Submission for EV transitional Enquiry. [redacted]

Contextual Background.

I am a male age 56yrs have a professional vocational standing. I am married to a doctor and we have several children of driving age and those that do not yet meet that criteria. We have one EV Polestar and would make the switch tomorrow for our collective 4 cars if affordable. We have a 15.7kw solar cell array on our roof and would love to be able to have and install 2x15kw batteries to enable us to be grid-free but initiation costs are such that this makes almost zero economic sense at it stands.

The establishment of resources, systems and infrastructure required to support the transition to EVs.

It is paramount that Australia utilises the natural resources that it is blessed with and for economic, logistical and ecological reasons establishes manufacturing industries in Australia pertinent to the green, environmentally focused zeitgeist that has already begun and as yet has left us in the slow lane. Such industries include battery manufacture of solar cells, batteries, EVs and supportive infrastructure.

Factories and plant of all types should have incentivised solar production and financial incentivisation for battery storage or to be in a power generational grid scheme. If companies are not forthcoming – the government could utilise them whilst still maintaining ownership of the hardware, and roof spaces for their production purposes perhaps at a reduction of rates and fees to incentivise acceptance of this. Every roof space should be harvesting ubiquitous energy from solar. Please note I focus solely on solar but the same could be true of wind and other such power harvesting as location allows.

The government must ensure that maximum generation is optimised both privately where it can be incentivised to do so and under government control when needed. Such a waste as it stands.

Perhaps motorways and road stretches could also be considered for harvesting, national roads having arrays mounted with microinverters along the lengths of open-spaced highways for a start. Both incentivise rural communities to harvest and utilise green energy, allaying some cost offsets for remote road upkeep etc. Fewer movement costs of energy as energy generation would be localised. This potentiates things such as water movement for better fire prevention etc but is not in the remit here as it is.

There should be federal solar incentivisation and council-owned initiation of solar as a form of energy production in all governmental and council-owned buildings. These ideas for industry should also be considered for domestic use. Those living in council accommodation should have installed solar cells for electricity production with metered use for the home occupier and resource production for governmental distribution. Solar powerhouses can be both private and publicly owned. These residential powerplants are hugely unrealised resources that make complete rational sense to maximise. Energy companies should be forced to invest in battery storage

technologies and capabilities to mitigate the woeful remuneration they offer homeowners with solar arrays at off-peak times only to charge astronomical costs for the very same KW sent back at peak times. (in my case A$ 0.16 (first 15kw) then A$ 0.08 for the rest of the export to be charged A$ 0.28 - 0.44 for the same unit? Batteries and storage would homogenous the unit of measure making timing irrelevant. Energy companies saying excess production from solar is a problem at off-peak times is mind-bogglingly short-sighted and irritating, to say the least. Increased self-sufficiency also reduces energy load pressures overall reducing peak demands etc.

When looking at infrastructure to support EVS in the future the above-mentioned power generation could assist in electrical farming/storage to offer improved access to remote charging for ev's. Think about a large highway's ability at energy generation coupled with periodic battery storage feeding charging facilities. Most Chargers should be focused on arterial routes and endpoint destination hubs rather than private spattering. Most will charge cars at home. Strengthening the need for grid resilience by investiture in centralised (energy Companies) and domestic (home battery storage, Vehicle to load and load to the vehicle 2-way tech. I already have a 78kw battery in the one EV I have why can't it be resourced at a time of need?

the impact of moving from internal combustion engine vehicles, including fuel excise loss, existing auto industry component manufacturers and the environment.

Fuel excise loss could be offset by government/federal energy manufacturing initiatives as mentioned above. The health benefits of EVs are often short-changed but looking at the health excise of pollution-rich combustion technology should be thrown into the equation here also. Manufacture of components and using Australia resource blessed status could offset motor industry job losses. The equation is broad and never really fully scoped. Car manufacturers have been abusing tax benefits, been profitable enough for shareholders and have cost health agencies for years without showing a dominant focus on gregariousness so I am not sure why I should assist slow-moving legacy car makers other than their employees.

the opportunities for fuel savings, such as by combining EVs with other consumer energy technologies and savings for outer suburban and regional motorists

the impact on electricity consumption and demand.

I think I have adequately touched on these in my above rambles.

The opportunities for expanding EV battery manufacturing, recycling, disposal and safety, and other opportunities for Australia in the automotive value chain to support the ongoing maintenance of Evs

Battery repurposing and reconditioning is a new and improving technology that is heading toward mitigating any negatives from production and use of them. Safety has improved because of intra-body usage of cell technologies and ancap ratings of vehicles in general are higher than ICE vehicles. Technology governance has many unexplored opportunities in this regard with driver-assist tech. moving forward. It is shameful we have not seized the opportunities to lead the world in this changing time, instead looking like knuckle-dragging Neanderthals in front of the first PC or MAC.

The impact of Australia's limited EV supply compared to peer countries, and

I don't know where to begin with this but it is shameful how much is being asked for EVS because of the limited units av. this question solicits such a why response I can't begin to say how lacking we have been in facilitating vehicles here. Instead, we are going to be the dumping ground for the world's antiquated tech. in the form of ICE vehicles. Perpetuating the problem as the market for ICE vehicles will collapse unless we address an avenue for investiture. EV conversion technology could assist in the interim.

any other relevant matters.

I think I have scribbled enough. Happy to discuss this with anyone but I would give Australia an F for effort in this area up to now. Missed opportunities for taking the lead in development, research, manufacturing and natural richness utilisation of all forms of resources. Prove to me that the Lobbyist from shareholder profitable energy giants has not succeeded in screwing us over time and time again with our "leaders" help. SHAME as it is.