Burrendong Wind Farm

Community Consultation Committee Project Update

Mudgee, Thursday 29 June 2023

ARK ENERGY

Acknowledgement of Country

We acknowledge the Traditional Custodians of the land upon which we meet and their continuing connection to lands, waters and communities.

We pay our respects to Elders past and present.

Agenda

- Introductions
- Ownership update
- Context
- Project details
- Assessment process
- Environmental Impact Statement
- Next steps
- Questions

Introductions

Ark Energy

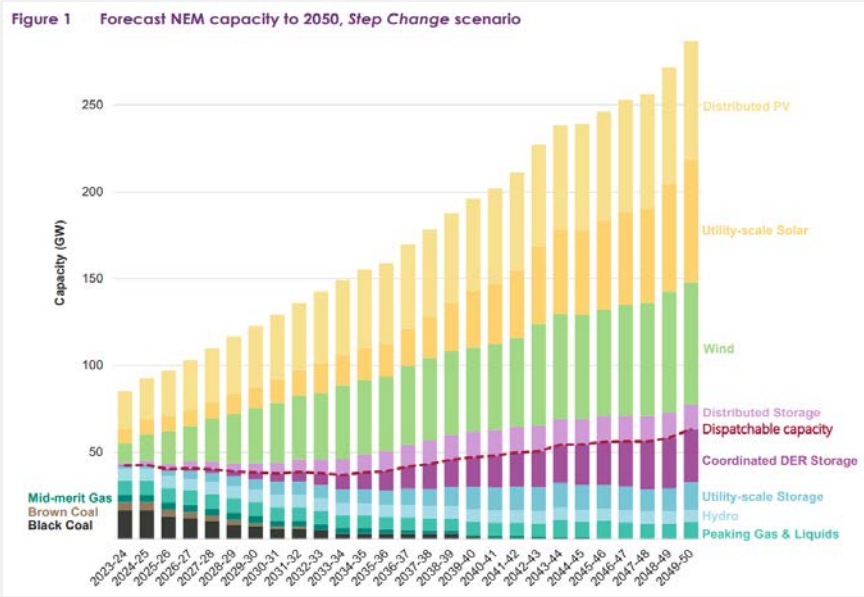
- Andrew Wilson, General Manager Development - NSW.
- Melissa Pisani, Communications & Engagement.
- Rebecca Riggs, Project Manager.
- Tim Chan, Project Officer.

Ownership

- Project now owned by Ark Energy. Friendly acquisition of Epuron completed in 2022 and Epuron name retired.
- No change to the project as a result of change in ownership.
- Ark Energy is a leading Australian renewable energy company specialising in greenfield utility-scale wind, solar and hydrogen.
    - 20+ years' experience, 13 projects in development.
    - Focused on accelerating the energy transition, including decarbonise energy supply of parent company Korea Zinc and other third-party customers.
- Korea Zinc first major refiner to join RE100 and commit to powering global operations from 100% renewable energy by 2050.

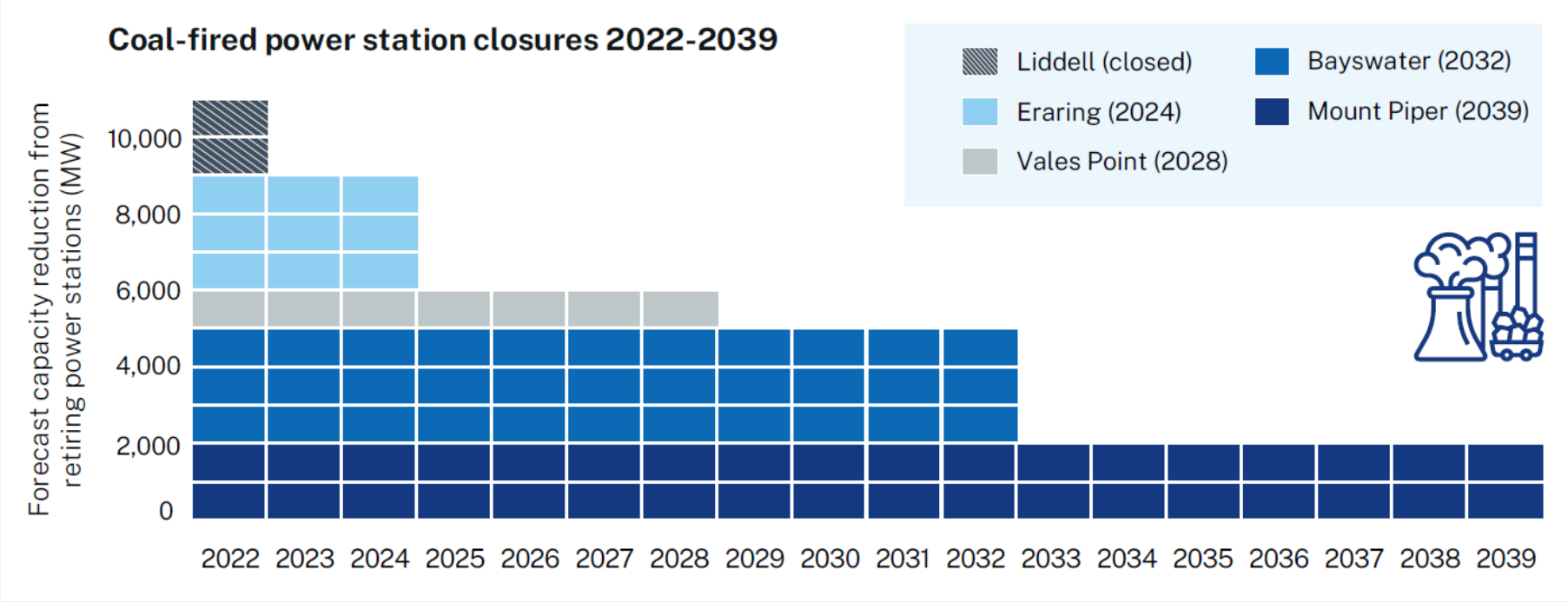
Context: rapid energy transition

- Energy transition at speed and scale required.
- Australian Energy Market Operator's 2022 Integrated System Plan *Step-change scenario* forecasts by 2050: electricity demand to double, coal to retire 2-3 times faster than anticipated, nine-fold increase in grid scale wind and solar required.
- National targets (legislated)- emissions reduction of 43% by 2030, net zero by 2050. 82% RE in NEM by 2030 (36% in 2022).
- NSW targets - emissions reduction of 50% by 2030 and net zero by 2050. (30.7% RE in 2022)



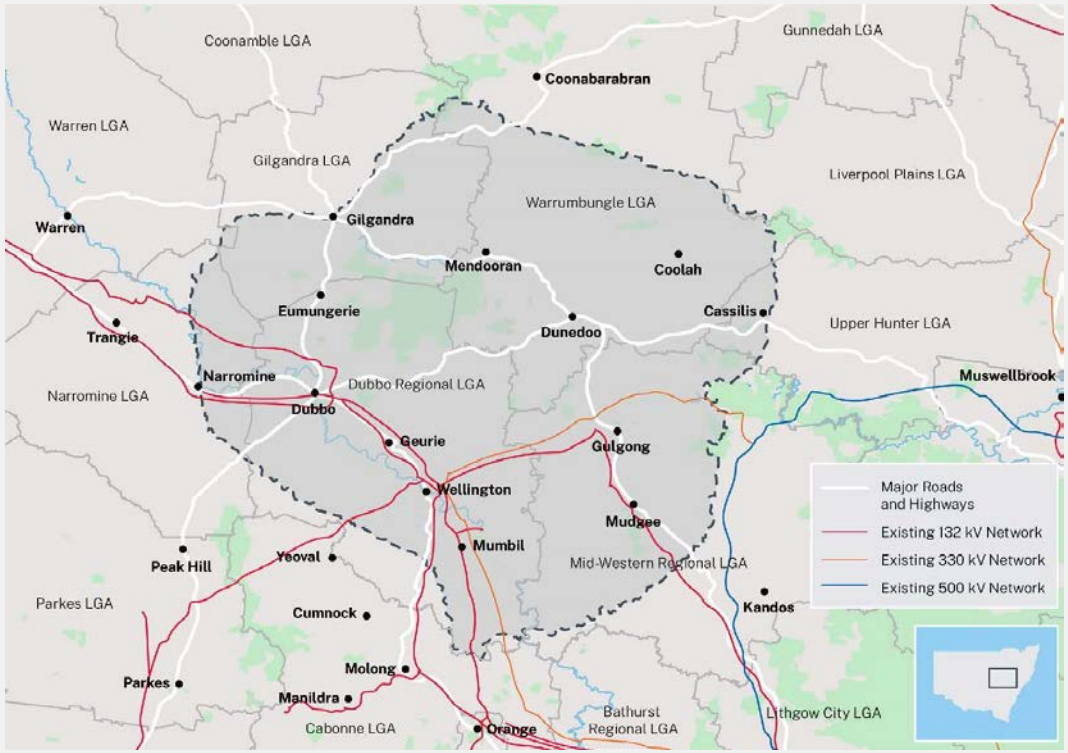
Source: AEMO ISP 2022

Coal-fired power station closures in NSW



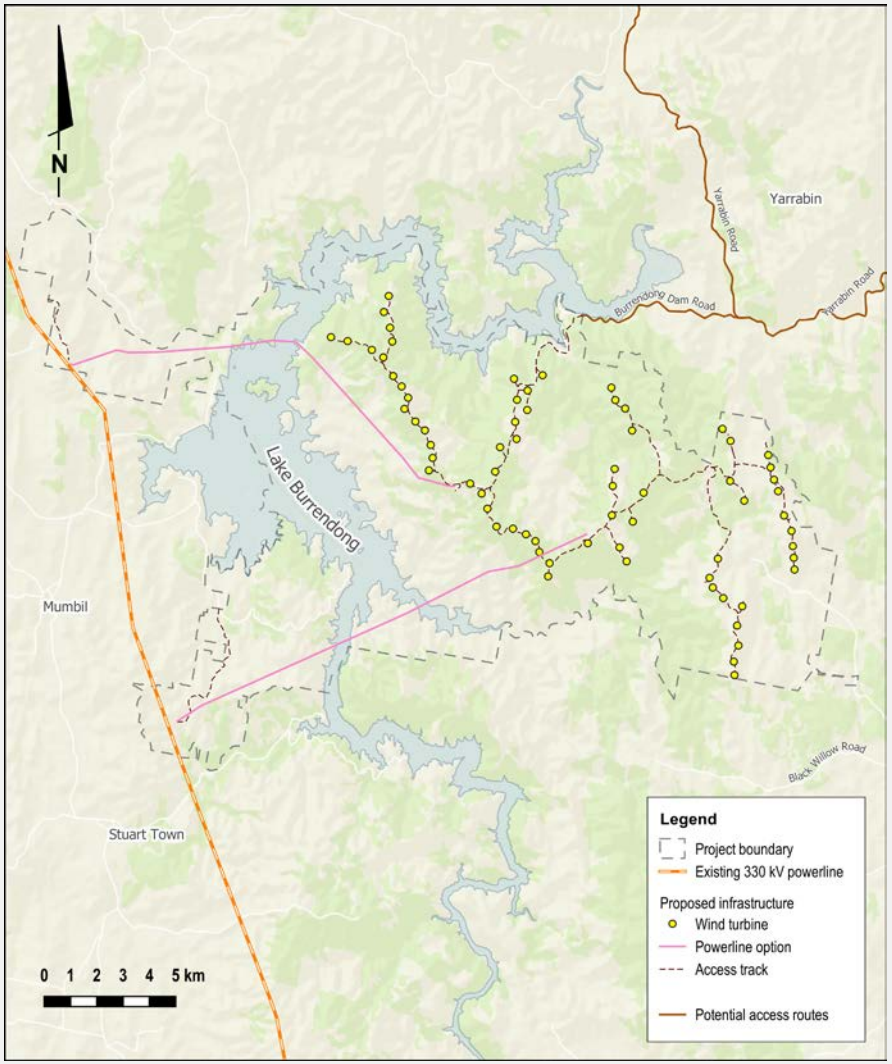
Burrendong Wind Farm

Located east of Lake Burrendong, in Central-West Orana Renewable Energy Zone.



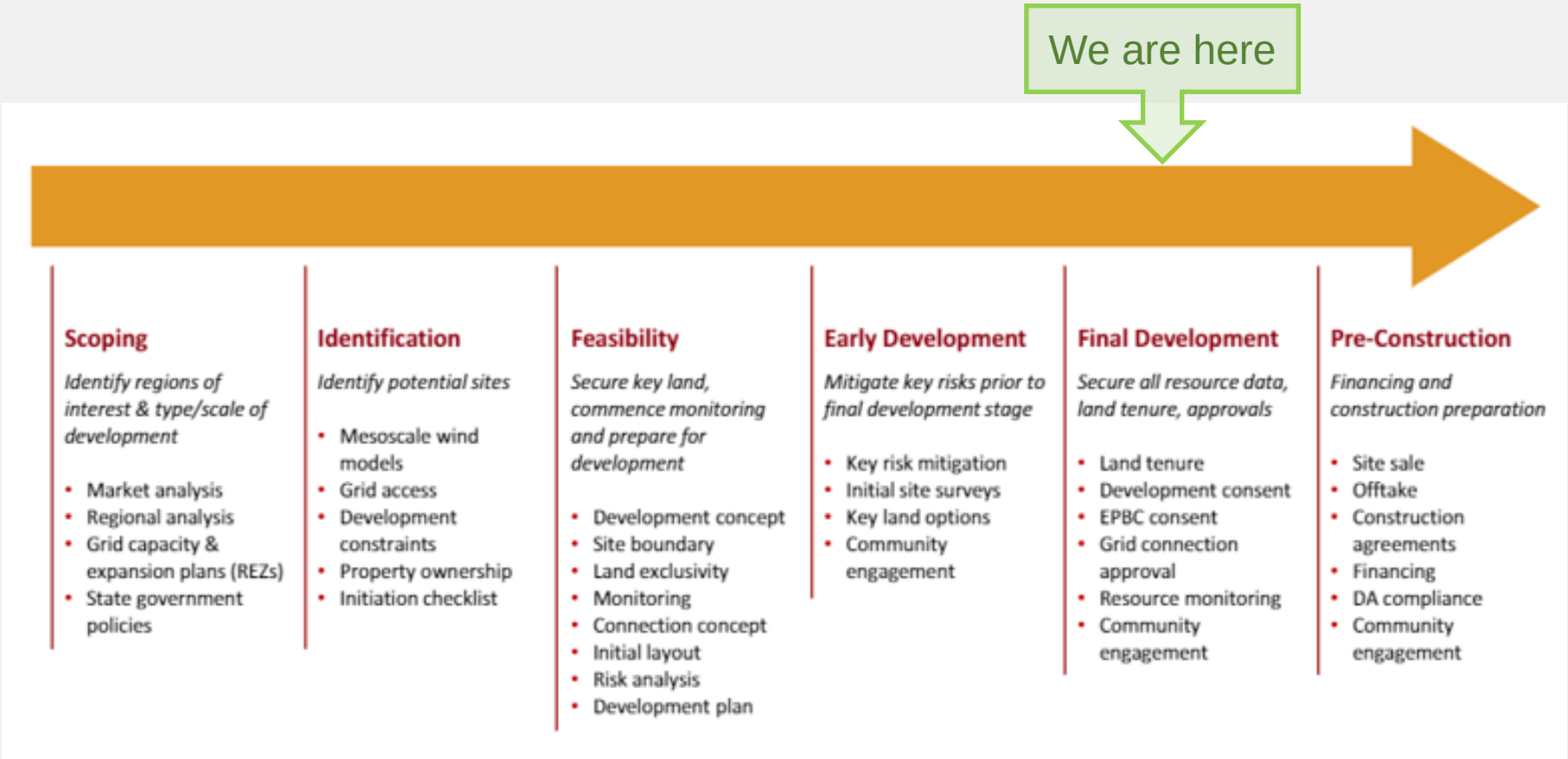
Burrendong Wind Farm

- Up to 70 wind turbines
- Generation capacity 400-500 MW
- Grid connection to Transgrid network – existing Wellington to Mt Piper 330kV transmission line



Project development stage

Project is due to lodge Environmental Impact Statement (EIS) Q3 2023



Wind farm infrastructure

Access tracks – 5 to 6m trafficable width; plus cut / fill batters; drainage and erosion control; cable trenches

Hardstands - crane pad & equipment laydown area (blades, tower, nacelle etc.); 1.5 to 2 ha per turbine.

Tower foundations ~800m^3 concrete.

Collector substation – including 33/330kV power transformers

Wind turbine component installation

Assessment process

- Assessed by the NSW Department of Planning and Environment (DPE) as a Major Project under Pt 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).
- (Updated) Scoping Report accepted 14 Sep 2022
- (Updated) Planning Secretary's Environmental Assessment Requirements (SEARs) for the Environmental Impact Statement (EIS) issued 30 Sep 2022
- (Updated) Referral to the Australian Department of Climate Change, Energy, the Environment and Water (DCCEEW) for review under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) – declared a 'controlled action' that will require assessment and approval under the EPBC Act. Assessment by DPE under bilateral agreement.
- Preparation of EIS in progress – due to be lodged July 2023.
- EIS adequacy review by DPE
- EIS placed on public exhibition

Environmental Impact Statement

SEARs prescribes independent technical studies into potential impacts, and preliminary management plans, including for:

- Landscape and visual
- Biodiversity and ecology (incl EPBC Act requirements).
- Noise and vibration
- Aboriginal and European heritage
- Traffic and transport
- Water
- Land use, including soil erosion and sediment control
- Aviation
- Bushfire
- Telecommunications
- Social impacts
- Economic impacts

Landscape and visual impact

- Requirements outlined in *Wind Energy: Visual Assessment Bulletin.*
- Dwellings within 3.35 km of wind turbines given detailed consideration.
- Tools for visual assessment include photomontages, from selected representative public viewpoints and dwellings as per *Scottish Natural Heritage Visual Representation of Wind Farms.*

Photomontage from Burrendong Dam, approximately 6.9 km away from closest turbine.

Noise

- Criteria and methodology for wind farm noise assessment set by DPE *Wind Energy: Noise Assessment Bulletin.*
- Operational wind turbine noise is predicted using acoustic modelling.
- Noise limits in NSW strictest in Australia and internationally. At a non-associated dwelling must not exceed the greater of 35 dB(A) or the ambient background noise plus 5 dB(A).
- Relationship between wind turbine noise and human health extensively investigated. No consistent evidence that wind turbine noise causes adverse health effects in humans (NHMRC, AMA).
- Noise and vibration impact assessment also includes construction and traffic noise.

Biodiversity

- Initial assessments were undertaken to identify the presence of any threatened species, populations and ecological communities listed under the NSW Biodiversity Conservation Act and the Commonwealth EPBC Act.
- A Biodiversity Development Assessment Report (BDAR) will be prepared in accordance with the Biodiversity Assessment Method 2020.
- The BDAR will identify the biodiversity offset obligation as a result of the project biodiversity impacts and the associated biodiversity credits required.
- The project is a controlled action under the EPBC Act and will be assessed under a bilateral agreement with NSW DPE.

Other matters

- Aboriginal cultural heritage
  - Consultation with Registered Aboriginal Parties (RAPs) including Mudgee LALC, Corroboree Aboriginal Corporation, Gunjeewong, Murong Gialinga Aboriginal & Torres Strait Islander Corporation, Wellington Valley Wirandjuri Aboriginal Corporation, Binjang Wellington Wiradjuri Heritage Survey & Wellington Aboriginal Action Party.
  - Archaeological surveys with archaeologists and RAPs, avoidance / mitigation measures.
- Traffic
  - Consultation with road authorities
  - Assessment of potential traffic impacts on road network, road safety & others
- Fire
  - Potential risks
  - Potential impacts on aerial fighting of bushfires
- Decommissioning
  - All above ground infrastructure to be removed and land rehabilitated at the end of operations

Consultation and engagement

- Guided by best practice and International Association for Public Participation (IAP2).
- Signatory to the Clean Energy Council's *Best Practice Charter for Renewable Energy Projects.*
- Open, accessible, transparent.

Focused on:

- Providing opportunities for interested community members and stakeholders to participate.
- Maximising opportunities for the local/regional community to benefit in meaningful ways.

- Website with feedback form: www.burrendongwindfarm.com.au
- Anytime - info@burrendongwindfarm.com.au or 1800 731 296.
- Newsletters.
- Briefings / meetings.
- Information sessions.
- Community Consultative Committee.
- Proposed community benefit fund $3,000 per turbine per year.

Summary – key points

- Investment of up to $900 million
- Significant economic boost for the Central West region:
  - Expected local and regional expenditure of $45M - $90M.
  - Expected to create 250+ jobs during construction and 10 jobs for operation.
- Annual renewable energy generation ~1,200 GWh enough for about 150,000 homes
- Community benefit program for the life of the project. Estimated $3,000 per installed turbine per year (~$210,000 per year, indexed to CPI)
- Reduction in greenhouse gas emissions of approximately 890,000 t CO2-e / year.

Next steps

- EIS lodgement - Q3 2023
- EIS exhibition period – Q3 2023
- Submissions and response to submissions
- NSW and Federal approvals - Q2 2024
- Procurement & pre-construction activities – Q3 2024 to Q2 2025
- Construction commencement - 2025

Questions

Thank you

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