



**Report Into the Social License** for the Liverpool Range Transmission **Line Easement** and its Ongoing Developments **Involving the** Transgrid CWOREZ Transmission Line.

December 2021



### **Executive Summary**

In March 2018, with little public awareness, the NSW Government approved a 60-meter-wide easement for a 350 kV power transmission line for the Liverpool Range Wind Farm, then owned by Epuron. The line is to run south of the Golden highway down the Ulan Rd, to Ulan. The route takes it in between the entrance of the aboriginal cultural site, Hands on Rock and the area known as the Great Dripping Gorge in the Goulburn River National Park. This area was recognized by the National Trust in 2013 as a culturally significant conservation heritage landscape. The easement corridor also traverses across State Conservation areas, Durridgere SCA and Turill SCA.

The current owners, Tilt Renewables, are in the process of lodging a Modified Application to the approved 2018 plan which will add an additional 17.5 km of transmission lines and associated vegetation clearance within the 60 m wide easement. The total clearing amounts to 950 hectares, an increase of 549 hectares and impacts 11 plant community types. This includes habitat for many vulnerable and critically endangered wildlife such as the Regent Honeyeater and Squirrel Glider. Forests teeming with life and natural beauty, embodying a traditional indigenous heritage of thousands of years old, will be bulldozed.

These impacts may be worsened by a further development. Recently MDEG was made aware of the possible widening of the Liverpool Range Windfarm easement for a double circuit 500 kV power line to service the Central West Orana Renewable Energy Zone (CWOREZ). We understand this development has been under discussion for a number of months at high government levels without any public scrutiny, consultation, or accountability, and has taken place as closed-doors negotiations with one select group of politically well-connected farmers, the Merriwa Cassilis Alliance. It involves moving a previously identified and consulted northern CWOREZ route that traverses the Merriwa plateau, to a new southern route along an existing 350 kV power line easement between Wollar and Ulan, which then heads north on the yet to be constructed Liverpool Range easement. Widening this already destructive footprint through this significant cultural heritage conservation landscape.

The impact on ecosystems of power lines is clear. The forest is fractured, irreversibly, dividing populations, and putting in place a barrier to movement. Habitat is lost. Tree nest hollows that take hundreds of years to form are destroyed leaving vulnerable birds, bats and mammals nowhere to shelter or breed. They die. Tree dwelling mammals such as gliders and possums lose their territory and ability to move between the fractured forest. Wildlife that tries to cross the clearing are easy prey to feral animals that predate and move openly along the margins of the clearing. Weeds replace once thriving floral communities, removing the food source for countless species of insects such as butterflies, that comprise the lower tiers of the food chain. Animals and birds are prevented from migrating to safer areas in the advent of climate change and bushfire. Then there are the effects of electromagnetic radiation on the behavior and fecundity of species such as birds. Native, ancient communities of flora and fauna, are reduced in biodiversity and resilience as more and more other land is cleared (particularly for agriculture and mining in this area).



This development is being done by an industry that purports to, and markets itself as protecting the environment.

To assess public sentiment about this proposal, seeing as they are stakeholders that have not been consulted, MDEG has carried out a survey of the general community and visitors to the area. A particular point of reference was the culturally significant Hands on Rock site, highly important to the Wiradjuri Nation. We understand the Wiradjuri Nation have not been adequately consulted by Transgrid or the NSW Government on the of clearing for this development on these cultural lands. The survey also included reference to the clearing of remnant forests on the route, and was done in the context of people's expectations and perceptions of renewable energy.

The results of the MDEG survey were clear. Of the 372 people who responded, there was a sentiment that was unequivocal in opposition to this development, in fact over 90% opposed it.

- The clear majority of people, in fact almost two thirds, were unaware of these developments and threats from the Tilt Renewables Liverpool Range Wind Farm transmission line. The majority of people who knew, did because MDEG had told them.
- The majority of respondents were current users of renewable energy or would buy it.
- Respondents felt that environmental protection was a part of the purpose of renewable energy and that clearing remnant forest and impacting cultural sites was not consistent or compatible with these aims.
- That clearing remnant forest, and lands near Hands on Rock was unacceptable, and that aboriginal cultural sites such as Hands-on Rock should be protected.
- the NSW (including Department of Planning, Industry and Environment) and Federal Governments should protect Hands-on Rock and the surrounding remnant forests as a priority.

Hence, the findings are clear, and that is there is no social license from the public to clear the remnant forests, or areas around Hands-on Rock. Furthermore the sentiment is clear, and that is DPIE, the NSW Government and the Federal Governments must protect these areas from future plans and threats. And finally it is obvious that consultation with affected stakeholders was inadequate.



## Introduction

Aboriginal and Torres Strait Islander cultural heritage, both tangible and intangible, is a key part of Australia's history. Loss of cultural heritage diminishes the heritage of our nation and deeply wounds the Aboriginal and Torres Strait Islander peoples for whom this heritage is sacred. It is inconceivable that Australia has not developed proper protections for such sites, and action must be a matter of national priority". Hon Warren Entsch MP Chair 15 October 2021. A Way Forward. PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA.

It is an NSW Government priority to increase the amount of renewable energy in the electricity supply system. There is globally broad support for renewable energy, largely due to concerns for global warming and climate change and the risk of other technologies, such as posed by nuclear power generation. As a result, there is a shift in the methods of electricity generation globally primarily to wind, solar, hydro and geothermal energy.

While renewable energy is marketed as a clean and environmentally sustainable form of energy, there are significant environmental and societal costs. These are borne disproportionally by populations and environments where the energy projects are located, not by the end users of the power, which are usually remote to production. Therefore, there is issue with the fairness of the burden of electricity generation, which in turn affects the public opinion of renewables as an energy solution. This causes community division at a local level.

While there may be economic benefits to landholders in the form of land use agreements and compensation, there is often localized objection to renewable energy projects. This is often due to loss of amenity, disruption due to construction activities, changes in land use, and visual and sound impacts (in the case of wind). However, the cost to the natural environment is often a significant factor that is downplayed, and accepted as an alternative to developers.

Running transmission lines through forests, reserves and parks reduces their need to negotiate and pay compensation to people, and from the social impacts of managing the risk of loss of reputation and social license to operate. Few people want transmission lines in "their back yard". In this, nature reserves and national parks are being the subject of development, land clearing and destruction. The Mid-Western Region of NSW is now the subject of such destruction. Appendix 1 outlines the environmental impacts anticipated from such developments.

It should be noted that the Epuron Environmental Assessment 2014 states about the region that regional biodiversity has already been impacted:



"...issues include inappropriate grazing management, habitat degradation and fragmentation, increasing dryland salinity, loss of native vegetation (i.e. clearing of native woodlands and grasslands), invasive pest species (foxes, goats, environmental, agricultural and noxious weeds), and conserving remnant vegetation on private lands (CMA 2012)".

Indicating farming practices in particular have had serious deleterious impacts on the biodiversity of the region. Mining has also had a huge impact on this area at 52,000 hectares.

To address the projected need for renewable energy in the NSW market, particularly as coal assets are retired, the NSW Government has created the Central West Orana Renewable Energy Zone (CWOREZ). This is to be serviced with power infrastructure implemented and operated by Transgrid. An early development in CWOREZ has been the Tilt Renewables Liverpool Ranges Wind Farm. This is a very large project, and was approved in March 2018. This transmission line is approved to run a north south orientation corridor.

This is complicated, by the shift from Option 5.2 transmission route for the CWOREZ transmission line by Transgrid to Southern Option 1A running on the Tilt Renewables transmission easement. This change had minimal public consultation other than with landholders such as the Merriwa Cassilis Alliance, which took place behind closed doors, and their landholder neighbours. Other stakeholders, such as MDEG, or the public, have not been given sufficient input into the development of this proposal as evidenced by Transgrid's own document, Section 4 of the Central-West Orana REZ Transmission, Community Engagement Feedback Report, December 2020 - September 2021.

Both of these transmission line projects will require substantial clearing of remnant native forests (at least 946 hectares), that are rare and vulnerable, and will impact on Aboriginal cultural sites of significance at Hands on Rock and the Great Dripping Wall. Furthermore, they will be detrimental to many bird and mammal populations. Appendix 1 shows the ecosystems and threatened communities to be impacted by the Tilt Renewables Line based on the data in their own Biodiversity Fact Sheet for the Modified Project, and the Epuron Environmental Assessment in 2014.

We decided to survey the social license given by the stakeholders of the general public to these developments. Social license is a developing obligation on companies to operate in a socially acceptable manner. This is termed a "social license to operate". This is usually defined as the level of acceptance of a project among communities, stakeholders and the public. It is a becoming a condition of business that companies are expected to conduct themselves in a manner which is acceptable to the community and stakeholders. The costs of public and stakeholder opposition can be considerable

By surveying people who have actually visited, seen the site and forest, or know of it, we can gauge the level of social license granted to Tilt Renewables specifically to this project easement, and the further proposed Transgrid developments. These people have no vested interest as they are not employed by



the project, they are not financial beneficiaries of it, and are not affected land holders or their neighbors. Hence they are relatively independent to the process and are not directly affected by it in terms of where they live. This will be framed by how they experience renewable energy, its aims and its environmental impacts.

It should be noted that the renewable energy sector promotes itself on the principles of advancing environmental protection. Transgrid state the following:

"As a responsible business, we maintain the highest standards and practices to minimize our environmental impacts.

Biodiversity plays an essential role in supporting healthy ecosystems and is critical to preserving our natural environment for future generations.

Protecting the habitats of species that live in the areas in which we operate is one of our key priorities. We have a robust risk assessment process in place to protect the natural habitat of the many endangered species who live near our assets".

Tilt Renewables state on their webpage:

We set out to find new ways to connect to our communities, engage with our team and deliver for our shareholders, with a perspective that looks beyond today and towards a sustainable future.

And one of the benefits of the Liverpool range Wind Farm is:

Increased knowledge of cultural heritage, local plant and animal species through surveys, monitoring and protection

### Results

#### Question 1: Is this you first visit to the Region?

This question was targeted to Hands on Rock visitors, but unfortunately had to be discontinued as surveys were transferred to digital platforms. Of relevance the postcodes reported by people completing the survey ranged from 2024 (Bronte, NSW) to 5041 (South Australia).



### Question 2: Do you use or would you buy renewable energy?



### **Question 3**

### Do you associate renewable energy with protection of the environment?





Question 4: Were you aware local Conservation Reserves and the remnant native forest here are under threat from land clearing for renewable energy transmission lines and towers?



Question 5: Do you think clearing a 60-meter corridor of forest at the entrance to the cultural heritage site "Hands on Rock" for power lines and towers is acceptable?







# Question 6: Do you think clearing remnant forest and land in front of an indigenous cultural site is compatible with the aims of renewable energy?

# Question 7: Do you think cultural sites such as Hands on Rock should be protected?





Question 8: Do you think the Department of Planning, Industry and Environment should give the protection of environment priority when approving new projects?



Question 9: Do you think the NSW State and Federal Governments should protect "Hands on Rock" and the remnant forests around it from land clearing?





## Conclusions

The findings from our survey were clear.

- 1. There was inadequate public consultation with stakeholders and the public about the transmission line developments.
- 2. Respondents predominantly embraced renewable energy or would consider using renewable energy.
- 3. People associate renewable energy with the protection of the environment.
- 4. People do not approve of the clearing of remnant forests, or developments that impact on Aboriginal cultural sites, in the delivery of electricity from renewable energy. In fact, they find it incompatible with the aims of renewable energy.
- 5. That aboriginal cultural sites should be protected.
- 6. That NSW Government departments such as DPIE, and the Federal Government should protect Aboriginal cultural sites and remnant forests as a matter of priority.

## Recommendations

- 1. That public lands with remnant forests such as those impacted by the Tilt Renewables Liverpool Range Wind Farm and the Transgrid transmission line proposal, be recognized by all stakeholders as a reservoir of biodiversity, and a corridor for wildlife in an otherwise fractured landscape dominated by agriculture and mining.
- 2. That the companies Tilt Renewables and Transgrid honor their mission statements that they value biodiversity and environmental sustainability and act accordingly in the development of their transmission lines. This is in line with the industry portrayed image of protecting the environment.
- 3. As a result of honoring their mission statements, Tilt Renewables and Transgrid find another route for the transmission line southern corridor, that does not traverse remnant forest, or threaten cultural sites, and that utilizes low biodiversity cleared land.
- 4. This may include: A north south corridor utilizing the cleared lands either side of the existing corridor such that the route minimizes the impact and footprint on existing remnant vegetation and aboriginal sites of cultural importance. Or: construct the planned east-west CWOREZ transmission line, and allow the Tilt Renewables line to



feed into it at the Golden Highway thereby saving the vegetation and biodiversity along the southern corridor. If necessary, land should be acquired by compulsory purchase.

- 5. That consultation be undertaken with a wide range of stakeholders and the public prior to the development of transmission lines. This includes stakeholders on the southern corridor and users of the areas that are not landholders or their neighbors.
- 6. That the limitations of the DPIE biodiversity offset system, which has been referred to NSW ICAC, be accepted and recognized as an unsuitable method of preserving biodiversity, as this system acts as a license to clear high biodiversity ecological communities rather than preserve them. It is not an acceptable method to compensate for habitat destruction in the construction of transmission lines as outlined in the Tilt Renewables proposal. The only way to preserve biodiversity is to keep it intact by preferencing low biodiversity easements and corridors in development.
- 7. That landholders be properly compensated for their loss of amenity, and any changes in property value, and that compensation strategies to farmers may include ongoing payments as discussed in the *Building Trust for Transmission* document by the RE Alliance, or one-off payments as to their preference.





## **Appendix 1. Expected Environmental Impacts Land Clearing**

- 1. Habitat destruction
  - a. Vulnerable plant communities
  - b. Endangered and vulnerable bird populations including the Regent Honeyeater, and mammals including a glider.
  - c. Fragmentation of the land area segregating the ecological system either side of the clearing.
  - d. Increased exposure to predation by forced transit across cleared areas
  - e. Loss of habitat for terrestrial mammals and bird communities
  - f. Loss of tree hollows
  - g. Loss of range for tree dwelling mammals reliant on tree-to-tree movement such as gliders and possums, as well as birds
  - h. Exposure to EMR due to the fields around high voltage power lines affecting insect and bird populations and biodiversity
- 2. Impact on bird communities
  - a. Exposure to EMR fields decreasing bird fecundity, populations and biodiversity
  - b. Reduction in food sources due to radiation impacts on invertebrate populations
  - c. Collision with overhead wires causing death
  - d. Electrocution of larger wingspan birds such as eagles, and raptors
- 3. Clearing Effects
  - a. Increased erosion into local waterways including the Goulburn River
  - b. Removal of remnant endangered biological communities
  - c. Reduction of biodiversity due to species loss in a National Park and Nature Reserve.
  - d. Loss of corridor and ecosystem connectivity essential for migration due to the effects of climate change.
- 4. Increased bush fire risk
  - a. Overhead power lines traversing forests
  - b. Clearing required under lines causing debris accumulation of combustible materials
- 5. Invasion of weed species
  - a. Introduction of cleared areas may lead to weed invasion
  - b. Introduction of service lines to towers may lead to introduction of weeds due to car tyres and workers.
- 6. Indigenous Culture and Heritage
  - a. Visual impacts and loss of amenity at Hands on Rock and the Drip
  - b. The total cultural disrespect of putting a high voltage power line in front of
- pg. 13 Hands-on Rock.



- 7. Tourism Loss of amenity to tourists who have come to visit the sacred sites and National Park
  - a. Reduction of visual appeal of the Hands-on Rock due to the transmission lines and extensive clearing
  - **b.** Loss of bird populations leading to reduced amenity to bird watchers and bushwalkers.

Indirect and peripheral impacts Epuron EA 2014.

As well as direct impacts already discussed, ecological impacts may arise from vehicle access and parking, as well as the laydown and stockpiling of materials. Peripheral impacts may include smothering of vegetation, soil compaction and erosion, introduction and spread of weed species, pollution associated with the generation of dust and use of concrete, fuels, lubricants and construction chemicals, and noise, vibration and activity during the construction phase.

#### Impacted Vegetation Types Tilt Renewables 2021.

	Plant Type	Location
PCT 84	<b>River Oak</b> - Rough-barked Apple - red gum - box riparian tall woodland (wetland)	Brigalow Belt South Bioregion and Nandewar Bioregion
PCT 281	<b>Rough-Barked Apple</b> - red gum - Yellow Box woodland on alluvial clay to loam soils on valley flats	In the northern NSW South Western Slopes Bioregion and Brigalow Belt South Bioregion
PCT 395	<b>Derived speargrass</b> - wallaby grass - wire grass mixed forb grassland	Mainly in the Coonabarabran - Pilliga - Coolah region
PCT 479	<b>Narrow-leaved Ironbark</b> - Black Cypress Pine - stringybark +/- Grey Gum +/- Narrow-leaved Wattle shrubby open forest	On sandstone hills in the southern Brigalow Belt South Bioregion and Sydney Basin Bioregion
PCT 481	<b>Rough-barked Apple</b> - Blakely's Red Gum - Narrow- leaved Stringybark +/- Grey Gum sandstone riparian grass fern open forest	in the southern Brigalow Belt South Bioregion and Upper Hunter region
PCT 483	Grey Box x White Box grassy open woodland on basalt hills	In the Merriwa region, upper Hunter Valley
PCT 488	<b>Silvertop Stringybark</b> - Yellow Box +/- Nortons Box grassy woodland on basalt hills	Mainly on northern aspects of the Liverpool Range, Brigalow Belt South Bioregion
PCT 490	<b>Silvertop Stringybark</b> - Forest Ribbon Gum very tall moist open forest	On basalt plateau on the Liverpool Range, Brigalow Belt South Bioregion
PCT 495	Brittle Gum - Silvertop Stringybark grassy open forest	In the Liverpool Range, Brigalow Belt South Bioregion
PCT 1661	Narrow-leaved Ironbark - Black Pine - Sifton Bush heathy open forest	On sandstone ranges of the upper Hunter and Sydney Basin
PCT 1675	Scribbly Gum - Narrow-leaved Ironbark - Bossiaea rhombifolia heathy open forest	On sandstone ranges of the Sydney Basin



## Impacted Wildlife. Epuron EA 2014.

Pink-tailed Worm Lizard (Aprasia parapulchella)V TSCV EPBC Open woodland with predominantly native grasses and natural temperate grasslands on well- drained slopes with scattered, partiallyburied rocks.NoBirds
(Aprasia parapulchella)grasses and natural temperate grasslands on well- drained slopes with scattered, partiallyburied rocks.BirdsSpeckled Warbler (Chthonicola sagittata)V TSCHabitats typically are structurally diverse with a grassy understorey, a sparse shrub layer and an open canopyYesBrown Treecreeper (Climacteris picumnus victoriae)V TSCOccurs in eucalypt woodlands, mallee and drier open forest of eastern Australia, preferring woodlands lacking dense understorey.YesVaried Sittella (Daphoenositta chrysoptera)V TSCThe Varied Sittella is sedentary and inhabits most of mainland Australia except the treeless deserts and open grasslands.YesWhite-fronted Chat (Epthianura albifrons)V TSCDamp open habitats along the coast, and near waterways in the western part of the stateNoBlack-chinned Honeyeater (Melithreptus gularis)V TSCDirier open forests or woodlands dominated by box and ironbark eucalypts, particularly Mugga Ironbark, White Box, Grey Box, Yellow Box and Forest Red Gum.YesRegent Honeyeater (Anthochaera PhrygiaE TSC; E M EPBCMost records are from box-ironbark eucalypt associations and it appears to prefer wetter fertile sites within these associationsNoHooded Robin (Melanodryas cucullataV TSCWoodland remnants with high habitat complexity and uses stumps, posts or fallen timber for nestingNo
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and locating provide the ground
cucullata) and locating prey on the ground
Scarlet Robin (Petroica V TSC Open forests and woodlands from the coast to the Yes
boodang) Inland slopes. Scanet robins breed in dry eucalypt
Flame Robin (Petroica V TSC Breeds in upland forests and woodlands and No
phoenicea) migrates to more open lowland habitats in winter.
Diamond Firetail V TSC Restricted largely to ungrazed or lightly grazed Yes
(Stagonopleura guttata) woodland remnants of grassy eucalypt woodlands,
including Box-Gum and Snow Gum Woodlands,
grassland and riparian areas.
Grey-crowned Babbler V TSC Prefers Box Gum Woodlands although also inhabits Yes
(Pomatostomus
temporalis temporalis)
Little LorikeetV TSCForages primarily in the canopy of open EucalyptusYes (offsite
(Glossopsitta pusilla) forest and woodland, yet also forages in
well as riparian babitats



Glossy Black-cockatoo (Calyptorhynchus	V TSC	Inhabits open forest and woodlands of the coast and the Great Dividing Range up to 1000 m in which	Yes
lathami)		stands of She-oak species are present.	
Gang-gang Cockatoo (Callocephalon fimbriatum)	V TSC	Often a seasonal altitudinal migrant, moving to lower altitudes and more open forests and woodlands (particularly Box-Ironbark assemblages for winter.	Yes
Turquoise Parrot (Neophema pulchella)	V TSC	Occurs in grassy woodland and open forest carrying a mixed assemblage of White Box, Yellow Box, Blakely's Red Gum, Red Box and Red Stringybark.	No
Square-tailed Kite (Lophoictinia isura)	V TSC	Occurs primarily in coastal and sub-coastal open forest, woodlands and mallee and has been recorded inland along timbered watercourses.	Yes
Little Eagle (Hieraaetus morphnoides)	V TSC	Occupies open eucalypt forest, woodland or open woodland. Sheoak or acacia woodlands and riparian woodlands of interior NSW are also used.	No
Grey Falcon (Falco hypoleucos	E TSC	Usually restricted to shrubland, grassland and wooded watercourses of arid and semi-arid regions, although it is occasionally found in open woodlands near the coast.	No
Spotted Harrier (Circus assimilis)	V TSC	Occurs in a variety of habitats including grassy open woodland and riparian woodland.	No
Barking Owl (Ninox connivens)	V TSC	Occurs in dry box-dominated forest and woodlands and roosts in dense foliage of Acacia, Casuarina or Eucalyptus species. It nests in large hollows of large, old eucalypts	No
Powerful Owl (Ninox strenua)	V TSC	This species occurs primarily in tall, moist productive eucalypt forests of the eastern tableland edge and the mosaic of wet and dry sclerophyll forests on undulating, gentle terrain nearer the coast	Yes
Masked Owl (Tyto novaehollandiae)	V TSC	Roosts and breeds in moist eucalypt forested gullies, using large tree hollows or sometimes caves for nesting. Lives in dry eucalypt forests and woodlands from sea level to 1100 m.	No
White-throated Needletail (Hirundapus caudacutus)	M EPBC	Recorded in the airspace above woodlands, forests and farmlands. Often seen 'patrolling' favoured feeding grounds above ridges and hilltops. This species migrates to Australia from mid-October and is a regular summer migrant until April when it returns to breed.	No
White-bellied Sea-eagle (Haliaeetus leucogaster)	M EPBC	Occurs around coastal areas, islands and estuaries, but is also found in inland areas around large rivers, wetlands and reservoirs.	Yes (offsite)
Mammals			
Squirrel Glider (Petaurus norfolcensis)	V TSC	Mature or old growth Box, Box-Ironbark woodlands and River Red Gum forest.	Yes



Koala (Phascolarctos cinereus)	V TSC V EPBC	Occurs in woodland communities, coastal forests, woodlands of the tablelands and western slopes	No
		and the riparian communities of the western plains.	
Bats			
Large-eared Pied Bat (Chalinolobus dwyeri)	V TSC; V EPBC	Found mainly in areas with extensive cliffs and caves, from Rockhampton in Queensland south to Bungonia in the NSW Southern Highlands. It is generally rare with a very patchy distribution in NSW. It roosts in caves (near their entrances), crevices in cliffs, old mine workings.	Yes
Little Pied Bat (Chalinolobus picatus)	V TSC	Occurs in dry open forest, open woodland, mulga woodlands, chenopod shrublands, cypress-pine forest, mallee, bimbil box.	No
Little Bentwing-bat (Miniopterus australis)	V TSC	Moist eucalypt forest, rainforest, vine thicket, wet and dry sclerophyll forest, Melaleuca swamps, dense coastal forests and banksia scrub. Generally found in well-timbered areas.	No
Eastern Bentwing-bat (Miniopterus schreibersii oceanensis)	V TSC	Roosts and raises its young in caves and mine tunnels. The species appears to forage above the forest canopy in a diverse range of forest types	Yes
Corben's Long-eared Bat (Nyctophilus corbeni)	V TSC; V EPBC	Overall, the distribution of the south eastern form coincides approximately with the Murray Darling Basin with the Pilliga Scrub region being the distinct stronghold for this species.	Yes
Yellow-bellied Sheathtail- bat (Saccolaimus flaviventris)	V TSC	It roosts alone or in groups of up to six, in tree hollows and buildings; in treeless areas they are known to utilise mammal burrows.	Yes
Eastern Cave Bat (Vespadelus troughtoni)	V TSC	Found in a broad band on both sides of the Great Dividing Range from Cape York to Kempsey, with records from the New England Tablelands and the upper north coast of NSW	Yes
Eastern False Pipistrelle (Falsistrellus tasmaniensis)	V TSC	Found in wet sclerophyll forest and coastal mallee. It appears to prefer wet sclerophyll forest although also utilises open forest at lower altitudes.	No
Greater Broad-nosed Bat (Scoteanax rueppellii)	V TSC	Utilises a variety of habitats from woodland through to moist and dry eucalypt forest and rainforest, though it is most commonly found in tall wet forest	No
Greater Long-eared Bat (Nyctophilus timoriensis)	V TSC V EPBC	Inhabits a variety of vegetation types, including mallee, bulloke but more commonly box/ironbark/cypress-pine communities that occurs in a north-south belt along the western slopes and plains of NSW and southern Queensland.	No



## **Ecological communities to be cleared. Tilt Renewables 2021**

Species	Conservation Status		Preliminary Areas of Impact	
	BC Act	EPBC Act	Total Indicative Development Footprints (ha)	
Threatened Ecological Community				
White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions	CEEC	-	546.6	
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	-	CEEC	305	
Threatened Species Habitat				
Silky swainson-pea (Swainsona sericea)	V	-	15.1	
Squirrel glider (Petaurus norfolcensis)	V	-	292.6	
Regent honeyeater (Anthochaera phrygia)	CE	CE	601.4	
Swift parrot (Lathamus discolor)	CE	CE	277.9	
*CEEC – Critically Endangered Ecological Community				

\*CE – Critically Endangered

\* V – Vulnerable

### Birds and bats at high to moderate risk of blade impact. Tilt Renewables 2021

Common Name	Project Record	Latin Name	Conservation Status (BC Act and EPBC Act) *
Barking owl	Not recorded	Ninox connivens	V – BC Act
Large bent-winged bat	Recorded	Miniopterus orianae oceanensis	V – BC Act
Powerful owl	Recorded	Ninox stenua	V – BC Act
Regent honeyeater	Not recorded	Anthochaera phrygia	CE – EPBC Act CE – BC Act
Swift Parrot	Not recorded	Lathamus discolor	CE – EPBC Act E – BC Act
White-throated needletail	Not recorded	Hirundapus caudacutus	V and M – EPBC Act
Black-chinned honeyeater	Recorded	Melithreptus gularis	V – BC Act
Corben's long-eared bat	Recorded	Nyctophilus corbeni	V – EPBC Act V – BC Act
Dusky woodswallow	Recorded	Artamus cyanopterus	V – BC Act
Painted honeyeater	Recorded	Grantiella picta	V – EPBC Act V – BC Act
Superb parrot	Not recorded	Polytelis swainsonii	V – EPBC Act V – BC Act
Wedge-tailed eagle	Recorded	Aquila audax	Not listed

\* Note: V= Vulnerable / M= Migratory / E=Endangered / CE=Critically Endangered