



COPPABELLA Wind Farm

Project Briefing Community Consultative Committee

6th March 2018

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- Project Overview
- Community Update
- Project Update
- Modification Application

Background

- Development Application in 2009 by Epuron
- Extended review process
- Reduced project approved in March 2016

NSW Development Consent (SSD 6698)

- 79 wind turbines & associated infrastructure

Commonwealth EPBC Approval (2013/7002)

Grid Connection

- Connection via 132kV TransGrid powerline between Yass & Murrumburrah

Goldwind acquisition in Feb 2017

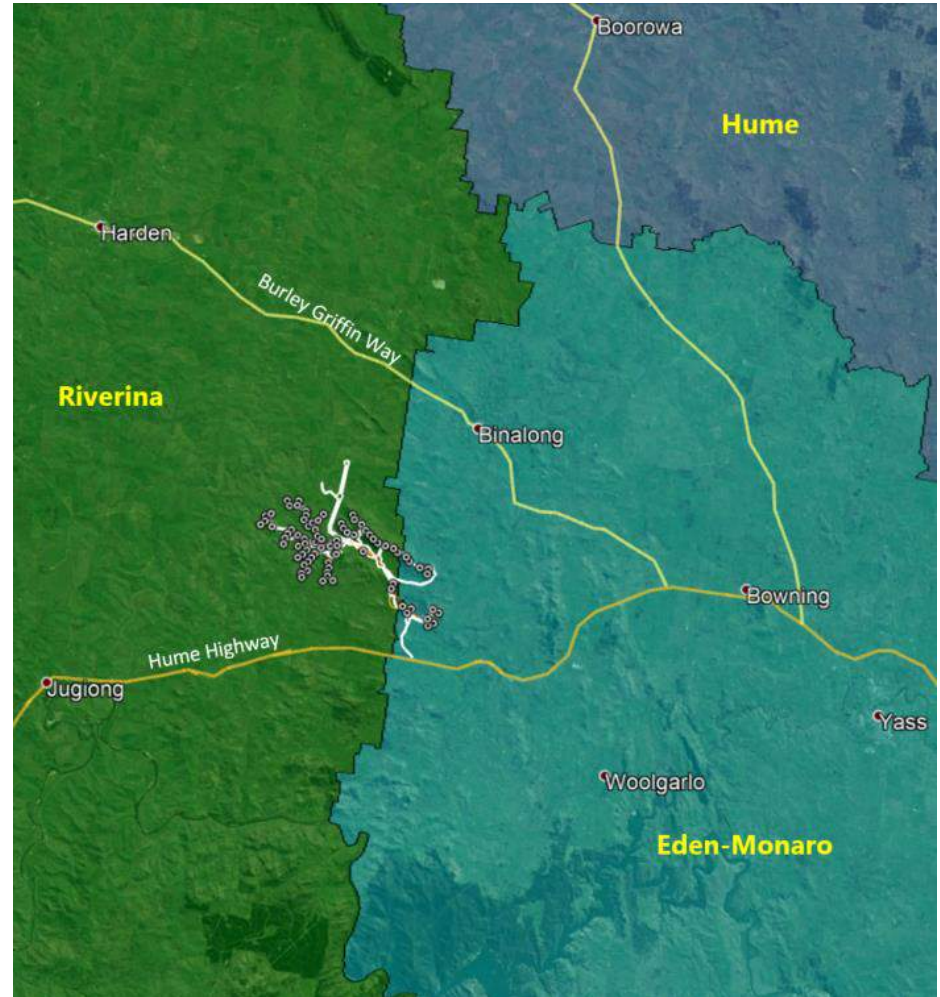
Landowners & Community

- 11 host landowners
- Low density of non-host neighbouring properties:
 - 0 residences within 0-2km
 - 9 residents within 2-3km
 - 13 residents within 3-4km
 - 29 residences within 4-5km (includes Bookham)

Community engagement now underway

A new industry and opportunity for the region

Construction planned to commence in late 2018



Tax subsidies in the renewables sector

- The project receives no tax subsidies
- The Large-scale Renewable Energy Target creates a financial incentive for the establishment and growth of renewable energy power stations (such as Coppabella Wind Farm). Accredited renewable energy power stations are entitled to create large-scale generation certificates (LGCs) As a guide, one LGC is equal to one megawatt hour of eligible renewable electricity.
- LGCs are usually sold to liable entities (generally electricity retailers), who are required to surrender a set number of certificates to the CER each year (under the Renewable Energy (Electricity) Act 2000).

Resource: [Clean Energy Regulator – How the scheme works](#)

Community Benefit Sharing in Binalong

- Sponsorship of initiatives and events in the local area during the pre-construction and construction period.
- Local economic injection through local suppliers (fencers, concrete works, labour etc.) during the construction period. Secondary economic injection through use of local facilities e.g. motel, pub, cafe etc.
- Community Enhancement Fund
 - \$2,500 per installed turbine per annum for the life cycle of the project (CPI adjusted annually).
 - Administered by the relevant local council under a Voluntary Planning Agreement
- Supplementary community investment model, to invest a further \$100,000 per annum (CPI adjusted annually) into the local area over the life of the project (separate and additional to the Community Enhancement Fund).

Clarification on Vegetation Clearing

The 180.9 Hectares (Ha) of clearing allowance sought under the Modification Application consists of:

- 20% Box Gum Woodland
- 80% Box Gum Woodland Derived Grasslands

This includes ≈30 Ha of construction buffer around all infrastructure. It is anticipated that no trees will need to be impacted in this zone.

The total footprint accounts for less than 6% of the total project area on the host landowner's properties.

BioBanking Offsets

BioBanking ensures impacted areas onsite are counterbalanced, or 'offset', by commitments to enhance and protect biodiversity values of similar character nearby.

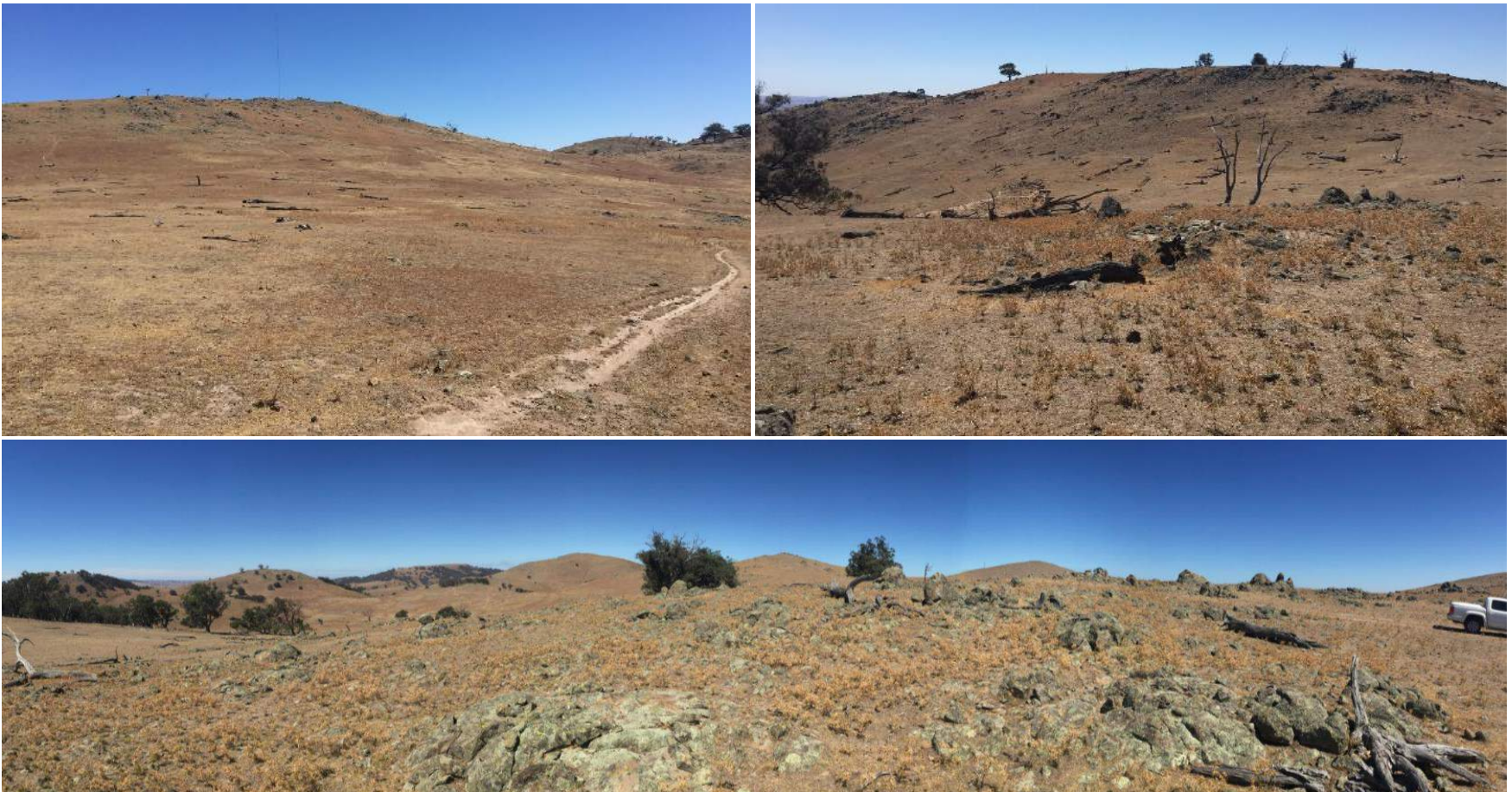
The project has been conservative in design during the planning phase and will thus offset for larger areas than will be impacted.

Resource: [NSW Biodiversity Offsets Policy for Major Projects](#)

Box Gum Woodland Derived Grasslands:

80% of the impact allowance being sought is considered derived grasslands.

Typical Box Gum Woodland Derived Grassland areas onsite:

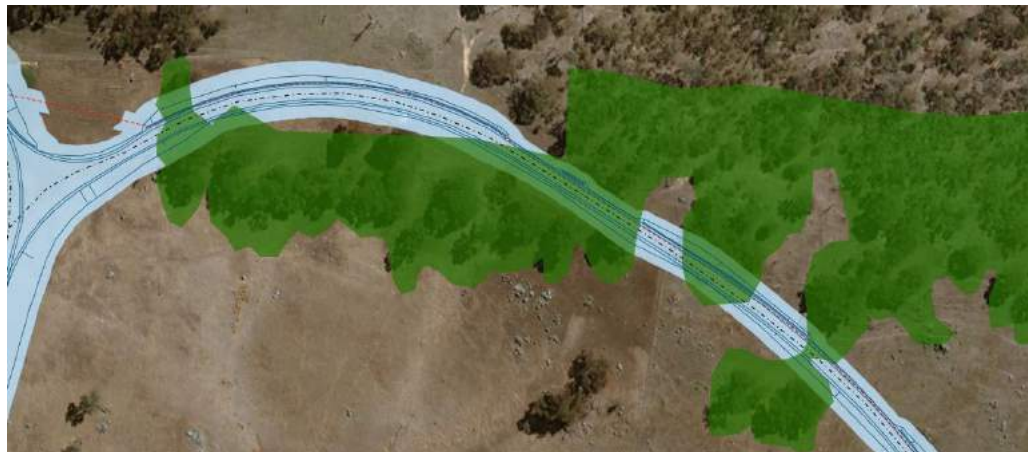




Box Gum Woodland:

20% of the impact allowance being sought is considered woodlands.

This includes impact to grassland areas between trees (trees can be up to 100m apart).

A total of 3.2 Ha is considered Critically Endangered Ecological Communities (CEEC), but impacts to trees have been sought to be avoided through the design.



-  CEEC Box Gum Woodland
-  Design Footprint (incl. 5m buffer)



Sponsorship of local community initiatives and events (since October 2017):

- Murrumburrah Makers Market – *financial contribution to cover the cost of advertising the event.*
- Binalong Mechanics Institute – *financial contribution to cover the cost of installation of reverse cycle heating and cooling in the kitchen area.*
- Binalong NSW Swimming Club Inc. – *financial contribution to cover the cost of training of swimming coaches and aqua instructors.*
- Binalong Brahmans – *Gold sponsor for 2018 season*
- Binalong Public School – *financial contribution for Market Day held in November 2017*
- Binalong CWA Building – *commitment to financial contribute towards the major works planned for the building.*
- Bookham shearing competition held in conjunction with the annual Bookham Sheep show and country fair. – *financial contribution to the shearing competition*

- Opening in Binalong shortly.
- Opening hours for the Information Centre:
 - Tuesday - 8:30am – 10:30am
 - Wednesday - 3:15pm – 6:45pm
 - Friday - 3:15pm – 6:45pm
 - Saturday - 9-1pm
- Modelled on Goldwind Local Information Centres established in Glen Innes in NSW and Beaufort and Ballan in Victoria.

Resource: [Clean Energy Council Case study of Glen Innes Information Centre](#)



Grid Connection:

- TransGrid have performed a study of the constraints on the line.
- Restring of 99M from connection point to Yass will allow for 280MW connection point.

Connection Point Capacity

Coppabella Wind Farm – Line 99M



Radar Assessment:

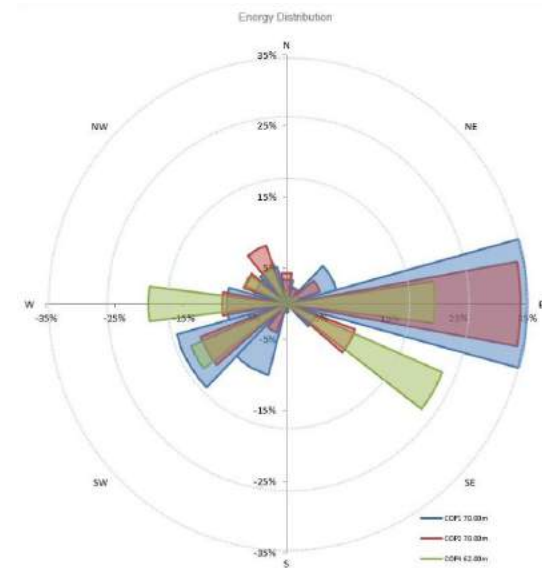
- Airservices Australia have is satisfied with the with the Aviation Impact Management Plan.
- The Department of Planning & Environment have confirmed that Conditions 34(a) and (b) of the Conditions of Consent have been met.

Water Supply Options:

- Ongoing investigations to firm up water options for construction
- Seeking approx. 200 mega litres (ML) for construction (i.e. ~100ML p/a)
- Confirmed available supply from Goldenfields Water and Yass Valley Council
- Preference to use water from on-site farm dams and bores (as appropriate). Investigating Water Access Licence (WAL) and allocation requirements to enable this option.

➤ Energy Assessment - Key Statistics

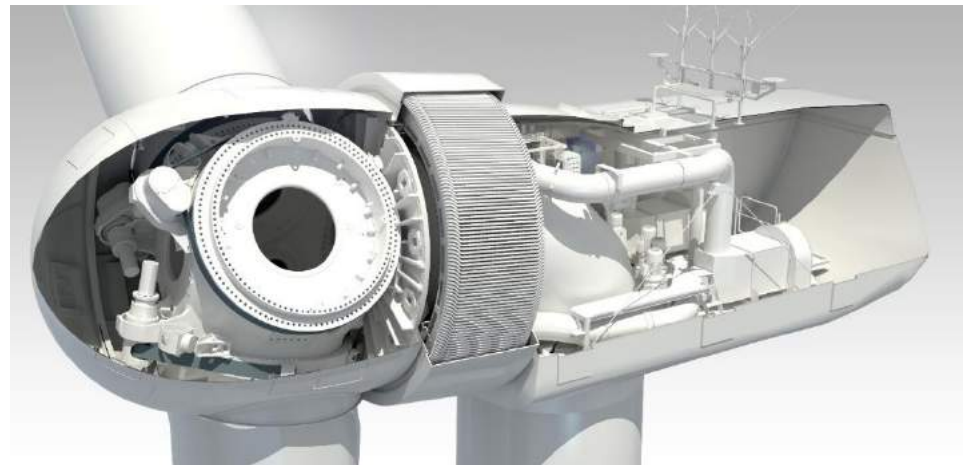
- 7.5 metres/second (27 kilometres/hour):
 - Average wind speed at hub height across the site
- 35% capacity factor with 69 x GW136/4.2
- 890 gigawatt hour (GWh):
 - Annual energy production
 - Assuming 280 megawatt (MW) base case
 - Approx. 120,000 NSW homes energy needs*
- 25 year life assessed



➤ GW4.2 Wind Turbine

The GW136/4.2MW is currently being assessed as ideal for the site:

- Permanent magnet direct drive design
- No high-speed gearbox
- High efficiency
- Low RPM = reduced noise levels

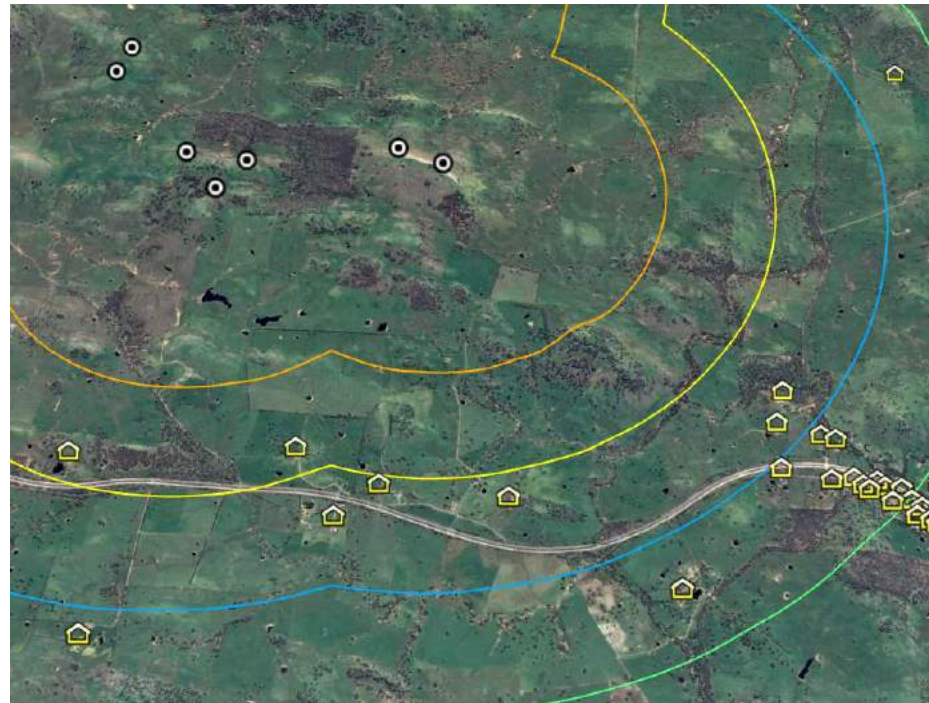


Removal of Approved Wind Turbines:

➤ Locations 75, 76, 77

- Public submissions from the nearby community
- Distance and visual impact for non-associated residences
- Biodiversity impacts
- Review of the wind resource and associated energy analysis.

The removal of these 3 wind turbines will ensure that there are no wind turbine locations within 2,700 metres of inhabited non-associated residences. Removal of these wind turbines also corresponds to the reduction in impact on 10 confirmed hollow bearing trees.



Removal of Approved Wind Turbines:

➤ Location 36

- 58 hollow bearing trees confirmed at this location. Much greater than any other wind turbine location.
- Project reduced to 75 locations



Whitefields Road

- Road design has been walked with ecologists and the current design affects only 4 hollow bearing trees of the 75 surveyed in this area.
- Trees of importance near to the road have been digitally recorded and overlaid onto the design to ensure avoidance.

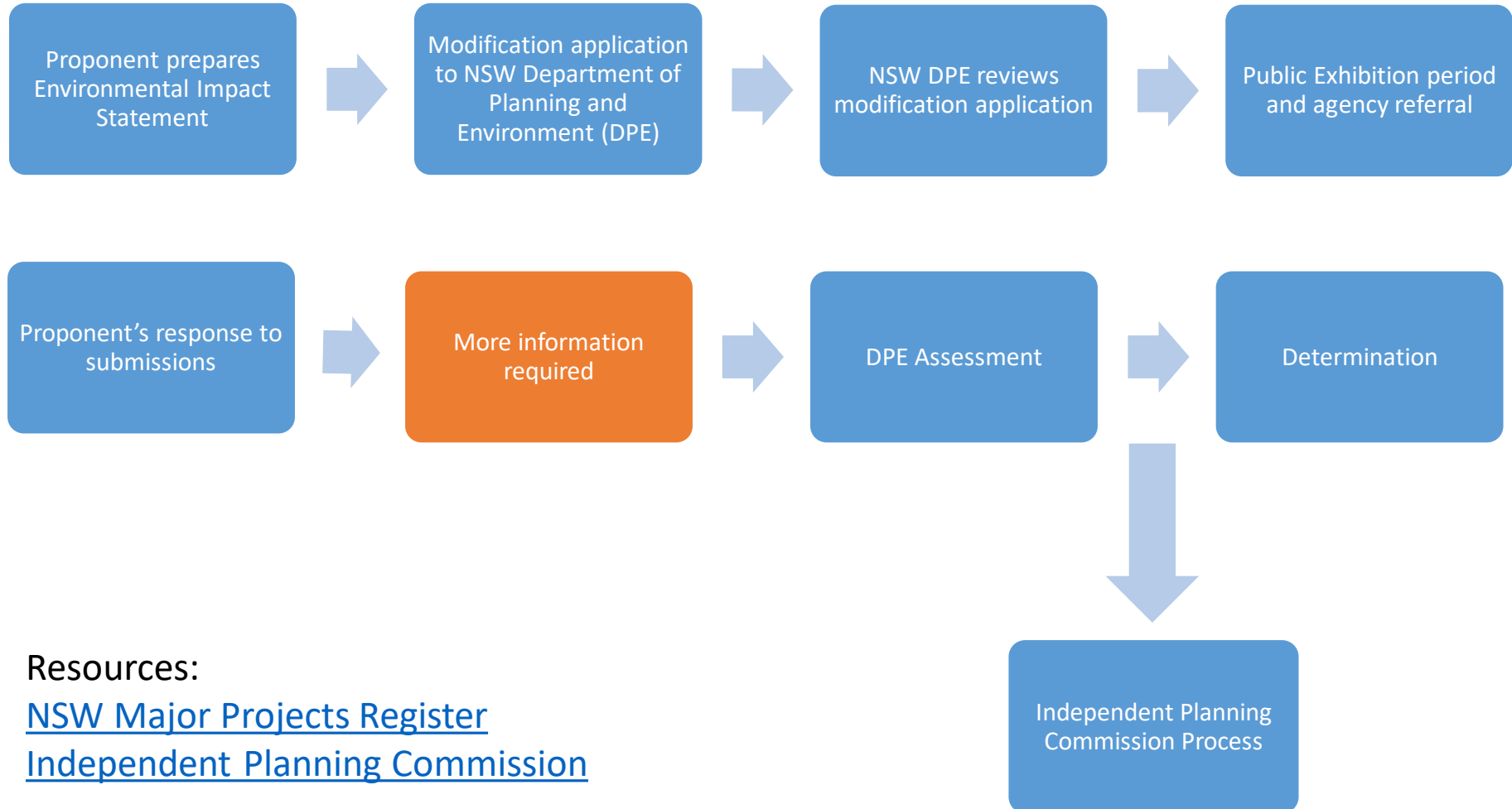


Construction Preparation

- Tender for main contractor underway.
- Optimisations being performed, with full detailed design to be performed on selection of contractor
- Construction to start in late 2018.

Coppabella EPBC Approval (Environment Protection and Biodiversity Conservation Act)

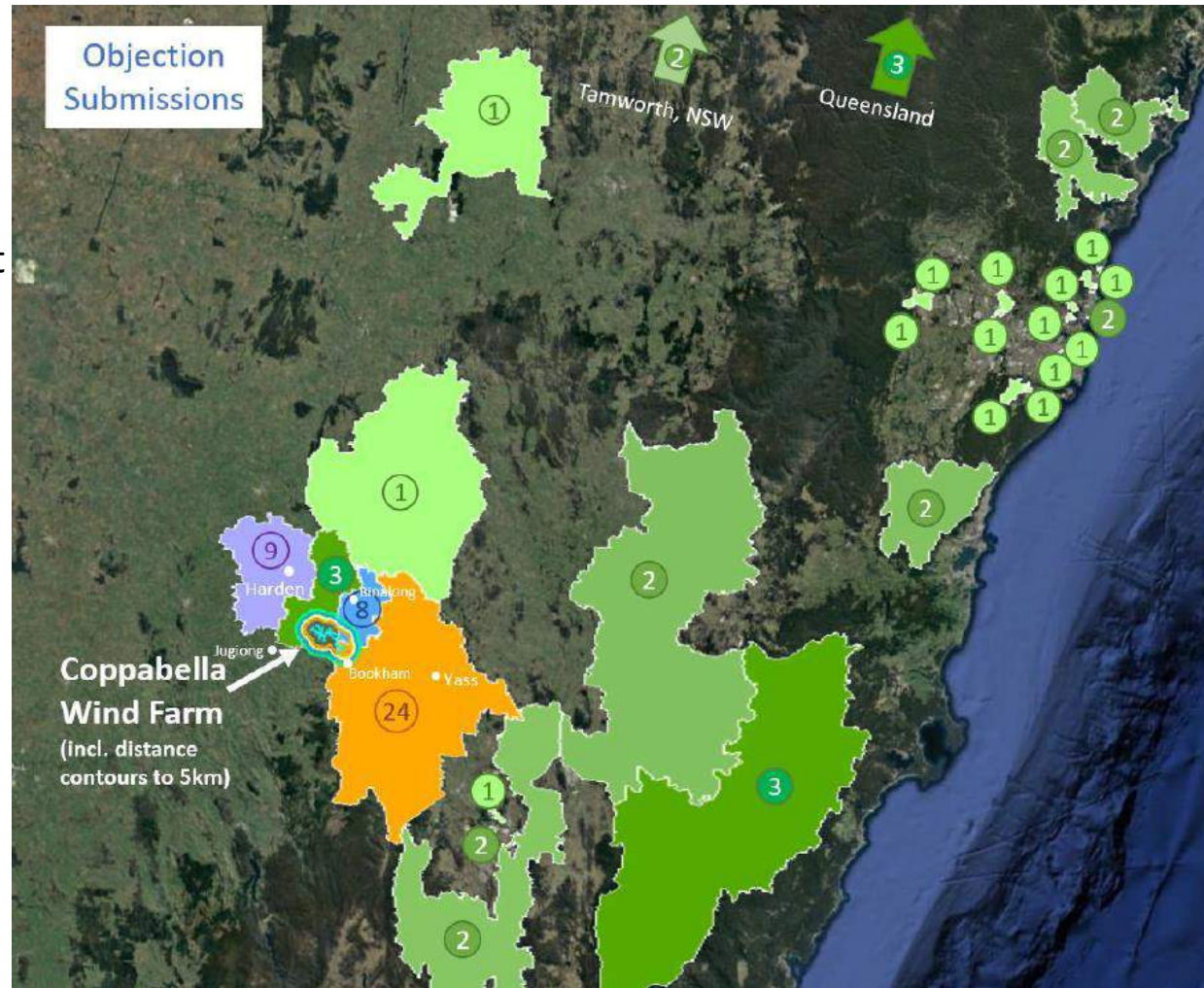
- The original federal government approval from 2014 was for the combined Coppabella and Marilba Hills with a combined 126 wind turbines. These wind turbines had a maximum 150m tip height and the footprint impacted on the habitat of the critically endangered Golden Sun Moth – which is not located on the Coppabella Hills.
- An updated referral has been submitted to the Department of Environment and Energy for a reduced number of wind turbines to max. 171m tip height, and to remove the Golden Sun Moth habitat impacts.



Submissions

104 total submissions were received by DPE:

- 9 from Govt agencies
 - All provided comment on the application
- 95 submissions from 89 members of the public
 - 81 submitters in objection
 - This includes 31 template submissions
 - 3 submitters provided comments
 - 5 submitters in support



Response to Submissions

- On receipt of the submissions from DPE, these submissions were assessed by Goldwind Australia and responses prepared based on the issues raised.
- On February 1st 2018, a Response to Submissions (RTS) was submitted to the Department of Planning & Environment.
- The most commonly raised areas of concern were biodiversity impacts, visual impacts, concerns with division within the community and general concerns regarding wind farms and renewable energy policy.
- Project updates as an outcome of submissions:
 - Removal of 4 wind turbines from approved layout
 - Commitment to develop a supplementary community investment model of \$100,000 annually during operations

Office of Environment and Heritage (OEH) Clarifications

- Avoidance of specific sensitive areas requested
 - The original modified road design sought to follow the approved road routes.
 - OEH identified areas where deviating from the approved routes or removal of approved wind turbines will reduce impacts to sensitive vegetation areas.
 - Updated design removes impacts on 133 hollow bearing trees (a reduction of 32% across site)
- Site visit to verify vegetation mapping
 - Some areas changed from exotic to native – offset requirements may increase by $\approx 2\%$ as a result.
- Further flora and fauna surveys
 - The site has recently been surveyed for koalas per OEH request. No koalas or koala scat were found.
 - All trees in the footprint that had not been surveyed had conservatively been classified as hollow bearing trees, thus increasing the offset requirements. OEH requested a full survey that has now been performed. Confirming a reduction in hollow bearing trees.



Clean Energy Council Case study on Glen Innes Information Centre:

<https://www.cleanenergycouncil.org.au/news/project-showcase/goldwind-presence-breath-of-fresh-air.html> .

Australian Government Renewable Energy Target:

<http://www.cleanenergyregulator.gov.au/RET/About-the-Renewable-Energy-Target/How-the-scheme-works>

NSW Biodiversity Offsets Policy for Major Projects:

<http://www.environment.nsw.gov.au/resources/biodiversity/140672biopolicy.pdf>

NSW Major Projects Register:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8751

NSW Independent Planning Commission Process:

<http://ipcn.nsw.gov.au/our-processes>