- Working in engineering I frequently globally promote the WHS act based safety in design requirements including risk reductions "so far as is reasonably practicable" (interpretive_guideline_-_reasonably_practicable.pdf (safeworkaustralia.gov.au)).
 - In this context I refer to the missing plan to install of exhaust filters in the ventilation stacks at (e.g. Balgowlah and the Wakehurst Parkway entry/exit points.)
 - The very principle above appears not to be considered and a thorough study of health impacts and the cost of exhaust filters must be conducted
 - The study must be based on current air quality in the area (the EIS is lacking scientific evidence as basis for evaluation). I am dissatisfied to see as evaluation criteria the project utilises requirements defined in 1998. I much rather believe in a country like Australia more up to date criteria supported by science need to be adopted (<u>RACGP Unsafe air pollution standards up for review</u>)
 - → I am shattered by the lack of consideration and the proposed beaches link tunnel in its current form doesn't portray the image of a forward thinking and responsible country and certainly doesn't meet the work health and safety act. A full and comprehensive study must be established to ensure affected communities in (especially around exhaust stacks) are not negatively affected by changes to air quality where alternatives are practicable (e.g. installation of exhaust filters).
- Through my engineering work I am involved in the supply of equipment into the mining industry on its own an industry of many question around environmental impact. It is a large number of Australian mining companies that address concerns in regards to safety and environmental impact through technological progress
 - The move to autonomous plants with haul trucks and even light vehicles now operating autonomously in a very challenging environment (Fortescue deploys autonomous light vehicles at Chichester Hub | Fortescue Metals Group Ltd (fmgl.com.au))
 - People like Andrew Forrest promoting the production of green steel possibly generating new arms of manufacturing in Australia (<u>Forrest unveils Fortescue's green steel plans -</u> <u>Australian Mining</u>)
 - It is part of all responsible mining companies and their suppliers to focus on the reduction of CO2 emission (amongst other sustainability measures) which considers the energy generation through renewable technologies
 - In this context the tunnel project fails to adequately explore and/or include alternative transportation concepts and only relies on old technology for transport (e.g. cars)
 - If mining can operate haul trucks and light vehicles autonomously then public transport through the tunnel should be equally possible. Electric vehicles seem a reasonable solution and overhead power supply like trams would seem to allow electric buses to charge while travelling – greatly reducing CO2 emissions and simultaneously noise as well as traffic congestion
 - New technologies in combination with public transport would also allow to address the desire of local residents for more public transport offering (Warringah MP Zali Steggall's Transport Survey (2019))
 - → I have not the resources to conduct a full design study (I would offer some time voluntary to explore options), but the tunnel project must explore alternative concepts to transportation which likely also have the ability to bring future economic benefits to Australia. Basing design and studies solely on old methods of transportation (cars) does meet the expectation of the community and does not portray the image of a forward thinking and progressive country. Consideration of public transport and new technologies must be part of adequate studies to deal with current road congestion issues. Without these studies the project must not proceed.
- Coming from overseas and having lived in the Northern Beaches for many years I have been involved in many conversations of what makes Australia so beautiful and attractive for immigrants and tourists, both so very important to the Australian economy.
 - To me it is clear, the attraction is based on the beauty of the country and very importantly for places like the northern beaches (well known in other continents) it is the harmony between urbanisation and natural habitat.

- The EIS reveals the permanent removal of up to 96% of base flow from the creek and substantial groundwater drawdowns across the entire catchment. The beaches link tunnel will put significant risk on the loss of important habitat, home to many endangered flora and fauna species.
- The project fails to provide a solution to this problem and doesn't sufficiently explore alternative approaches and simply accepts to destroy flora and fauna and reduce the standard of living for many local residents
- → It is simply not acceptable to destroy the habitat without exploring alternatives. I understand planning our road system is a macro economic problem and requires "trade-offs" at times, but the project doesn't sufficiently provide evidence for the benefits of this project.