Welcome

Bowmans Creek Wind Farm
Information Session #3

Friday 24 July 2020

Welcome and Acknowledgement of country

We acknowledge the traditional owners of the land on which we meet and pay our respects to their elders past and present

Speakers

- Margaret Harvie – Session facilitator
- Martin Poole – Executive Director, Epuron
- Julian Kasby – Project Manager, Epuron
- James Bailey, Hansen Bailey

Forum etiquette

We want this to be a positive and productive session. Everyone is welcome and encouraged to participate – please observe the following guidelines.

- **Everyone's input is equally valued**
- **Respect each speaker**
- **Respect differences and support everyone's right to be heard**
- **Ask for clarification when needed**
- **Offensive language or any form of abuse will not be tolerated**

Purpose and agenda

- Project update
- Layout
- Comments, questions & answers

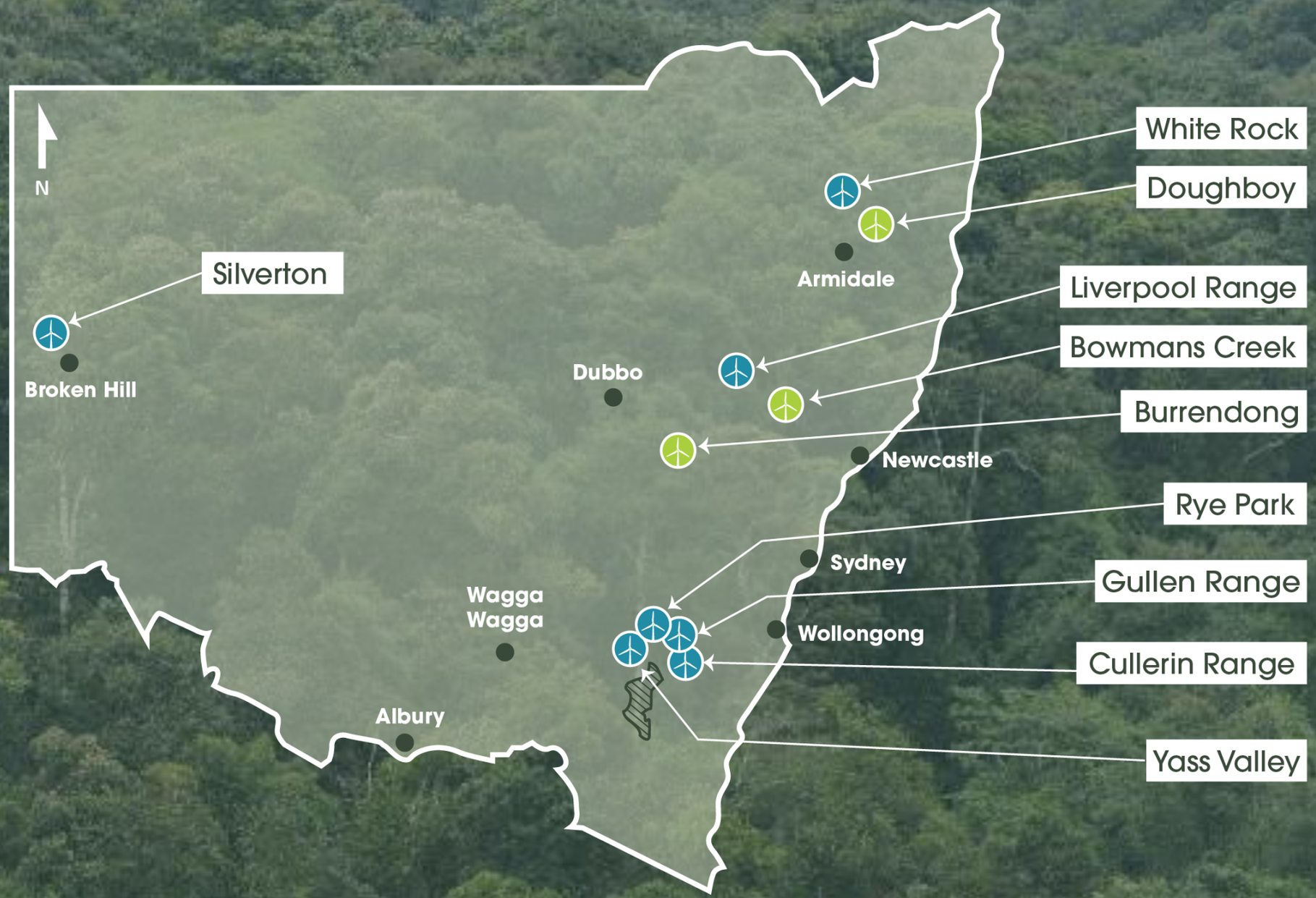
- The session will comprise of:
  - **Presentation** - Julian and Martin
  - **Comments & questions** – accepted via chat and in person
  - **Poll** – key issues
  - **Discussion**

Epuron

Expertise in large scale wind development

- Australian owned
- Since 2003, 7 projects successfully developed (4 constructed and operating)
- Broad experience in the National Electricity Market
- Projects have been acquired by AGL, Goldwind, Origin, Tilt Renewables

White Rock Wind Farm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White Rock
Doughboy
Armidale
Silverton
Liverpool Range
Bowmans Creek
Dubbo
Broken Hill
Burrendong
Newcastle
Rye Park
Sydney
Gullen Range
Wagga
Wagga
Wollongong
Cullerin Range
Albury
Yass Valley
KEY: Current development
Completed Projects

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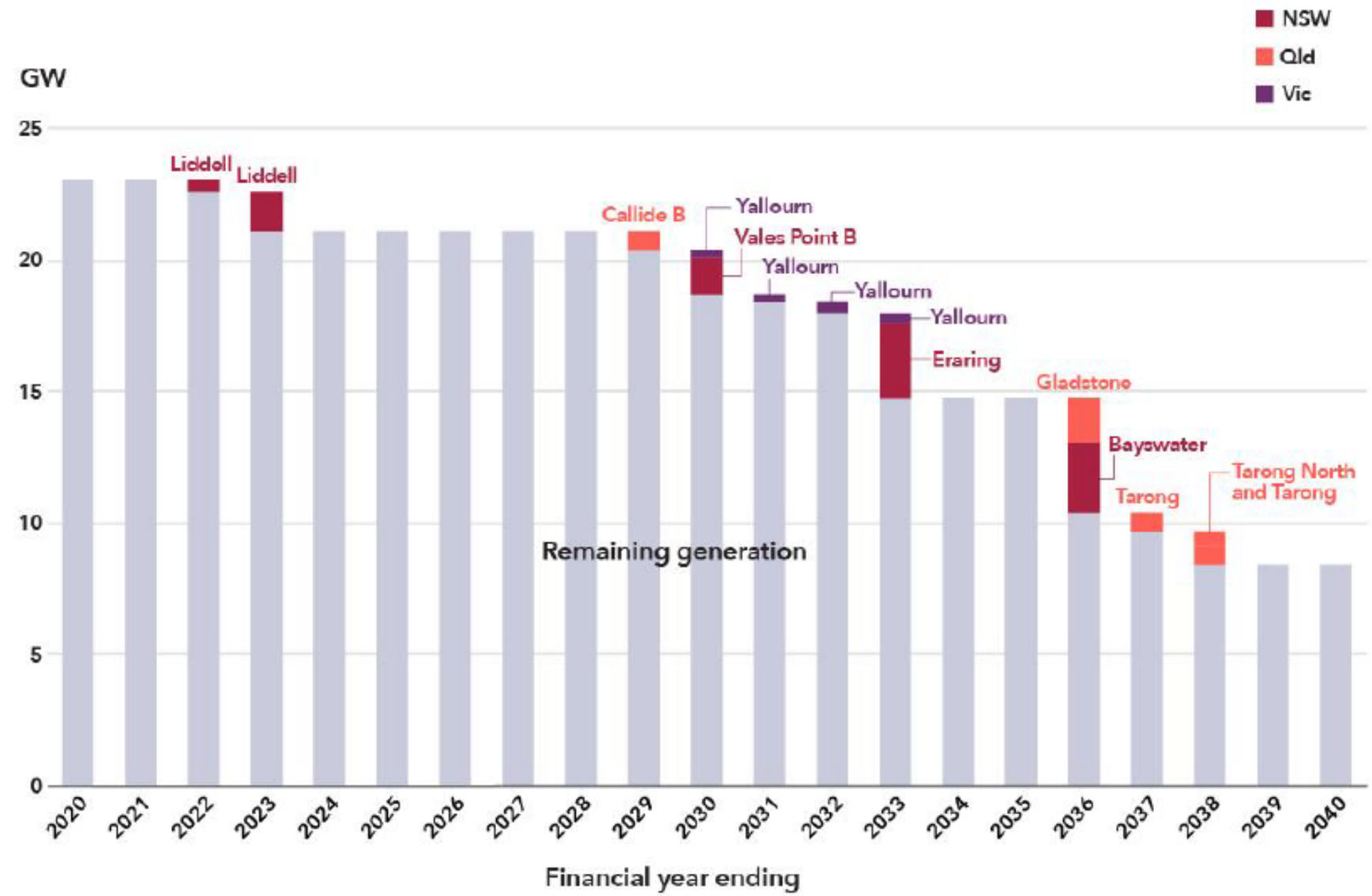
The bigger picture

- Bowmans Creek WF can play an important role in NSW energy
  - We want to tell you about it and understand your concerns
- Epuron brings 16 years experience in wind development
  - We know there are concerns and challenges and we know how to work through them
  - For example: visual impact and noise
- Australia needs new power sources
  - All operating coal power stations in NSW planned to retire by 2043
  - NSW currently a net importer of electricity and more generation is required in the system

Power stations are closing

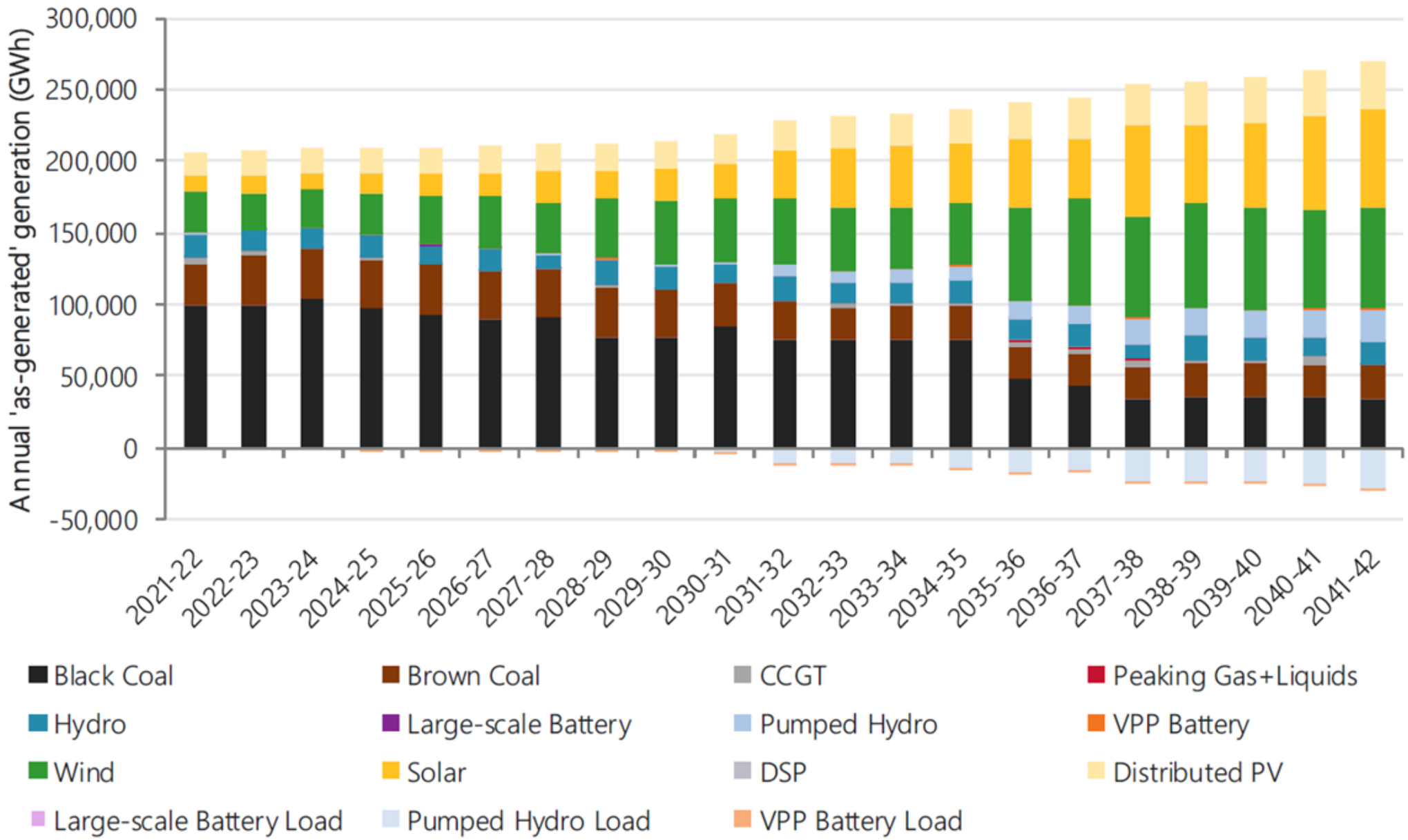
Figure 9 Coal-fired generation remaining as power stations retire*

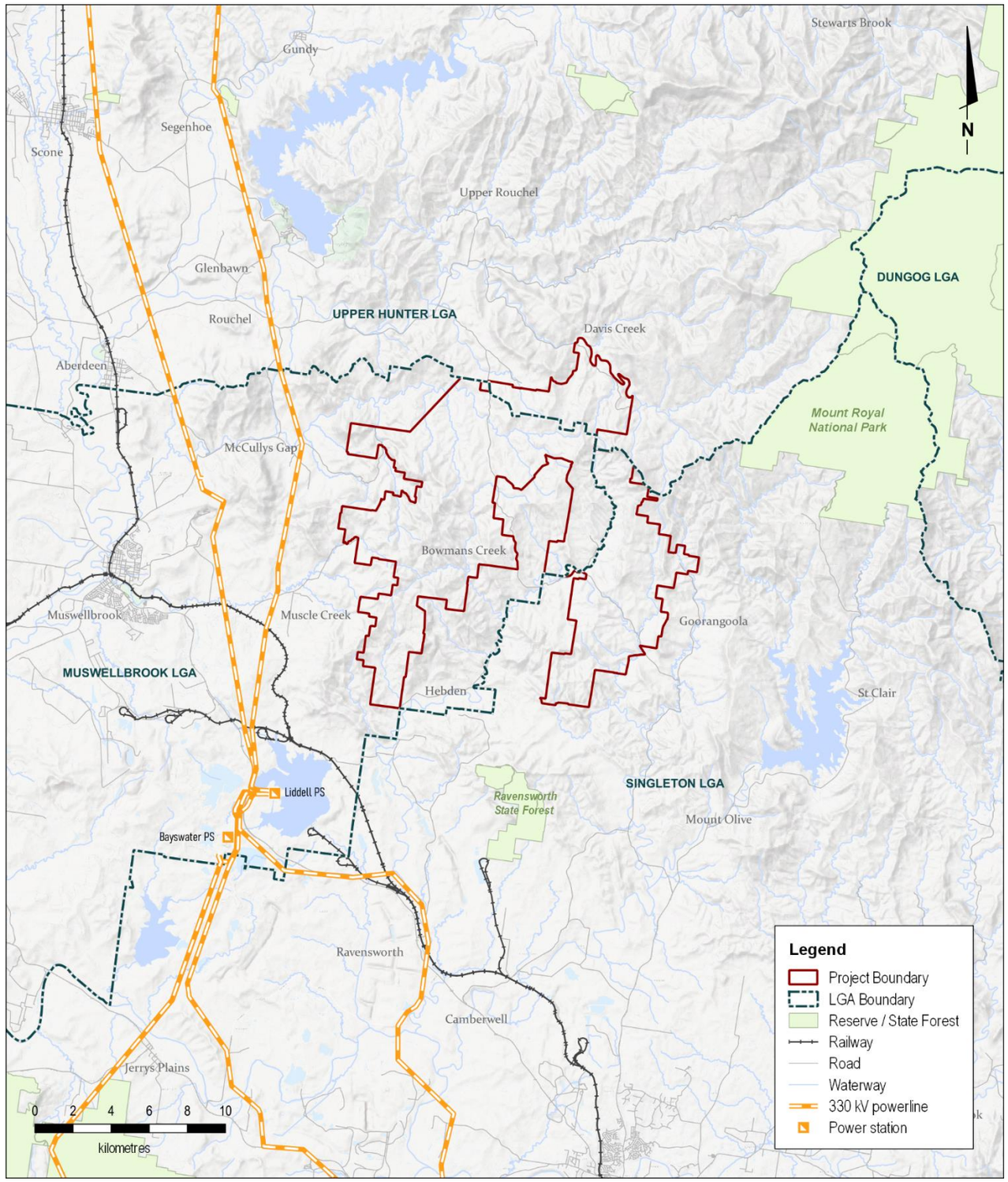


* Based on expected closure years provided by participants as of November 2019. Modelled outcomes vary slightly from these timings and are based on expected closure years reported in August 2019.

AEMO expectation is that most new capacity will be solar and wind (optimal balance is about 55/45), supported by storage

Figure 6 Forecast annual generation to 2041-42, Central Scenario





Why Bowmans Creek?

- Good wind
- Excellent capacity within existing transmission network
- More cost effective connection to the network
- Downward pressure on electricity prices
- Private grazing land – land use compatibility

Bowmans Creek Wind Farm

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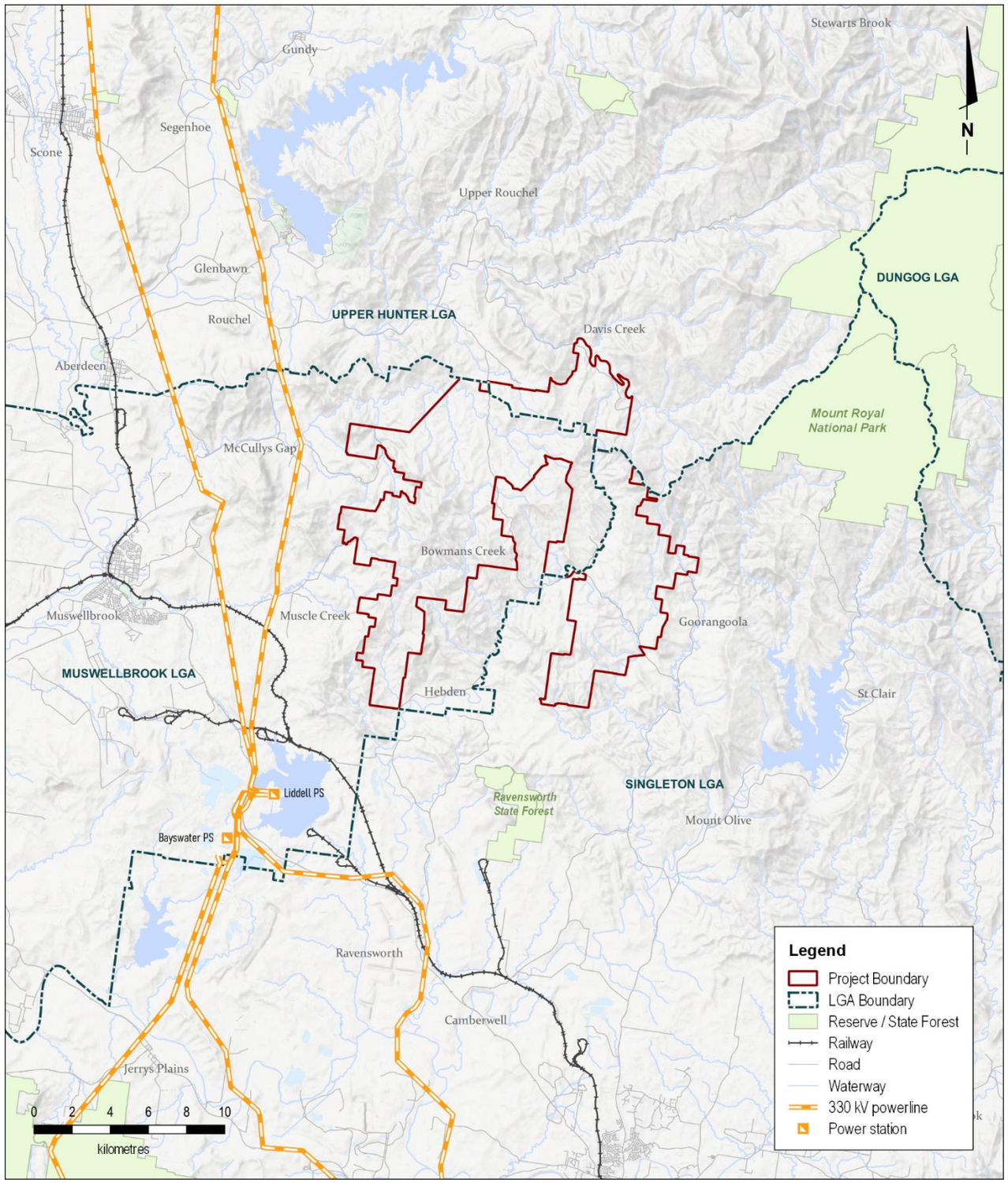
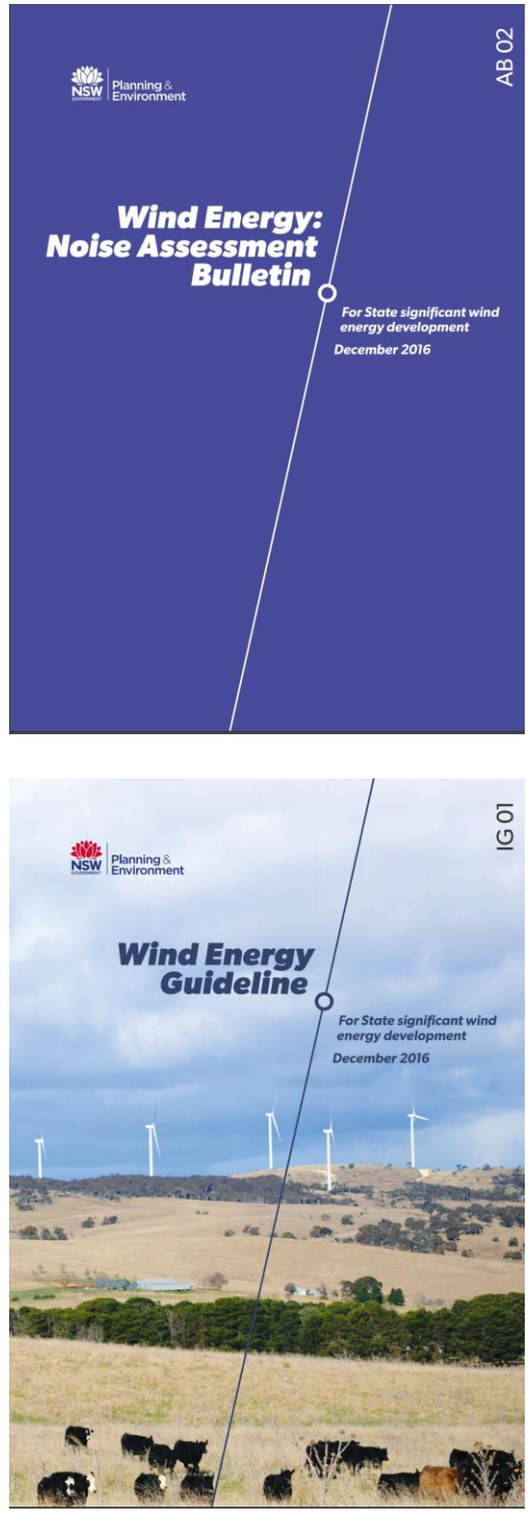


- Project to date
  - Scoping Document May 2019
  - Secretary's Environmental Assessment Requirements (SEARs) issued in Jul '19
  - Specialist studies nearing completion, including; Visual, noise, fauna, archaeology transport, aviation.
  - Community consultation ongoing
  - Revised layout as a result of community feedback and specialist recommendations

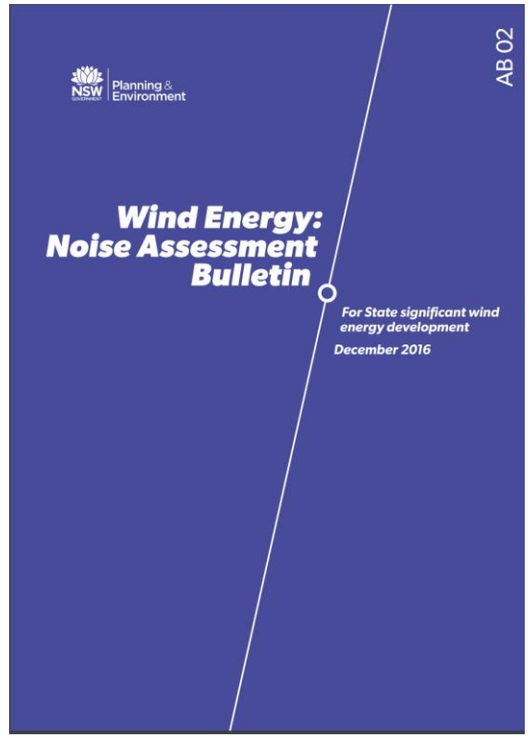
EIS - key specialist assessments

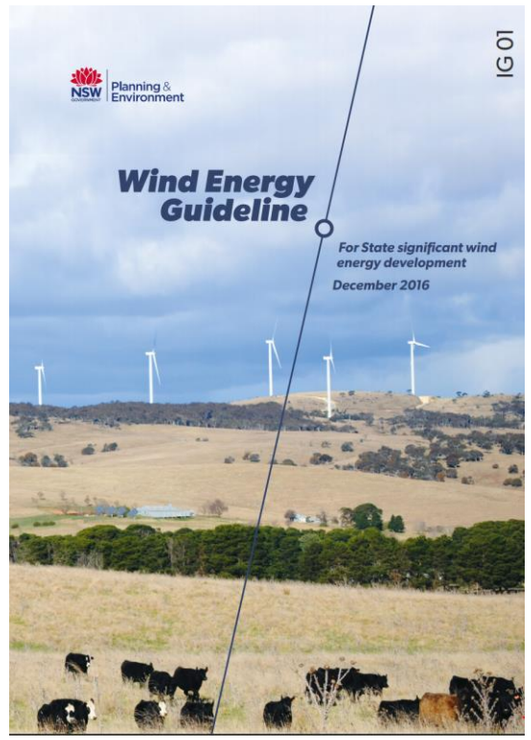
Area	Guidelines
Visual	NSW Wind Energy: Visual Assessment Bulletin (DPIE)
Noise	NSW Wind Energy: Noise Assessment Bulletin (DPIE)
Biodiversity	Biodiversity Assessment Method 2017 (OEH)
Heritage	OEH codes and guidelines for consultation and assessment
Transportation	Guide to Traffic Generating Developments (RMS)



Further considerations

Area	
Property values	Review of the Impact of Wind Farms on Property Values
Bushfires	Risks associated with construction and operation of wind turbines
Aviation	Local airports and private landing areas plus aerial agriculture
Health	Latest advice from the National Health and Medical Research Council
Social and economic	Potential impacts and benefits for the region and State
Water and soils	Water demand, river or creek crossings and water sources





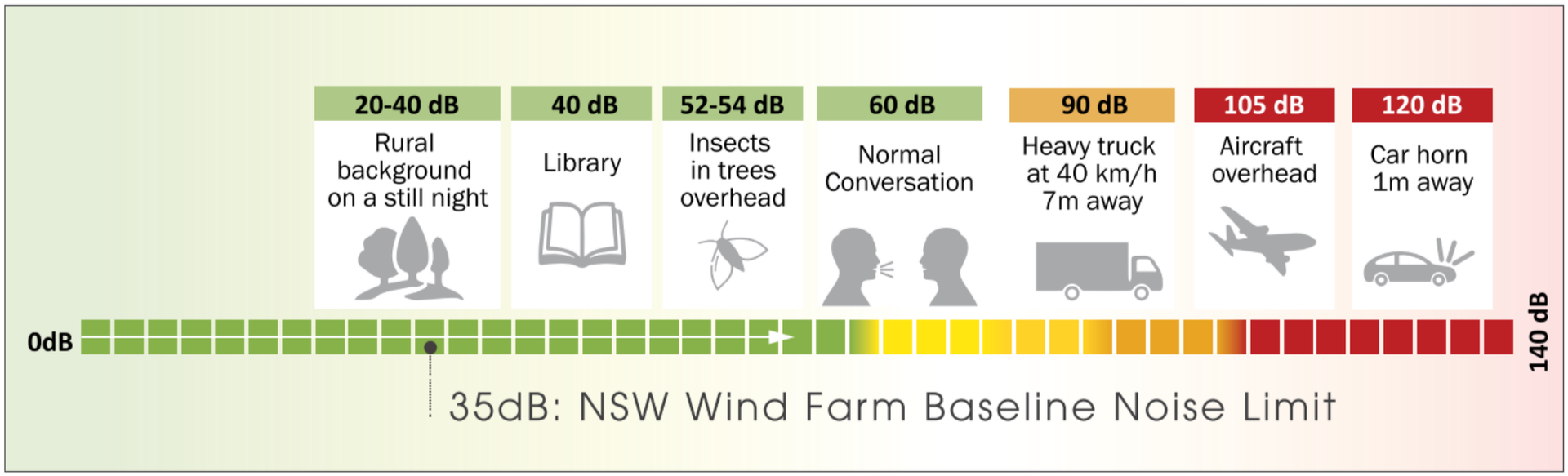
Visual

- NSW Wind Energy: Visual Assessment Bulletin
- Strictest requirements of any state in Australia, with comprehensive and rigorous assessment criteria
- Each residence within 4.4km assessed
- Photomontages created from public and private viewpoints

Noise

- Assessment against the Noise Assessment Bulletin
- Strictest noise limits in of any state, lower than anywhere in Australia
- Background noise monitoring at multiple locations
- Operating noise limits at a residence is the greater of:
  - 35dB(A), or
  - Existing background plus 5dB(A)

- The project will be required to meet these noise limits and demonstrate compliance through a noise monitoring program.



Biodiversity and Heritage

- Assessment teams undertook surveys between Sept ‘19 – Jan ‘20 and in Mar ‘20
- Local Aboriginal groups were consulted and assisted with cultural heritage surveys
- Mitigation measures developed including Offset Strategy for vegetation clearance
- Fauna surveys included; Glossy Black-Cockatoo, Wedge-tailed Eagle, Square-tailed Kite and Powerful Owl.

Transportation

- Delivery of turbine components likely to come from Port of Newcastle
- Transportation route assessed from Port of Newcastle to site
- Hunter Expressway, New England Highway, Hebden Road, Scrumlo Road
- Transportation assessment contains predictions of numbers of vehicle movements
- Delivery of turbine components to be scheduled in consultation with RMS, council and local community with consideration for peak road use times and school bus routes.

Source: https://www.armidaleexpress.com.au/story/4336369/blade-runner-along-highway/

Bushfire Risk

- Assessment of the risk of bushfire from the wind farm including potential impacts to aerial fire fighting
- Development of Bushfire Management Plan in consultation with RFS
- RFS position that fire on a wind farm managed in the same way as any other bush fire
- Examples in Australia of bushfires fought on a wind farm with fixed wing water bombers
- Access tracks can provide benefit for ground based fire fighters

Property Values

- Wind farm impacts on value of surrounding properties has been subject of two studies commissioned by the NSW Government
- NSW Valuer General found no reductions near any of the eight wind farms investigated
- Urbis commissioned by NSW Office of Environment and Heritage
  - Compared sales from same property before and after the wind farm was established
  - Same property resale analysis indicates that all of the properties examined demonstrated capital growth that aligned with the broader property market of the time

Community Information Sessions October 2018 & November 2019

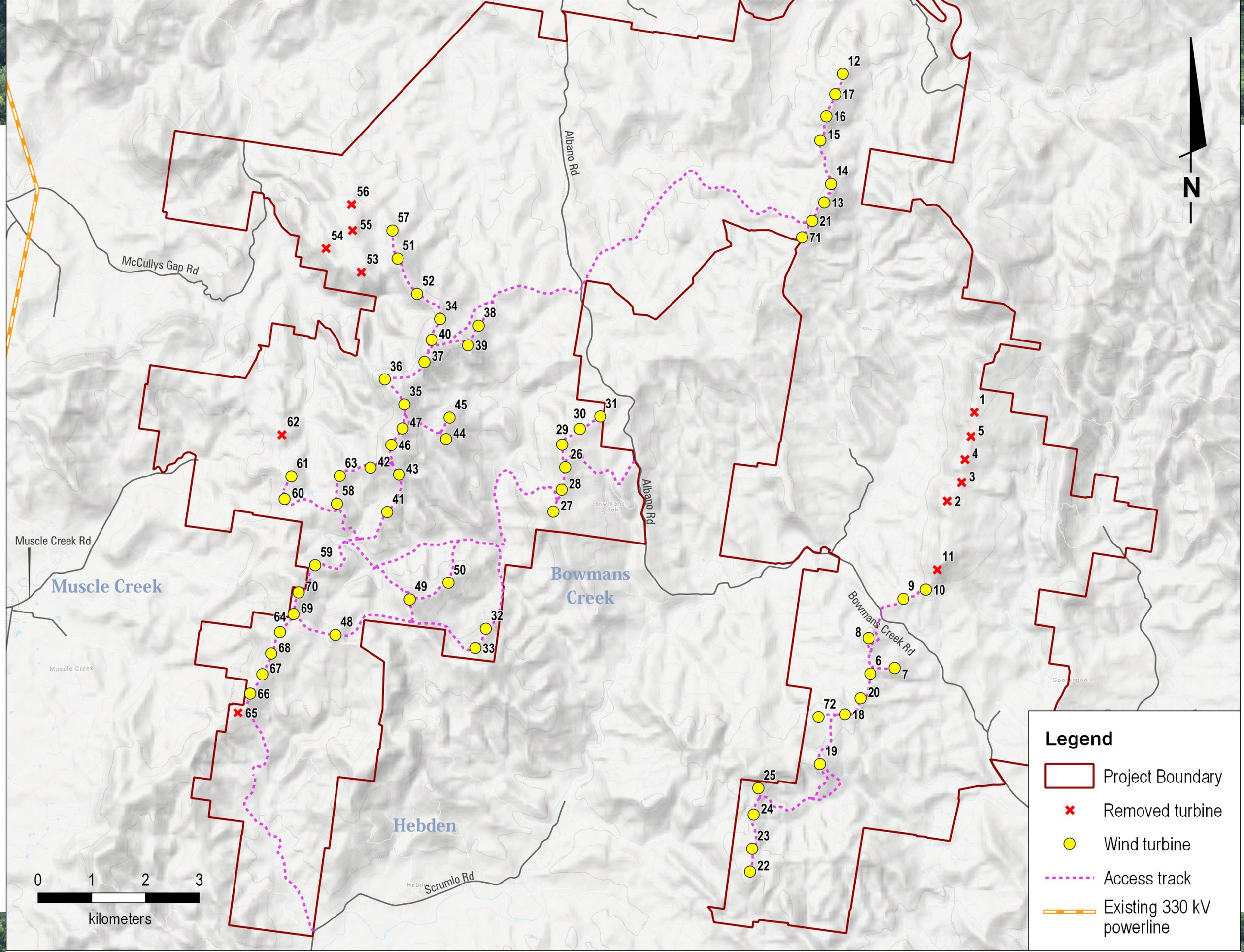
- Four sessions in each series - McCullys Gap, Muscle Creek, Hebden, Mt Pleasant
- Approx. 200 attendees across eight sessions
- Matters raised:
  - **Positive**: Employment, cost effectiveness, community funding, clean energy
  - **Concerns:** Visual impact, noise, property values, traffic, bushfire risk, new powerline

Additional consultation

- Phone calls and face-to-face meetings with neighbours
- Introductory letters
- Regular project updates to our mailing list
- Presentation to council
- Chamber of commerce

Concerns

Visual impact	Detailed analysis in the EIS, removal of 12 turbines
Noise	Background noise measurements and strict legislative standards apply
Transportation	Avoiding use of Muscle Creek Rd, McCullys Gap Rd (Sandy Creek Rd), Goorangoola Rd. Transport management plan developed in consultation with stakeholders
Property values	Evidence suggests nil or positive effect
Bushfires	Bushfire management plan developed in consultation with RFS. Access tracks improve access for ground fire fighters.
Decommissioning	All above ground infrastructure will be removed at end of project life


N
McCullys Gap Rd
Albano Rd
Muscle Creek Rd
Muscle Creek
Bowmans Creek
Hebden
Scrumlo Rd
Bowmans Creek Rd
Albano Rd
Goodingoola
0 1 2 3
kilometers
Legend
Project Boundary
Removed turbine
Wind turbine
Access track
Existing 330 kV powerline

Benefits and Opportunities

Local business growth	Significant work for local suppliers and contractors
Local investment	Benefits to region through jobs and land payments
Local economy	Boost to local retail and hospitality
Jobs	Direct employment for 150+ jobs during construction (18 – 24 months) and 12-15 full time operation and maintenance jobs
Community funding	Voluntary Planning Agreement (VPA) with local councils providing $3,000 annually per wind turbine installed for community projects (ie up to $180k p.a.)

Timing & next steps

Timeframe	Item
Sep 2019 – Jul 2020	Preparation of Environmental Impact Statement (EIS)
Jul 2020	Online community information sessions Target lodgment of EIS
Aug – Sep 2020	Public exhibition of EIS
1st half 2021	Respond to submissions and DPIE assessment
2nd half 2021	Determining Authority recommendation and determination
Subject to DA approval	
2022 – 2023	Pre-construction activities and construction commencement
2024 – 2025	Operation

Questions

Poll

- Noise
- Property values
- Bushfires
- Visual
- Traffic
- Birdlife
- Decommissioning
- Other

Discussion

Thank you

More information:

💻 www.bowmanscreekwindfarm.com.au

j.kasby@epuron.com.au

✆ +61 (2) 8456 7404