

**From:** [REDACTED]  
**To:** [Transport and Resources Committee](#)  
**Subject:** submission: Inquiry into Vehicle Safety, Standards and Technology, including Engine Immobiliser Technology  
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To the committee,

Federal law precludes the use of safe encryption technology in consumer goods rendering the proposed remote engine shutdown feature inadvisable. You will probably do it anyway. In such a case, the car must have an easy way to update authentication keys so that they may be revoked or retain a way to disable the feature with a signed firmware update should a serious design flaw be discovered. Preferably, a system external to the ECM (the ECM should be discreet by design for reliability reasons.)

On the subject of design standards. We all love safety so much, the under 25 age bracket being the most vulnerable road users, Queensland should immediately issue a brand new executive BMW sedan to everyone with a license under the age of 25. Now that it has been established that you are willing to compromise on safety -not to mention motorbikes- we need to reconsider the passenger vehicle.

On the subject of passenger vehicle design standards. Australia could recommence vehicle manufacturing in a starkly different way. The road legal sand rail or recumbent reverse trike. Although such vehicles do exist on Australian roads they are highly artisanal and out price production sports performance vehicles, are in high demand and subsequently are exclusively for the super wealthy. The simplicity, no trim or fancy geegaws and doodads, would dramatically lower the tooling costs and vehicle mass. Of course they should probably be power limited by legislation to prevent hotrodding and ensure the design purpose is retained.

Less mass means less consumables like brake pads, fluids and sacrificial components that need to be disposed. Less carbon cost.

Develop a standard frame design that can be made up from off the shelf materials by any boilermaker. The standardisation of design means less approval and design complexity. With industry partners, develop simple interfacing parts to adapt production parts to the frame. This is already occurring in Australia but in a prototype fashion as artisanal one off pieces with extremely high approval and compliance costs.

In regards to non-technology options, legislation requiring the secure storage of vehicle keys. Keys must be either kept on your person or stored out of direct view such as in a closed drawer. Make it illegal to leave an unattended vehicle unlocked.

In regards to improving customer safety, the only measure that can be taken is to abolish the pre-sale certification scheme. Prove that door frame wasn't bent before it was inspected. Prove that hose wasn't leaking before the hamfisted mechanic fished around in the engine bay. A mechanic may defect a vehicle for having a 'dim' set of brake light bulbs that he has intuitively felt do not feel bright enough and hey you need to tow it somewhere you can remove all that trim to replace the bulbs so it'll cost the same to just pay him a couple hundred to do it. The engine may 'sound' not by any measurement or compliance requirement for that vehicle too loud but a general feeling of loudness that can be remedied by a mystical service costing a few hundred dollars. The pre-sale certification scheme has just delivered consumers into the arms of mechanics. After the first few times I had work done by mechanics, I bought tools and learnt to do it myself. Somehow seals don't get

fitted properly and leak a few months later. Transmission fluid leaks on the alternator because the bolt wasn't tightened. The mechanic couldn't check the engine codes at the ford dealership and diagnosed a faulty transmission requiring a replacement but the limp home mode initiated by a sticky throttle body went away with a little elbow grease. I have so many horror stories. Maybe its a bit cleaner than the days of buying a \$500 smogmobile, chucking an egg in the radiator and adding a liter of oil every 1000km but Nobody who could afford something better would choose that option.

Vehicle affordability is a pressing concern. Great Wall slashed the cost of utes across all brands with its \$20k offering but the proposed no petrol cars by 2030 leaves the cheapest new car option as the Toyota Yaris SX hybrid at \$32k. The price of used vehicles has dramatically increased without dramatically increasing the quality of the stock. It used to be possible to just buy a cheap car in good shape but with electrical problems that could be fixed cheaply by some one who knows how and a weekend to spare fault tracing. A dicky sensor that throws off the fuel mapping or the previous mechanic just not knowing that the air must be bled from the cooling system from an obscure port or the coolant sensor will be off. Those cars are too hard to repair and get junked before their time because the certification system will ramp up the purchase/sale/repair cost with a bunch of other problems that weren't already there thus increasing the carbon footprint of the car by reducing its usable lifetime.

The only reasonable choice now with the uncertainty of non-electric vehicles going into the future, the high cost of used vehicles that aren't guaranteed to be reliable and the mechanic extortion tax is to buy new. To that end, since a labour government tends to socialize rather than privatize the benefits of government policy, I would suggest the introduction of state backed low interest loans for new hybrid vehicles. I would also suggest making the term hybrid or electric a protected term denoting more than just regenerative braking in advertising material.

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