

NSW E-Bikes – Exempt & Non-Exempt

Exempt E-Bikes

To be classed as an e-bicycle and therefore to be exempt from registration and requiring a licence to ride one, the e-bike must be either of the following.

Electrically power-assisted cycles

An electrically power-assisted cycle has a maximum continued rated power of up to 500 watts. This power output must be:

- progressively reduced as the bicycle's speed increases beyond 6km/h
- cut off when:
 - the bicycle reaches a speed of 25km/h.
 - you stop pedalling and the speed exceeds 6km/h.

or

Power-assisted pedal cycles

A power-assisted pedal cycle:

- has one or more motors attached with a combined maximum power output of up to 200 watts.
- can't be propelled only by the motor/s
- weighs less than 50kg (including batteries)
- has a height-adjustable seat.

If the e-bike does not comply with the above, then it is classed as a small motorcycle (Moped) and the Law and Regulations say clearly and without ambiguity the e-bike must be registered and require a licence to ride it. If the e-bike has a motor greater than 4,000-Watts it would be classed as standard motorcycle. Transport for NSW states that restricting a more powerful motor to 500-Watts or less does not make the bike exempt (see advice below).

The NSW Transport Regulations (Road Transport (Vehicle Registration) Regulation 2017 and Road Transport (Driver Licensing) Regulation 2017) make this clear and it is unambiguous.

Non-Exempt E-Bikes (e.g. Overpowered E-Bikes)

Overpowered E-bikes (>500W) **DO NOT** comply with the requirements to be an exempt motor vehicle. These E-bikes fit into the vehicle classification of a small motorcycle (Moped) . They have one or all of the following attributes which precludes them from being an exempt motor vehicle and therefor requires both registration and a licence to ride one:

- The motors continuous power is greater than 500-Watts. The vast majority of these bikes have continuous rated power of either 750 or 1,000-Watts. Restricting the motor to 500-watts or less by software, switches or other means does **NOT** make these bikes exempt (see *Transport for NSW advice below*).
- The maximum pedal assist by the motor does not cut out at 25 k/h allowing pedal assistance by the motor to much higher speeds.
- Allows propulsion by a throttle (not pedalling) up to 50 km/h well above the legal 6km/h.

Overpowered e-bikes fit within the classification of a Moped (see classification below). If the motor is greater than 4,000-Watts they would be classified as a standard motorcycle. They most certainly are **NOT** bicycles by definition.

NOTE - E-bikes that have maximum continuous power greater than 500w and are restricted, electronically, mechanically or otherwise to 500w or less are not considered road legal in NSW.

NSW Moped Law ([CLICK HERE](#) for Transport for NSW E-Bike and Moped Law)

A moped is a small motorcycle that:

- has an internal combustion engine with a capacity not exceeding 50ml, or an alternative power source e.g. electric motor.
- has a maximum speed of 50km/h
- may be either two-wheeled or three-wheeled.
- may be pedal assisted.

These vehicles (Mopeds) are legal on NSW roads as long as they're:

- entered on the Register of Approved Vehicles (RAV), or for an older model, fitted with an identification plate (commonly referred to as a compliance plate),
- compliant with the applicable vehicle standards
- registered
- ridden by a licensed rider.

Insurance Liability

E-bikes not classed as exempt motor vehicles require registration and therefore CTP insurance. These bikes are currently being ridden without registration and insurance. In the event of a crash that injures a pedestrian, a pillion passenger, or the driver/rider of another vehicle the CTP Nominal Defendant would be called on to meet any personal injury claims for third parties. This will be costly for the Government because it collects no premium and often the Nominal Defendant is unable to recover from the party at fault.

Where the rider is identified, the Nominal Defendant will seek to recover any cost it has paid. As the bike is illegal any liability insurance a rider may have (e.g. public liability on home contents or insurance provided by Bicycle NSW) will be voided. Without insurance the rider (or for a young rider's parents) could lose their house and /or any other assets they may have.

The Nominal Defendant will join any party to the proceedings that they believe have contributed to the liability claim. These other parties could include the retailer and distributor (if they are misrepresenting the bike as street legal and road worthy). Councils could also be joined to proceedings for not supervising the illegal riding of these bikes in Malls, Council property and on shared bike paths etc.

If the bikes were to be registered, the CTP insurance that is required, would in addition to the third-party personal injury cover, provide 12 months' medical and hospital cover for an at fault rider.

Consumer Rights

The ACCC, Dept of Fair Trading and the Dept of Infrastructure all have current open investigations into the importation and sale of these bikes. They believe they are falsely being imported as bicycles when even the Dept of Infrastructure's own definition they are classed as Mopeds (small motorcycles). Both the ACCC and Dept of Fair Trading are investigating the misrepresentation of these bikes as legal bicycles. The remedy if this is proven is the forced recall of the bikes and the customer being given a full refund (there are numerous precedents for this).

Conclusion

Overpowered E-bikes including Fat Bikes are **NOT** Bicycles, they **ARE** Small Motorcycles (Mopeds) and are **NOT** exempt from Registration and Licensing.

Thank you for your enquiry about the permitted power of e-bikes.

To be classified as a bicycle in NSW, an electrically power-assisted bicycle must have a maximum continued rated power of 500 watts, if the power output:

1. progressively reduces as the bicycle's speed increases above 6km/h, and
2. is cut off when:
 1. the bicycle reaches a speed of 25km/h, or
 2. the rider of the bicycle stops pedalling and the speed is more than 6km/h

The term continuous rated power is defined within Australian Standard 15194:2016 and is measured according to EN 60034-1.

Transport for NSW is of the opinion that the continuous rated power is a specification of the motor itself, and therefore it would not be legal to use an e-bike on NSW roads that uses a motor with higher power rating even if it is limited by software, switch or other means.

Regards

Julie

Transport for NSW