Inquiry into e-mobility safety and use in Queensland

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I acknowledge the growing trend of emoblity devices Australia wide. Statistically there will always be risk and ensuring Australian Brands comply with laws in design and quality/safety standards is key, though purchases from websites globally and example Aliexpress for ebike kits and other complete emobility devices will almost be forever out of Australia's control. So what can be done, I do have a few ideas and I must note I work in the ebike industry.I have been gathering ideas globally about what other countries are doing, how mature their 2 wheel light vehicle user base is and what suits Australia's infrastructure.The age group 13-25yo, simply their social groups, what content they consume, education and experience in life for these young Australians lead to dangerous use of these vehicles.Some states have below 50cc petrol moped eligible for C-Class license and registration $125~ which is reasonable. The requirements for maintenance service log, brake tests and indicator/brake light spacing, brightness certifications and other details that validates a road worthy vehicle could come into this argument quickly shutting down the viability for say the popular 1000W ebike user (equals roughly 40cc) and these bikes typically have a top speed of 50kmh (similar to 50cc moped).I would like to see that the thousands of adult owners of these bikes have a reasonable pathway to use these devices when they heed to traffic and respect other shared pathways or are restricted to use them. Open for discussion.Eg. $100 per year (colour coded plate) rego, C-Class license, 500-1000W ebike R.S.A type certificate as well and have discussion for brake light, indicator, horn and service history discussed about, involving Australian bike shops.The NSW test of the 500W motor was apparently a failure. The conclusion of the test might have bias to suppress heavier ebikes which need a minimum of 400W to be viable in product design.Many of the China domestic ebikes are at 400W and I noticed when travelling in China that 25kmh was well suited to their environment. Though China has incredibly dense cities. The number plate system was that government was pushing hard for everyone to register their ebike. So the 25kmh 400W bikes were all eligible for free white number plate and the 25-45kmh 1000W ebikes were registered with a yellow number plate (unsure on cost).Number plates also help combat bike theft.Note USA ebike speed limit is 32kmh and 750W motor. Their infrastructer has big cars and faster roads, with lots of space in the less dense regions.Australia has quite a lot of space and when out on the open the road, 25kmh does feel hindering. But it was the opposite feeling when in China.Some Australian lobbyists have been advocating for 32kmh, I am unsure. I actually believe from a mechanical standpoint that the brakes installed to many ebikes are not powerful enough, The brakes on the Lithium Bicycle Co, VINXS, Ebike100 etc (these are the china domestic looking bikes for delivery) these bikes have very good brake sizing, but often are neglected due to being rented and user not caring to service the brakes, but compared to fat ebikes, Fatboy, Dirodi etc the brakes have increased rotor size, but main bicycle manufacturers still only offer standard 2mm thick rotor and legacy caliper and pad size due to the competitiveness of the market. If Dirodi upgrade to a super moped style brake, Dirodi incur the cost and it may only improve sales for a fraction, but incurring the cost across their whole inventory, so essentially no brands push forward on this and all brands compete against similar specs. The braking power is not insufficient, but results on speed, one can also inspect brakes, so minimize crashes and force the global brake giants to properly do market research, be a catalyst in getting what people want and need for the trend of ebike moped style. Let's be honest here, 100% of the China Domestic ebikes, clad with vehicle ferrings (bodywork) -they also often have pedals- these bikes all have very suitable brake specifications and furthermore very good service life (1 year+) compared to fat ebike with Tektro brake HD-3520 from Australian ebike brands using this brake commonly (2-5 months use).Throttle: Another touchy topic. 100% it is safe to use, Perhaps some parties, eg. Shimano who manufacture chains for bicycles

might suffer due to the need for drivetrains moving towards hub motor and throttle and removing drivetrain altogether would suffer marketshare loss and would lobby against this, trickling down into analog bicycle brand giants, Trek, Giant, Specialized etc using mid-drive motors incorporating chain intro drivetrain (the riding experience is very good, but service life is less and more of a boutique bike user and these brand giants like to keep the pedal culture alive. I respect it a lot. EMobility in the chainless, hub motor design is simply inevitable. Imagine our future. Scooters are legal, throttle to 20kmh and digging deeper you can legally have a moped, chainless and throttle spec'd at 200W but no Australian entrepreneur sees the market in that.400W is minimum required, also hills can impede the viability. Some cities may see uptake in licensed 1000W emopeds to compensate for this.So what can more light electric vehicles help with growing population? more efficiency, less polution, less congestion, more convenience, more outdoor use, bicycles have been a great benefit for mental health. Also personally we have gathered data that ebikes and scooters are often bought to alleviate the need for parents to be the driver for them.By the way, I noticed in China that the traffic was very submissive in the way I felt cars were always prepared to stop for one another. In Australia I do not feel that. I feel that many daydream going through orange lights, ebikes 25kmh continuing straight across slip lanes, traffic behind aggressive towards bike rider.I would like to see number plates on all emobility devices, will compromise for the emoped above 400-500W type for use 18yo+ / c-license. Affordable rego $100 per year, for battery and charger safety certification logo checks etc.I would also like to see more CCTV cameras on a large scale to help prevent theft and provide evidence on dangerous use of these devices.I also believe 1000W should be the maximum for this emoped C-license class vehicle to hinder the Surron type bike and the custom ebike 'kit' bike where we see the wheelie crowd get funnelled into. These bikes are often 60V 1500-3000W and are fitted to cheap mountain bikes with weak brakes, axles and headset bearings. And battery packs fitted into material triangle bags. Apparently the largest portion of ebike fires per year were related to these ebikes. This statement was given by Peter at Bicycle Industries Australia.I hope to hinder the surron bikes used in public. I am at word limit. Would love to chat. and take constructive criticism on my views.