



Bookham Wind Farm

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At a glance



410k

Expected homes
powered



752MW

Expected capacity



410k

Expected tonnes
of emissions
avoided

Project update

This newsletter provides updates and a summary of activities currently underway. It includes information in response to key issues we've heard from the community as part of our ongoing engagement.

Planning process

Development applications (DAs) for State Significant Development must be accompanied by an Environmental Impact Statement (EIS), which needs to meet the Planning Secretary's Environmental Assessment Requirements (SEARs). Bookham Wind Farm received SEARs in March 2025, and this information is available on the [project website](#).

The EIS will provide detailed information on the economic, environmental, and social impacts of the project. It helps the community, government agencies and the consent authority to make informed decisions about the project and will be prepared by qualified, independent consultants.

The scope and structure of the EIS must consider the [State Significant Development Guidelines – Preparing an EIS \(Appendix B\)](#). The technical assessments required as part of the EIS are underway and are expected to be completed in the next 12 months.

Community

We powered up the local region with a visit from the St George Illawarra Dragons Community Blitz program, bringing sport, wellbeing, and inspiration to local schools, including Bowning, Binalong and Jugiong public schools.

NRL and NRLW stars Ryan Couchman (St George Illawarra Dragons) and Grace Kemp (Canberra Raiders) joined the visits, as well as an afternoon footy clinic at Bookham Oval.

We're proud to partner with the Dragons to deliver the Community Blitz program and help young people be the best they can be - on and off the field.



FAQs

Curious about wind energy and how wind farms work?

We have put together answers to some of our most [frequently asked questions](#).



Next steps

Refinement of the Bookham Wind Farm project layout will continue by using information from ongoing technical studies, civil design and feedback from community consultation.

Ongoing assessments and studies include:

- Biodiversity
- Noise
- Visual
- Electromagnetic Interference and Electromagnetic Fields
- Traffic and transport
- Hydrology and soil
- Aboriginal cultural heritage
- Shadow flicker
- Lighting
- Social-economic impacts

You can read about these assessments and studies in full from pages 3 to 7, as well as other key issues we've heard from the community as part of our ongoing engagement.

Your input is valuable, and we encourage you to share your questions, concerns and feedback. Please contact the project team using contact details below to have your say.

To find out more about Squadron Energy and Bookham Wind Farm visit [our website](#).

Contact us

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Biodiversity

We are about to complete the first 12 months of bird and bat monitoring across the project site, with a further 12 months of monitoring remaining.

We installed two meteorological masts in February 2025, which record ongoing bat activity, including migration, up to 160m in the air.

Fauna and vegetation surveys are being conducted in accordance with the *Biodiversity Conservation Act* (NSW), the *NSW Biodiversity Assessment Method* (BAM) and the *Environment Protection and Biodiversity Conservation Act* (Commonwealth).

In addition to scheduled seasonal monitoring, our specialist ecology consultants will survey nocturnal (active at night) and diurnal (active during the day) bird species, small and large arboreal (tree-dwelling) mammals, reptiles and other species through:

- direct observation
- spotlighting
- camera traps
- hair traps (a tube lined with a sticky substance which catches some of the animal's hair as it passes through, the hair being used to identify the animal)
- drone surveys
- collision risk modelling.

This will provide an evidence-based approach to preparing the *Biodiversity Development Assessment Report* (BDAR) for submission with the EIS.

The BDAR is being independently prepared by a person accredited under the NSW accreditation scheme for application of the BAM. An aquatic ecology assessment will also be starting, as will studies of streams, water bodies, riparian (riverbank) areas, hollow-bearing trees and other valuable wildlife habitats.



Visual

A detailed assessment of the landscape and visual impacts of all components of the project is to be completed in accordance with the *Technical Supplement for Landscape Character and Visual Impact Assessment* (2024).

To ensure consistency and accuracy, photomontages are prepared in accordance with specific methods and within photographic parameters. Lenses with 50mm focal length must be used, the camera must be positioned at a specified height above ground, and photos must be taken at set times of day. There is no deliberate distortion of images through the choice of photographic equipment or any other means.

Noise

A noise and vibration impact assessment will model potential noise and vibration impacts during construction and operations. The methodology will conform to the *Wind Energy Guideline: Technical Supplement for Noise Assessment*.

The meteorological masts installed earlier this year provide wind data which can be used to support noise modelling. The next step is to start noise monitoring at selected dwellings to determine existing background noise levels to inform the technical assessment and ensure we comply with noise guidelines.

It cannot be assumed that taller turbines, or higher generating capacity turbines are necessarily noisier because technology differs between different manufacturers. The worst case sound power level for the turbines being considered will be used in the noise modelling.

Wind turbine syndrome is an alleged illness with reported symptoms of headaches, nausea, sleep problems, vertigo and tinnitus among others. There are claims that wind turbine syndrome is caused by exposure to low frequency noise or 'infrasound'. There have been multiple scientific, peer-reviewed studies on wind farm noise that have found that infrasound from wind farms does not cause negative health effects. Wind farms are considered a safe and clean source of renewable energy.

The National Health and Medical Research Council (NHMRC, 2015) identifies no consistent evidence that wind farm noise causes adverse health effects in humans.

The NSW DPHI Renewable Energy Framework FAQs (2024) identify that low frequency noise is typically not a significant feature of modern wind turbine noise when it complies with noise limits that are weighted to human hearing.



Electromagnetic Interference (EMI) and Electromagnetic Fields (EMF) Assessments

The EMI assessment examines the potential impact on existing telecommunication systems. The project must demonstrate compliance with the Environment Protection and Heritage Council (EPHC) *National Wind Farm Development Guidelines*.

The EMF assessment calculates electric and magnetic fields including from the project's overhead and underground electrical services. A complete impact assessment is carried out against exposure guidelines set by the International Commission on Non-ionising Radiation Protection (ICNIRP) and the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

Traffic and transport

The project will assess traffic impacts during the construction, operation and decommissioning phases. We will prepare a detailed Traffic and Transport Assessment to examine traffic generation, road and intersection upgrade requirements, and assess the impact of project traffic on public transport users and vulnerable road users including pedestrians, cyclists and schoolchildren.

A traffic management plan will be prepared to minimise traffic safety risks, including minimising disruption to local road users. It will include a cumulative impact assessment of traffic from any nearby developments.



Hydrology and soil

A surface water assessment is a requirement to understand potential impacts of the project on surface water runoff, flood risks, risks and impacts to waterways and water quality.

An erosion and sediment control plan will be prepared to understand and manage the site's water and soil conditions during construction. A soil survey will start shortly to determine the soil characteristics and consider the potential for erosion.

As part of the EIS, an assessment of the compatibility of the development with existing land uses during construction, operation and decommissioning will be carried out.

We will assess how much water will be required to build and operate the project, identify available water sources and understand licensing requirements. We may also need to assess alternative water supply options, if a secure water supply is not available on site.

Contamination

There are no known contaminants of concern associated with renewable energy materials subject to appropriate design and environmental controls.

Livestock Production Assurance (LPA), a program existing to ensure Australian-produced red meat is safe to eat and is free from contamination says:

“There is no prohibition or restriction on having transmission lines, solar panels, wind turbines or any similar operations or equipment on property. Having such infrastructure on property does not impact obtaining or retaining LPA accreditation and there are no additional audit requirements for a producer. If the infrastructure is maintained, there should be no problem.”

Socio-economic impact assessment (SEIA)

A Social Impact Assessment and Economic Impact Assessment will start soon, as part of the preparation of the EIS. These assessments will include an agricultural impact assessment, workforce accommodation strategies, employment opportunities, economic benefits and impacts, project decommissioning and other socio-economic considerations specific to Bookham and the region. These will be prepared by an independent specialist consultant, in accordance with the *NSW Social Impact Assessment (SIA) Guideline*, *NSW Benefit-Sharing Guidelines*, *NSW Cumulative Impact Assessment Guideline for State Significant Projects* amongst others.



Shadow flicker

A shadow flicker assessment will be conducted according to guidelines to assess potential flicker durations at dwellings. The guidelines state that the shadow flicker experienced at any dwelling should not exceed 30 hours per year as a result of the operation of the wind farm.

Lighting

Aviation safety is thoroughly assessed as part of the EIS, in consultation with the Civil Aviation Safety Authority (CASA). CASA may recommend aviation hazard lighting on each WTG. However, this requirement will ultimately be determined by the consent authority for the project.

Insurance

The Insurance Council of Australia (ICA) has stated that insurers do not have specific concerns related to neighbouring clean energy infrastructure. At the time of writing, the ICA is not aware of any instances where its members have been unable to provide insurance, or have increased premiums as a result of a farm or a neighbouring property hosting energy infrastructure.

During the construction and operational phases of our projects, Squadron Energy takes out a range of insurance policies, including policies that respond to loss or damage resulting from a cause originating on neighbouring land.

Aboriginal cultural heritage

An Aboriginal Cultural Heritage Assessment will be prepared in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW and the NSW Community Consultation Guidelines.

Aboriginal heritage surveys were recently completed prior to drilling bore holes to assess substrate conditions. We will continue to engage with local First Nations stakeholders.

Bushfire

Wind farms are typically located in agricultural areas with existing bushfire risk. Their presence does not materially increase this risk and facilitates improved ground-based access by the all-weather, low gradient access tracks throughout the site, strategic location of firewater, and vegetation management. The lightning protection on wind turbines reduces the risk of fire from lightning strikes within a wind farm.

As part of the EIS, the project must assess the risks associated with fires given the proximity of the project to bushfire prone land. This will include assessing the potential impacts of the project on the aerial fighting capability during bushfires.

Firefighting Aircraft Operations: Squadron Energy complies with aviation regulations to record structures encroaching into airspace throughout development, construction and operations to mitigate risk of any collision. Agency guidelines require a minimum 300m separation between turbines to allow safe aerial firefighting and that operators must shut down turbines and rotate them into a uniform 'Y' position during fire events. This can be performed remotely and at the touch of a button.

Operational Protocols: Wind farms are equipped with lightning protection, temperature monitoring systems, and permanent site teams. These features support early detection and rapid response to fire events.

Squadron Energy works closely with local RFS teams to ensure coordination and cooperation in the event of a fire in or near our wind farm sites. Onsite staff are trained in firefighting.

The Australasian Fire and Emergency Service Authorities Council (AFAC), which includes the NSW RFS as a member, published a detailed guideline titled [Wind Farms and Bushfire Operations](#).

A Bushfire Emergency Management Plan will address the operational requirements in relation to aerial firefighting and access. These requirements will be developed in consultation with the RFS and generally in accordance with the AFAC Guidelines.

Battery Energy Storage System: the project will be preparing a separate hazard analysis for the battery energy storage system (BESS).

The project will be consulting with Fire and Rescue NSW to ensure that the battery technology selected meets fire safety guidelines.

Decommissioning

There will be requirements in the development consent around decommissioning, including decommissioning and waste management plans.

The industry is continuing to explore options to recycle blades. It is an important issue and Squadron Energy is a member of the Clean Energy Council's Wind Industry Recycling and Waste Management Working Group.