

## **Inquiry into e-mobility safety and use in Queensland**

<b>Submission No:</b>	816
<b>Submitted by:</b>	DiroDi
<b>Publication:</b>	Making the submission and your name public
<b>Attachments:</b>	See attachment
<b>Submitter Comments:</b>	

**To: Members of the QLD State Development, Infrastructure and Works Committee**

Dear Committee Members,

As a leader in the Australian e-bike market, DiroDi welcomes this inquiry and commends the Queensland Government's initiative in addressing the safety and practicality of electric bicycles. We believe that "speed control", not arbitrary limits on "power" or "throttle usage", is the key to enhancing e-bike safety. Enforcing "tamper-resistant speed limits" for road-legal bikes, rather than capping motor power, aligns safety goals with the real-world needs of riders especially when dealing with hills, cargo, child seats, or heavier riders.

### **1. Focus on Speed, Not Power**

Current regulations place disproportionate emphasis on motor wattage and throttle use rather than the actual "assisted speed", which is the main safety concern. A powerful motor limited to 25 km/h poses no greater risk than a 250W motor at the same speed, but it offers significantly better performance in practical use cases like hill climbing or carrying a child. In fact, the true danger arises when riders choose to use more powerful bikes to overcome power shortcomings in hill climbing, but end up using unregulated, higher-powered e-bikes with no speed limit, exposing themselves and others to unsafe speeds.

### **2. Current Laws Are Overly Conservative and Counterproductive**

The existing regulations are so conservative that many compliant e-bikes are impractical under normal riding conditions. For example, a 250W bike cannot climb moderate hills under load, leading to safety hazards and a frustrating user experience. This has a perverse effect: riders seeking safer hill performance often break the law to increase motor power, and once that step is taken, they may also unlock higher speeds. Since the penalty is the same, there's little incentive to limit their modifications to safe-speed operation. Overly restrictive laws, therefore, inadvertently encourage unsafe practices.

### **3. Regulation Should Aim to Reduce Accidents, Not Just Appear Safe**

We believe in regulations that minimise actual accidents, not ones that are technically conservative but practically unworkable. When the rules "contradict common sense", many riders stop following them. Instead, we propose a balanced, enforceable approach that encourages widespread compliance: maintain a fixed speed cap (e.g. 25–32 km/h) but allow higher motor power and throttle usage within that limit. Widespread adherence to such rules would reduce risk more effectively than current laws that many riders feel forced to break.

### **4. Recommendation: Raise Speed Limit from 25 km/h to 32 km/h**

The current 25 km/h limit is lower than what many traditional cyclists naturally ride at. Once this limit is reached on an e-bike, the motor cuts out, leaving the rider to pedal a heavy, non-electric bike, defeating the very purpose of owning one. Raising the limit to "32 km/h", a standard already adopted in the US and other jurisdictions, would make e-bikes more practical and promote compliance.



## **5. Treat Throttle and Pedal Assist Equally Under Speed Cap**

Whether a rider reaches 25 or 32 km/h using a throttle or by pedalling should make no difference in the eyes of the law. What matters is the capped speed. A throttle-limited e-bike at 25 km/h is no less safe than one with pedal assist limited at 25 km / h. In fact, pedal assist at high levels mimics the effect of a throttle, with the motor doing most of the work while the rider barely turns the crank. The current rules banning throttles but allowing high-assisted pedalling ignore this reality, and when laws break common sense, riders stop respecting them. We strongly recommend recognising this and legalising throttles that are speed-limited, as they offer practical support for tired riders, long commutes, or hill climbs.

## **6. Proposal: Legalise 1000W Motors with Speed Tampering Protections**

We propose increasing the legal “continuous motor power” to 1000W, while maintaining strict enforcement of “speed limiters”. This mirrors how cars operate: although Australia's legal speed limits are well below most car capabilities, vehicles are allowed more power to ensure safe performance in varied conditions, like climbing hills with passengers. The same logic should apply to e-bikes. A 250W motor often cannot climb a hill under load, forcing riders to dismount and push. A 1000W motor, limited to 25 or 32 km/h, ensures safe, controlled operation while still delivering the torque needed for practical transport use. If speed tampering protections are built in (as many modern systems allow), the higher power serves utility, not speed, and should be embraced in policy.

## **7. Avoid Fragmented, State-Specific Overregulation**

We caution against “state-specific rules” that isolate Queensland from the national and international market. NSW’s experience shows that overly specific or unique requirements can hinder innovation, inflate costs, and reduce consumer choice. Regulatory fragmentation would confuse consumers and manufacturers alike, ultimately undermining the goals of safety and sustainability.

We would welcome the opportunity to conduct a live demonstration for the committee. By comparing a 250W and a 1000W bike, both speed-limited so you can directly observe the difference in hill-climbing ability, practicality, and safety, without any increase in risk at the speed limit.

In summary, we recommend:

- Enforcing anti-tampering measures on speed, not restricting power or throttle.
- Raising the legal power limit to 1000W.
- Increasing the assisted speed limit to 32 km/h.
- Treating throttle use equally to pedal assist, within the speed cap.
- Ensuring Queensland’s regulations remain aligned with national and international norms.

Thank you for the opportunity to contribute to this important inquiry. We are available for further discussion or demonstration at your convenience.

Sincerely,

**DiroDi**