Inquiry into e-mobility safety and use in Queensland

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2025 Parliamentary Inquiry into e-mobility safety and use in Queensland

A submission in support of e-mobility by
Bicycle Queensland – *Queensland's leading voice for bike and scooters riders*.

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Executive summary

Bicycle Queensland (BQ) is the peak body representing people who ride bikes and scooters for recreation and transport. Established in 1979 by a group committed to a more active, sustainable Queensland, we now have more than 12,000 active members and represent the 1.5 million Queenslanders who own a bike and ride regularly.

At Bicycle Queensland we understand that **active transport is key to solving some of society's biggest problems**, be it the health crisis brought about by physical inactivity, the cost of living problem of which high transport costs are a big part, or the sustainability dilemma challenging our way of life.

We believe that;

- People are happier and healthier
- Transport is easier, more sustainable and affordable
- Communities are more relaxed and better connected when, for recreation or transport, more people have access to the joy of riding a bike

In addition to bike riding, BQ also provides insurance and advocacy for those Queenslanders who have safely and legally taken up e-scooter use. We have hundreds of members who regularly ride e-scooters for local transport and for fun. **We provide a voice for responsible e-scooter owners and riders across Queensland.**

Bicycle Queensland is part of an active and well connected group of sustainable transport advocacy groups nation-wide. These groups co-operate to encourage governments across Australia to facilitate sustainable transport.

Bicycle Queensland welcomes this Parliamentary Inquiry into e-mobility, a new and rapidly evolving form of transport. Active transport offers undeniable benefits including better health, environmental sustainability, transport affordability and community connectedness. The e-mobility revolution, by taking some of the effort out, extends those benefits even further to people who never considered using active transport before.

Still, e-mobility is (pardon the pun) a fast moving space and one in which issues have emerged. Those issues include unsafe riding, a flood of illegal and unregulated devices on our roads and footpaths and long term serious infrastructure deficiencies (now highlighted by an uptick in active transport usage) which heighten conflict between users, pedestrians and motor vehicles.

Bicycle Queensland brought those issues to public attention in March this year when we wrote an open letter to the Australian Parliament and the Queensland Minister for Transport seeking better regulation – and in particular resolution of inconsistencies –

between state and federal law. Our earlier Position Statement and Minister Mickelberg's reply noting he is "not aware of any safety issues with *legal* e-bike use" (emphasis added) are attached to this submission (See *Attachments 1 and 2)*.

In considering how best to manage the emergence of e-mobility, we urge government to apply three principles;

1. **Facilitate the revolution** – Active transport and e-mobility have great power to improve public health and wellbeing and make our cities and towns more liveable, connected, clean and green. Government action should facilitate this shift.

2. **Regulate, enforce and educate for safety** – Changes are needed to regulation, enforcement of road rules and education to ensure that e-mobility is accessible and safe for all. Importantly, government should enforce existing rules before adding new ones.

3. **Coordinate nationally** – Australian governments have gone to enormous trouble to harmonise national road rules and transport regulation, yet now e-mobility regulation is occurring in a confusing and piecemeal way. The last thing we need is a unique Queensland approach to e-mobility. The Queensland Government should develop a logical and leading approach and work with other governments to ensure national consistency.

Format of this Submission

This submission is set out in the following parts;

1. **Overview of Recommendations**
2. **About Bicycle Queensland**
3. **Background to the Inquiry**
4. **A timeline of active transport and e-mobility in Queensland**
5. **The benefits of active transport and the e-mobility revolution**
6. **The active transport policy changes Queenslanders need**
7. **An overview of the current safety issues**
8. **Recommendations for change in e-mobility regulation, enforcement and education**
9. **Conclusion**

Attachments
1- Bicycle Queensland's Position Statement on high powered E-Bikes
2 - Letter of reply to Bicycle Queensland from Minister Brent Mickelberg MP
3 - Letter from Transport and Main Roads (TMR) to industry regarding illegal e-bikes
4 – Australian Design Rule Electrically Power Assisted Cycle (EPAC)

1. Recommendations

Based on the three guiding principles, Bicycle Queensland makes the following recommendations;

1.1 Make active and e-mobility transport a serious, mainstream and properly funded part of the transport network

a) Re-introduce **mode share targets** to transport planning, setting goals for the proportion of trips including journeys to school and work which can be taken by safe active transport.
b) Increase **active transport funding** from the current active transport budget (of $314 million over 4 years or less than 1% of the $37.4 billion total) to 10% per annum by 2032, aligned to the Brisbane 2032 Olympic and Paralympic Games.
c) **Decrease speed limits on local roads from 50km/hr to 40km/hr** to make the streets safer and the suburbs more pleasant for everyone.
d) Complete the **Principal Cycle Network Plans** – the detailed plans for active transport trunk infrastructure (priority routes) which have existed as part of Regional Plans for Brisbane since 2007 and regional centres since 2009 – in a staged rollout to be completed by 2032.
e) Develop **Ride Safely to School** strategies including requirements for bike lanes and cycle tracks to new schools and supported by active transport programs to support children safely riding, rather than being driven, to Queensland schools.
f) Revise **road rules to ensure active transport safety** and apply a clear no tolerance approach to the growing incidence of aggressive anti cyclist and e-scooter driver behaviour.
g) Develop a comprehensive **Cycle Tourism Strategy** including, active provision for visitors to Queensland's cities and towns to use e-mobility as a mainstream form of local transport; activation of Queensland's extensive network of mountain bike and rail trails; and support for the development of new tourism options like guided regional rides - a growing segment of Europe's destination travel offering and a real opportunity for regional Queensland.

1.2 Ensure that only EN15194 compliant e-bikes are available for use on Queensland streets

a) **Work with the Commonwealth to reintroduce restrictions on the importation** of high-powered e-bikes. Devices that exceed the power or speed limits of standard e-bikes or e-scooters should not be allowed to be imported or sold.
b) **Restrict on-line and in-person sales** of e-bikes which don't meet the Australian Standard based on EN15194, and after-market kits which don't meet the 250W continuous power pedal-assist standard.

c) **Public Education:** Given many thousands of these devices are already in use, a public awareness campaign is needed to educate riders and the general public about the legal requirements, safety measures, and appropriate use of e-bikes. This includes providing clear guidance on how to distinguish a legal e-bike from an illegal one.
d) **Speed governing:** All e-bikes have software systems built into the devices, and Bicycle Queensland suggests that existing non-legal devices are returned to the place of purchase to have the speed governed, and throttles removed. These devices cannot technically meet the EN15194 standard, but could be restricted to a 25kmh maximum assistance, and be pedal-assist only.
e) **Enforcement:** The Queensland Police Service and Department of Transport and Main Roads inspectors should have the necessary training and operational capability around the ability to recognise, test and enforce regulation of high-powered vehicles.
f) **Exemptions for disability sector and for use on private property:** There is a need for specialist e-bikes suitable for those with a disability, that may require features such as a throttle etc. This will require an exemption, similar to those who wish to legitimately use high-powered e-bikes on their own property should be required to gain approval on a case-by-case basis from the Department of Transport and Main Roads that precludes their use in public spaces.

1.3 Promote safe riding through a professional public education campaign (Bicycle Queensland is a willing partner in this work)

a) **Undertake a major safe riding public education campaign** with information about compliant devices, the road rules and respectful behaviour to be provided both in a general campaign and at point of sale.
b) Provide **targeted safe riding programs** for bike, e-bike and e-scooter users.
c) Promote **public liability and personal accident insurance** as a means of supporting the safe use of bikes and scooters, as provided by Bicycle Queensland.

1.4 Work with other governments to ensure safe charging

a) Apply a **nationally consistent set of standards** to the importation of batteries and chargers to ensure that fire safety risks are appropriately mitigated.
b) Produce standardised safe charging guidelines that allow e-mobility users to safely charge their devices at home and at places of work or study.
c) Ensure **planning laws and building regulation** provide for the secure storage and safe charging of high quality, compliant e-mobility devices.

2. About Bicycle Queensland

Bicycle Queensland (BQ) is Queensland's peak advocacy group for cycling and micromobility. We represent the 1.5 million Queenslanders who ride a bike or scooter weekly via our 12,000+ members and 33,000+ supporters, who join us in promoting our vision of getting more Queenslanders to ride more often.

Bicycle Queensland is **the leading insurer of Queensland riders of bikes and e-scooters**, offering quality insurance products to individuals, households and concession holders. Our members receive personal accident, income protection and public liability insurance for bike riding and e-scooter riding worldwide. Notably, in the three years since we started offering insurance for e-scooter riders, we have had just one minor claim.

We are dedicated to **promoting cycling as a sustainable, healthy, and enjoyable mode of transport**. Bicycle Queensland works with governments, businesses, and other stakeholders to improve cycling infrastructure, raise awareness about the benefits of cycling, and encourage people to ride more frequently.

In addition to advocacy, Bicycle Queensland organises **events and educational programs for cyclists of all levels**. These events include charity rides and community rides, aimed at fostering a vibrant cycling culture. We also run training programs, such as our well established Her Ride program (a partnership with government) which supports women with riding skills and confidence, to facilitate safe riding across the state.

Bicycle Queensland's mission is to ensure that cycling is safe, accessible, and enjoyable for all residents of Queensland, whether for commuting, recreation, or sport. We also support micromobility and believe that e-bikes and e-scooters are important for transport and recreation, noting however that safety is paramount and e-mobility devices should comply with relevant laws and standards.

3. Background to this Inquiry

The Queensland Government announced the Parliamentary Inquiry into e-mobility safety and use in Queensland on 1 May 2025 following a reported increase in e-mobility (and particularly e-scooter) related accidents in Queensland.

The Inquiry follows a call made by Bicycle Queensland in March this year for federal import restrictions and state based point of sale restrictions on high powered e-bikes which do not comply with the current laws for legal use on Queensland roads.[1] Bicycle Queensland considers community confidence in the integrity of the regulatory and

[1] Bicycle Queensland's March Open letter to the Australian Parliament and to the Queensland Minister are provided, along with Minister Mickelberg's reply as Annexure A of this submission.

education regime for active transport and e-mobility to be important and welcomes this Inquiry.

Bicycle Queensland notes that the first term of reference focuses on the benefits of e-mobility. We hope and expect that this focus – *on the benefits* – will continue to frame the Inquiry's conduct.

The terms of reference for the Inquiry are;

1. Benefits of e-mobility (including both Personal Mobility Devices (PMDs), such as e-scooters and e-skateboards, as well as e-bikes) for Queensland;
2. Safety issues associated with e-mobility use, including increasing crashes, injuries, fatalities, and community concerns;
3. Issues associated with e-mobility ownership, such as risk of fire, storage and disposal of lithium batteries used in e-mobility, and any consideration of mitigants or controls;
4. Suitability of current regulatory frameworks for PMDs and e-bikes, informed by approaches in Australia and internationally;
5. Effectiveness of current enforcement approaches and powers to address dangerous riding behaviours and the use of illegal devices;
6. Gaps between Commonwealth and Queensland laws that allow illegal devices to be imported and used;
7. Communication and education about device requirements, rules, and consequences for unsafe use; and
8. Broad stakeholder perspectives, including from community members, road user groups, disability advocates, health and trauma experts, academia, the e-mobility industry, and all levels of government.

4. A timeline of active transport and e-mobility in Queensland

While active transport (walking and cycling) are well established modes of transport in Queensland, their use has diminished significantly in recent decades. This change is perhaps most marked in children's journeys to school. While eight out of ten children walked or rode bikes to school in the 1970s, Department of Transport and Main Roads data indicates that today 74% of primary school aged children are driven to school in private cars.

Following a decades long drift away from active transport, e-mobility has begun to turn this trend around. E-bikes began to emerge from the early 2000s and e-scooters from the late 2010s, both powered by developments in lithium ion batteries.

Both e-bike and e-scooter take-up increased significantly during the pandemic when a marked reduction in traffic volumes made riding short distances by bike and scooter a safer and more attractive option. Regretably, despite calls from organisations including

Bicycle Queensland for this unique opportunity to be seized, governments across Queensland took only limited action during this time to capture the return to active transport and make it permanent.[2] Active transport peaked during the pandemic, then returned to lower levels as riders once again felt unsafe on the road.

In Queensland and Australia, there have been six notable steps in terms of e-mobility regulation;

1. In **2012**, the Federal Government adopted as Australian standard for Electrically Power Assisted Cycle (EPAC). The Australian standard, which remains in place, is based on EN15194, the European Standard for Power Assisted Pedal Cycles (EPAC) which is in widespread international use. The standard (provided at Attachment 4) reads –

   Electrically Power Assisted Cycle (EPAC) means an electrically power assisted cycle with a maximum continuous rated power of 250W, of which the output is;
   a) *Progressively reduced as the cycle's travel speed increases above 6km/hr; and*
   b) *Cut off, where:*
      1. *The cycle reaches a speed of 25km/hr, or*
      2. *The cyclist is not pedalling and the travel speed exceeds 25km/hr*

2. Between **2012 and the present time**, the Queensland Government introduced a regime of road rules for rideables (or personable mobility devices, PMDs) which form the basis of current regulation.

   The rules provide for;
   - EPAC bicycles (as defined under the Australian Design Rule, above) can be used on roads and paths, except as signed.[3]
   - A bicycle with a pedal assisted electric motor of up to 200 watts can be used as above.
   - E-scooters (and other PMDs) are allowed to be ridden by one person over 16 or with supervision for children 12-16 years of age. They are allowed on footpaths and shared paths but can not be ridden over 12km/hr. They are also allowed on local roads with speed limits of up to 50km/hr and which have no dividing line (that is minor roads). On roads, the speed limit for PMDs is 25km/hr. Helmet, drink driving and other restrictions apply.[4]

[2] Active transport usage soared during the pandemic with bike stores selling out across the country and ride to school take up skyrocketing. The one notable and commendable exception to policy inaction was cooperation which occurred between the Queensland Government and the Brisbane City Council to establish Brisbane's CityLink network during the pandemic years.
[3] Queensland Department of Transport and Main Roads, Electric Bicycle Rules
https://www.qld.gov.au/transport/safety/rules/wheeled-devices/electric-bicycle-rules
[4] Queensland Department of Transport and Main Roads, Rules for Personal Mobility Devices
https://www.qld.gov.au/transport/safety/rules/wheeled-devices/personal-mobility-devices

3. In **2018**, the Brisbane City Council introduced Australia's first e-scooter hire scheme.[5]

4. In **2021**, the then Federal Government, without consultation with the bicycle industry, advocacy groups or state governments, introduced the Motor Vehicle Standards (Road Vehicles) Amendment Determination (No 1) 2021. This had the effect of untying import restrictions on e-bikes from EN19154 and allowed for the flood of imports of dangerous e-bikes which are now widely sold in Queensland despite not being legal for use on Queensland footpaths or roads.[6]

5. In **2024**, New South Wales conducted its own Parliamentary inquiry into the use of e-scooters, e-bikes and mobility related options, followed by a government response. The consequence of that process is that NSW will soon allow e-scooter use on shared paths and local roads (where they had previously been banned) and confirmed NSW allowing e-bikes with up to 500 watts in power, a standard adopted in 2023 after the federal import changes and one which is out of step with both EN15194 and Queensland.

6. On **27 May 2025**, the Department of Transport and Main Roads wrote to bike retailers in Queensland (including the non-mainstream retailers selling questionable fat bikes) setting out the EPAC rules and warning of possible fines for misleading retailer conduct. This correspondence is available at Attachment 3 to this submission.

   Still, Bicycle Queensland is not aware of any actual enforcement action being undertaken.

The consequence of this somewhat messy evolution is threefold;

1. Policy inaction has seen active transport diminish in mode share over many decades, with resultant negative consequences for the environment, transport affordability and public health;
2. The abandonment of federal import restrictions has led to the proliferation of non-compliant devices; and
3. The regulatory environment is nationally inconsistent and highly confused, with real consequences for safety and community confidence.

[5] Haworth, N et al, 2021 **"**Changes in shared and private e-scooter use in Brisbane, Australia and their safety implications" Accident Analysis and Prevention Vol 163 https://www.sciencedirect.com/science/article/abs/pii/S0001457521004826

[6] Bicycle Industries Australia submission to the Commonwealth Department of Infrastructure and Transport regarding imports of e-bikes https://www.infrastructure.gov.au/sites/default/files/documents/adrhr-bicycles-industries-australia.pdf

5. The benefits of active transport and the e-mobility revolution

The significant mode share shift from active transport to private vehicles which has occurred, largely as a result of cars becoming more accessible and affordable, has had a number of negative public consequences including deleterious impacts on public health, greenhouse emissions and air quality, as well as contributing to urban sprawl and poorly connected communities.

While Bicycle Queensland does not imagine that these shifts could – or indeed should – be suddenly reversed, there is substantial evidence of the public benefits which would arise if active transport and e-mobility were considered serious and fundamental parts of the transport system. The key, well researched benefits are as follows;

✓ **Active transport is great for physical and mental health**

While Queenslanders' life expectancy has increased markedly in modern times, from 49 years in 1890 to 83 in 2016,[7] those gains are now challenged by diseases related to widespread physical inactivity. Data from the Queensland Chief Health Officer indicates that more than two thirds (68.8%) of Queenland adults are now overweight as are around one third (34.1%) of children,[8] while international evidence shows, not surprisingly, that increasing physical activity through active transport (including e-mobility, which still involves more movement than driving) can contribute to sustained improvement.

Physical activity also improves mental health.

While Bicycle Queensland absolutely supports the need for improved safety around e-mobility, it must be understood that it is physical inactivity, far more than accidents, which is the greatest contemporary threat to public health.

✓ **Active transport is zero emissions and improves amenity**

In 2022, Queensland's net greenhouse gas (**GHG**) **emissions** were 124.1 $MtCO_2$-e or around 22 metric tons per person, a figure well above the Australian average and very high by global standards. Of these emissions, most arise from stationary energy but transport is the second highest source, accounting for 17% of Queensland's total emissions. The largest contributor to transport emissions – at 42% - is the use of private cars.[9]

[7] The McKell Institute, 2020 "Riding the Revolution: A New Approach to Active Transport in South East Queensland" https://mckellinstitute.org.au/research/reports/riding-the-revolution/
[8] Queensland Chief Health Officer, 2022 https://www.choreport.health.qld.gov.au/our-lifestyle/weight
[9] Queensland Government Emissions Data 2025. https://www.qld.gov.au/environment/climate/climate-change/climate-science,-analytics-and-reporting/emissions-data

Active transport and e-mobility (which is virtually zero emission) offer significant environmental benefits, including in relation to air quality, urban amenity and noise.

✓ **Active transport beats traffic**

E-mobility options provide an efficient alternative to cars, particularly for short-to-medium distance trips. Reducing car dependency frees up road space, eases congestion in peak times, and increases the efficiency and design life of existing transport networks.

✓ **Active transport saves households money and makes transport accessible**

Running a private motor vehicle is a significant expense for most Queensland families. In 2024, the RACQ estimated a range of vehicle expenses ranging from $12,028 as the annual cost of running a light car to $20,648 for a medium car.[10] In addition, many people, be they young, old, environmentally conscious or unable to afford a car, do not drive. In 2025 Queensland had 4.15 million licensed drivers in a population of 5.6 million people.

While Bicycle Queensland does not posit that bikes and scooters provide a practical alternative to all car use, we do envisage that creating a safe road environment in which bikes become a practical option, particularly for short trips, would save Queenslanders money, improve quality of life and make transport more accessible to all.

✓ **Active transport can drive tourism benefits**

E-bikes and e-scooters offer significant advantages to tourists in that they allow a greater level of accessibility that does not rely on negotiating public transport or requiring a high standard of physical fitness. Based on research by The University of Queensland and Brisbane City Council, e-mobility unlocks the city and allows tourists to see more and do more while making a wider and more significant impact to the community all while created lasting memories.[11]

Bicycle Queensland notes the effectiveness of regional e-scooter hire schemes in locations such as Townsville and Cairns as well as the effectiveness of the Gold Coast e-bike hire scheme. We also note the increasing occurrence of e-bikes with "grey nomads" travelling around Queensland.

Getting the tourism offering right by providing modern products that cater to international tourists' sense of adventure has never been more critical for Queensland

[10] RACQ 2024 Vehicle Operating Cost Report https://www.racq.com.au/-/media/project/racqgroup/racq/articles/news/2024/11/racq-vehicle-operating-cost-report-2024/racq-vehicle-operating-cost-report-2024.pdf?rev=780cd7696cc24204b7141c01f643b7ad&hash=DFFB2BF6CA73F89D8A094FD189EE8B96

[11] Buning, R. J., Pham, W., & Chen, M. (2023). So, what do you think about eScooters and eBikes: Understanding visitor and resident Experiences and Perceptions with Micromobility in Brisbane. Prepared for Brisbane City Council. (50 pp.). https://business.uq.edu.au/files/104406/micromobility-in-brisbane-report.pdf .

than now, as we head towards 2032 and the huge opportunities it presents for our tourism sector and wider economy.

6. The Active Transport Policy changes Queenslanders need

Internationally, leading world cities have deliberately made the shift from cars alone as the primary source of private transport to a systematic embrace of active transport. While Australians traveling to Europe or even North and South American cities such as Portland, Oregon or Bogota, Colombia may see bikes as representing a particular European or cosmopolitan lifestyle; in fact the walkable and rideable cities of Paris, London, Amsterdam and Copenhagen are the result of considered transport policy choices.

In **Amsterdam**, the shift to active transport occurred from the 1970s when increased congestion and traffic fatalities including among children led to calls for safer streets. Today, 38% of trips in that city are taken by bicycle.

In **London**, a series of highly publicised bicycle fatalities in the early 2000s led to citizens and media, including *The Times*, campaigning for change. The 2003 introduction of the congestion charge and subsequent investment in Cycling Superhighways, in large part under the Mayoralty of Boris Johnson, has created connected infrastructure networks. There are now more trips by bike than car in the City of London.

In **Paris**, active transport was a key part of planning for the 2024 Olympic and Paralympic Games. While Paris already had more than 1,000km of bike lanes before the Games, a further 60km of permanent infrastructure was added for the event, with spectator apps directing visitors to active transport options. By April 2024 (before the Games) 11% of inner city trips were taken by bicycle compared to 4% by car. From the suburbs to the city, the figures were 14% bike and 12% car.[12]

At Bicycle Queensland, we call for a similarly bold approach to transport planning, one which at its heart would see active transport as a serious and mainstream component of the transport network.

As per Recommendation 1.1, key changes required are to;

a) Re-introduce **mode share targets** to transport planning, setting goals for the proportion of trips including journeys to school and work which can be taken by safe active transport.

[12] GHD 2024 "How Paris 2024 is Pedalling Towards a Greener Future" https://www.ghd.com/en/insights/how-paris-2024-is-pedalling-towards-a-greener-future

b) Increase **active transport funding** from the current active transport budget (of $314 million over 4 years or less than 1% of the $37.4 billion total) to 10% per annum by 2032, aligned to the Brisbane 2032 Olympic and Paralympic Games.[13]
c) **Decrease speed limits on local roads from 50km/hr to 40km/hr** to make the streets safer and the suburbs more pleasant for everyone[14]
d) Complete the **Principal Cycle Network Plans** – the detailed plans for active transport trunk infrastructure (priority routes) which have existed as part of Regional Plans for Brisbane since 2007 and regional centres since 2009 – in a staged rollout to be completed by 2032.
e) Develop **Ride Safely to School** strategies including requirements for bike lanes to new schools and supported active transport programs to support children riding, rather than being driven, to Queensland schools.
f) Revise **road rules to ensure active transport safety** and apply a clear no tolerance approach to the growing incidence of aggressive anti cyclist and anti scooter driver behaviour.
g) Develop a comprehensive **Cycle Tourism Strategy** including active provision for visitors to Queensland's cities and towns to use e-mobility as a mainstream form of local transport; activation of Queensland's extensive network of mountain bike and rail trails; and support for the development of new tourism options like guided regional rides - a growing segment of Europe's destination travel offering and a real opportunity for regional Queensland.

7. An overview of the current issues with e-mobility

E-mobility is not a new annoyance or blip that will go away. It is, like the development of the bicycle and the subsequent introduction of the car, a transformative new technology which essentially changes the transport landscape.

When bicycles were introduced in the late nineteenth century, they met opposition from horse and carriage drivers who were concerned they would frighten horses, from pedestrians who feared collisions, from authorities who struggled to manage the change and from the pillars of society who considered them inappropriate, particularly for women. In England and in some American cities, the first cars were regulated by "red flag laws" requiring the new motor driven carriages to be preceded by a person walking down the road waving a red flag.

New transport technology always undergoes a difficult introduction.

[13] While a staged increase to 10% of TMR funding would be a very significant increase on current levels, it remains well below the 20% transport budget share to active transport recommended by the UN https://www.unep.org/news-and-stories/press-release/urgent-investment-needed-walking-and-cycling-infrastructure-save
[14] Bicycle Queensland Position Statement Lower Urban Speed Limits https://bq.org.au/advocacy-statement/

And just as those developments ultimately improved transport and made towns and cities better, so too e-mobility may be transformative; presenting an opportunity to make transport accessible, cheap, healthy, clean and fun.

The challenge here is to capture the potential benefits of that transition while prioritising safety both for the users of e-mobility themselves and for other road users, cyclists and pedestrians.

While Bicycle Queensland is a strong advocate for e-mobility, we are also conscious of, and indeed have led the debate, on the gaps in regulation, enforcement and education which are currently presenting challenges in this transition.

In our observation, the key issues are these;

Issue 1- A prevalence of illegal devices

As this submission has already set out, and as Bicycles Industries Australia will further elaborate in their own submission, in 2021, the then Federal Government, without consultation with industry, expert bike advocates or it would seem state governments unilaterally changed import requirements for e-bikes. The change, which was then followed by states adopting their own bespoke e-bike definitions, has created significant confusion among community members and, we suspect, police and regulators themselves.

The change, which has not been rectified by the current federal government, has led to the importation and sale of e-bikes (including throttle driven fat bikes) which do not comply with the international standard. Notably, these legally questionable devices are not sold by established, mainstream bike retailers. Rather, a whole pop up industry of shopfront and online retailers has emerged selling over powered and throttle driven devices while nodding to their customers for instance that throttles should only be unlocked for “off road biking.”

These non-compliant devices are heavily marketed to teenagers and young adults, creating an uncomfortable and sometimes dangerous situation in which illegal devices are ridden by unskilled (or irresponsible) riders who mix with pedestrians on footpaths and shared paths. A particularly serious concern is the legal ramifications for riders of non-compliant devices, who are uninsured and personally liable for damages (ncluding personal injury to third parties) caused by accidents in which they are at fault.

In addition to those safety and legal concerns, the piecemeal approach to e-mobility regulation flies in the face of decades of national vehicle standard and road rules harmonisation. Australia is one country and should have clear and consistent vehicle standards and road rules.

Issue 2 - Wholly inadequate infrastructure, which maximises conflict points

As this submission has already set out, Queensland at present commits less than 1% of the transport budget to active transport, a proportion well below the 9.9% of trips which the Department of Transport and Main Roads' Queensland Household Travel Survey identifies as being undertaken by active transport.[15]

In addition to this ongoing under-investment, the Queensland Government's ambition has declined with Queensland cycle strategies removing mode share targets after 2011-12.[16]

While some significant active transport infrastructure projects have occurred such as the Brisbane City Council's recent Kangaroo Point Bridge opening and the Queensland Government's ongoing development of the Veloway between Brisbane and the Gold Coast, Bicycle Queensland identifies an essential policy failure: **it makes no sense that active transport offers so many clear benefits but in fact experiences investment below existing mode share.**

This underinvestment, which occurs on a comparable but perhaps more critical scale on the part of local governments, means that Queensland roads are becoming progressively less safe for cyclists as traffic grows, vehicle size increases and attitudes to cyclists and scooter riders become more aggressive. This in turn creates conflict points on footpaths in places where dedicated active transport infrastructure would create alternatives.

Issue 3 – On e-scooters in particular, there is little public understanding of what the law actually is

While Bicycle Queensland represents fewer scooter users than bike riders, we note that our scooter using members are acting responsibly. This is evidenced by there having been only one minor accident claim over the more than three years that we have provided public liability and personal accident insurance to scooter users.

We consider scooters, when appropriately used, to be a highly practical and easily portable mode of transport, particularly for short trips.

Still, it is clear that the past and ongoing efforts to educate the public on e-mobility road rules have not worked, largely because it has not matched the convenient nature of e-mobility. We recommend the state rethink how and where it is educating the public on e-mobility road rules. Road rules education needs to occur broadly but also targeted and mandated at the points of sale (for both personal and shared devices) and on the

[15] The Department of Transport and Main Roads' Queensland Household Travel Survey continues to be conducted but the last available data is for 2018 and relates to SEQ https://public.tableau.com/app/profile/qldtravelsurvey/viz/QueenslandHouseholdTravelSurveyInteractiveReport/QueenslandHouseholdTravelSurvey

[16] The McKell Institute, 2020 "Riding the Revolution" https://mckellinstitute.org.au/research/reports/riding-the-revolution/

vehicles themselves. This education effort needs to clearly and visually communicate e-mobility road rules and the related penalties of non-compliance inclusive of speed limits, permissible riding areas, helmet use, and unsafe riding behaviours (e.g., drink riding, doubling, phone use).

The Queensland Government needs to run a public education campaign promoting road rules (including that scooters are only allowed to be ridden at up to 25km/hr on local roads with no dividing line), connecting new riders to training programs and promoting insurance.

The Queensland Government does have experience of promoting safe riding, with campaigns like Share the Road and some promotion of safe passing laws having occurred in the past. So far, there have been no such campaigns around e-mobility despite the clear public knowledge gaps and enthusiastic take up of devices.

This new campaign could include general advertising and the provision of information at the point of sale. Both Bicycle Queensland and, we would be confident, the responsible elements of the bike and scooter retailer network (many of whom we are formally partnered with through our BQ Link network) would be willing partners in such a campaign.

Issue 4 - Data gaps, leading to a plethora of opinion unsupported by evidence

Despite the significance, and significant community interest, in the emergence of e-mobility, there is no systematic data collection or research project in Queensland or Australia currently devoted to measuring e-mobility take up, benefits (such as congestion reduction or emissions savings) or accident and health consequences, such as a comprehensive compilation of injury data.

This absence of verifiable fact is fuelling a sea of commentary, largely based on anecdotal evidence and catastrophising by the media, concerning trends like an apparent increase in accident data - which is likely proportionally smaller than the increase in take-up - and unsourced incident reports.

Issue 5 - Battery safety concerns – mainly in devices of questionable origin

Among the real but highly publicised concerns about e-mobility safety are highly publicised reports of lithium ion battery fires. While Bicycle Queensland is not aware of battery fires among e-bikes compliant with EN15194 (we do not have data on e-scooters), we are concerned that unregulated imports may increase unsafe battery risk and that the widespread concern about batteries is creating other flow-on impacts.

We have heard, for instance, of TravelTrain services being unwilling to transport e-bikes and of building owners and managers being unwilling to facilitate safe device charging for fear of fires.

8. Recommendations for change in e-mobility regulation, enforcement and education

While much public commentary has focused on the possibility of new regulation, including bicycle registration (which Bicycle Queensland has opposed for many years as unnecessary red tape which would discourage responsible active transport[17]), the fact is that the e-bikes which are the subject of most current community concern are illegal for use on Queensland roads and paths under existing law.

This proposition does not appear to be in dispute, and is evidenced by the fact that on 27 May, Queensland's Department of Transport and Main Roads wrote to bicycle retailers across the state indicating that the department *"has become aware of a significant increase in illegal devices purporting to be legal e-bikes, being marketed, sold and used in Queensland"* and warning of fines of up to $50 million for misleading marketing claims (Attach 3).

With that the case, Bicycle Queensland believes that government's first priority should be to cease the sale and remove from the streets the illegal devices that exist now. The following steps should be undertaken to achieve this end;

As per Recommendation 1.2, ensure that only EN15194 compliant e-bikes are available for use on Queensland streets

a) **Work with the Commonwealth to reintroduce restrictions on the importation** of high-powered e-bikes. Devices that exceed the power or speed limits of standard e-bikes or e-scooters should not be allowed to be imported or sold.
b) **Restrict on-line and in-person sales** of e-bikes which do not meet the Australian Standard based on EN15194, and after-market kits which don't meet the 250W continuous power pedal-assist standard.
c) **Public Education:** Given many thousands of these devices are already in use, a public awareness campaign is needed to educate riders and the general public about the legal requirements, safety measures, and appropriate use of e-bikes. This includes providing clear guidance on how to distinguish a legal e-bike from an illegal one.
d) **Speed governing:** All e-bikes have software systems built into the devices, and Bicycle Queensland suggests that existing non-legal devices are returned to the place of purchase to have the speed governed, and throttles removed. These devices cannot technically meet the EN15194 standard, but could be restricted to a 25kmh maximum assistance, and be pedal-assist only.

[17] Bicycle Queensland Position Statement on Bicycle Registration https://bq.org.au/advocacy-statement/

e) **Enforcement:** The Queensland Police Service and Department of Transport and Main Roads inspectors should have the necessary training and operational capability around the ability to recognise, test and enforce regulation of high-powered vehicles.
f) **Exemptions for disability sector and for use on private property:** There is a need for specialist e-bikes suitable for those with a disability, that may require features such as a throttle etc. This will require an exemption, similar to those who wish to legitimately use high-powered e-bikes on their own property should be required to gain approval on a case-by-case basis from the Department of Transport and Main Roads that precludes their use in public spaces.

As per Recommendation 1.3, promote safe riding through a professional public education campaign (noting that Bicycle Queensland is a willing partner in this work)

Overall, while Bicycle Queensland is very supportive of the e-mobility revolution, we consider that many of the issues which are currently coming to public attention exist because of the existing regulatory framework, because people are simply not aware of what the law is, occasionally do not have the skills to use the new devices, and are not clear about how to manage the risks.

As we have said consistently throughout this submission, we believe government's posture should be to lean into the shift to e-mobility while taking steps to ensure it is safe. As, to the best of our knowledge, the only Queensland based provider of bike, e-bike and e-scooter public liability and personal accident insurance and an organisation with more than 40 years' experience promoting safe and accessible riding, including through specific bike education programs (often in conjunction with councils and state government), we are more than happy to partner with government to ensure safe riding.

Specifically, we endorse;

a) **A major safe riding public education campaign** with information about compliant devices, the road rules and respectful behaviour to be provided both in a general campaign and at point of sale.
b) Ensuring the provision of specific, **targeted safe riding programs** for bike, e-bike and e-scooter users.
c) Promoting **public liability and personal accident insurance** as a means of supporting the safe use of bikes and scooters, as provided by Bicycle Queensland.

As per Recommendation 1.4, work with other governments to ensure safe charging

While Bicycle Queensland is not aware of fire issues arising from charging high quality, compliant e-bikes, the unregulated nature of imports, significant second-hand market and high profile reporting of battery fires has led to various crack downs such as building owners banning charging of e-mobility devices.

Consistent with Bicycle Queensland's general view that e-mobility is a great opportunity which should be facilitated, we consider that it should be well within the capacity of government to work together to ensure safe battery regulation and to ensure that provisions can be made for charging.

Specifically, we endorse;

a) Applying a **nationally consistent set of standards** to the importation of batteries and chargers to ensure that fire safety risks are appropriately mitigated.
b) Ensuring **planning laws and building regulation** provide for the secure storage and safe charging of high quality, compliant e-mobility devices.

9. Conclusion

E-mobility is the best thing to have happened in the field of transport for decades. It provides the opportunity for more people to get around independently, safely, in an environmentally friendly way and at virtually no cost. While the e-mobility revolution does require more infrastructure to be made safe, the infrastructure required has been planned and promoted by government for decades and is both smaller scale and substantially cheaper than the infrastructure which continues to be required on the current trajectory of car dependency.

The infrastructure required for every new e-bike or e-scooter required is miniscule and available at a fraction of the cost of the infrastructure necessary for every new car (and car park).

While we understand that there are current legitimate community and safety concerns about the current poorly managed introduction of e-mobility, we note, as the Minister himself has written, that the problems relate to devices that are already illegal under Queensland law.

Bicycle Queensland is a long-time advocate for active transport and now the e-mobility revolution. We are a significant community organisation with a more than 40 year record of promoting safe riding and working with government to get ***more Queenslanders riding more often*** in ways that are safe, healthy and fun.

As the leading, long time advocates for safe bike and scooter riding, we are proud to be a leading insurer of Queensland riders of bikes and e-scooter, providing coverage for our 12,000+ members.

We welcome this Inquiry – indeed we believe our actions bringing these issues to public attention may have contributed to precipitating it. We consider ourselves to be a constructive partner. We link the thousands of Queenslanders who ride bikes and

scooters responsibly and who want to be able to do so more, with the governments charged with ensuring safe and accessible transport.

We look forward to working with the Committee and with government to ensure safe e-mobility in Queensland for the benefit of all. We are comfortable for this submission to be published and would welcome the opportunity to contribute to the upcoming public hearings.

Yours sincerely

[redacted]

Rachel Nolan
Chair
Bicycle Queensland

Bicycle Queensland Position Statement on high powered e-bikes

Bicycle Queensland (BQ) notes and is dismayed by the rapid growth of high-powered illegal e-bikes in Queensland and across Australia. BQ advocates restrictions on import and sales of devices that don't meet legislated standards, to ensure the safe integration e-bikes and PMDs into transport and recreation.

What is the issue?

Retailers outside of the mainstream bicycle industry are selling e-bikes which are more powerful than allowed by the Australian standard, not speed restricted to 25km/h, and can be operated by a throttle rather than requiring the user to pedal. These illegal devices are of course attractive to many, including teenagers. They are effectively an unregistrable electric moped. Many can operate at speeds up to 60kmh.

With higher speeds and higher power outputs, these devices present increased risks to both riders and other road, bikeway or shared path users. This is of greatest concern when used in shared public spaces. Public concern is demonstrated by public meetings on both the Sunshine Coast and the Gold Coast, dominated by residents concerned for their own safety on pathways.
BQ supports the continued growth of e-mobility devices, but it is crucial to ensure that safe, legal e-bikes and PMDs are the devices which ride this growth wave.

Clear boundaries must be established between legal pedal-assist e-bikes, which should remain subject to existing cycling rules, and high-powered e-bikes that operate beyond the legal limits.

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What are the current regulations in Queensland?

Under current Queensland laws, pedal-assist e-bikes are regulated by the EN15194:2017 standard, limiting motor assistance to 250W continuous power with a speed cut-off at 25km/h. These e-bikes are considered bicycles and are subject to the same rules and responsibilities as traditional pedal-powered bicycles.

However, high-powered e-bikes, defined as having motor outputs exceeding 250W or lacking a speed restriction (often exceeding 25km/h) are not appropriately regulated under current cycling or vehicle laws. These devices are often sold without adequate public awareness of their legal classification, leading to confusion and potential safety hazards.

Why is restriction of high-powered e-bikes and PMDs important?

Safety: High-powered e-bikes with throttles and power outputs exceeding the legal limits pose greater risks to both riders and other road/pathway users. In mixed-use environments, such as footpaths and shared pathways, higher speeds can lead to accidents and injuries.
The amount of power generated immediately by these devices requires a level of skill and experience beyond many users. Observational data suggests that many high-powered devices are marketed and sold to younger, more inexperienced users. We believe there is a *prima facie* safety concern for the rider in these circumstances.

Legal Clarity: High-powered e-bikes are not permitted to be used in Queensland (or any other State or Territory). However, they maybe be freely purchased. This leads to confusion about whether these devices can be used, who can ride them, and what safety standards apply. No state or territory allows their use in public spaces.

Shared access: High-powered devices are prone to inappropriate use. This is already apparent, with increasing reports of these devices speeding through urban areas, along roads and pathways, and along walking trails. There is a risk that with increasing proliferation of these devices, other users will have their access to these areas compromised.

What is the position of Bicycle Queensland?

Bicycle Queensland advocates for a tiered approach to regulating e-mobility devices, distinguishing between standard pedal-assist e-bikes, high-powered e-bikes, and electric motorbikes based on their design and performance characteristics. Specific recommendations include:

1. **Reintroduce restrictions on the importation** of high-powered e-bikes. Devices that exceed the power or speed limits of standard e-bikes or e-scooters should not be allowed to be imported or sold.

2. **Restrict on-line and in-person sales** of e-bikes which don't meet the Australian Standard based on EN15194, and after-market kits which don't meet the 250W continuous power pedal-assist standard.

3. **Public Education:** Given many thousands of these devices are already in use, a public awareness campaign is needed to educate riders and the general public about the legal requirements, safety measures, and appropriate use of e-bikes. This includes providing clear guidance on how to distinguish a legal e-bike from an illegal one.

4. **Speed governing:** All e-bikes have software systems built into the devices, and Bicycle Queensland suggests that existing non-legal devices are returned to the place of purchase to have the speed governed, and throttles removed. These devices cannot technically meet the EN15194 standard, but could be restricted to a 25kmh maximum assistance, and be pedal-assist only.

5. **Enforcement:** The Queensland Police Service and Department of Transport and Main Roads inspectors should have the necessary training and operational capability around the ability to recognise, test and enforce regulation of high-powered vehicles.

6. **Exemptions for disability sector and for use on private property:** There is a need for specialist e-bikes suitable for those with a disability, that may require features such as a throttle etc. This will require an exemption, similar to those who wish to legitimately use high-powered e-bikes on their own property should be required to gain approval on a case-by-case basis from the Department of Transport and Main Roads that precludes their use in public spaces.

What will Bicycle Queensland do?

Bicycle Queensland is committed to advocating for clear, consistent, and evidence-based regulations and restrictions for high-powered e-bikes and PMDs. We believe that the current Australian Standards, based on the successful experience of similar European standards, are fit-for-purpose.

We will continue to engage with government, industry, and community stakeholders to ensure that these devices are appropriately managed within Queensland's transport networks while preserving the benefits of active transport and sustainable mobility.

We will advocate for change with both the Australian and Queensland governments, reflecting the 6 key recommendations above.

Queensland Government

Department of
Transport and Main Roads

27 MAY 2025

Dear Sir/Madam,

I am writing to you in relation to the sale and use of illegal e-bike devices in Queensland and the significant consequences for industry if misrepresenting their products.

The Department of Transport and Main Roads (TMR) has become aware of a significant increase in illegal devices, purporting to be legal e-bikes, being marketed, sold and used in Queensland. This issue is causing substantial community concern and tragically there have been serious injuries and fatalities.

A Queensland Parliamentary Inquiry has recently commenced to examine e-mobility safety in Queensland and one of the key aspects of this inquiry will be the importation, sale and use of illegal e-bike devices. More information about the inquiry can be found at www.parliament.qld.gov.au/Work-of-Committees/Committees/Committee-Details?cid=272&id=4522

As an organisation involved in the importation, wholesale or retail of e-bikes in Queensland, it is your responsibility to know the rules and requirements.

Under Queensland law, a legal e-bike must:

- Be predominately pedal powered.
    - The motor can only provide assistance to a pedalling rider.
    - Throttle control is only permitted up to 6km/h, after which the motor can only operate if the rider is pedalling.
- Have a motor with a maximum continuous power rating of 250 watts.
    - Higher powered motors are never legal, even if limited to a lower output by software locking, or similar.
- Be capable of a maximum of 25km/h while the motor is operational.

TMR recommends that consumers look out for e-bikes that comply with the European Standard for Power Assisted Pedal Cycles (EN15194) as a clear indication that it is legal for use in Queensland. For information about legal e-bike requirements in Queensland visit https://streetsmarts.initiatives.qld.gov.au/electric-bikes

Any device that exceeds the requirements above, is considered a motorcycle and is illegal for use in public places, such as roads and paths, unless compliant with vehicle registration requirements.

I am aware that there are illegal e-bikes being marketed and sold in Queensland as legal for use in public places. This misleading practice exposes consumers to considerable risk and could be illegal under consumer law.

Facsimile +61 7 3066 2110
Website www.tmr.qld.gov.au
Email lavr@tmr.qld.gov.au
ABN 39 407 690 291

The Office of Fair Trading investigate complaints relating to false or misleading claims about products and significant penalties apply. This includes fines of up to $50 million for a corporation and $2.5 million for an individual. For more information about your obligations under consumer law go to www.qld.gov.au/law/laws-regulated-industries-and-accountability/queensland-laws-and-regulations/business-advice-rights-and-responsibilities/avoid-using-unfair-business-practices-against-consumers/avoid-making-false-claims-about-products-or-services

In addition to any criminal penalties, supplying illegal e-bikes under false or misleading claims may expose businesses to civil liability claims. Police are increasingly seizing illegal devices when used in public places and consumers may seek damages from the supplier if misled during the purchasing process.

I trust this information is of assistance and will support your business in correctly representing the legality of all e-bikes marketed and sold in Queensland. For any questions, please contact TMR at [redacted].

Yours sincerely

[redacted]

Joanna Robinson
General Manager (Land Transport Safety & Regulation)

Queensland Government

Minister for Transport and Main Roads

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Our ref: MC149301

29 April 2025

Mr Alton Twine
Chief Executive Officer
Bicycle Queensland
[redacted]

Dear Mr Alton Twine

Thank you for your letter of 12 March 2025 about illegal e-bikes. My Department is hard at work supporting disaster recovery in the wake of Ex-Tropical Cyclone Alfred, as well as our business-as-usual priorities. While it could have been much worse, I am pleased Queenslanders were well prepared.

I sincerely appreciate your passion and commitment to road safety in Queensland. I value the great working relationship between my Department and Bicycle Queensland (BQ). I am aware that BQ is represented on Department of Transport and Main Roads' (TMR) e-Mobility Safety Reference Group and plays an active role in advising on how to improve e-mobility safety in Queensland.

As you would agree, 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. I am not aware of any significant safety issues with legal e-bike use. Unfortunately, the current issues regarding illegal e-bikes undermine public perspectives on legal e-bikes, putting these benefits at risk.

I am very concerned about the increasing number of illegal devices, purporting to be e-bikes, available for sale and use in Queensland. As you rightfully point out, 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.

There are significant community concerns about illegal e-bike use and it is totally unacceptable that pedestrians, including children, have been injured by these devices. My Department has been inundated by community members calling for action to make our pathways safer and this is something I intend to deliver on.

Under current regulations illegal e-bikes cannot be used in any public place in Queensland. 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 that allows a child to ride an illegal e-bike in public can be fined. Queensland Police Service officers also have the ability to impound and confiscate devices for repeat offences.

I support BQ's advocacy at a federal level as something must be done to prevent illegal devices flowing into the country so easily. The ultimate solution to this problem is to stop the importation of illegal devices as they have no place on our roads and paths. I intend to raise this matter with my Commonwealth colleagues at the first available opportunity.

My Department is currently developing a package of actions to address the use of illegal e-bikes, which includes:

- Clarifying community and industry confusion about what e-bikes are legal and which are already banned.
- Distributing educational materials to schools, retailers, police, and other community and stakeholder groups.
- Working with police to support active enforcement of the current rules and requirements.
- Promoting the current rules and any enforcement activities in the media to ensure messaging receives a broad audience.

If you require further information, please contact Mr Nick Mackay, Manager, Road Rules and Emerging Technology, TMR, by email at [redacted] or telephone on [redacted]

I trust that BQ will remain a strong partner in this work and thank you again for your interest and support on this issue.

Yours sincerely

[redacted]

BRENT MICKELBERG MP
Minister for Transport and Main Roads

E - a nominal unit of '*Control Signal*' strength which, for compressed air '*Brake Systems*', is shown in the table below:

Table: 'E' VALUES OF CONTROL SIGNAL STRENGTH

Nominal Conversions	
0.0E	Zero Compressed Air Energy Level
0.15E	15psi = 100kPa
0.20E	l9psi = 130kPa
0.24E	22psi = 155kPa
0.31E	29psi = 200kPa
0.65E	61psi = 420kPa
1.00E	94psi = 650kPa
1.06E	100psi = 690kPa

For the purpose of ADR 35/.. and ADR 38/.. 1.0 '*E*' has been equated to the '*Nominal Minimum Energy Level*' of compressed air brakes which for vehicles, has been nominated as 650 kPA. Values appearing in brackets after '*E*' values in ADR 35/.. and ADR 38/... are the equivalent kPA values for compressed air '*Brake Systems*'. The relationship between '*E*' and the other brake control mediums has not been set in ADR 35/.. and ADR 38/...

ECE REGULATION - (UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE REGULATION) - an addendum to the United Nations Agreement Concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations. Also see UN REGULATION.

ELECTRICALLY POWER-ASSISTED CYCLE (EPAC) - means an electrically-powered pedal cycle with a maximum continuous rated power of 250W, of which the output is:

(a) progressively reduced as the cycle's travel speed increases above 6 km/h; and

(b) cut off, where:

(i) the cycle reaches a speed of 25 km/h; or

(ii) the cyclist is not pedalling and the travel speed exceeds 6km/h.

EMERGENCY BRAKE SYSTEM: that part of the 'Brake System' which automatically applies in the event of trailer break-away.

EMERGENCY LOCKING RETRACTOR - a retractor incorporating a locking mechanism that is designed to lock under abnormal operating conditions.

ENGINE FAMILY - a basic classification of vehicles having similar characteristics as defined in clauses 37.4.3.1 to 37.4.3.2 of ADR 37/00 or clauses 7.3.1 to 7.3.2 of ADR 37/01.

ENGINE FAMILY - means a basic classification of engines having similar characteristics as defined in ADR 36 clauses 36.3.4.1 to 36.3.4.4.

ENGINE SPEED AT MAXIMUM POWER - ADRs 28/01, 39 and 56 (exclusive definitions in each ADR).

ENGINE START CONTROL - a hand-operated device that enables the driver to activate the vehicle's propulsion system. This includes but is not limited to a