The Department of Planning and Environment Locked Bag 5022 Parramatta NSW 2124

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Hunter Valley Hydrogen Hub | Planning Portal - Department of Planning and Environment (nsw.gov.au)

From: saveoursurroundings@outlook.com

Dear Pamela Morales, Contact Planner SOS objects to SSD-48655719 Hunter Valley Hydrogen Hub

The Proponent states that " The hydrogen production facility would include an electrolyser capacity of approximately 60 MW to produce hydrogen using grid connected renewable energy...". That is, hydrogen manufactured using electricity generated solely from wind and solar technologies. However their statement is misleading. Electrons do not discriminate.

Once connected to the grid this proposed hydrogen manufacturing project will use grid electricity generated from all generating sources, but, for many years to come, predominately from fossil fuels. Unless the Proponent actually sources its electricity requirements using only renewable energy independently generated from the NEM grid it is just "green washing". It will not of course do this because unreliable, intermittent, expensive and often unavailable wind and solar generators will make the energy intensive manufacture of hydrogen unviable. Using electrolysis of water to create hydrogen is not new, but making it economically competitive with much cheaper methods of hydrogen production is why electrolysis of water is little used elsewhere in the world.

The AEMO has stated that the NEM grid capacity will need to increase by many times the current capacity to accommodate the huge electricity demands that hydrogen manufacturing would need. Very much more energy is needed to make hydrogen from electrolysis of water than the hydrogen delivers when burnt. This means more immediate increases in CO2 from imported Chinese-made wind turbines, solar panels and lithium batteries. It means more destruction of Australia's meagre 6% of arable land and food-producing capacity. It means more destruction of wildlife habitats and wilderness areas. It means a massive waste of resources of many types, including from increased mining, increased process and manufacturing waste, frequent turbine, solar and batteries capacity replacement and massive waste disposal issues. The Hunter Valley Hydrogen Hub will exacerbate these already undesirable results of expanding "renewables" electricity generation, building new transmission lines and increasing battery storage.

Save Our Surroundings (SOS) objects to this Proposed Project because all the real life evidence today demonstrates the claimed benefits of the project will not be achieved. Electricity prices will continue to increase for consumers and the project will have no affect on the climate. However, the local and global environments (people, flora and fauna) will be increasingly substantially damaged, food production compromised and livelihoods destroyed. The project proposal should be rejected.