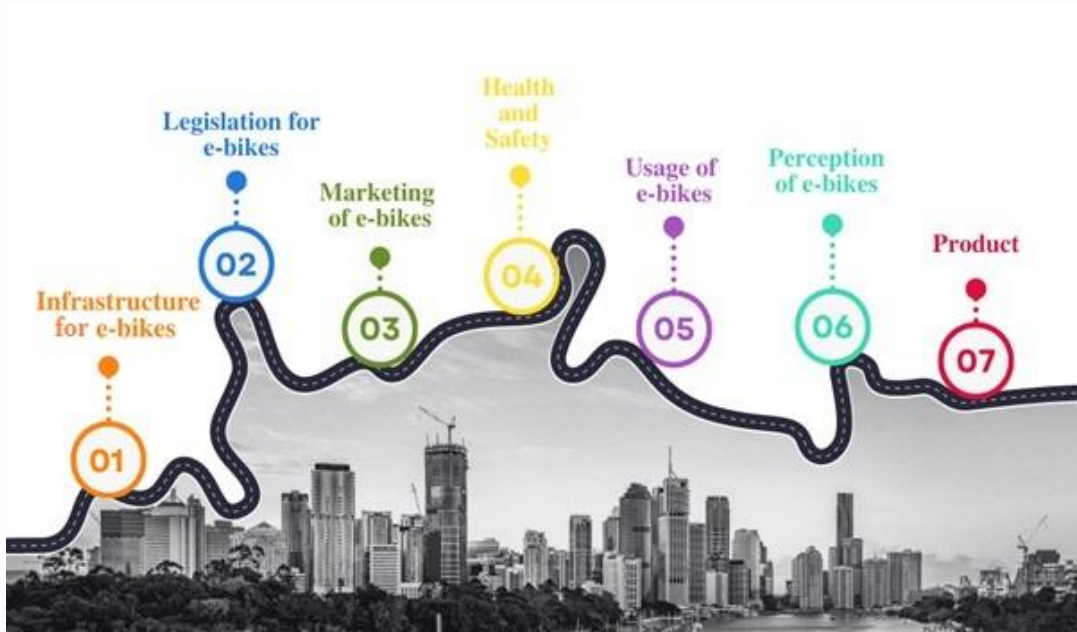


Figure 3. Themes from the social media discourse analysis on e-bikes

Survey Results:

Two key messaging topics to drive Attention, Interest and Desire among all respondents:

- Using an e-bike for transport is environmentally friendly
- E-bikes are fun and enjoyable

Phase 4, Key findings (continued)



Survey Results - *Action:*

- *Trial* influencers – Presence of e-bike lending library nearby, instructions on basic e-bike riding skills, opportunity to take a short ride before borrowing
- *Purchase* influencers – Cost of e-bike and free servicing at 90 day and again at 12 months

Opportunities for further research

- Replicate the national-level survey of e-bike owners
- Conduct an e-bike trial to better understand drivers and barriers to adoption
- Investigate how best to introduce e-bikes to individuals with physical limitations
- Evaluate potential of cargo bikes to address barriers to bicycling for women
- Investigate changes that bicycle riders make in their riding behaviour

More information

[Phase 1, Survey of e-bike owners](#)

[Phase 2, Analysis of Queensland Data](#)

[A report on good practices in e-bike charging at workplaces](#)

[The power of electric bikes to encourage riding](#)

Phase 3, Incentives and initiatives (Pending)

Phase 4, Targeting messaging (Pending)

Electric bicycles (e-bikes) | Transport and motoring | Queensland Government (www.qld.gov.au)

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For Queenslanders Contact us

Home > Transport and motoring > Public transport, taxis and bicycle riding > Bicycle riding



Bicycle riding



Get started with riding

Do you want to ride a bike or an electric bike for fun, exercise, transport or every reason? Find out all you need to know to put the wheels in motion.

[Find out how to get started with riding](#)



Benefits of riding

Riding is fun, convenient and good for your physical and mental health. Electric bikes have extra benefits too!

[Find out the benefits of riding](#)

Queensland Government

Search website Search

For Queenslanders Contact us

Home > Transport and motoring > [...] > Bicycle riding > Electric bicycles (e-bikes)

[Print](#)

Bicycle riding

[Benefits of riding](#)

[Electric bicycles \(e-bikes\)](#)

[Getting started with riding](#)

[Safety](#)

[Where to ride](#)

[Bike riding stories](#)

[Bike riding takes you places](#)

Electric bicycles (e-bikes)

Electric bicycles, also known as e-bikes, are creating more opportunities for more Queenslanders to experience the joy of bike riding and get around more sustainably than using a car. They make riding easier no matter your ability or location.

What is an electric bicycle (e-bike)?

An e-bike is a type of vehicle that has the same basic features as a regular push bike, but has an electric motor that can be used to assist the rider when pedalling. There are specific rules and requirements for e-bikes in Queensland. Read more about [e-bike rules and riding an e-bike in Queensland](#).

E-bikes make riding easier

As fun as riding is, Queensland's climate, hilly terrain and distance can sometimes put the brakes on even our best intentions to get outdoors for some exercise or to ride to work instead of taking the car.

But, these things don't need to get between you and your next ride!

With an e-bike, you can enjoy a riding experience that's more comfortable and fun than ever, all while boosting your physical fitness and mental wellbeing.

Hilly terrain and heat

Using the assistance of the motor while riding, e-bikes boost your pedal power and help you maintain speed, ride uphill and against the wind with ease. You'll also reach your destination fresh and without feeling as hot and sweaty as you might with a regular bike.

Distance

Long rides are no problem, with e-bikes allowing you to ride further with less effort. You could generally expect to ride about 40 to 80km on a single charge, but the exact range will depend on several factors including battery size, your weight, the terrain, and how much assistance you use. Many e-bikes also come with the option to upgrade to a higher capacity battery.

Low levels of fitness or limited physical ability

With the motor's assistance, pedalling uphill and going on longer journeys is a breeze and will help you reach your destination without feeling exhausted.

Taking off is easy, as they help you accelerate faster from a standstill than a regular bike. Some e-bikes may come equipped with 'start assist' technology that allows the motor to operate without you pedalling up to a speed of 6km/h, to help you get going and stay stable when you first take off.

Adaptive e-bikes (such as e-bikes propelled by hand pedals, recumbent e-bikes and three-wheeled e-trikes), provide accessible options for people with disability, stability or mobility concerns.

Transporting children or goods

E-bikes are available in various models with various features to meet people's different needs. This includes cargo e-bikes for carrying goods, kids, pets and shopping, and e-mountain bikes for trail riding. E-bikes can be fitted with different accessories to suit your needs. This includes child seats, and compartments, baskets and panniers to carry bags, boxes or other items.

E-bikes are good for you and good for the environment

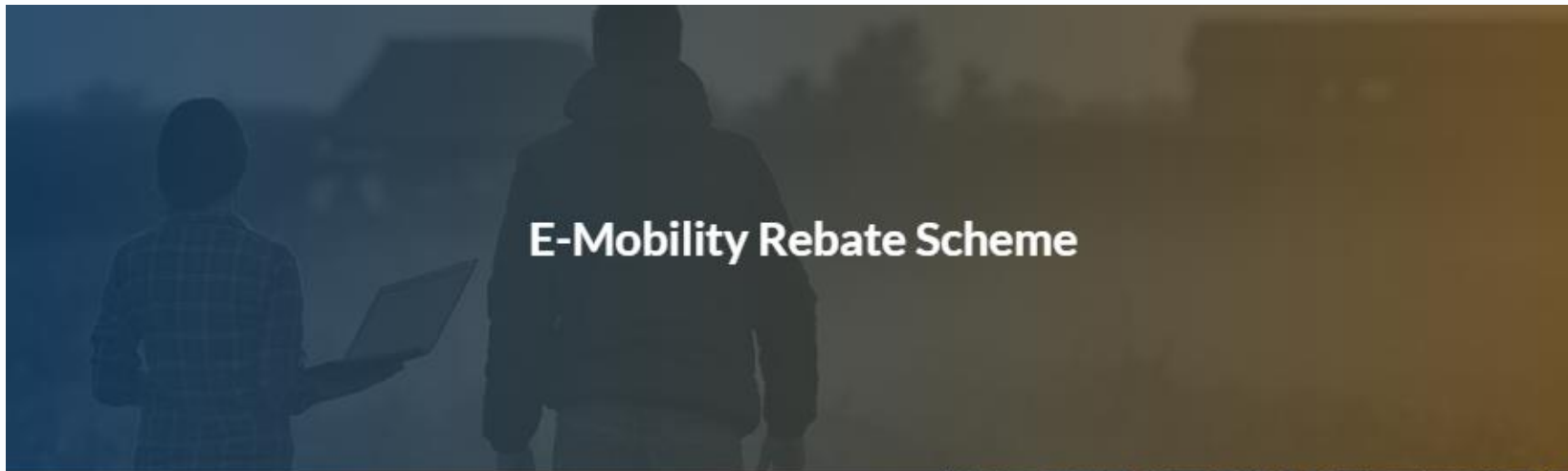
Even though e-bikes make riding easier in a lot of ways, you'll still reap many of the same [personal benefits](#) that come with riding a regular bicycle. These include:

- improved physical fitness and mental wellbeing
- a convenient and efficient form of transport
- the fun, freedom and adventure that comes with exploring your community by bike.

Your hip pocket and our planet will benefit too.

When compared to internal combustion engine vehicles and electric vehicles, e-bikes are a more affordable and environmentally friendly way to get around. This means e-bikes can often be a better option and a viable alternative to owning a car or a second car, particularly for people on low incomes and those looking to reduce their carbon footprint.

Even if you do have a car, it's easy to replace car trips with an e-bike. You'll not only avoid fuel costs and traffic congestion, you'll be helping reduce congestion, emissions and parking pressures too.



The E-Mobility Rebate Scheme offers rebates to reduce the upfront cost of purchasing a new eligible e-bicycle or e-scooter, encouraging the uptake of safe e-mobility devices as a more active and sustainable mode of transport.



Please note that due to the current Queensland State Government election caretaker period, QRIDA is continuing to receive and assess applications until this scheme's funding is exhausted but is unable to finalise applications until after the [caretaker period](#) has concluded.

As at 14 October 2024, there is approximately 20% of scheme funding remaining.

As part of Queensland's Zero Emission Vehicle Strategy 2022-2032, the Queensland Government has committed \$2 million to the E-Mobility Rebate Scheme to provide Queensland residents with rebates to reduce the upfront cost of purchasing a new eligible e-bicycle or e-scooter.

Related information

[Queensland's Zero Emission Vehicle Strategy](#)

[Road rules and safe use of e-scooters and e-bikes](#)

Questions



Stay connected

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**Thank you and stay
connected**

www.tmr.qld.gov.au