

# Cellars Hill Wind Farm – Frequently Asked Questions

## PROJECT

### What type of project is being proposed at Cellars Hill?

The Cellars Hill Wind Farm is a grid connected wind farm with potential capacity up to 350MW. It will include electricity infrastructure (such as a switchyard and substation) to facilitate connection into the existing 220kV transmission line that runs through the site.

The proposal includes land for construction, maintenance, and operation, new access tracks and upgrades to existing tracks, laydown areas and security infrastructure.

The wind farm will be constructed to enable the continued use of the land for agricultural, conservation, forestry and hunting practices.

### How much land will the wind farm cover?

The total site area of the wind farm is approximately 8,460 hectares. Of that, approximately 430 hectares will comprise the construction footprint, to enable development of the wind turbines and other infrastructure (roads, internal transmission, switchyard and substation etc).

Following construction, the operational footprint which will remain for the life of the project will comprise approximately 345 hectares. Of this footprint, approximately 157 ha comprises easements for underground cabling and the overhead transmission line. Restrictions will remain over this land for the operational period, however the land will largely return to existing agricultural use.

The remainder of the site area will be left undisturbed, and the parts of the construction footprint no longer required will be rehabilitated.

### Who is developing the project?

Alternate Path and Gamuda Engineering are working with local landowners to co-develop and construct Cellars Hill Wind Farm.

Together, the partnership brings decades of experience in renewable energy development, including the successful Cattle Hill Wind Farm, located on the eastern shore of Lake Echo.

As established local families, the landowners are committed to sensitively considering the environmental and cultural values of the area, ensuring the local community benefits from the project and their ongoing stewardship of the land. This includes a \$1,000 annual energy subsidy per household/business within 12 kilometres of the project, paid for the life of the project.

The overall vision is to use the renewable electricity generated on-site to support sustainable businesses and industries in the local area, through a 'Behind the Meter' connection to generate real and lasting social and economic benefits for Bothwell, surrounding communities and the state of Tasmania.

### What makes Cellars Hill suitable to host wind turbines?

The project is suitably located within the Central Highlands Renewable Energy Zone (T3-REZ) and benefits from being adjacent to existing 220 kV transmission line infrastructure. This means that there is no need to build new external transmission lines, minimising impacts on the local landscape. In addition, the wind farm is sited in an area that is remote and sparsely settled, and more than 7 kilometres from the nearest town, reducing impacts on the local community.

Further, the site has already been disturbed through grazing and forestry, and areas of remaining biodiversity value will be protected as far as practicable.



### How many wind turbines are being proposed?

Cellars Hill Wind Farm will have up to 55 turbines. This is reduced from an initial plan of approximately 89 turbines over a broader area following biodiversity studies and early neighbour and community engagement.

### How large are the wind turbines?

The model of wind turbine being used for Cellars Hill Wind Farm will be confirmed once technical assessments are completed. At this stage, it is expected that the diameter of the wind blades will be up to 164 metres, with up to 82-metre-long blades. The height of the turbine 'hub' will be up to 168 metres from ground level with a maximum tip height of up to 250 metres. This is the standard height of wind turbines currently on the market, and less than other Tasmanian projects being proposed at 270m.

### Will I be able to see or hear the wind farm from Bothwell or other local towns?

The closest turbines within the Cellars Hill Wind Farm will be located at least 10 kilometres from Bothwell, 7 kilometres from Osterley and 15 kilometres from Ouse. These distances are comparably further than most Tasmanian wind farms.

At this distance, there will be minimal visual impact on Bothwell and other local towns and many of the turbines will be hidden by natural undulations in the land. Whilst there will be some turbines visible from various vantage points, it will be visually recessive and will not dominate the landscape from these distances.

A landscape and visual impact assessment is being prepared to inform the planning and design of the project and mitigation measures such as landscaping would be implemented, if required. As seen in the diagram below, the visibility of wind turbines alters significantly as viewed from varying distances.



Figure 1 – Visual prominence of 250m turbines at varying distances (NSW Department of Planning, Housing and Infrastructure, Wind Energy Guideline).

A noise assessment is being prepared, but at this distance, surrounding dwellings and Bothwell will easily meet the stringent noise standards in use in Tasmania. As pieces of machinery, wind turbines inherently generate noise during operation. Most operation noise comes from the blades moving through the air and the mechanics inside the turbine hub. Operational noise is only noticeable at particularly close distances to each turbine and significantly reduces as distance from the turbine increases. Other electrical infrastructure that will be developed as part of the project, including the inverters, transmission line, substation and switching station, will also generate some noise.

### **Is there enough wind to generate sufficient electricity?**

Yes. According to [Building Tasmania](#), Tasmanian wind farms produce more energy than most areas on mainland Australia due to their ability to capture the prevailing westerly winds from the reliable 'roaring forties'. Tasmanian wind farms also have a greater efficiency which means less turbines are required to produce the equivalent volume of energy.

### **How will Cellars Hill Wind Farm connect to the energy grid?**

The Cellars Hill Wind Farm will connect to the National Electricity Market (NEM) through the existing 220kV transmission line in the site running parallel to Highland Lakes Road. This existing connection avoids the need to install new external transmission lines in the area. The connection point will include a switchyard which is being developed as part of the adjacent Weasel Solar Farm (approved separately).

### **Will the properties hosting turbines continue to be used for forestry, agriculture, conservation and hunting practices?**

Yes, Cellars Hill Wind Farm is being designed and will be constructed to ensure established grazing, forestry, conservation and hunting practices can continue throughout operation. The wind turbines themselves only occupy a small portion of the site's ground cover, meaning these practices can continue around them. Hunting can also continue at the site, subject to additional precautions.

## PLANNING & DESIGN

### What planning and environmental approval process is used for a wind farm project in Tasmania?

Cellars Hill Wind Farm sought a Major Project declaration from the Minister for Planning. In February 2025, the Minister for Planning declared the Cellars Hill Wind Farm project a Major Project for its scale as well as its contribution to the region's economy, environment or social fabric.

The Major Project process is facilitated via division 2A of the *Land Use Planning and Approvals Act 1993*. A Major Project Impact Statement is currently being prepared to provide a comprehensive assessment of the impacts of the project.

In addition, Cellars Hill Wind Farm has been referred under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) due to its potential to impact on Matters of National Environmental Significance (MNES), notably flora and fauna. The assessment of MNES as required under the EPBC Act will be included in the Major Project Impact Statement.

### What is the Major Project process and timeline?

The Tasmanian Planning Commission acts on behalf of the Minister for Planning as the Planning Authority for the Major Project process.

Once declared as a Major Project, the Commission is directed to establish a Development Assessment Panel. The Major Project Impact Statement would be provided to the Panel and participating regulators for initial assessment.

Once lodged, and following initial assessment, an assessment report is publicly exhibited, a public hearing is held, and a determination is made as to whether a permit will be granted, and a final assessment report is issued.

Subject to necessary approvals in 2027, construction of the wind farm could begin in 2027/2028 and become operational in 2029/2030.

### What environmental studies must be undertaken to ensure impacts are identified and avoided or minimised?

Environmental studies are undertaken by independent experts to identify possible project impacts. These studies are used to inform decisions about design, planning and construction management.

Studies typically undertaken for a wind farm project include:

- Traffic
- Noise
- Cultural Heritage
- Flora and Fauna, including Bird and Bat studies
- Landscape and Visual
- Shadow Flicker
- Electromagnetic Interference and Communications
- Fire
- Surface Water and Groundwater
- Socio-economic
- Aviation
- Agricultural Land Use
- Air Quality and Emissions
- Waste management

### **When will construction start and for how long?**

The construction period would be expected to take approximately two years. If the proposal is approved, construction could commence in 2027 or 2028, with operations expected to begin in 2029 or 2030.

Construction traffic will use Highland Lakes Road as the primary site access, secondary access points will be provided at Meadsfield Road and Waddamana Road.

### **What are the potential impacts of the project?**

The careful planning and construction of the wind farm will ensure that local biodiversity is preserved, demonstrating a commitment to environmental stewardship while driving forward Tasmania's clean energy future.

As part of this, the project team is completing a range of assessments and studies to ensure the plans for the wind farm avoid or minimise impacts on biodiversity, cultural heritage, noise, landscape character and visual amenity. Overall, a wind farm in a good location can be very low risk, and those potential localised impacts can be addressed through careful design.

The project could also provide a range of positive impacts for the Central Highlands community. The Cellars Hill Wind Farm is proposed to provide financial relief by covering electricity bills up to \$1,000 annually for all local households and businesses within 12 km of the project, for the life of the project.

Additionally, it can create local jobs for the Central Highlands region and support Tasmania's net-zero transition. Combined with other energy projects in the region, it will contribute to a growing regional employment sector.

### **How will views of the wind turbines be minimised for neighbouring properties?**

The project has sought to reduce visual impacts by early identification and exclusion of areas that pose the greatest visual prominence and cannot be screened by existing woodland vegetation.

Following environmental studies and early neighbour and community engagement, the quantity of turbines has been reduced and shifted further from Bothwell.

Most of the surrounding area is quite undulating and the areas selected for the wind farm turbines are relatively distant from surrounding viewpoints. There may be some visual exposure to neighbouring properties, although given the nature of the site, the distance from local towns and very few residences in close vicinity, it is a highly suitable location.

A full landscape and visual impact assessment is being prepared as part of the Major Project Impact Statement and will detail the landscape values of the area and make recommendations to further minimise these impacts.

### **How will Cellars Hill Wind Farm benefit the local economy?**

The project vision is to use renewable energy generated in the Central Highlands to support sustainable businesses and industries in the local area through a 'Behind-the-Meter' connection. Doing so would generate real and lasting social and economic benefits for Bothwell, surrounding communities and the state of Tasmania.

The Cellars Hill Wind Farm will generate employment opportunities for local and regional communities. Additionally, the project is expected to provide opportunities for local businesses to be involved during the construction phase and will promote the growth of new industries to support local economic development.

The key economic impacts anticipated for this project include:

- More than 230 direct jobs in the construction phase
- Approximately 14 direct ongoing jobs during operation

- Opportunities for training and development within the renewable energy industry
- Delivery of more affordable and secure electricity, with a capacity equivalent to powering approximately 140,000 Tasmanian homes.

Furthermore, this includes a proposal for a \$1,000 annual energy subsidy per household and businesses within 12 kilometres of the project.

The project team is interested in understanding community perspectives on benefit sharing and open to additional suggestions from members of the Central Highlands community.

## CONSULTATION & COMMUNITY

### Who has been consulted about the proposed wind farm?

A detailed Community & Stakeholder Engagement Plan was prepared in 2024 to ensure stakeholders are informed and consulted at key phases of the planning process.

A priority of the project team was to seek early neighbour feedback and input it into the concept design of the wind farm. Since early 2024, the project team have been corresponding with neighbours who are either involved, adjacent to or overlooking the developable areas.

The project team has also met with local members of parliament, Council and the State Government to brief them on the proposed wind farm. Further engagement is planned as the project moves into the Major Project Impact Statement phase.

### Will I get a chance to have my say about the project?

As part of the Major Project process, the Development Assessment Panel will formally place the Major Project Impact Statement on public notice – likely in 2027 – providing an opportunity for public representations. The project team will also be hosting another Community Information Drop-In Session in mid-2026 to share information on the project and allow for direct feedback.

If you have questions or feedback related to the project, please reach out to the project team via [consultation@cogencyaustralia.com.au](mailto:consultation@cogencyaustralia.com.au) or on 0452 593 428.

### When have community drop-in sessions been held about the project?

The project team held a Community Drop-in Session on Tuesday 10 December 2024 at the Bothwell Town Hall, from 4:00pm to 7:00pm, outlining the project and seeking feedback.

A second Community Drop-in Session is being held on Tuesday 25 August 2026 at the Bothwell Town Hall, from 3:30pm to 7:00pm, providing updates following Major Project declaration and seeking feedback.

Details about the project that were presented at the sessions are available on the [website](#).

### How and when will updates about the project be provided?

In the early planning stages, the project team expect to provide project updates at regular intervals. The [website](#) will continue to be updated as the project moves through the planning process.

### What community benefit sharing could be offered with this type of project?

The Proponent is committed to ensuring that Cellars Hill Wind Farm directly contributes to the long-term prosperity and wellbeing of the Bothwell community. The project team is proposing a Cellars Hill Wind Farm Energy Subsidy, providing financial relief by covering electricity bills up to \$1,000 annually for local households and businesses within 12 km of the project, for the life of the project.

### Is there work for local people and businesses?

The project team, including Gamuda Engineering, is committed to employing local people, buying local and working with Tasmanian businesses, wherever possible.

We're always on the look out to build new working relationships local businesses and encourage businesses to register their interest via [email](#).

### What is the Community Reference Group?

A Community Reference Group is being established as an advisory body aimed at providing an additional channel for feedback and input to the project. The project will soon announce the members of the Community Reference Group to the wider community, and hold their first meeting.



## ENVIRONMENT

### Will a wind farm affect local waterways?

Water resources are critically important to the sustainability of local farm enterprises. Hydrological modelling will be undertaken as part of the Major Project Impact Statement to understand potential flood risk across the properties, so that the design can avoid areas that are subject to flooding. This will also consider stormwater runoff so that local rivers are protected. Similarly, areas of potential erosion will be considered and managed.

### Will a wind farm affect local flora and fauna?

The turbine locations will be selected to avoid impacts to local flora and fauna as far as possible. The wind farm is primarily proposed on already disturbed or modified land, such as areas currently used for grazing and forestry rather than on areas with high ecological value.

A range of flora and fauna studies have been carried out to date, and will continue to be undertaken, including targeted surveys, as the project progresses. Environmental and nature conservation groups like WWF, Greenpeace, Friends of the Earth, and Birdlife support wind energy. Birdlife recently stated that climate change was the single largest threat to birds and renewables were a clear solution to mitigating the effects of anthropogenic climate change.

The project will be subject to comprehensive assessments which ensure that their potential effect on the immediate surroundings, including fauna and flora, are carefully considered before construction commences.

### Will the wind turbines injure eagles and other birds?

The project layout has been undertaken in consideration of Raptor, Bird Utilisation and Nest Surveys which provide an indication of the likely avifauna that utilises the site for nesting, habitat or during migration. A one-kilometre turbine exclusion buffer has been applied to the known location of eagle nests. The Major Project Impact Statement will provide a detailed overview of bird species thought to exist on the site and methods to reduce impacts.

The Proponent is committed to the use of IdentiFlight to reduce impacts on avifauna. IdentiFlight technology is the international best practice for bird detection and collision avoidance for wind farms and has been successfully implemented at the nearby Cattle Hill Wind Farm.

Deaths from birds flying into wind turbines represent only a fraction of those caused by other human-related sources such as vehicles and buildings. During operations, trained observation groups and detection dogs are used to find birds and bats near turbines. The technique is used to develop an estimate of the impact of the turbines during the early phases of operation.

### How does IdentiFlight protect species of birds?

IdentiFlight consists of stereo and wide-field-of-view cameras, proprietary software, and neural network technologies to determine position, velocity and trajectory, of protected birds, all in real time. When a bird of interest is detected, the turbines slows and shuts down, allowing the bird to pass. Further details about the technology can be found on the IdentiFlight [website](#). IdentiFlight is a recognised mitigation measure that has been used successfully in several wind farms across the world, including the nearby Cattle Hill Wind Farm.

The development of the Cellars Hill Wind Farm includes collaboration with IdentiFlight to ensure that species of interest, particularly Tasmanian Wedge-tailed Eagles, can be protected throughout the operation of the wind farm.

## What happens if a wind turbine catches fire?

Fortunately, the risk of fire at wind farms is very low due to:

- the location of turbines in relation to cleared construction hardstand areas which reduce available fuel load
- lightning protection devices installed on every turbine, which in turn reduce ground strikes that might otherwise have started fires
- monitoring systems are installed in turbines to detect temperature increases and will automatically slow or shut down the turbine if the temperature or windspeed exceeds an assigned threshold
- any flammable elements are located high above the ground.

A fire management assessment will be prepared to inform the planning, design, construction and operational management of the wind farm, and detailed in the Major Project Impact Statement.

## Could wind farms make fighting a bushfire harder?

Wind farms are planned and constructed in consultation with the appropriate fire authorities.

Wind farms are not considered to increase fire risk. In fact, in most cases wind farms benefit firefighting because of their large access track network and greater monitoring. These provide quicker access to fires, and act as fire breaks. Further, the additional personnel on site during construction and operation, and additional water access points and tanks, act to assist fight fighting efforts.

Furthermore, wind farms are not considered to pose a major hazard for fighting bushfires from the air as turbine coordinates are logged with airspace authorities and pilots quickly become accustomed to the turbines. Pilots view turbines as no different to other tall structures and hazards such as power lines, transmission towers, radio masts, mountains and valleys. Wind farms are just another piece of infrastructure in the environment that need to be managed on a risk basis when fighting fires.

## WIND TECHNOLOGY

### What is wind energy?

Wind energy works by converting the kinetic energy from moving air into electrical energy through the use of an electrical generator spun by wind turbines. As winds force the turbine blades to spin, they rotate a shaft inside the hub of the turbine, which is connected to a generator which contains coils of electrically conductive material and strong magnets. As the shaft turns, it spins these magnets around the coils, creating a flow of electrical energy, which in turn is sent to the electricity grid to power homes and businesses or stored in batteries for later use.

According to the [Global Wind Energy Council](#), a record 165 GW of wind power was installed last year, (up 40% on the previous record year of new capacity). Over 28,300 wind turbines are to be installed across 57 countries in 2026.

### How much power does wind energy generate in Australia?

According to the [Clean Energy Council](#), wind power accounted for 13.4 per cent of all electrical generation in 2024.

### What's involved in designing a wind farm in Tasmania?

Designs are developed iteratively and refined over time as more information becomes available, such as site investigations, confirmation of planning requirements from the Tasmanian Planning Commission and early community engagement.

We look at a wide range of technical, community and environmental considerations, including:

- local topography
- proximity and connectivity to the grid
- relevant standards, guidelines and legislation
- stakeholder and community feedback
- constructability – whether the design is practical to build
- connections to local roads and transport routes
- environmental and heritage impacts
- operations and maintenance requirements
- ongoing productivity of the land
- project cost and value for money.

### How long does it take to build a wind farm?

Depending on the size of the wind farm and weather conditions, construction can take about two to three years.

### What is the lifespan of a wind farm?

A wind farm (including all its components) has a typical lifespan of around 25 to 30 years, during which, the turbines can operate efficiently to generate clean electricity. However, just like all machinery, turbine components such as the blades, gears and electrical systems, may wear out and need maintenance over time. Regular servicing and maintenance help keep the turbines running smoothly throughout the wind farm's operational lifespan.

After 25 to 30 years, a wind farm might need to be upgraded, which involves replacing older turbines and components with new, more efficient ones. Alternatively, the wind farm can be decommissioned, where the turbines are dismantled and removed.

### Do wind farms generate power on low wind days or during extreme weather?

Modern wind farms still generate power on low wind days, but the exact amount they produce depends on wind speed. On days where wind is weak, the turbines will spin slower and generate less power, but they typically still produce some electricity.



During extreme weather events, such as very high winds or storms, turbines may automatically shut down to protect them from damage. Most modern wind turbines are designed to stop operating if wind speeds go above a certain limit, usually 90 kilometres per hour. Once wind speeds return to nominal levels, they can start up again and resume generating power.

Each wind turbine will connect into the National Electricity Market (NEM), an interconnected system that covers Queensland, New South Wales, Australian Capital Territory, Victoria, Tasmania and South Australia. The NEM is supplied by electricity from many geographically and technologically diverse generators, allowing electricity from all over the country to reach homes and businesses where it's needed.

The Australian Energy Market Operator (AEMO) manages the system to ensure that a mix of generators and storage technologies are available to meet demand. If the wind is not blowing at one wind farm, generators in other regions or using other technologies should be available to meet demand.

### **What is renewable energy?**

Renewable energy is clean energy generated from natural resources that are abundant and are replenished at a higher rate than they are consumed, even if their availability depends on the time of day or weather. These resources include solar, wind, and hydro power.

On the other hand, fossil fuels such as coal, gas, and oil are non-renewable resources that take millions of years to form and be replenished. When burned, these fossil fuels produce harmful greenhouse gas emissions and other pollutants, which heavily contribute to climate change.

### **Why should renewable energy be generated?**

Cellars Hill Wind Farm and the uptake of other renewable energy projects are crucial for fostering a more sustainable and affordable future. To mitigate the escalating impacts of climate change and achieve emissions reduction targets, substantial changes to the energy sector are essential.

### **Do wind farms affect human health?**

The National Health and Medical Research Council (NHMRC) is the Australian Government's primary health and medical research funding agency and have stated there is no direct evidence that exposure to wind farm noise affects physical or mental health.

While exposure to environmental noise is associated with health effects, these effects occur at much higher levels of noise than are likely to be perceived by people living near wind farms in Australia. The parallel evidence assessed suggests that there are unlikely to be any significant effects on physical or mental health at distances greater than 1,500 m from wind farms.

### **Where are wind turbines manufactured?**

In terms of the geographical split, six out of ten of the world's wind turbine manufacturers are based in Europe, while the remaining are based in Asia-Pacific.

Historically there has been minimal local manufacturing due to the high cost of labour in Australia and the existence of greater industry support in other countries. However, global wind turbine original equipment manufacturer (OEM), Vestas, [announced](#) that it has partnered with local Victorian contractor, Marand Precision Engineering, to establish a turbine assembly and testing facility at the former Ford Geelong manufacturing site.

### **Can wind turbines be recycled?**

Yes. The steel, iron, aluminium, copper, concrete, and electronic components of wind turbine foundations, towers, and wiring can be completely recycled.

Most parts of a wind tower can be recycled but there are currently limited options for turbine blades.

In April 2023, the [Clean Energy Council](#) released *Winding Up: Decommissioning, Recycling and Waste Management of Australian Wind Turbines*. The report highlighted that between 85 and 94 per cent of a wind turbine can avoid landfill disposal. This can occur through a range of recycling or repurposing raw materials to partial or full recommissioning of turbines via service life extension or even reuse in future projects within Australia.

The industry is currently seeking to go further and eliminate waste disposal during the end-of-life pathways, including composite materials such as carbon fibre and fibreglass commonly used in turbine blades.

### What kind of jobs do wind farms create during construction?

Construction and operation of a wind farm provides an economic boost for regional communities by increasing demand for local goods and services, such as accommodation, restaurants and cafes. The types of jobs created during construction include:

- Domestic scale electricians
- Transport operators
- Machine operators
- General labourers
- Civil and engineering workers
- Road workers
- Quarry related jobs
- Fencing and signage
- Concrete suppliers
- Accommodation providers
- Local shops, pubs, accommodation and food service providers.

### Do wind farms impact the value of land?

Studies have been completed in recent years about [property prices](#) on land surrounding wind farms. These studies indicate that there is insufficient data to have a conclusive answer, though windfarms are unlikely to negatively impact on the value of surrounding land in an agricultural setting.

A [2016 study](#) commissioned by the NSW Office of Environment and Heritage had similar findings and states that for rural properties used for primary production, there is no direct loss of productivity resulting from wind farms; therefore, they are unlikely to negatively impact the value of such properties.

### Is renewable energy cheaper or more expensive than nuclear energy in Australia?

According to the CSIRO's [GenCost: cost of building Australia's future electricity needs 2024-2025](#) draft report, renewables have the lowest cost of any new electricity generation. By 2030, solar and wind (including transmission and storage costs) are projected to cost between \$67–\$137/MWh. In comparison, large-scale nuclear and small modular reactors (SMRs) are estimated to cost \$150–\$245/MWh and \$285–\$487/MWh, respectively.

Despite recent discussions around the cost of deploying nuclear energy, the GenCost report shows that nuclear electricity remains significantly more expensive than renewables.

### Where will visiting workers be accommodated?

Wherever possible, we are committed to using a local labour force during construction. For visiting workers, suitable accommodation will be identified in consultation with key community groups including Council. This may include Bothwell, Ouse, Miena, Hamilton, or Hobart.