

## Queensland's e-mobility legislative framework

Written Brief to the State Development, Infrastructure and Works Committee Inquiry into e-Mobility Safety and Use in Queensland



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## Queensland's e-mobility legislative framework

### Introduction

E-mobility, including e-bikes and Personal Mobility Devices (PMDs) such as e-scooters, offers a host of benefits, including reduced carbon emissions, decreased traffic congestion, and enhanced accessibility for short-distance travel. These eco-friendly modes of transport are not only cost-effective but also promote healthier lifestyles and more sustainable urban environments.

However, as the popularity of e-mobility grows, it is crucial to establish and maintain a robust regulatory framework to ensure the safety of riders, pedestrians, and other road users. Striking the right balance between innovation and safety is essential to maximise the potential of e-mobility while ensuring all Queenslanders feel safe as they travel on our road and paths.

The Department of Transport and Main Roads (TMR) has played an active role in reforming PMD regulatory frameworks in recent years and Queensland is regarded as having nation-leading rules for safe use of devices such as e-scooters. However, despite this, injuries and fatalities are increasing and more can be done.

There is also an increasing trend of illegal devices being used unsafely in public places. For example, devices that may be mistaken as e-bikes but that have performance capabilities similar to motorcycles. This is causing community concern and significant safety risks.

### Context

TMR welcomes the opportunity to brief the State Development, Infrastructure and Works Committee (the Committee) in relation to the Inquiry into e-mobility safety and use in Queensland (the Inquiry).

This brief provides an overview of the current e-mobility legislative framework, as requested by the Committee. This includes the rules and requirements for PMDs and e-bikes.

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### This brief details:

- the different types of e-mobility devices, and clarifies the confusion about legal versus illegal devices;
- the role of each level of government in regulating e-mobility;
- current rules and penalties in Queensland;
- a history of relevant legislative frameworks; and
- current work that is of relevance to the Inquiry.

TMR would also welcome an opportunity to provide further background information on the broader issues raised in the Terms of Reference, should that be of assistance to the Committee.

### E-mobility devices explained

### Personal Mobility Devices

A PMD is defined in the *Transport Operations (Road Use Management) Act 1995* (TORUM Act) as a vehicle designed to be used by one person and as otherwise prescribed by regulation.

Section 15A of the *Transport Operations (Road Use Management – Road Rules)*Regulation 2009 (Queensland Road Rules) further classifies a vehicle as a PMD if it:

- has 1 or more wheels; and
- is propelled by an electric motor; and
- is not more than
  - o 1250mm in length by 700mm in width by 1350mm in height; or
  - 700mm in length by 1250mm in width by 1350mm in height; and
- weighs 60kg or less when the vehicle is not carrying a person or other load;
   and
- is none of the following—
  - a low powered toy scooter;
  - a motorised mobility device;
  - o a vehicle with pedals.

Based on this definition a broad range of devices are considered PMDs. E-scooters are by far the most common type. However, other examples include e-skateboards, e-unicycles, and Segway-style devices.



By regulating PMDs in an outcomes focused manner, Queensland's approach is flexible to changes in vehicle design and emerging technologies. Provided a device meets the specifications above, it can be used without constant need for legislative amendments.

### E-bikes

E-bikes are a type of bicycle defined in the TORUM Act as a power-assisted bicycle, which can have one or more auxiliary motors. This means the motor(s) cannot be the primary source of power and the device must be predominately pedal-powered by a rider. Further specifications for power-assisted bicycles are prescribed by regulation.

Section 353B of the Queensland Road Rules sets out the types of vehicles that are, and are not, power-assisted bicycles. There are two types of devices allowed:

- Electrically Power Assisted Cycles (EPACs); and
- 200-watt devices.

Some examples of legal e-bikes are provided below:



Legal e-bikes provide a legitimate mobility benefit and help to encourage more people to ride bikes by making riding up hills or in the heat more comfortable. Like all bicycles, legal e-bikes do not require registration or driver licencing, and riders are required to comply with all road rules.

### **Electrically Power Assisted Cycles**

The most common type of power-assisted bicycle is known as an EPAC which is defined in the Commonwealth *Road Vehicle Standards (Classes of Vehicles that are not Road Vehicles) Determination 2021* (the Determination).

An EPAC can have a motor with a Maximum Continuous Rated Power (MCRP) of 250 watts. The motor's output must be:

- progressively reduced as speed increases above 6 km/h; and
- cut off, where:
  - o speed reaches 25 km/h; or
  - the cyclist is not pedalling and speed exceeds 6km/h.

MCRP means the highest amount of power that the motor can deliver continuously without overheating or suffering damage. This rating is determined by the manufacturer according to the motor's design and cannot be changed. This means that any software limitation or lock that reduces a motor's output does not change the MCRP itself and is not compliant. For example, an e-bike with an MCRP of 500 watts with a software restriction to reduce the motor's output to 250 watts is not compliant.

The intention of the Determination is that e-bikes that comply with the European Standard for Electrically Power Assisted Cycles (EN15194) can be imported into Australia without further assessment against motor vehicle standards and Australian Design Rules (ADRs).

Given EPACs are the most common type of e-bike available, TMR recommends users look out for an EN15194 compliance label to be sure a device is legal for use in public places.

### 200-watt devices

The other type of power-assisted pedal cycle is a device that can have 1 or more electric auxiliary motors with a combined maximum power output of no more than 200-watts. This is a legacy e-bike definition that existed prior to EPACs (formerly known as pedelecs) being allowed.

Other than the maximum motor output, there is little difference between a 200-watt device and an EPAC as the Queensland Road Rules also prescribes the types of vehicles that are not power-assisted bicycles.

Any device that can be propelled only by the motor at speeds above 6km/h or with the motor capable of providing assistance at speeds above 25km/h is not allowed. This means, any device that can be throttle controlled only or travel faster than 25km/h under motorised power is illegal, regardless of its motor output.

### Non-compliant devices

The term e-bike can refer to different types of vehicles and there is considerable confusion in the community about which e-bikes are legal for use in Queensland.

TMR is aware of an increasing number of illegal devices, purporting to be e-bikes, available for sale and in use in Queensland. These devices are typically capable of being throttle powered only or have high-speed (greater than 25km/h) or high-powered (greater than 250 watts MCRP) motors that exceed legal requirements. A device with an internal combustion engine is also illegal.

Even though these devices are fitted with pedals, they are not bicycles. Instead, they are considered illegal motorcycles and are banned from use in any public place in Queensland, including on paths and roads.

Some examples of illegal devices are provided below.



Petrol powered engine



1000 watts, 50km/h



750 watts, 45km/h, throttle controlled

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### Registerable vehicles

There are also a range of electric motorcycles, which are sometimes referred to as ebikes, that can be registered with compulsory third-party insurance. These vehicles do not have pedals and are capable of high speeds. They range in appearance from resembling a moped, touring motorcycle or dirt bike.

Some of these vehicles comply with relevant ADRs and can be registered for full road use. Others may be eligible for conditional registration for limited use, such as when loading and unloading from a trailer.

Some examples of registerable vehicles that can be confused for e-bikes are provided below:



These vehicles are all considered motorcycles and must be registered for any road use, users require a licence, and they cannot be used on paths.

### Government roles

### Commonwealth Government

The Commonwealth Government is responsible for setting the standards and rules for vehicle importation and enforcing these at the border. This responsibility is shared between the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDSCA) and the Australian Border Force.

Under Commonwealth law, PMDs and e-bikes that comply with certain specifications (provided in the Determination) can be imported into Australia as "vehicles that are not road vehicles". This is essentially an exemption from the need to comply with motor vehicle standards and ADRs.

However, devices that do not meet the specifications set out in the Determination should not be imported without approval and full assessment against motor vehicle standards and ADRs.

### Importation process

Before 2021, importing legal e-mobility devices required approval from DITRDCSA. With the introduction of the Determination, DITRDCSA launched the ROVER portal to manage import applications under the Road Vehicle Standards legislation. This system removed the need for import approvals for 'vehicles that are not road vehicles'. Therefore, vehicles such as PMDs and e-bikes, which are not solely or principally designed for on-road use, are now categorically separated from road vehicles for the purpose of import.

For compliant e-bikes, ROVER now issues optional 'advisory notices' confirming the vehicle is not a road vehicle and does not require import approval. However, advisory notices are not mandatory if the vehicle is listed under the Determination.

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Therefore, vehicles imported under the Determination are not subject to the same level of scrutiny or assessment as road vehicles by the Australian Border Force. This has enabled the importation of non-compliant devices, such as high-powered or high-speed e-bikes that function more like motorcycles to be imported as legal e-bikes without oversight.

TMR believes these changes, coupled with rising demand, have led to an influx of illegal devices, contributing to current safety concerns.

The Honourable Brent Mickelberg MP, Minister for Transport and Main Roads, has previously advocated to the Commonwealth Government about importation reform regarding PMDs. The Minister intends to again write to the Honourable Catherine King MP, Minister for Infrastructure, Transport, Regional Development and Local Government, to request a review of the importation and enforcement processes for both PMDs and e-bikes.

### **Queensland Government**

### Sale

Once imported, e-mobility devices can be sold in Queensland. If a device has been imported which exceeds Queensland's regulated specifications, retailers may still supply the device to consumers, however, it must be for use on private property only.

The Office of Fair Trading (OFT) is responsible for the administration of Queensland consumer law, investigation of consumer complaints, and enforcement of retailers found to be supplying goods under false or misleading claims. Therefore, any retailer found to be supplying an illegal device to a consumer, with claims that it is safe and legal for use in public spaces, is subject to enforcement by OFT and can face severe penalties. Fines of up to \$50 million for a corporation and \$2.5 million for an individual apply.

### Use

TMR regulates the use of e-mobility devices in Queensland and the penalties for non-compliance through the Queensland Road Rules. This includes regulation of:

- which devices can be used on public infrastructure and where they can be ridden:
- rider requirements, such as minimum age limits;
- rider behaviour, such as helmet use, carrying passengers, and compliance with speed limits; and
- other general road rules which apply to all road users, including e-bike and PMD riders.

In addition, the TORUM Act sets out more serious offences associated with drink and drug riding, careless riding, and post-crash obligations.

A detailed summary of the rules for PMDs and e-bikes is provided later in this brief.

### **Enforcement**

Enforcement is the responsibility of the Queensland Police Service (QPS). The QPS can issue infringement notices and fines for a wide range of e-mobility offences.

A summary of the PMD penalties and infringement volumes is at **Appendix 1.** It is not possible to provide data on e-bike infringements as offence data groups e-bikes with all other bicycles.

### Lithium-ion batteries

A summary of the Electrical Safety Office (ESO) responsibilities and powers relating to e-mobility devices is provided at **Appendix 3**.

### Local governments

### Shared schemes

In Queensland, the responsibility for shared e-mobility device schemes sits with local governments. This is because devices are used and parked on local government infrastructure. TMR does not directly regulate shared schemes or their providers.

Shared e-scooter and e-bike schemes are present across Queensland including Brisbane, Gold Coast (e-bikes only), Logan, Ipswich, Sunshine Coast, Hervey Bay, Bundaberg, Cairns, Rockhampton and Townsville.

Local governments have agreements with providers that include device caps, safety rules such as geofenced no parking and go-slow zones, a requirement to provide a helmet with each device, and minimum standards to ensure providers move badly parked devices quickly.

Permitting local governments to manage these schemes allows for appropriate decisions to be made based on the needs of each community. As compared to other jurisdictions, Queensland local government areas are relatively large and clearly defined, and less likely to create cross-border issues for shared e-mobility use. As such, to TMR's knowledge, there have been no practical issues for users, or the industry, caused by different approaches across local governments.

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### Local laws and signs

Local governments can also make local laws that govern the use of vehicles, including e-mobility devices, on footpaths and shared paths. This can include prohibitions, restricted areas, speed limits, and parking requirements.

Local governments also have the power to install official signs that have regulatory meaning under the Queensland Road Rules. For example, a local government can set a path speed limit that applies to all vehicles (including bicycles, e-bikes and PMDs) that use the path. They can also install prohibition signage to prevent use in certain areas (often used in high-volume pedestrian areas like outdoor malls).

### Current rules

### Rules for riders

E-bikes and PMDs share many rules, but key differences exist due to their varying risk profiles. E-bikes have broader road access, no age limits, and no specific path speed limits, reflecting their classification as bicycles. Community compliance with bicycle rules, such as helmet use, is stronger, reducing the need for extra regulation for e-bikes.In contrast, PMDs like e-scooters are less stable (due to smaller wheels), often used by less experienced riders, and are subject to stricter regulations.

The table below compares key rules across e-mobility types. Note that the penalties and penalty units (PU) provided are for the 2024-25 financial year.

Rule	E-bike	PMD
Rider age	No limit	<ul> <li>16 unsupervised</li> <li>12 if supervised by an adult</li> <li>Penalty: \$161 (1 PU)</li> </ul>
Helmets	<ul> <li>Approved bicycle helmet</li> <li>Penalty: \$161 (1 PU)</li> </ul>	<ul> <li>Approved bicycle or motorcycle helmet</li> <li>Penalty: \$161 (1 PU)</li> </ul>
Speed limits	25km/h under motor assistance, otherwise the speed indicated on speed signs     Penalty: \$322 (2 PU) to \$1854 (11 ½ PU) depending on speed over the limit (same as for all vehicles)	<ul> <li>12km/h on footpaths and shared paths</li> <li>25km/h elsewhere</li> <li>Speed signs also apply <ul> <li>Penalty: \$161 (1 PU)</li> <li>to \$645 (4 PU)</li> <li>depending on speed over the limit</li> </ul> </li> </ul>

Rule	E-bike	PMD				
Passengers	<ul> <li>Allowed if device designed to carry passengers</li> <li>Passengers must wear helmet         <ul> <li>Penalty: \$161 (1 PU)</li> </ul> </li> </ul>	<ul><li>Prohibited</li><li>Penalty: \$161 (1 PU)</li></ul>				
Access	<ul> <li>All paths and roads         (excluding motorways)</li></ul>	<ul> <li>All paths</li> <li>Local streets (50km/h with no dividing line)</li> <li>Bicycle lanes that are physically separated         <ul> <li>Penalty: \$193 (1 1/5 PU)</li> </ul> </li> <li>Prohibited in areas with no PMD signs         <ul> <li>Penalty: \$161 (1 PU)</li> </ul> </li> </ul>				
Mobile phone	<ul> <li>Prohibited unless cradled</li> <li>Penalty: \$1209 (7 ½ F</li> </ul>	PU)				
Pedestrian protections		s on footpaths and shared paths trian side of a separated path				
Safety equipment	` •	<ul><li>Fitted with bell (only for PMDs with handlebars)</li><li>Lights and reflectors for night use</li></ul>				
Alcohol and drugs	<ul> <li>Cannot ride under the influence of alcohol or drugs</li> <li>Cannot ride while drinking alcohol         <ul> <li>Court-imposed penalty: \$2258 - \$4516 depending on severity</li> </ul> </li> </ul>					
General road rules	stop and give way signs, and	road rules such as traffic lights, I give way rules. to \$645 (4 PU) depending on				
Post crash duties	<ul> <li>Stop, provide assistance to the injured, and exchange details</li> <li>Court-imposed penalty: up to \$18,576</li> </ul>					

There are no demerit points applicable for users of legal e-mobility devices. However, demerit points may be relevant for users of illegal devices that are regulated under broader motorcycle laws (discussed more below).

### Rules to protect riders

There are also a range of rules that apply to drivers to protect riders of bicycles (including e-bikes) and PMDs. These include:

- Minimum passing distances penalty \$483 and 3 demerit points:
  - o 1 metre on roads with a speed limit of 60km/h or less.
  - 1.5 metres on roads with a speed limit of more than 60km/h.
- Give way to riders penalty \$483 and 3 demerit points:
  - o on or crossing the road a driver is turning into at an intersection.
  - o on a footpath when a driver is entering or existing a driveway.
  - crossing slip lanes.
  - o on or entering a pedestrian crossing.

### Penalties for the use of illegal devices

Under Queensland's current regulations, illegal devices are illegal motorcycles and cannot be used in any public place, including on roads or paths.

Users caught riding an illegal e-bike can face significant penalties. This can include fines of more than \$1580 and three demerit points for offences such as riding an unregistered and uninsured vehicle, not wearing a motorcycle helmet, not holding a motorcycle licence, and riding a motor vehicle on a path.

Some of these fines can also be issued directly to the person who permits the use. For example, a parent who allows a child to ride an illegal e-bike in public can be fined.

The QPS can also impound and confiscate devices for repeat offences committed within 5 years or where they suspect the device will be used in the commission of further offences.

### Other jurisdictions

E-bike rules are generally consistent across Australia, with uniform power and speed limits, except in New South Wales (NSW), which allows EPACs up to 500 watts. Only Victoria and Western Australia impose an age limit of 16 years. While most states permit adults on footpaths, some restrict this. No jurisdiction mandates registration, licensing, or insurance for legal e-bikes.

All Australian jurisdictions are developing e-scooter regulations, with most allowing both private and shared devices, except the Northern Territory, which excludes private devices. PMD is the most common term used, though specifications like size and weight vary. Most jurisdictions set a minimum age of 16 years, require helmets, and ban passengers and mobile phone use. Road and path access, including speed limits, differ, with footpath rules aligning with bicycles. Maximum speeds range from 15 to 25km/h, with 10 to 15km/h limits in pedestrian areas. No jurisdiction mandates registration, licensing, or insurance for e-scooters or PMDs.

The NSW Portfolio Committee No. 6 – Transport and the Arts published its report on the <u>Use of e-scooters</u>, <u>e-bikes and related mobility options</u> (Report 25) on 13 February 2025, including 34 wide-ranging recommendations. The NSW Minister for Regional Transport and Roads, Minister for Transport released a statement on 13 May 2025 in response to Report 25. <u>A safer pathway for the future of e-bikes and e-scooters | NSW Government</u> indicates plans to introduce a regulatory framework that significantly aligns with Queensland's existing PMD framework. NSW is set to:

- allow private and public e-scooters;
- introduce a minimum age of 16 years;
- introduce two speed limits depending on infrastructure 10/20km/h whereas Queensland's is 12/25km/h;
- allow access to shared paths, bicycle paths and local streets.

**Appendix 2** contains a detailed jurisdictional analysis of both e-bike and PMD rules.

## History of e-mobility regulation in Queensland

### E-bikes

E-bike regulation in Queensland has progressively aligned with national and international standards, transitioning from basic motor limits to adopting the EPAC framework in 2024.

The table below summarises the key changes in the regulation of e-bikes in Queensland since 2012.

Prior to 2012	<ul> <li>200-watt devices allowed in Queensland. Motor must be auxiliary, meaning it cannot be the primary power source and the rider needs to pedal.</li> <li>Internal combustion engines not permitted.</li> </ul>
2012	<ul> <li>Commonwealth government introduced the definition of a 'pedelec' to the ADRs. A pedelec was compliant with EN15194.</li> <li>Pedelecs have a maximum assisted speed of 25km/h and a MCRP output of 250 watts.</li> <li>Queensland Road Rules amended to allow pedelecs in addition to 200-watt devices.</li> </ul>

2019	<ul> <li>Queensland Road Rules were amended to make clear that throttle only e-bikes are illegal, as well as those capable of receiving motor assistance above 25km/h.</li> <li>This reinforced that an e-bike motor must provide assistance only and could not be the primary means of propulsion.</li> </ul>
2021	<ul> <li>In January 2021, DITRDCSA introduced the Determination, and made consequential amendments to existing definitions under the ADRs. This replaced the term pedelec with EPAC.</li> <li>While the intention was to ensure devices that comply with EN15194 were exempted from assessment against motor vehicle standards and ADRs, the removal of the reference to EN15194 has created some confusion.</li> </ul>
2024	Queensland Road Rules amended to refer to the Determination and update terminology from pedelec to EPAC.

### Personal Mobility Devices

Queensland has led the way in regulating PMDs, introducing rules in 2013 and continually refining them to enhance safety and consistency. Key developments include expanded device access, stricter safety measures, and tougher penalties for high-risk behaviours.

The table below summarises the key changes in the regulation of PMDs in Queensland since 2013.

2013

2018	<ul> <li>First e-scooter share scheme launched in Brisbane.</li> <li>Queensland Road Rules amended to broaden range of PMDs based on dimensions, mass and speed.</li> <li>Queensland is the first jurisdiction to allow e-scooters, e-skateboards and other similar devices.</li> <li>Maximum speed increased to 25km/h.</li> </ul>
2021	<ul> <li>PMD rules adopted into the Australian Road Rules, modelled on Queensland's 2018 regulation.</li> <li>Key differences in the Australian Roads Rules compared to the Queensland Road Rules include:         <ul> <li>Minimum age 16 years, no supervised use for riders aged 12 to 15 years.</li> <li>Speed limits are at the discretion of jurisdictions.</li> <li>Road and path access is at the discretion of jurisdictions.</li> </ul> </li> <li>Commonwealth first included PMDs in importation legislation, exempting them from assessment against motor vehicle standards and ADRs. Definition of PMD aligned to Australian Road Rules and Queensland Road Rules.</li> </ul>
2022	<ul> <li>As part of PMD Safety Action Plan¹ and following significant stakeholder consultation, Queensland Road Rules amended to address community safety concerns.</li> <li>Changes included:         <ul> <li>Reduced footpath speed limit of 12km/h.</li> <li>Expanded road access to include some bicycle lanes.</li> <li>Change of classification from pedestrian to vehicle to ensure application of all general road rules.</li> <li>Increased penalties for high-risk offences.</li> </ul> </li> </ul>
2024	TORUM Act amended to ensure consistent offences and penalties for high-risk behaviours, regardless of whether offending occurs on road or paths.

<sup>&</sup>lt;sup>1</sup> TMR released the PMD Safety Action Plan in 2022 which featured 18 actions to improve safety based on significant stakeholder consultation. Actions included establishing stakeholder groups (which are still active), road rule amendments, enforcement blitzes, high-profile communications campaigns, and advocacy to the Commonwealth government about importation issues. More information can be found at <a href="https://www.tmr.qld.gov.au/safety/road-safety/road-safety-strategy-and-action-plans/personal-mobility-device-plans">www.tmr.qld.gov.au/safety/road-safety/road-safety-strategy-and-action-plans/personal-mobility-device-plans</a>

- Careless riding on paths now faces court-imposed fines of more than \$6000.
- Post-crash obligations apply to PMD riders who must stay at the scene, provide assistance to anyone that is injured, and exchange details with other people involved and the QPS.

### Current work underway

### **Evaluation**

TMR is currently undertaking an independent evaluation of the PMD reforms to ensure they are meeting their intended road safety outcomes. The evaluation will provide evidence about whether the reforms have been successful in creating a safe regulatory framework for use; and may recommend additional regulatory changes or other activities (such as additional communications and community education) to further support safe PMD use.

The outcomes of the evaluation are expected by mid-2025 and TMR will share the results with the Committee once available.

### Stakeholder engagement and the PMD Safety Action Plan

In 2021, TMR held a stakeholder roundtable event to listen to the views of the community and allow these to form the approach to the creation and implementation of Queensland's e-scooter regulatory framework. This allowed the community the chance to raise their concerns and assist with developing solutions to resolve them.

Following the stakeholder roundtable event, TMR introduced the PMD Safety Action Plan (the Action Plan). The Action Plan included 18 key actions which aimed to improve the safety of PMDs for all path and road users in Queensland. The plan aimed to balance community safety with the emerging role of PMDs in the broader mobility ecosystem.

As part of the Action Plan, TMR established a government and industry PMD Safety Reference Group (the Group). The Group's purpose was to assist government with developing and implementing e-mobility solutions which cater to the entire community. TMR continues to consult with the Group in its new form, the e-Mobility Safety Reference Group (SRG). More information is provided below.

TMR has implemented several actions from the Action Plan since publishing. As noted above, a comprehensive package of road rules was legislated in 2022 which clarified the rules for riders and set tougher penalties for high-risk offences. In 2024, additional legislative amendments implemented significant court-imposed penalties for riders who ride without due care and attention (on paths and roads) as well as those that leave the scene of a crash without stopping, rendering medical attention, and exchanging relevant information (such as name and address).

TMR engaged Griffith University to undertake research into PMD design trends, with the aim of understanding the safety implications of potential changes to the regulated dimensions. While initial consultation occurred with key stakeholders, and support for the proposed recommendations was received, this work will not progress further until outcomes from the PMD evaluation and the Inquiry are known.

Of the 18 actions from the Action Plan, 17 have now been delivered. The final action relates to improving enforcement of drink riding and giving QPS the ability to undertake random breath tests. Stakeholder consultation has occurred on this action and legislative amendments are being considered.

### Proactive communication and education

TMR is committed to improving public awareness and understanding about e-mobility rules and safety. TMR has implemented a range of educational and enforcement initiatives. These include clarifying legal definitions for e-bikes and PMDs, distributing educational materials to schools, retailers, police, and other stakeholders, and collaborating with agencies such as QPS, OFT, and the Department of Education, to tackle issues like retail enforcement and school policies.

TMR has also promoted existing rules and enforcement activities through media campaigns and advocated for the Commonwealth Government to strengthen importation processes to prevent illegal devices entering Australia.

Key resources developed include an <u>E-bike Rules brochure</u>, which explains the differences between legal and illegal e-bikes, outlines key rules, and details penalties, and a <u>Rules for Riders brochure</u>, which provides PMD rules, penalties and safety tips. Both brochures are widely distributed to stakeholders, including Electorate Offices, schools, and retailers.

Additionally, the *Fine. A Fine* campaign, launched in 2022, used social media, radio, billboards, and web content to promote PMD safety and included a QR code handout linking to StreetSmarts for further information.

TMR also regularly partners with the QPS to deliver e-mobility education in schools, shopping centres and other popular areas where e-mobility devices are used.

### Relevant stakeholders

The SRG has been a key consultation forum for TMR for all recent reforms, as well as a way of fostering a community of practice to share lessons learned and potential solutions to e-mobility safety issues.

TMR currently chairs the SRG whose membership comes from a broad range of sectors impacted by PMD and e-bike use in Queensland, including representatives from the following organisations:

### **Queensland Government**

- TMR
- OFT
- QPS
- Queensland Rail

### Local governments

- Brisbane City Council
- Bundaberg Regional Council
- Cairns Regional Council
- Douglas Shire Council
- Fraser Coast Regional Council
- Gold Coast City Council
- Livingstone Shire Council
- Mackay Regional Council
- Moreton Bay Regional Council
- Redlands City Council
- Sunshine Coast Council
- Townsville City Council
- Local Government Association of Queensland

### **Academia**

- Queensland University of Technology
- University of Queensland
- University of the Sunshine Coast

### **Health**

- Jamieson Trauma Institute
- Royal Australasian College of Surgeons

### User groups

- Bicycle Queensland
- Queensland Walks
- Royal Automobile Club of Queensland
- Scooter Squad

### **Disability advocates**

- Queenslanders with a Disability Network
- Vision Australia

### <u>Industry</u>

- Ario
- Beam
- Benzina Zero
- Bicycle Industries Australia
- E-Mobility Australia
- Everybody e-Bikes
- Evolve Skateboards
- Lime
- Neuron

## Appendix 1: PMD offences, penalties and infringements

The table below lists most applicable offences for PMD riders in Queensland, along with the current penalty (for 2024-25), and the number of QPS issued infringements from 1 November 2022 (when significant road rule reforms commenced) until 31 December 2024. The list is sorted by the volume of infringements.

Offence	Penalty (2024-25)	Number of infringements
Fail to wear approved helmet	\$161	5,003
2. Ride on prohibited road	\$193	1,756
3. Carry passengers	\$161	337
4. Fail to stop at red traffic light	\$645	223
5. Exceed speed limit by less than 14kmh (not footpath)	\$161	205
6. Exceed 12kmh footpath speed by less than 14kmh	\$161	154
7. Exceed speed limit by 14kmh to 20kmh (not footpath)	\$241	110
8. Exceed speed limit by 20kmh to 30kmh (not footpath)	\$403	75
Ride device without lights/reflectors at night	\$161	64
10. Use mobile phone handheld/resting on body	\$1209	56
11. Fail to keep left of centre of road	\$129	48
12. Fail to stop as required by stop sign or stop line	\$483	45
13. Fail to keep to left side of road (not multi-lane)	\$129	42
14. Exceed speed limit by more than 30kmh (not footpath)	\$645	27
15. Exceed 12kmh footpath speed limit by 14kmh to 20kmh	\$241	25
16. Fail to keep left of centre dividing line	\$290	25
17. Contravening lights at crossing	\$161	22
18. Proceed after stopping at red traffic light	\$645	18
19. Exceed 12kmh footpath speed limit by 20kmh to 30kmh	\$403	16
20. Cross level crossing while pedestrian light red	\$64	14
21. Fail to ride within marked lane on multi lane road	\$129	12
22. Fail to stop at red traffic arrow	\$645	11
23. Fail to comply with PMD prohibited sign	\$161	11
24. Move into path of vehicle/pedestrian and cause hazard	\$161	11
25. Fail to keep left of median strip	\$129	10
26. Ride wrong way on service road	\$129	10
27. Drink liquor while riding	\$483	10
28. Fail to keep left of oncoming vehicle	\$64	9
29. Fail to stop at stop sign or stop line (other place)	\$483	8
30. Fail to give way entering road from road related area	\$483	7
31. Disobey 'no entry' sign	\$225	7

Offence	Penalty (2024-25)	Number of infringements
32. Follow another vehicle too closely	\$376	7
33. User involved in crash fail to fulfil duties	\$322	7
34. Disobey 'one way' sign	\$225	6
35. Obstruct path of another driver or pedestrian	\$161	6
36. Ride in r/lane multi-lane road >80km/h	\$96	6
37. Fail to ride in line of traffic on road	\$129	6
38. Proceed contrary to red bicycle crossing light	\$161	6
39. Fail to give way at intersection (not T or roundabout)	\$483	5
40. Fail to give way entering traffic from side of road	\$483	5
41. Fail to keep left of double continuous dividing lines	\$290	5
42. Ride device without bell	\$161	5
43. Exceed 12km/h footpath speed limit more than 30km/h	\$645	4
44. Fail give way at give way sign i/section not		
roundabout	\$483	4
45. Disobey directional arrow on road	\$129	3
46. Fail to drive left of centre island on roundabout	\$96	3
47. Fail to give way to pedestrian on footpath / shared	\$161	3
path	'	
48. Make improper right turn	\$129	2
49. Proceed contrary red light/arrow after stopping	\$645	2
50. Fail to give way at t-intersection	\$483	2
51. Disobey 'no right turn' sign	\$129	2
52. Disobey road access sign	\$193	2
53. Disobey 'keep left' sign	\$225	2
54. Fail to signal left before leaving roundabout	\$96	2
55. Cross continuous line/s beside painted island	\$290	2
56. Overtake to the left of vehicle turning left	\$161	2
57. Fail to give way when changing lanes on multi lane road	\$483	2
58. Ride more than 2 abreast (not multi lane road)	\$64	2
59. Ride in bus only lane	\$161	2
60. Fail to stop before riding across pedestrian/children's crossing	\$161	2
61. Disobey road marking when making left turn	\$129	1
62. Start right turn improperly – with centre line/median	\$96	1
63. Start right turn improperly – no centre line/median	\$96	1
64. Start right turn improperly – multi lane road	\$96	1
65. Make improper right turn – not complying turn line	\$129	1
66. Begin unsafe U-turn	\$129	1
67. Make U-turn intersection control by traffic lights	\$129	1
68. Improper U-turn at intersection	\$129	1
69. Fail to signal intention to change direction left	\$96	1
70. Fail to signal intention to change direction right	\$96	1
71. Fail to stop at yellow traffic light	\$645	1
72. Proceed after stopping at red traffic arrow	\$645	1
12.1 Toogen alter stopping at ten traille allow	ψ040	I

Offence	Penalty (2024-25)	Number of infringements
73. Fail give way at left turn on red after stopping sign	\$483	1
74. Fail to give way as required by stop sign or stop line	\$483	1
75. Fail give way bicycle/PMD when turn intersection	\$483	1
76. Fail to give way to vehicle at stop sign/line	\$483	1
77. Fail to give way when facing stop/give way sign/line	\$483	1
78. Fail to give way at give way sign/line	\$483	1
79. Fail to move out of path of police/emergency vehicle	\$376	1
80. Fail to give way to police/emergency vehicle	\$376	1
81. Fail to stop at children's crossing	\$483	1
82. Fail to give way to pedestrian on pedestrian crossing	\$483	1
83. Fail to give way to pedestrian in shared zone	\$483	1
84. Fail to give way to vehicle in median turning bay	\$483	1
85. Disobey "no left turn' sign	\$129	1
86. Fail to signal left when approach roundabout	\$96	1
87. Fail to give way to vehicle when entering roundabout	\$483	1
88. Fail to stop at stop sign at level crossing	\$483	1
89. Enter level crossing while boom closing/closed/opening	\$483	1
90. Enter intersection while road beyond blocked	\$247	1
91. Disobey keep left unless overtaking sign	\$96	1
92. Overtake when not safe to do so	\$225	1
93. Fail maintain safe distance overtaking	\$225	1
94. Ride more than 2 abreast in marked lane	\$64	1
95. Ride in tram lane	\$161	1
96. Rider under 12 years of age	\$161	1
97. Cross road within 20m of pedestrian crossing	\$64	1
98. Ride device without effective stopping system	\$161	1
99. Ride device with sharp protrusion/s	\$161	1
	Total	8517

### Appendix 2: Jurisdictional comparison of e-mobility rules

### E-bikes

State-by-state comparison	Australian Road Rules (ARR)	Queensland	Victoria	Tasmania	Northern Territory	South Australia	Western Australia	Australian Capital Territory	New South Wales
Motor assistance speed limit	25km/h	25km/h	25km/h	25km/h	25km/h	25km/h	25km/h	-	25km/h
Power restriction (watts)	200 watts for power assisted pedal cycles & 250 watts for EPAC.	Adopts ARR	Adopts ARR	Adopts ARR	Adopts ARR	Adopts ARR	Adopts ARR	Adopts ARR	200 watts for power assisted pedal cycles and 500 watts for EPAC.
Weight restriction	For 200 watts Power Assisted Pedal Cycle: Weighs less than 50kg (including batteries)	Not prescribed	Not prescribed	Not prescribed	Not prescribed	For 200 watts Power Assisted Pedal Cycle: Weighs less than 50kg (including batteries)	Not prescribed	Not prescribed	Weighs less than 50kg (including batteries)
Age restriction	Not prescribed	Not prescribed	16 years	Not prescribed	Not prescribed	Not prescribed	16 years	Not prescribed	No age restrictions to ride own e-bike, but must be at least 14 years old to hire

State-by-state comparison	Australian Road Rules (ARR)	Queensland	Victoria	Tasmania	Northern Territory	South Australia	Western Australia	Australian Capital Territory	New South Wales	
Safety requirements	<ul> <li>approved helmet, except in Northern Territory where adults over 17 years old are not required to wear a helmet unless riding on the road</li> <li>working brakes</li> <li>bell /warning device</li> <li>rear facing red reflector</li> <li>white light at front and red light at rear at night</li> </ul>									
Footpaths	<b>⊘</b>	<b>⊘</b>	Permitted unless: under 13 years old and unaccompanie d by an adult	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	Children under 16 years old and accompanying adults can ride on footpaths People over 16 years old cannot ride on footpaths	
Shared Paths	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	
Bicycle Paths	<ul><li>∅</li></ul>	<ul><li>∅</li></ul>	<b>⊘</b>	<b>⊘</b>	<ul><li>∅</li></ul>	<b>⊘</b>	<b>⊘</b>	<ul><li>∅</li></ul>	<b>⊘</b>	
Bicycle Lanes	<b>⊘</b>	<ul><li>∅</li></ul>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	
Roads	<ul><li>∅</li></ul>	<ul><li>∅</li></ul>	<b>⊘</b>	<b>⊘</b>	<ul><li>∅</li></ul>	<b>⊘</b>	<b>⊘</b>	<ul><li>∅</li></ul>	<b>⊘</b>	
Registration	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	
Licensing	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	
Mandatory insurance	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	

### Personal Mobility Devices

State-by-state comparison	Australian Road Rules	Queensland	Tasmania	Victoria	Northern Territory	South Australia	Western Australia	Australian Capital Territory	New South Wales
Governing Legislation	Australian Road Rules	Transport Operations (Road Use Management —Road Rules) Regulation 2009	Road Rules 2019	Road Safety Road Rules 2017	Traffic Regulations 1999 & Australian Road Rules	Awaiting introduction of regulatory framework.	Road Traffic Code 2000	Road Transport (Road Rules) Regulation 2017	Road Rules 2014
Relevant Terminology	Personal Mobility Device	Personal Mobility Device	Personal Mobility Device	Electric Personal Transporter	E-scooter	Not prescribed	Electric Rideable Device	Personal Mobility Device	Electric scooter
Definition	PMDs have at least one wheel, is designed to be used by one person, is propelled by an electric motor/s, does not include a bicycle, motorised scooter/wheel chair, or wheeled recreational device. Within ARR, escooters are	PMDs are legal vehicles and must follow the QRRs, including specified PMD sections. PMDs are not vehicles with pedals, motorised mobility devices nor wheeled recreational devices.	Electrically powered & has at least one wheel. Designed for use by one person. PMD riders are considered pedestrians.	Transports one standing or seated person, has two wheels (one in front of the other), footboard, steered by a handlebar.	E-scooters provided by Beam Mobility Australia.	Not prescribed. Regulations expected to be introduced in mid-2025.	A device that; has one or more wheels, is designed for one person.	Device propelled by an electric motor, designed for use for one person, 1 or more wheels, and with a brake system. *That is not a motorised wheelchair.	Defined as a vehicle, borrowed or hired through a share scheme.

State-by-state comparison	Australian Road Rules	Queensland	Tasmania	Victoria	Northern Territory	South Australia	Western Australia	Australian Capital Territory	New South Wales
	considered pedestrians.								
Age Rules	16+	12-15 supervised by adult. 16+ unsupervised.	16+	16+	18+	Not prescribed	16+	<12 requires adult supervision.	16+
Dimensions	No more than 1250mm long, 700mm wide & 1350mm high; OR No more than 700mm long, 1250mm wide & 1350mm high.	No more than 1250mm long, 700mm wide & 1350mm high; OR No more than 700mm long, 1250mm wide & 1350mm high.	No more than 1250mm long, 700mm wide & 1350mm high; OR No more than 700mm long, 1250mm wide & 1350mm high.	Not prescribed	Not prescribed	Not prescribed	No more than 1250mm long, 700mm wide & 1350mm high; OR No more than 700mm long, 1250mm wide & 1350mm high.	No more than 1250mm long, 700mm wide & 1350mm high; OR No more than 700mm long, 1250mm wide & 1350mm high.	Not prescribed
Weight (when not carrying person or other load).	Less than 60kg	Less than 60kg	Less than 45kg	Less than 45kg	Not prescribed	Not prescribed	Less than 25kg	Less than 60kg	Not prescribed
Privately owned devices	<b>(</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>			<b>⊘</b>	<b>⊘</b>	
Shared or hire devices	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	Permitted in trial areas only.	<b>⊘</b>	<b>⊘</b>	Permitted in trial areas.
Helmet Rules	Approved bicycle helmet.	Approved bicycle or motorbike helmet.	Approved bicycle helmet.	Approved bicycle helmet.	Approved bicycle helmet.	Not prescribed	Approved bicycle, skateboard or motorcycle helmet.	Approved bicycle helmet.	Approved bicycle helmet.

State-by-state comparison	Australian Road Rules	Queensland	Tasmania	Victoria	Northern Territory	South Australia	Western Australia	Australian Capital Territory	New South Wales
Warning device required	$\odot$	<b>⊘</b>	$\bigcirc$	<b>⊘</b>	<b>⊘</b>	Not prescribed	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>
Brakes required	$\odot$	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	Not prescribed	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>
"Doubling"						Not prescribed			
Road permitted	Not prescribed	Permitted on local streets with 50km/h or less posted speed limit, and no dividing lines. 25km/h maximum.	Permitted on roads that have posted limits of 50km/h or less, no dividing lines or median strip, and no multiple lanes if a one-way road. 25km/h maximum.	Permitted on roads with posted limits of up to 60km/h.	Only for up to 50m when there is an obstruction on a path, or it is impracticable to travel on adjacent area.	Not prescribed	Permitted, where speed limit is no more than 50km/h and no dividing lines. 25km/h maximum. "Where safe".	Prohibited unless crossing by shortest, safest route.	Permitted in trial areas, where the posted speed limit is under 50km/h. Under 20km/h.
Shared Path permitted	<b>⊘</b>	Permitted. 12km/h maximum, unless signed otherwise.	Permitted. 25km/h maximum.	<b>⊘</b>	<b>⊘</b>	Not prescribed	Permitted. 25km/h maximum. "Where safe".	Permitted. 25km/h maximum.	Permitted in trial areas. Under 10km/h.
Bicycle Paths/lanes permitted	Cycle paths – permitted.	Permitted. 25km/h maximum. Bike lanes on roads with	Permitted on bicycle paths - 25km/h maximum.	Permitted on bicycle paths.	<b>⊘</b>	Not prescribed	Permitted. 25km/h speed limited. "Where safe"	Permitted for bicycle paths only.	Permitted in trial areas. Under 20km/h.

State-by-state comparison	Australian Road Rules	Queensland	Tasmania	Victoria	Northern Territory	South Australia	Western Australia	Australian Capital Territory	New South Wales
		speed limit of 50km/h or less, OR where the bike lanes are physically separated. Also applies to separated paths (unless signed otherwise).					Bicycle lanes where speed limit is no more than 50km/h.	Prohibited on bicycle lanes, on roads. 25km/h speed limit.	
Footpath permitted	Not prescribed	<b>⊘</b>	<b>⊘</b>		<b>⊘</b>	Not prescribed	<b>⊘</b>	<b>⊘</b>	
Maximum permitted speed	25km/h	25km/h	25km/h	25km/h on level ground	15km/h	Not prescribed	25km/h	25km/h	Not prescribed
Footpath Speed	Not prescribed	12km/h	15km/h	Not allowed on footpaths	15km/h	Not prescribed	10km/h	15km/h	10km/h
Pedestrian Crossing	Not prescribed	Permitted, when stopping prior to the crossing, ride safely and give way to pedestrians. 12km/h maximum.	<b>⊘</b>		Not prescribed	Not prescribed	Permitted. 10km/h maximum.	Slow down to 10km/h when using a crossing.	<b>©</b>
Mobile phone use	Not in hand while riding.	Illegal unless stationary on paths, or mounted for	<b>©</b>			Not prescribed	Permitted when mounted or attached to riders arm for		<b>S</b>

State-by-state comparison	Australian Road Rules	Queensland	Tasmania	Victoria	Northern Territory	South Australia	Western Australia	Australian Capital Territory	New South Wales
		navigation or speed monitoring.					calls, navigation or speed monitoring.		
Alcohol/drugs	Not prescribed	No alcohol or drug riding.	No alcohol or drug riding.	No alcohol or drug riding. Positive test may result in loss of driver licence.	0.05 BAC limit.	Not prescribed	0.05 BAC limit. No drug riding.	No alcohol or drug riding.	0.05 BAC limit. No drug riding. Positive test may result in loss of driver licence.
Night Riding	Permitted with lights.	Permitted with lights.	Permitted with lights.	Permitted with lights.	Permitted with lights.	Not prescribed	Permitted with lights.	Permitted with lights.	Permitted with lights.
Registration	Not required	Not required	Not required	Not required	Not required	Not prescribed	Not required	Not required	Not required
Licencing	Not required	Not required	Not required	Not required	Not required	Not prescribed	Not required	Not required	Not required
Mandatory insurance	Not required	Not required	Not required	Not required	Not required	Not prescribed	Not required	Not required	Not required

# Appendix 3: Summary of Queensland's Electrical Safety Office powers and responsibilities

### **Queensland's Electrical Safety Office**

The Electrical Safety Office (ESO) and Policy and Workplace Services (PWS), within the Office of Industrial Relations, Department of State Development, Infrastructure and Planning, form Queensland's electrical safety regulator.<sup>2</sup>

As the regulator of electrical safety in both workplaces and the community, ESO is responsible for administering the electrical safety framework consisting of the *Electrical Safety Act 2002* (Qld) (ES Act), Electrical Safety Regulation 2013 (Qld) (ES Regulation) and codes of practice. These legislative pieces are reviewed and maintained by PWS.

Queensland's dedicated electrical safety framework seeks to eliminate the human cost to individuals, families and the community of death, injury and destruction that can be caused by electricity. The electrical safety framework supports safe access to electricity and use of electrical equipment in Queensland workplaces, homes, schools and hospitals.

ESO is responsible for compliance and enforcement under the electrical safety framework, participation in the development of national and international minimum safety standards, administration of occupational and contractor licensing, accreditation of auditors and certifiers, and education and awareness initiatives.

### Queensland's electrical safety framework

The ES Act and ES Regulation provides for a variety of regulatory levers available to the regulator and the Minister to respond to critical risks to life and property.

Electrical risks posed by electrical equipment can be mitigated by ensuring that the equipment is manufactured to safe standards, manufacturers and importers are held responsible for the safety of equipment they supply, consumers are informed of safe use, persons working on the equipment are safe and maintain the integrity of the equipment, and the regulator can respond to any emerging risks.

### **Equipment regulated under the ES Act**

Under the ES Act, the following are captured as *electrical equipment*: prescribed electrical equipment<sup>3</sup>, low voltage electrical equipment<sup>4</sup>, and high voltage electrical equipment.<sup>5</sup>

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<sup>&</sup>lt;sup>2</sup> Note that the regulator under the ES Act is the person appointed as the regulator under the *Work Health and Safety Act 2011*. The person appointed as the regulator is the Deputy Director General. Reference to ESO within this submission pertains to both the regulator and organisation.

<sup>&</sup>lt;sup>3</sup> Electrical Safety Act 2002 (Qld) (ES Act), section14, **prescribed electrical equipment** refers to extra low voltage equipment that is placing, or may place, persons or property at electrical risk and is included (prescribed) in the ES Regulation.

<sup>4</sup> ES Act, Schedule 2, **low voltage** means voltage greater than extra low voltage, but not more than 1,000V AC RMS or 1,500V

<sup>&</sup>lt;sup>5</sup> ES Act, Schedule 2, *high voltage* means volage greater than low voltage.

### Equipment that is not captured

Extra low voltage<sup>6</sup> equipment, with some exceptions including prescribed electrical equipment, is not captured under the electrical safety framework.<sup>7</sup> Equipment forming part of the propulsion unit of a vehicle<sup>8</sup> is also typically outside the scope of the electrical safety framework,<sup>9</sup> except where it is included as prescribed electrical equipment.

Currently, this means that e-mobility devices and e-bikes <u>are not electrical equipment</u> within the meaning of the ES Act. This includes both the e-mobility device (or e-bike), and the accompanying lithium-ion battery.

### Equipment that is captured

Whilst e-mobility devices (and e-bikes) themselves (including the lithium-ion battery component) are not electrical equipment, the chargers for the devices are electrical equipment.

Chargers are electrical equipment as they convert mains power (e.g., power from your house or business) into a suitable voltage (e.g., from low voltage to extra low voltage) and current to recharge batteries in various devices.

### **Electrical equipment regulation**

Key elements of electrical equipment regulation include:

- supply chain duties to ensure the equipment is safe and compliant
- ministerial recall powers for unsafe products
- incident notification to ensure the regulator is informed of incidents and is well placed to investigate and respond accordingly
- licensing requirements for those performing work (electrical work) on the electrical equipment

### Supply chain duties

All persons conducting a business or undertaking<sup>10</sup> (PCBUs) involved in the supply chain of electrical equipment are subject to a duty of care.<sup>11</sup> This originates with PCBUs who design electrical equipment through to PCBUs that manufacture, import, sell, install or repair electrical equipment.

Each PCBU has slightly different duties, however they each are responsible for ensuring the electrical equipment is electrically safe. Those PCBUs that design electrical equipment must provide information to PCBUs that give effect to their design regarding how to be used and installed to ensure it is electrically safe. Further, PCBUs that supply electrical equipment must ensure that the equipment is accompanied by information about the way the equipment must be used to ensure that its use is electrically safe. Further, PCBUs that design, manufacture, import or supply electrical equipment and required to comply with regulator issued electrical safety notifications 12 and any recall orders. 13

In addition to the duties identified, there is also primary duties of care for all PCBUs, duties for officers of PCBUs, duties for workers, duties for persons in control of electrical equipment and duties of other persons.

### Ministerial recall powers

Where the Minister determine that electrical equipment is placing, or will place, persons or property in electrical risk the Minister may require electrical equipment to be recalled from use. 14 This requirement

<sup>&</sup>lt;sup>6</sup> ES Act, Schedule 2, extra low voltage means voltage of 50V or less AC RMS, or 120V or less ripple-free DC.

<sup>&</sup>lt;sup>7</sup> ES Act, section 14(1).

<sup>&</sup>lt;sup>8</sup> ES Act, Schedule 2, *vehicle* means any means of transport by land, air or water.

<sup>&</sup>lt;sup>9</sup> ES Act, section 14(2).

<sup>&</sup>lt;sup>10</sup> ES Act, section 21.

<sup>&</sup>lt;sup>11</sup> ES Act, Part 2, Division 2.

<sup>&</sup>lt;sup>12</sup> ES Act, section 35.

<sup>&</sup>lt;sup>13</sup> ES Act. section 35.

<sup>&</sup>lt;sup>14</sup> ES Act, section 40G.

is directed to designers, manufacturers or importers of electrical equipment. Suppliers of electrical equipment must also assist in the recall of electrical equipment.<sup>15</sup>

### Incident notification

Under electrical safety laws, PCBUs must notify the ESO where there is a serious electrical incident<sup>16</sup> or dangerous electrical event.<sup>17</sup> Where ESO is notified of the serious electrical incident or dangerous electrical event, inspectors have the power to inquire into the circumstances and probably causes of the incident or event.<sup>18</sup> This supports any compliance action taken against alleged offenders (e.g., through prosecutions) and ensures that ESO can respond to emerging issues or identified gaps in existing legislation or education.

ESO is involved in investigations if the incident involves a charger and assists the Queensland Fire Department where there is reasonable suspicion of an electrically initiated fire.

### Licensing requirements

An electrical worker's licence and electrical contractor's licence is generally required when carrying out electrical work on electrical equipment. Noting that certain work activities or tasks that have been determined to be appropriate to be performed without an electrical licence, are not captured within the definition of electrical work (and therefore are not subject to licensing requirements).<sup>19</sup>

### Other requirements for household electrical equipment

Queensland gives effect to the Electrical Equipment Safety System (EESS), a multi-jurisdictional scheme, which provides specific regulation of low voltage household electrical equipment.<sup>20</sup> Key elements of the EESS include:

- a mandatory requirement for businesses that import, manufacture or sell certain types of electrical equipment to be registered on a database and to be linked to an Australian-based registered responsible supplier prior to sale;
- a system of certification to ensure that equipment meets relevant safety standards;
- a single regulatory compliance mark (RCM) used by industry to mark all compliant equipment; and
- a national register (database) containing information on registered responsible suppliers, equipment and certificates accessible to the public.

### Queensland participation in national discussions

Representatives from Queensland's PWS and ESO are participating in national discussions occurring in respect to the regulation of extra low voltage equipment and/or e-mobility devices.

Under the Council on Federal Financial Relations, a review was undertaken to better protect consumers and enhance harmonisation, increase regulatory efficiency and reduce compliance costs for industry. The review was conducted through a partnership between the Australian Government Department of Finance and the Australian Competition and Consumer Commission in consultation with the states and territories. Recommendations stemming from the review include investigating risk-based regulation of extra-low voltage electrical products (such as certain lithium-ion batteries).

Queensland Treasury and PWS are engaging with the Australian Government to determine implementation responsibilities and timeframes. A National Meeting of Consumer Electrical Safety Ministers will be established to oversee and monitor implementation of agreed reforms.

<sup>&</sup>lt;sup>15</sup> ES Act, section 40K.

<sup>&</sup>lt;sup>16</sup> ES Act, section 11.

<sup>&</sup>lt;sup>17</sup> ES Act, section 12.

<sup>&</sup>lt;sup>18</sup> ES Act, section 143.

<sup>&</sup>lt;sup>19</sup> ES Act, section 18.

<sup>&</sup>lt;sup>20</sup> See the Electrical Equipment Safety System, https://www.eess.gov.au/.

<sup>&</sup>lt;sup>21</sup> See Australian Government Department of Finance, <a href="https://www.regulatoryreform.gov.au/priorities/review-regulatory-framework-safety-household-electrical-products">https://www.regulatoryreform.gov.au/priorities/review-regulatory-framework-safety-household-electrical-products</a>.

Further, a cross-jurisdictional working group, led by New South Wales, is being established to pursue a national approach under the Australian Consumer Law to address the safe use of lithium-ion battery powered e-micromobility vehicles.<sup>22</sup> It is not anticipated for consideration of regulation under the electrical safety framework to form part of this working group, with equipment regulation to continue to be consider under the agreed reforms (mentioned above).

Additionally, ESO have also been partaking in discussions with Australian Standards in respect to adopting an international standard for e-scooters with modifications as an Australian Standard.

### **Education and guidance**

While Queensland's electrical safety framework does not currently regulate lithium-ion batteries or e-mobility devices (and e-bikes), ESO takes an active role in liaising with Government agencies, and raising awareness to educating industry and community on electrical risks associated with the incorrect use, handling, charging and storage of lithium-ion powered equipment.

ESO also convenes and chairs a lithium-ion working group, made up of representatives from across Queensland government to exchange information and identify opportunities for collaboration on issues relating to lithium-ion batteries.

ESO has released safety tips to help the public, retailers and importers consider appropriate purchasing of equipment and safe storage of these devices specifically for schools, places of work and business.

• <u>Lithium-ion battery-operated equipment (including electric scooters)</u> | Electrical Safety Office

ESO has been working alongside other government agencies, such as Queensland Fire Department, to encourage the safe use of e-mobility devices and e-bikes over the last three years. This has included cross promotion and engagement in education campaigns and disseminating correspondence on electrical and fire safety to schools and universities to increase awareness of risks posed by poor storage, handling and charging practices. General safety guidance has also been released by ESO to encourage the safe use and charging of lithium-ion devices:

- Consumer warning: Safe use and charging of electric scooters | WorkSafe.qld.gov.au
- "Do you smell smoke?" Your everyday tech can cause battery fires | WorkSafe.qld.gov.au

Industry and community are encouraged to stay informed about electrical safety matters by visiting the <u>Electrical Safety Office</u> and <u>WorkSafe</u> websites, subscribing to <u>e-safe newsletters</u>, and following the Electrical Safety Office on Facebook and LinkedIn.

### **Further Resources**

For further information, the below resources may assist:

Electrical Safety Act 2002

https://www.legislation.gld.gov.au/view/whole/html/inforce/current/act-2002-042

• Electrical Safety Office – Lithium-ion battery-operated equipment (including electric scooters)

https://www.electricalsafety.qld.gov.au/lithium-ion-battery-operated-equipment-including-electric-scooters

• WorkSafe Queensland – Electrical safety laws https://www.worksafe.qld.gov.au/laws-and-compliance/electrical-safety-laws

WorkSafe Queensland – Prescribed electrical equipment

<sup>&</sup>lt;sup>22</sup> See New South Wales Ministers Treasury portfolio, <a href="https://ministers.treasury.gov.au/ministers/stephen-jones-2022/media-releases/consumer-affairs-ministers-renew-commitment-protecting">https://ministers.treasury.gov.au/ministers/stephen-jones-2022/media-releases/consumer-affairs-ministers-renew-commitment-protecting</a>

 $\underline{\text{https://www.worksafe.qld.gov.au/safety-and-prevention/hazards/electricity/electrical-products-and-equipment/prescribed-electrical-equipment}$ Review of the Regulatory Framework for the Safety of Household Electrical Products • Review of the Regulatory Framework for the Safety of Household Electrical Products <a href="https://www.regulatoryreform.gov.au/priorities/review-regulatory-framework-safety-household-">https://www.regulatoryreform.gov.au/priorities/review-regulatory-framework-safety-household-</a> electrical-products