Hills of Gold
Wind Farm near Timor
Environmental Vandalism
And an environmental disaster

The proposed development of the 'Hills of Gold Wind Farm', to be located on the ridge line between Hanging Rock and Crawney Pass in the Northern Tablelands region of NSW.

The construction of this wind farm in the proposed location as detailed in the EIS dated 18th November 2020, Project Number 0550690 would be an ecological and environmental disaster if constructed in its proposed location.

Below is a short list of aspects of grave concern, which is by no means a comprehensive list.

A brief summary of concerns include:
- Destruction of vegetation (particularly native vegetation)
- loss of animal habitat (particularly threatened and vulnerable species habitat)
- soil erosion which may affect downstream karst areas and river systems
- impact of spinning turbine blades on airborne creatures (eg. microbats and birds)
- Destruction of 2.067 sq km of native vegetation.
- Destruction of 2.8 sq km of other vegetation.

This wind farm should be built in another location where the land has already been stripped of vegetation year ago for farming.

Quotes from the Hills of Gold Wind Farm - Environmental Impact Statement (EIS) are reproduced in italic text.

1. Page VII of the EIS quotes;

"Thirteen threatened terrestrial fauna species were directly observed within the Development Footprint, including Koala, Greater Glider, Spotted-tailed Quoll, Southern Myolis, Large-eared Pied Bat. Little-Pied Bat, Eastern False Pipistrelle, Eastern Coastal Free-tailed Bat, Little Bent-wing Bat. Large Bent-winged Bat, Greater broad-nosed Bat, Eastern Cave Bat and Grey-headed flying-fox. In addition to the threatened fauna species directly observed within the Development Footprint, identified a high likelihood of occurrence for an additional four fauna species; Booroolong Frog,Border Tick-tailed Gecko,Eastern Pygmy Possum,Squirrel Glider, The field surveys identified two species of raptor most at risk of collision, Nankeen Kestrel and Wedge-tailed Eagle."

The Development Footprint, land to be cleared of vegetation, is habitat for those threatened species. We can't bring back species when they are extinct. By destroying more vegetation we are pushing these animals to extinction.

2. Page 153 of the EIS;
shows a map identifying the locations where 12 threatened species have been recorded in areas designated for the location of turbines and clearing of vegetation crucial to the existence of these threatened species. Besides the vegetation removal the turbines create a significant impact hazard for airborne creatures such as the Wedge Tail Eagle including other birds and bats. The study undertaken to collect data on threatened

species was only taken over a couple of short periods and is most likely considerably lacking in providing a holistic picture of species and their movements. This is because many of these species are very elusive and extremely hard to identify.

The bat study for instance was only conducted over a short period of time using ultrasonic bat microphones at some locations. There are limestone caves containing large numbers of cave-dwelling bats at Crawney Pass, Timor, Glenrock, Barry and of course an unknown number of disused mine audits which bats use, within the study area and surrounding areas. Bats also use rock cracks and fissures as well as caves and there are surely many unrecorded rousting sites in the mountains. Monitoring for this EIS was only undertaken over a couple of day periods, so is not indicative of bat movements over a full year as it greatly depends on atmospheric temperature, wind strength, rain, availability of insects in specific areas and times of year when micro bats move between rousting and breeding sights. The bat study is very inadequate and lacks credibility regarding an overall picture covering at least 12 months.

3. Page 94 of the EIS listed the threatened species and communities;
The proposed wind-farm should not proceed because it impacts on threatened ecological community of the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland, and 3 listed fauna species being Koala, Large-eared Pied and the Spotted-tailed Quoll. Yet on page 155 of the EIS, the Greater Glider is also listed as vulnerable and found within the study site. Any clearing of vegetation on the project site will be detrimental to these threatened species as well and a wide range of other native plant and animal species.

4. Page VII of the EIS quotes;
"*Within the total combined Development Footprint of 513 ha, a total of 486.45 ha of vegetation was mapped, which includes vegetation communities classified as native vegetation, exotic grassland and planted/urban vegetation. The majority (58% or 279.75ha) of the mapped vegetation within the Development Footprint composed of exotic grassland or planted/urban vegetation, with 42% of the mapped vegetation (206.7 ha) being classified as native. The 206.70 hectares of native vegetation which is contained in the Development Footprint represents 0.95% of the approximately 21,540ha of native vegetation contained within the biodiversity assessment study area*."

As per the EIS there is 206.70 hectares of native vegetation to be cleared for this project. This is equivalent to 2.067 square km of native vegetation. This is a huge area of native vegetation let alone the 279.75 hectares of other vegetation, which equals 2.80 square km.
So in total there is 4.86 square km of vegetation cleared if the proposed wind farm is approved. Clearing such a huge amount of established vegetation will enable soil erosion to occur, which could affect the downstream karst areas which contain caves and specialised echo systems.

This project is not environmentally sound. The destruction of vast areas of vegetation to create renewable energy does not stack up in this location.

5. Page 147 of EIS Percentage of high quality native vegetation cover.
"*49% of the 42,316 ha study area has been cleared of native vegetation. However approximately21,540 ha (or 51% of the study area) consists of native vegetation which is classified as having a cover class of between 30-70% meaning this is the percentage of native vegetation cover within the study area*"

The total "Study Area" of native vegetation compared to non-native vegetation should not be used to try and justify the proposed building of a wind-farm. This is misleading as they don't represent the area of vegetation, which is proposed to be destroyed to construct the wind-farm, it is the "Development Footprint", which is important. Most of the study area is not actually affected by clearing of vegetation and is privately owned property or State Forest.
The EIS also mentions setting aside "Biodiversity Offsets" to counteract what would be destroyed by this development. An offset will never equate to 100% of what is actually lost.

What will be bulldozed for this development is 486.45 hectares (4.86 square kilometers) of vegetation.

This is unacceptable.

6. Page 156 of the EIS states;
"*The wind farm layout was also amended to avoid any direct impacts to areas of roost habitat for cave-dwelling bats and no infrastructure is proposed within these important areas. To further avoid impacts a 100m buffer was applied to these areas of roosting habitat on steep cliffs, and as much as possible, the placement of turbines was excluded from this buffer.*
The assessment has used the formula for required buffers to areas of vegetation developed in 'Natural England Technical Information Note TIN051(cid:0) Bats and on shore wind turbines interim guidance'. This method takes into consideration the hub height and blade length of adjacent turbines and identifies the required horizontal distance a turbine should be placed to maintain a suitable buffer.

The use of the paper quoted to determine turbine proximity to steep cliffs is flawed in that most of the cliffs and slopes host a considerable amount of vegetation, which causes turbulence and affects the airflow over the ridges. The rising airflow over a tree covered ridge is different to a cliff, thus affecting the flight path of bats and birds. The interpretation of the '*Natural England Technical Information Note TIN051 Bats and on shore wind turbines interim guidance*' needs to be revaluated and further study undertaken on how the vegetation on the slopes of the Hills of Gold will affect the flight path of bats and birds.

7. Page 47 of the Preliminary Environmental Assessment dated October 2018 states;

"*Grassy woodlands dominate the undulating foothills and escarpments with an increase in tree canopy cover towards the forested mountain tops, which are dominated by dense, mature forests, most notably associated with Ben Halls Gap National Park to the east, Hanging Rock to the north and Crawney Pass National Park.*
The siting of any infrastructure in this area has the potential to result in vegetation removal within or in close proximity to the Ben Halls Gap State Forest and Ben Halls Gap National Park."

Is there further clearing of land proposed within the State Forest and the Ben Halls Gap National Park is not detailed in this current EIS? If so it is not obvious in the present EIS.

More details about this proposed wind farm can be obtained at the NSW Government website at;
https://www.planningportal.nsw.gov.au/major-projects/project/9701

You can sign an on-line petition against the wind farm at https://www.change.org/p/nsw-department-of-planning-industry-and-environment-save-the-hills-of-gold-from-78-wind-turbines-at-nundle-hanging-rock-crawney-mountain-timor

The Hills of Gold Preservation Inc. Facebook page can we accessed at.
https://www.facebook.com/hillsofgold/ and their website is https://nundle.com.au/community/hills-of-gold-preservation-inc/

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