To: Department of Planning and Environment 12 October 2022

Online lodgement by major projects planning portal

From: saveoursurroundings@outlook.com

Dear Ms/Sir

Subject: SSD-6896-Mod-1: Liverpool Range Wind Farm Modification 1

Save Our Surroundings (SOS) is a network of community groups across multiple states that share their experiences about, and research into, industrial wind, solar, BESS and pumped hydro proposed and developed projects and their impacts on affected individuals and regional communities.

SOS objects to the Liverpool Range Wind Farm proposal for the following reasons:

Basic facts

1. Substantial emissions of carbon dioxide equivalents are embedded in all wind turbines, lithium batteries and supporting infrastructure, as well as all the mining, processing, sea and land transport, special equipment, ongoing maintenance, and decommissioning and disposal, which take years of intermittent electricity generation to offset. If manufactured in China, which is highly likely, the embedded CO2e is the greatest. The project lacks transparency of this fact in their proposal. As they include estimated CO2 savings numbers from the project they must also produce verifiable embedded CO2e of the project.

2. All proponents claim, using the same now outdated methodology, that their proposed wind project in Australia will reduce annual CO2 emissions by 'x' tonnes/annum. Such claims cannot be true. Electricity generated from fossil fuels has been decreasing for many years as more non-fossil fuel generation plants have become operational. Therefore, each new proposed project must have a lesser CO2 saving than each operating project. A point will be reached when each new wind project actually increases CO2e as its embedded CO2e cannot be offset by its future electricity production. In addition, the stated annual CO2 saving is for the first full year of operation and therefore is not sustainable over the project's life as coal-fired plants are shut down and the wind plants import spares, lubricating oil, replacement batteries and components from overseas, most likely from China, the world's largest emissions country and largest exporter of wind, solar and batteries in the world.

3. Historically, industrial electricity generating wind turbines operating in Australia only produce electricity 30.1% on average over a year. On occasions of too light or too strong winds or periods of no wind, especially during prolonged wind droughts, no electricity is produced. The proposed project therefore cannot claim to put downward pressure on electricity wholesale prices when 70% of the time electricity has to be provided from an alternate, very expensive source. This explains why all countries or jurisdictions globally that have over 30% wind and solar in their electricity mix have amongst the highest electricity retail prices in the world.

4. It is well documented that slave labour is used to produce components used in wind turbines, solar panels and lithium batteries. For instance, children and adults in the Democratic Republic of Congo mine cobalt and copper using artisan methods, often resulting in their poor health and even death. China is the biggest buyer of cobalt and tracing artisanal mined cobalt from industrial mined cobalt is virtually impossible. This fact cannot be dismissed by statements saying the proponent will comply with Australian and State laws on modern slavery reporting. Where is their moral stand against slavery?

5. It is a fact that wind turbines kill large numbers of insects, bats and birds, some protected and some endangered. The sheer number and size of proposed wind turbines occupying such a very large area of grasslands and woodlands will be destructive to such wildlife. The elimination of large numbers of insect eating bats and meat eating raptor birds will lead to plagues of insects and vermin, which will result in crop losses and land degradation. In addition, the project will kill flocks seed eating birds such as Corellas, Galahs, and many other species of birds. This purchase of offsetting certificates does not address the large scale destruction of wildlife in the area in and around the proposed sites.

6. Statistically, some of the wind turbines will catch fire and possibly initiate catastrophic grass and bush fires resulting in property damage, and injury or death to animals and humans. Likewise Battery Energy Storage Systems catch fire and are extremely difficult to extinguish, as are turbine fires. Both give off dangerous toxic gases, posing threats to first responders and nearby communities. The proposal does not and most likely cannot adequately address these risks.

7. A recent court case proved that audible noise from wind turbines is injurious to human health. A recent study using 40 years of data concluded that wind turbines create significant intermittent infrasound, which is even more damaging to human health (the effects on other animals were not part of the study). However, the findings were for the periods when wind turbines where very much smaller in size than the massive 250m high or more wind turbines proposed for this project . No independent credible evaluation has been done by the proponent to prove that no human will be adversely impacted at any time by audible noise or infrasound.

8. Micro particles shed from deteriorating turbine blades made from fibreglass, plastics and carbon fibre will contaminate the soil and most likely some waterways. At present each 40 to 60 tonnes blade is cut up and buried (where?) as no adequate recycling of blades exists. Will the proponent put up an indexed million dollar bond per turbine to cover the huge eventual cost of decommissioning, disposal, recycling. and land rehabilitation (is this even possible?) to prove its commitment to undertake such activities?

9. Despite the large size of Australia it only has 6% arable land. But this is being reduced by each wind, solar, BESS and pumped hydro project, which almost invariably are being built on agricultural land. This threatens the livelihood of people in agricultural towns, Australia's long-term ability to feed our growing population and that of other parts of the world. It poses a significant security risk to our country if we become dependent on others to feed us. This project proposal to occupy/destroy large areas of arable land and therefore add to the problem of diminishing agricultural land that could otherwise feed the generations of Australians to come and other people globally.

10. Australia currently imports about 90% of its wind, solar and battery infrastructure and components from China. Dependency on China for replacement parts poses a sovereign security risk as our new electricity system will fail if such spares and replacements are withheld, restricted or made much more expensive because we will be a captive market. Collapse of our power system will cause untold destruction of our economy and the resulting dislocation of our society. Will the proponent categorically accept, with penalties, a condition that it will not buy Chinese made wind turbines, batteries or other critical components, such as inverters.

11. The proposed wind turbines are to be 250m tall and about 180m wide. Apart from the Sydney Tower (Centre Point, 305m) and Crown Sydney (271m) no other building is taller than 250 metres. The proponent proposes to build an industrial wind turbine complex consisting of 220 turbines each 250m high. The enormous height and width of these turbines will dominate the rural landscape and be visible from many of the surrounding towns and residences. The construction of these wind turbines and associated infrastructure will negatively impact the residents, road users and road surfaces for years, especially as several other wind and solar projects will simultaneously use the same route from Newcastle Port to the CWO REZ, which the proposed project adjoins.

Conclusion

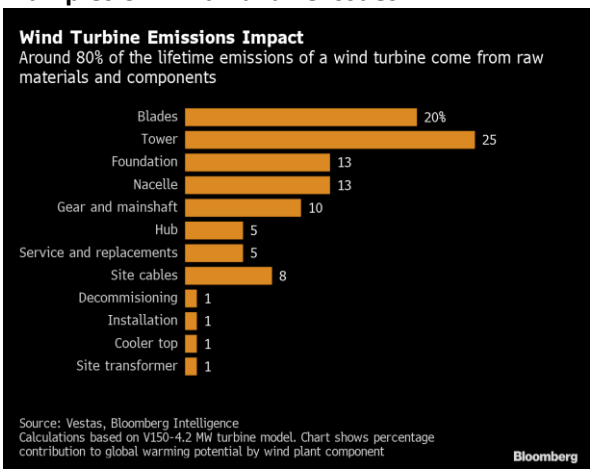
Clearly, the proponent's claims of emissions reductions and lowering of electricity prices is not supported with facts. Lowering CO2 emissions and electricity prices has not been achieved by any country or jurisdiction in the world. This proposed project should not be recommended for approval on these two facts alone.

In addition, there are the issues of potentially facilitating the use of slave labour, the mass slaughter of wildlife and habitat destruction, the significantly increased fire risks, the unavoidable noise created, the contamination of the environment, the reduction in available agricultural land, the sovereign security risk of relying on virtually a single source of supply and the cumulative impacts of existing and future wind, solar, BESS and pumped hydro projects.

Taking just the foregoing into account the proposed project is "not fit for purpose" and must not be approved. Other countries now recognise these shortcomings and are now turning to better alternatives such as safe, long-life, 24/7 output electricity generation options, such as nuclear reactors and in the near future small modular reactors.

Yours Faithfully
Save Our Surroundings (SOS)

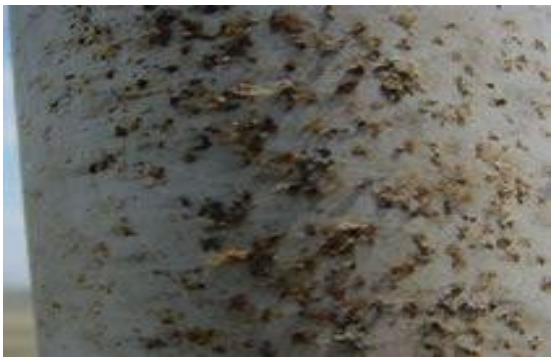
Examples of Wind Turbine Issues



Wind turbines emissions impact


Mining lithium for batteries

Child slave labour used in DRC



Insect encrusted turbine blade attracts bats & birds

Bird and bats at risk when in flight

Burning turbines create toxic smoke

55,000ha Leadville fire 2/17#

Traffic disruption (e.g. blade movement)

Accidents may occur

Turbines can fail catastrophically

Is this the fate of all discarded turbine blades?

The February 2017 Leadville-Dunedoo fire destroyed 35 homes, killed 6000 livestock & burnt 500km2 of bush and grassland in one day. Grass fires are frequent occurrences in the region, especially during periods of drought. While this fire was not started by a non-fossil fuel electricity plant, such plants may start grass/bush fires or be vulnerable to such fires in the future.