

# **ENERGY** FORMS

## CONSULTATION OUTCOMES REPORT

# Wimmera Plains Energy Facility



For BayWa r.e.



#### Prepared for BayWa r.e

Version	Author	Date	Description of changes
1	Fi Cotter	25/04/2020	First Draft
2	Fi Cotter	14/05/2020	Final Draft for client comment
3	Fi Cotter	22/05/2020	Final Draft

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#### TABLE OF CONTENTS

<u>1.</u>	INTRODUCTION	4
<u>2.</u>	DEFINING THE COMMUNITY	4
<u>3.</u>	BACKGROUND	5
<u>4.</u>	ENGAGEMENT ACTIVITIES	6
SUN	IMARY	6
DRC	DP-IN SESSION	7
Ηοι	ISE VISITS	8
<u>5.</u>	CONSULTATION OUTCOMES TO DATE	8
<u>6.</u>	CONCLUSION	8

#### TABLES

Table -1 Consulta	ation Activities	 

#### FIGURES

Figure -1 Site Location	4
Figure2 Surrounding Dwellings	5
Figure -3 Drop-In Session	7

#### **APPENDICES**

Appendix A - Newspaper Notices for Drop in Session	. 6
Appendix B Material Used at Drop-In Session	. 6
Appendix C - FAQ Sheets	. 6



## **1.** INTRODUCTION

This report summarises the outcomes to date resulting from the consultation which has occurred in relation to the proposed Wimmera Plains Energy Facility (the Project). It is to be read in conjunction with the Wimmera Plains Consultation and Engagement Plan which was first prepared in May 2019 and updated in May 2020.

The proposed Wimmera Plains Energy Facility is bounded by Kalkee East Rd and Mokepilly Rd to the north, Dogwood Road, Dooen-North Rd and Kelly Rd to the west, Ladlows Road and Johns Rd to the south and Jung Wheat Road and Jung North Rd to the east. The Project will consist of approximately 54 turbines with a total capacity of around 302 megawatts. It will connect into the 220 kV electrical network which traverses the site. More details about the Project can be found on the project website and will regularly be made available throughout the development of the Project.

BayWa r.e is a German headquartered renewable energy developer. BayWa r.e have received approval for a two-turbine wind farm in the same location in 2018, and a hybrid facility in May 2019.

## 2. DEFINING THE COMMUNITY

The location of the Project is shown in Figure -1 Site Location.



FIGURE -1 SITE LOCATION



For the purposes of the engagement activities, the "community" was defined as all neighbours to the project within 5km which includes all houses in the Jung township located approximately 3km from the nearest turbine. During the evolution of the project, the layout and therefore involved landowners and neighbours can alter.

For the purposes of engagement activities, a 'landowner' is anyone owning land within 5km of the project whether is occupied by a dwelling or not. A 'neighbour' is any occupier of a habitable dwelling within 5km.

Figure - -2 Surrounding Dwellings is an example of the layout plan and location of neighbours visited and location of letter drop offs.



FIGURE - - 2 SURROUNDING DWELLINGS

#### 3. BACKGROUND

BayWa r.e have sought and received permission to build two other projects in the area. The first is a two turbine wind farm which was approved by DELWP in 2018. The second was for a hybrid facility adjacent to the turbines which includes solar and batteries. That project was approved by Horsham Rural City Council in May 2019. These projects are targeted for construction in 2021. Community engagement was undertaken for both of these projects, so there was previous community awareness regarding BayWa r.e as a company and of renewable energy projects. As a result, this project was originally referred to as Jung Wind Farm Stage 2. It was then renamed to the Wimmera Plains Energy Facility project.



### 4. ENGAGEMENT ACTIVITIES

#### Summary

During 2017-2018 community engagement had been undertaken associated with two other BayWa r.e projects being a two turbine wind energy facility (Jung), and then the Jung Renewable Energy Facility. Based on this engagement there was already a level of community awareness around renewable energy projects. A range of engagement activities have been undertaken commencing in early 2019 through to current day. The purpose of the activities has been to inform the community about the project, build relationships with the local community and to develop a neighbour and community benefit sharing scheme associated with the project. It is expected that engagement activities will continue during the planning application period right through to beyond energisation of the facility should it be approved.

Date	Activity	Document/Material	
5 <sup>th</sup> March 2019	House visits	Letter dated 4 <sup>th</sup> March	
Multiple dates March 2019	Advertisements in the	Ads – See Appendix A -	
	Wimmera Times Mail and	Newspaper Notices for Drop in Session	
	Weekly Times Advertiser		
	giving notice of a community		
	Drop in Session		
16th March 2019	Community Drop in Session	See Appendix B Material Used at Drop-In Session	
9 <sup>th</sup> April 2019	Email FAQ Sheet to registered	See Appendix C - FAQ Sheets	
	parties		
4 & 5 <sup>th</sup> September 2019	House Visits and letter drop	See Appendix C - FAQ Sheets	
	offs		
19th & 20th November 2019	House Visits and letter drop	See Appendix C - FAQ Sheets	
	offs		
10 <sup>th</sup> & 11 <sup>th</sup> December 2019	Finished remaining visits and	See Appendix C - FAQ Sheets	
	letter drop offs to 5km and		
	Jung township		

An outline of activities is included in Table -1 Consultation Activities



#### **Drop-In Session**

The Drop-In session was held from 11am to 3pm on the 16<sup>th</sup> March in the Jung Community Hall. A number of representatives from BayWa r.e attended as well as expert consultants. An attendee register was prepared, and visitors asked to register their attendance and also note if they wanted to be kept informed about the project. 34 people registered on the attendee sheet although attendance numbers were greater as in some instances one member of a party would register, or some people did not wish to provide their personal details.

A variety of information was available at the session including:

- An indicative wind energy facility layout plan
- The plans and permit for the Jung Wind Farm and Jung Hybrid facility
- Images of wind turbines
- Some posters with questions and answers
- Information about the planning system and process
- Information about setting up a Community Benefit fund and neighbour sharing scheme



FIGURE -3 DROP-IN SESSION

The general feedback from community members at the drop-in session was positive. Some people asked questions regarding noise, visibility, traffic during construction all of which were answered by BayWa r.e team members and representatives. There was significant interest and support from the community in relation to the establishment of the Community Benefit Fund. Questions related to how the fund would be set up, what 'vehicle' would administer the fund, and what sorts of things could be funded. This was discussed on the day and also then summarised



further in a FAQ sheet that was sent out in April following the information session (See Appendix C - FAQ Sheets.)

#### House visits

House visits were undertaken on a number of occasions to dwelling owners within 5km of the project. If the occupant was home, then a FAQ sheet was handed to them and they were asked if they had any questions or concerns regarding the project. If the occupant was not at home then the FAQ sheet and contact details were left where most appropriate (road-side box, under the door, etc). If there was no suitable location to leave the FAQ sheet or the dwelling was inaccessible or derelict then this was noted in the Consultation Register.

#### One on one meetings

During the early interactions and at the Drop-in Session one on one visits were offered. A number of people requested such meetings which were undertaken at various times over the consultation period. These meetings are recorded in the Consultation Register.

## 5. CONSULTATION OUTCOMES TO DATE

There were a range of matters raised during the various consultation activities, most of which have been addressed verbally during personal encounters, in the FAQ's and information sheets.

Some concerns have been raised by residents in relation to matters such as:

- Visual impact
- Noise
- Property values

Information has been provided about some of these matters, however residents have been informed that they will see full information about the Project in the planning application material. This will include photomontages of what the wind farm will look like from various vantage points as well as noise assessments. Everyone has been informed about the planning process and their ability to be part of the planning process when that time comes.

The overwhelming feedback from the community has been of support for the Project. There is significantly high level of interest in the Community Benefit Fund and the Neighbour Benefit Fund. There has also been positive feedback about the amount and quality of the consultation process. This was reflected in the article published in the Wimmera Times –

http://www.mailtimes.com.au/story/6550361/jung-district-to-receive-financial-fund-fromwind-farm-developer/?cs=225

#### 6. CONCLUSION

There has been extensive community engagement undertaken for the proposed Wimmera Plains Energy Facility project. The majority of feedback to date has been positive. Consultation with the community will be ongoing and continue through the planning and construction process.



# **ENERGY** FORMS

APPENDIX A – ADS FOR DROP IN SESSION









Ad Horsham Weekly Advertiser 13/03/19 renewable energy

#### BayWa r.e. Wind Pty Ltd | 79-81 Coppin Street, Richmond | VIC 3121

BayWa r.e invites members of the Jung township and surrounding area to a "Drop In" information session reaarding future plans for the Jung Wind Farm- Stage 2 project. The proposal is for a larger wind farm at the site near where two turbines were approved last year. The Drop-in session will be held at the Juna Town Hall between 11am - 3pm on Soturday : I sth March 2019, Representatives of the Disconding differentiation of the mark and a statistical statistic can for the sole our pose to ferabling or the Jung community as avel as any wervany questions you may have. For more information about BayWa r.e. Pond goe internation about BayWa at **Planne improved Frequent of the 198**7] 3 mail us at info@baywa-re-com.gu purplose/which may breach any

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# **ENERGY** FORMS

Wimmera Plains Wind Farm (formally Jung Wind Farm Stage 2) Drop-In Information Session



#### Document List – Wimmera Plains Energy Facility Drop-In Session

Held in the Jung Town Hall on 16 March 2019

- 1. Poster About BayWa
- 2. Attendees List Sheet
- 3. Poster Benefits for the Community
- 4. Wind Farm layout with dwellings and preliminary LVIA
- 5. Poster/map Ecological Assessment Previously documented significant flora within 10km of the study area
- 6. Poster/map Ecological Assessment Previously documented significant flora within 10km of the study area
- 7. Poster/map Jung Renewable Energy Facility Site Plan
- 8. Poster/map Jung Hybrid Renewable Energy Facility- Control Building and Battery Bank Compound
- 9. Permit For Jung two-turbine wind energy facility
- 10.Excerpt/Poster Planning Process on a Page
- 11. Information Wind farms and health





BayWa r.e. is a German headquartered renewable energy developer that has installed over 2,000 MW in renewable energy generation capacity and has 5,000 MW under operations management globally.

Founded in 1923, BayWa AG is a trading and services company that operates in the agricultural, energy and construction sectors. In 2017, BayWa AG had over €16.1 billion in revenues and 17,550 employees globally. The company is listed on the Frankfurt Stock Exchange (DAX) with a market capitalisation of €1.0 billion.

BayWa r.e. entered the Australian renewable energy project market in 2017 with the investment in utility scale solar farms in Victoria and Queensland and multiple wind farms in Victoria through the acquisition of Future Energy Pty Ltd and its pipeline of Wind Energy projects.

BayWa-Re has various projects under active development in Australia which include 5 wind and 4 solar projects with capacities ranging from 7.2 MW to 112 MW.

The wind projects that are currently fully operating include the Timboon Wind Farm and Yawong Wind Farm both completed in late 2018. Currently under development are Ferguson Wind Farm, Diapur Wind Farm and Jung Wind Farm all of which have planning permission.

Solar projects include the completed Hughenden, Queensland 20 MW. Under construction are Karadoc solar farm 112 MW and Yatpool solar farm 106 MW.

For more information about BayWa-Re and specific projects please visit www.baywa-re.com.au, call us on +61 3 9429 5629 or email us at <u>info@baywa-re.com.au</u>



#### ATTENDEE SHEET

Name	Property address near	Postal address	Phone no and email	Would you like updates
	project			on the project?
nis copied document to be	e made available			
for the sole purpose of its consideration and part of a planning proce Planning and Environm	of enabling review as ess under the ent Act 1987.			ADVERTISED
The document must not b purpose which may b	e used for any preach any			PLAN



# Jung Wind Farm Stage 2 Benefits for the Community

- Clean Energy
- Landowner benefits
- Neighbour benefits occupied houses to 2km payments per turbine
- Neighbour benefits occupied houses within 3.6km eligible for a solar system
- Community Benefit Fund annual payment of \$1000 per turbine, \$47,000 per annum









Existing powerline connection to proposed Jung wind turbines

# Preliminary LVIA

题 and a Kewell 2019 CNE Murtoa Re Murtoa 0m 2km

S/F

Figure 4 **Photo locations** 







	Lege	end
		Study Area
	Signi	ficant fauna
	$\bigcirc$	Australasian Bittern
	•	Black Falcon
	•	Brolga
T	•	Brown Treecreeper (south-eastern ssp.)
ĺ	•	Diamond Dove
Í	•	Eastern Great Egret
4	•	Freckled Duck
	•	Freshwater Catfish
_		Golden Perch
		Grey Falcon
	-	Musk Duck
ł		Nankeen Night Heron
		Pale Sun Moth
4		Plains-wanderer
1	_	

![](_page_20_Figure_0.jpeg)

![](_page_21_Figure_0.jpeg)

#### Planning and Environment Regulations 2015 Form 4

Sections 63, 64, 64A and 86

PLANNING PERMIT

Permit No.: PA1800346

Planning Scheme: Horsham Rural City Council

Responsible Authority: Minister of Planning

ADDRESS OF THE LAND:

Crown Allotment 192 Parish of Jung Jung VOLUME 09358 FOLIO 368

Road Reserve Areas in Banyena Road and Max Johns Road

THE PERMIT ALLOWS:

Use and development of a wind energy facility with associated works and removal of native vegetation

THE FOLLOWING CONDITIONS APPLY TO THIS PERMIT:

#### **DEVELOPMENT PLANS**

- 1. Before development starts, amended Development Plans must be submitted to, approved, and endorsed by the responsible authority. When endorsed, the plans will form part of this permit. The plans must be fully dimensioned and drawn to scale. They must be generally in accordance with the application plans and must show:
  - a. A maximum of two wind turbines with the following specifications:
    - i. Maximum blade tip height of 241 metres above natural ground level;
    - ii. Minimum blade tip clearance from ground level of 91 metres; and
    - iii. Maximum rotor diameter of 150 metres.
  - b. The location, model, specifications, materials and finishes of the turbines.
  - c. The location, elevation, materials and finishes of the control building.
  - d. The location of underground electricity cabling.
  - e. Native vegetation that will be removed.
  - f. Details of aviation safety lighting.
- Except as permitted under Conditions 4 and 5, the use and development must be generally in accordance with the endorsed Development Plans. The requirements of Condition 1 and the endorsed Development Plans must not be altered or modified without the written consent of the responsible authority.

![](_page_22_Picture_25.jpeg)

#### STAGING

3. The use and development may be completed in stages in accordance with the endorsed Development Plans. The corresponding obligations arising under this permit may be completed in stages.

#### MICRO-SITING OF TURBINES

- 4. Before development starts, a Micro-siting Plan must be submitted to, approved, and endorsed by the responsible authority. When endorsed, the plan will form part of this permit. The plan must be fully dimensioned and drawn to scale. The plan must identify a footprint at ground level within which each wind turbine may be located, and the turbines can be located anywhere in the footprint shown. The footprint for each turbine identified on the Micro-siting Plan:
  - a. Must not extend more than 100 metres in any direction from the centre of the turbine at ground level as shown on the Development Plans endorsed under Condition 1.
  - b. Must not be within 1 kilometre of a dwelling, unless evidence is provided to the satisfaction of the responsible authority that the owner of the dwelling has consented in writing to the location of the turbine footprint.
- 5. Any changes to access tracks, underground cabling and associated infrastructure arising from micro-siting a wind turbine in accordance with an endorsed Micro-siting Plan are permitted without requiring the consent of the responsible authority, or any amendments to the Development Plans endorsed under Condition 1.
- 6. The endorsed Micro-siting Plan must not be altered or modified without the written consent of the responsible authority.

#### LANDSCAPING

- 7. Before development starts, an Off-Site Landscaping Program must be submitted to, approved, and endorsed by the responsible authority. When endorsed, the plan will form part of this permit. The Program must:
  - a. Provide for off-site landscaping or other treatments to reduce the visual impact of the turbines from any dwelling within four kilometres of any turbine.
  - b. Include a methodology for determining:
    - i. The type of landscaping treatments to be proposed; and
    - ii. A timetable for establishing and maintaining the landscaping for at least two years.
  - c. Include a process for making offers to affected landowners to undertake landscaping on the landowner's land.
  - d. Include a process for recording:
    - i. Offers that have been made to landowners;
    - ii. Whether or not the offers are accepted; and
    - iii. When and how offers are actioned following acceptance.
  - e. Include a process for the preparation and provision of progress reports regarding the implementation of the endorsed Off-site Landscaping Program to be provided to the responsible authority annually from the date of this permit, and at other times on request.

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- 8. The endorsed Off-site Landscaping Program:
  - a. Must be implemented to the satisfaction of the responsible authority; and
  - b. Must not be altered or modified without the written consent of the responsible authority.

#### NOISE

In Conditions 9 to 17:

- 'The Standard' means New Zealand Standard 6808:2010, Acoustics Wind Farm Noise.
- Noise sensitive locations are locations defined as such in the Standard and that were
  present at 5 April 2018.

#### **Performance Requirement**

- 9. Subject to Condition 10 at any wind speed, noise emissions from the operation of the wind energy facility, when measured at noise sensitive locations, must comply with the limits specified in the Standard.
- 10. The limits specified in the Standard do not apply if an agreement has been entered into with the relevant landowner waiving the limits at a noise sensitive location. The agreement must be in a form that applies to the land comprising the noise sensitive location for the life of the wind energy facility, to the satisfaction of the responsible authority, and be provided to the responsible authority upon request.

#### **Post-Construction Noise Assessment**

11. A Post-Construction Noise Assessment report prepared in accordance with the New Zealand Standard NZS6808:2010, Acoustics – Wind Farm Noise demonstrating whether the wind energy facility complies with the Standard, must be submitted to the responsible authority.

If the wind energy facility is constructed in stages, additional Post-Construction Noise Assessment reports for each stage must be submitted to the responsible authority.

- 12. Each Post-Construction Noise Assessment report must be accompanied by an environmental audit report prepared under Part IXD, Section 53V of the *Environment Protection Act 1970* by an environmental auditor appointed under Part IXD of the *Environment Protection Act 1970*. The environmental audit report must verify that the acoustic assessment undertaken for the purpose of the Post-Construction Noise Assessment has been conducted in accordance with the New Zealand Standard NZS6808:2010, Acoustics Wind Farm Noise.
- 13. The initial Post-Construction Noise Assessment report must be submitted to the responsible authority within 12 months of the first turbine commencing operation.

#### **Noise Management Plan**

14. Before development starts, a Noise Management Plan must be submitted to, approved and endorsed by the responsible authority. When endorsed the Noise Management Plan will form part of this permit.

The Noise Management Plan must specify details of:

a. Post-Construction Noise Assessment Reports: detailing how these will be prepared in accordance with the Standard, to demonstrate whether or not the wind energy facility complies with the performance requirements specified in the Standard.

![](_page_24_Picture_20.jpeg)

- b. Noise Investigation Reports: detailing procedures for when complaints are received in accordance with the endorsed Complaints Investigation and Response Plan required by this permit or when potential non-compliance with the performance requirements in the Standard is otherwise detected.
- c. Noise Remediation Plans: detailing procedures for when non-compliance with the performance requirements in the Standard is found to have occurred.
- d. The requirements for each of the documents referred to in condition 14a, 14b and 14c, including what matters they must address, and when they must be submitted to the responsible authority.
- 15. The endorsed Noise Management Plan:
  - a. Must be implemented to the satisfaction of the responsible authority; and
  - b. Must not be altered or modified without the written consent of the responsible authority.

#### **Peer Review of Reports**

- 16. If requested by the responsible authority, the noise investigation reports required under Condition 14b must be accompanied by a peer review from an environmental auditor appointed under Part IXD of the *Environment Protection Act 1970* verifying that the report or plan meets the Standard and the requirements of this permit.
- 17. The environmental auditor or peer reviewer must be independent of the author of the report being reviewed.

#### **BLADE SHADOW FLICKER**

18. Shadow flicker from the wind energy facility must not exceed 30 hours per annum at any dwelling that existed on 5 April 2018, unless an agreement has been entered into with the relevant landowner waiving this requirement. The agreement must be in a form that applies to the land comprising the dwelling and run for the life of the wind energy facility, to the satisfaction of the responsible authority, and must be provided to the responsible authority upon request.

#### **BLADE GLINT**

19. All turbines must be non-reflective to eliminate blade, to the satisfaction of the responsible authority.

#### **TELEVISION AND RADIO RECEPTION AND INTERFERENCE**

- 20. Before development starts, a Television and Radio Strength Survey must be submitted to, approved, and endorsed by the responsible authority. When endorsed, the Survey will form part of this permit. The Survey must be to the satisfaction of the responsible authority, and must:
  - a. Be carried out by a suitably qualified and experienced television and radio monitoring specialist.
  - b. Include testing at selected locations within 5 kilometres of the facility to enable the average television radio reception strength to be determined.
- 21. If a complaint is received regarding the effect of the facility on television or radio reception at a pre-existing dwelling (5 April 2018) within 5 kilometres of the site, the wind energy facility operator must:

![](_page_25_Picture_19.jpeg)

- a. Investigate the complaint in accordance with the Complaint Investigation and Response Plan (Condition 44) required by this permit.
- b. If the investigation indicates that the facility has had a detrimental impact on the quality of reception, restore reception at the pre-existing dwelling to at least the quality determined in the Television and Radio Reception Strength Survey carried out under Condition 20, to the satisfaction of the responsible authority.

#### TRAFFIC MANAGEMENT

#### Vehicle Access Points

- 22. Vehicle access points must be designed and located to the following standards, to the satisfaction of the relevant road management authority:
  - a. Truck movements to and from the site must be able to be accommodated on sealed roadways where available;
  - b. To the extent practicable, access points must be able to accommodate turning movements without vehicles encroaching onto the incorrect side of the road;
  - c. Safe sight distances must be provided; and
  - d. Potential through traffic conflicts must be avoided.

#### **Pre-Construction Public Roads Survey**

- 23. Before development starts, a Pre-Construction Public Roads Survey must be submitted to, approved and endorsed by Horsham Rural City Council. Once endorsed, the Survey will form part of the permit. The Survey must assess the suitability, design, condition and construction standard of the relevant public roads and access points, and must:
  - a. Be prepared by a suitably qualified and experienced civil or traffic engineer.
  - b. Include recommendations, if any, regarding upgrades required to accommodate construction traffic, and to meet the requirements of condition 22.
  - c. Be prepared in consultation with VicRoads prior to submission to Horsham Rural City Council.

#### **Traffic Management Plan**

24. Before development starts, a Traffic Management Plan must be prepared in consultation with VicRoads and must be submitted to, approved and endorsed by Horsham Rural City Council. Once endorsed, the Plan will form part of the permit.

The Traffic Management Plan must:

- a. Be prepared by a suitably qualified and experienced civil or traffic engineer;
- b. Specify measures to be taken to manage traffic impacts associated with the construction of the facility; and
- c. Include a program to inspect, maintain and (where required) repair public roads used by construction traffic.

Any mitigating works identified on the road network in the Traffic Management Plan must be undertaken to the satisfaction and at no cost to the relevant road management authority.

25. The endorsed Traffic Management Plan must be implemented to the satisfaction of Horsham Rural City Council. The endorsed Traffic Management Plan must not be

![](_page_26_Picture_23.jpeg)

altered or modified without the written consent of Horsham Rural City Council. Any proposed alteration or modification to the endorsed Traffic Management Plan must be prepared in consultation with VicRoads prior to submission to Horsham Rural City Council.

#### **Traffic Upgrade Works**

- 26. Where traffic upgrade works are recommended or required by a plan/report required by any condition of this permit, the following must be submitted to, approved and endorsed by Horsham Rural City Council prior to commencement of the traffic upgrade works:
  - a. Detailed plans for the required works.
  - b. A program indicating when the works will be undertaken.

The plans/program required under this condition must be prepared in consultation with VicRoads. Traffic upgrade works must be completed to the satisfaction of Horsham Rural City Council.

#### ENVIRONMENTAL MANAGEMENT PLAN

27. Before development starts, an Environmental Management Plan must be submitted to, approved and endorsed by the responsible authority. Once endorsed, the Plan will form part of the permit.

The Environmental Management Plan must:

- a. Describe measures to minimise the amenity and environmental impacts of the construction, operation and decommissioning of the facility;
- b. Include organisational responsibilities, and procedures for staff training and communication;
- c. Detail measures to ensure that no vehicular access is permitted through areas of native vegetation;
- d. Procedures to manage dust and noise emissions, erosion, mud and stormwater run-off; and
- e. Procedures to remove temporary works, plant equipment, buildings and staging areas, and reinstate the affected parts of the site when construction is complete.
- 28. The endorsed Environmental Management Plan must be implemented to the satisfaction of the responsible authority. The endorsed Environmental Management Plan must not be altered or modified without the written consent of the responsible authority.

#### BAT AND AVIFAUNA MANAGEMENT PLAN

29. Before development starts, a Bat and Avifauna Management (BAM) Plan must be submitted to, approved and endorsed by the responsible authority. Once endorsed, the Plan will form part of the permit.

The BAM Plan must:

- a. Include a statement of the objectives and overall strategy for minimising bird and bat strikes arising from the operation of the facility, which must include:
  - i. Strategies to manage and mitigate significant impacts on all bird and bat taxa listed as threatened under the *Flora and Fauna Guarantee Act 1988 (FFG*

![](_page_27_Picture_21.jpeg)

Act) and/or the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) due to collisions arising from the operation of the facility.

- ii. The definition of 'significant impact' to the satisfaction of DELWP Environment Portfolio and in accordance with policies published by the Australian Government for the *EPBC Act*.
- b. Include a comprehensive science-based mortality monitoring program of at least two years duration, that commences when the first turbine is commissioned, or such other time approved by DELWP Environment Portfolio. The monitoring program must include:
  - i. Surveys to ascertain:
    - The species, number, age, sex (if possible) and date of any listed threatened and migratory bird or bat strike;
    - Any seasonal and yearly variation in the number of listed threatened and migratory bird and bat strikes; and
    - Whether further detailed investigations of any potential impacts on listed threatened and migratory birds and bats are warranted.
  - ii. Procedures for the reporting of strikes/mortalities of birds and bats listed threatened or migratory under the EPBC Act and/ or the FFG Act, to DELWP Environment Portfolio within 7 days of becoming aware of any strike. All other species of bird and bat strikes/mortalities are to be recorded and provided guarterly to DELWP Environment Portfolio.
  - iii. Information on the efficacy of searches for carcasses of birds and bats, and information on the rate of removal of carcasses by scavengers, so that correction factors can be determined to enable quantified estimates to be made of the total number of mortalities.
  - iv. Procedures for periodic reporting, within agreed time frames, of the findings of the monitoring to DELWP Environment Portfolio and the local community.
  - v. A data sharing agreement to provide georeferenced, time stamped, data that is collected as part of the BAM Plan.
- c. Be approved by DELWP Environment Portfolio prior to submission to the responsible authority.
- 30. When the monitoring program (of at least two years duration) required under the BAM Plan is complete, the operator must submit a report to the responsible authority and DELWP Environment Portfolio setting out the findings of the program. The report must be:
  - a. To the satisfaction of the responsible authority and DELWP Environment Portfolio.
  - b. Made publicly available on the operator's website.
- 31. After considering the report submitted under condition 30 and consulting with DELWP Environment Portfolio, the responsible authority may direct the operator to conduct further investigation of impacts on birds and bats listed threatened and migratory under the *EPBC Act* or the *FFG Act*. The further investigation must be undertaken by the wind energy facility operator to the satisfaction of the responsible authority and DELWP Environment Portfolio.

![](_page_28_Picture_17.jpeg)

#### LIGHTING

32. External lighting is not permitted on the site other than:

- a. Low-level, low-intensity security lighting.
- b. Lighting necessary in the case of an emergency or for operational call-outs at reasonable times.
- c. Aviation safety lighting as required by this permit.

#### **AVIATION SAFETY LIGHTING**

33. The wind energy facility must be lit with a single steady red medium intensity hazard light on the highest fixed point of the Turbine T1 whenever aircraft is in the near vicinity, at night time and in other low light conditions. Lighting must be installed in accordance with the Civil Aviation Safety Authority Manual of Standards Part 139 – Aerodromes, Chapter 9, paragraph 9.4.7.

The requirements of this condition may be altered or modified with the written consent of the responsible authority. The responsible authority may also direct the wind energy facility operator to alter operation of lighting installed under this condition, including switching the lighting on or off.

- 34. No other aviation obstacle lighting, other than lighting as outlined in Condition 33, is to be operated without the written consent of the responsible authority.
- 35. Before development starts, the permit holder must provide evidence to the responsible authority, that:
  - a. The 10-nautical mile (nm) Minimum Safe Altitude (MSA) for Horsham Airport has been raised from 2,200ft to 2,300ft;
  - b. The 10nm MSA for Warracknabeal Airport has been raised from 1,700ft to 2,300ft; and
  - c. The 25nm MSA for Warracknabeal Airport has been raised from 2,100ft to 2,300ft.

These changes must be published in the Aeronautical Information Publication and the permit holder must make appropriate notifications, to the satisfaction of Airservices Australia, that relevant mitigation measures have been taken.

- 36. Within 30 days of the endorsement of Development Plans under Condition 1 of this permit, copies of the endorsed Development Plans must be provided to the following entities to enable details of the wind energy facility to be shown on aeronautical charts of the area:
  - a. Civil Aviation Safety Authority;
  - b. The Department of Defence (Royal Australian Air Force Aeronautical Information Service);
  - c. Airservices Australia;
  - d. Horsham Airport;
  - e. Warracknabeal Airport;
  - f. Any aerodrome operator within 30 kilometres of the site;
  - g. The Aerial Agricultural Association of Australia;
  - h. Any agency responsible for providing Air Ambulance services in the area; and
  - i. Any agency responsible for aerial firefighting in the area.

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37. If there are any subsequent changes to turbine location or height during construction, Airservices Australia must be advised prior to erection of any turbines, to enable details of any changes to the facility to be shown on aeronautical charts of the area.

#### NATIVE VEGETATION REMOVAL

- 38. Before works start, the permit holder must advise all persons undertaking the vegetation removal and associated works on site of all relevant permit conditions and associated statutory requirements or approvals.
- 39. Before works start, a plan identifying all native vegetation to be retained and describing the measures to be used to protect the identified vegetation during construction must be submitted to, approved, and endorsed by the responsible authority. Once endorsed, the plan will form part of the permit. All works constructed or carried out must be in accordance with the endorsed plan.
- 40. Except with the written consent of the responsible authority, within the area of native trees and patches of native vegetation to be retained and any associated protection zones, the following are prohibited:
  - a. Vehicular or pedestrian access;
  - b. Trenching or soil excavation;
  - c. Storage or dumping of any soils, materials, equipment, vehicles, machinery or waste products;
  - d. Entry and exit pits for underground services; and
  - e. Any other actions or activities that may result in adverse impacts to retained native vegetation.
- 41. To offset the removal of 0.009 hectares of native vegetation the permit holder must secure a native vegetation offset, in accordance with the *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (DELWP 2017) as specified below:
  - A general offset of 0.001 general habitat units;
  - Located within the Wimmera Catchment Management Authority boundary or Horsham Rural City Council municipal district; and
  - With a minimum strategic biodiversity score of at least 0.344.

This may be varied with the written consent of the responsible authority.

- 42. Before any native vegetation is removed, evidence that the required offset for the project has been secured must be provided to the satisfaction of the responsible authority. This evidence is one or both of the following:
  - An established first party offset site including a security agreement signed by both parties, and a management plan detailing the 10-year management actions and ongoing management of the site; and/or
  - Credit extract(s) allocated to the permit from the Native Vegetation Credit Register.

A copy of the offset evidence will be endorsed by the responsible authority and form part of this permit. Within 30 days of endorsement of the offset evidence by the responsible authority, a copy of the endorsed offset evidence must be provided to the Environment Portfolio of the Department of Environment, Land, Water and Planning.

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43. In the event that a security agreement is entered into as per Condition 42, the permit holder must provide the annual offset site report to the responsible authority by the anniversary date of the execution of the offset security agreement, for a period of 10 consecutive years. After the tenth year, the landowner must provide a report at the reasonable request of a responsible authority.

#### COMPLAINTS

#### **Complaint Investigation and Response Plan**

44. Before development starts, a Complaint Investigation and Response Plan must be submitted to, approved and endorsed by the responsible authority. Once endorsed, the Plan will form part of the permit.

The Complaint Investigation and Response Plan must:

- a. Respond to all aspects of the construction and operation of the wind farm;
- b. Be prepared in accordance with Australian/New Zealand Standard AS/NZS 10002:2014 Guidelines for Complaint Management in Organisations; and
- c. Include a process to investigate and resolve complaints (different processes may be required for different types of complaints).
- 45. The endorsed Complaint Investigation and Response Plan must:
  - a. Be implemented to the satisfaction of the responsible authority; and
  - b. Not be altered or modified without the written consent of the responsible authority.

#### **Publishing Information about Complaints Handling**

- 46. Before development starts, the following information must be made publicly available and readily accessible from the wind farm project website, or another publicly available resource to the satisfaction of the responsible authority:
  - a. A copy of the endorsed Complaints Investigation and Response Plan; and
  - b. A toll-free telephone number and email contact for complaints and queries to the wind energy facility operator.

#### **Complaints Register**

- 47. Before development starts, a Complaints Register must be established which records:
  - The complainant's name and address (if provided), including (for noise complaints) any applicable property reference number contained in the report titled Jung Wind Farm: Environmental Noise Assessment, prepared by Marshall Day Acoustics, dated 14 February 2018 (ref. 001 R02 20171391);
  - b. A receipt number for each complaint, which must be communicated to the complainant;
  - c. The time and date of the incident, and the prevailing weather and operational conditions at the time of the incident;
  - d. A description of the complainant's concerns, including (for a noise complaint) the potential occurrence of special audible characteristics;
  - e. The process for investigating the complaint, and the outcome of the investigation, including:

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- i. The actions taken to resolve the complaint; and
- ii. For noise complaints, the findings and recommendations of an investigation report undertaken in accordance with the endorsed Noise Management Plan.
- 48. All complaints received must be recorded in the Complaints Register.
- 49. The complete copy of the Complaints Register must be provided, along with a reference map of complaint locations, to the responsible authority on each anniversary of the date of this permit and at other times on request.

#### DECOMMISSIONING

- 50. The following requirements must be met when a turbine permanently ceases operation:
  - a. The responsible authority must be notified within two months after the turbine permanently ceases operation.
  - b. Prior to commencing decommissioning works, a Decommissioning Traffic Management Plan specifying measures to manage traffic impacts associated with removing the turbines and associated infrastructure from the site, must be submitted to, approved and endorsed by the Horsham Rural City Council.
  - c. All infrastructure, plant, equipment and access tracks that are no longer required for the on-going use of the land, or decommissioning of the facility, must be removed.
  - d. Turbine footings must be capped with topsoil and rehabilitated as pasture.
  - e. The site or the relevant part of the site must be reinstated to the condition it was in prior to the commencement of development to the satisfaction of the responsible authority.

#### EXPIRY

- 51. This permit will expire if one of the following applies:
  - a. The development is not started within five years of the date of this permit.
  - b. The development is not completed within ten years of the date of this permit.

DATE ISSUED:

10/15

SIGNATURE FOR THE RESPONSIBLE AUTHORITY

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#### IMPORTANT INFORMATION ABOUT THIS PERMIT

#### WHAT HAS BEEN DECIDED?

The responsible authority has issued a permit.

#### (Note: This is not a permit granted under Division 5 or 6 of Part 4 of the Planning and Environment Act 1987).

#### CAN THE RESPONSIBLE AUTHORITY AMEND THIS PERMIT?

The responsible authority may amend this permit under Division 1A of Part 4 of the Planning and Environment Act 1987.

#### WHEN DOES A PERMIT BEGIN?

#### A permit operates:

- from the date specified in the permit; or
- if no date is specified, from
  - i) the date of the decision of the Victorian Civil and Administrative Tribunal, if the permit was issued at the direction of the Tribunal; or
  - ii) the date on which it was issued, in any other case.

#### WHEN DOES A PERMIT EXPIRE?

- 1. A permit for the development of land expires if-
  - the development or any stage of it does not start within the time specified in the permit; or
  - the development requires the certification of a plan of subdivision or consolidation under the Subdivision Act 1988
    and the plan is not certified within two years of the issue of the permit, unless the permit contains a different
    provision; or
  - the development or any stage is not completed within the time specified in the permit, or, if no time is specified, within two years after the issue of the permit or in the case of a subdivision or consolidation within five years of the certification of the plan of subdivision or consolidation under the Subdivision Act 1988.
- 2. A permit for the use of land expires if-
  - the use does not start within the time specified in the permit, or if no time is specified, within two years after the issue
    of the permit; or
  - the use is discontinued for a period of two years.
- 3. A permit for the development and use of land expires if-
  - the development or any stage of it does not start within the time specified in the permit; or
  - the development or any stage of it is not completed within the time specified in the permit, or, if no time is specified, within two years after the issue of the permit; or
  - the use does not start within the time specified in the permit, or, if no time is specified, within two years after the
    completion of the development; or
  - the use is discontinued for a period of two years.
- 4. If a permit for the use of land or the development and use of land or relating to any of the circumstances mentioned in section 6A(2) of the Planning and Environment Act 1987, or to any combination of use, development or any of those circumstances requires the certification of a plan under the Subdivision Act 1988, unless the permit contains a different provision
  - the use or development of any stage is to be taken to have started when the plan is certified; and
  - the permit expires if the plan is not certified within two years of the issue of the permit.
- 5. The expiry of a permit does not affect the validity of anything done under that permit before the expiry.

#### WHAT ABOUT REVIEWS?

- The person who applied for the permit may apply for a review of any condition in the permit unless it was granted at the direction of the Victorian Civil and Administrative Tribunal, in which case no right of review exists.
- An application for review must be lodged within 60 days after the permit was issued, unless a notice of decision to
  grant a permit has been issued previously, in which case the application for review must be lodged within 60 days after
  the giving of that notice.
- An application for review is lodged with the Victorian Civil and Administrative Tribunal.
- An application for review must be made on the relevant form which can be obtained from the Victorian Civil and Administrative Tribunal and be accompanied by the applicable fee.
- An application for review must state the grounds upon which it is based.
- A copy of an application for review must also be served on the responsible authority.
- Details about applications for review and the fees payable can be obtained from the Victorian Civil and Administrative Tribunal.

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# WIND ENERGY - THE FACTS WIND FARMS AND HEALTH

There are nearly 250,000 wind turbines across sites all over the world – many of them close to people's houses.

Reviews conducted by leading health and research organisations from all over the world, including Health Canada, the Australian Medical Association and Australia's National Health and Medical Research Council, have found no direct link between wind farms and health effects.

Opponents of wind farms have claimed that 'infrasound', or sound that is too low-frequency for humans to hear, can cause negative health effects. However, there have been multiple scientific, thorough, peer-reviewed studies on wind farm noise that have found that infrasound from wind farms is not a problem.

#### >> STUDIES FROM GOVERNMENT HEALTH AND ENVIRONMENT AUTHORITIES

#### THE NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL

The top Australian authority on health issues, the National Health and Medical Research Council (NHMRC), conducted a review into wind farms and potential health issues in 2009, and is currently undertaking a more detailed review of the evidence<sup>1</sup>. A 2010 NHMRC report concluded:

"This review of the available evidence, including journal articles, surveys, literature reviews and government reports, supports the statement that: There are no direct pathological effects from wind farms and that any potential impact on humans can be minimised by following existing planning guidelines."

The NHMRC also released a draft information paper on wind farms and human health<sup>2</sup> for public consultation in early 2014. The paper summarised the evidence on whether wind farms cause health effects in humans, and provided an overview of the process by which the evidence was identified, critically appraised and interpreted by the reference group.

That information paper also found that: **"There is no reliable or consistent evidence that wind farms directly cause adverse health effects in humans."** 

#### HEALTH CANADA

Health Canada, Canada's national health organisation, released preliminary results of a study into the effect of wind farms on human health in 2014<sup>3</sup>. The study was initiated in 2012 specifically to gather new data on wind farms and health. The study considered physical health measures that assessed stress levels using hair cortisol, blood pressure and resting heart rate, as well as measures of sleep quality. More than 4000 hours of wind turbine noise measurements were collected and a total of 1238 households participated.

No evidence was found to support a link between exposure to wind turbine noise and any of the self-reported illnesses. Additionally, the study's results did not support a link between wind turbine noise and stress, or sleep quality (self-reported or measured). However, an association was found between increased levels of wind turbine noise and individuals reporting to be annoyed.

- 1 National Health and Medical Research Council, 2014, Wind Farms and human health. Available at https://www.nhmrc.gov.au/yourhealth/wind-farms-and-human-health
- 2 National Health and Medical Research Council, 2014, NHMRC Draft Information Paper: Evidence on Wind Farms and Human Health Available https://consultations.nhmrc.gov.au/public\_consultations/wind\_farms
- 3 Health Canada 2014, Wind Turbine Noise and Health Study: Summary of Results. Available at http://www.hc-sc.gc.ca/ewh-semt/noisebruit/turbine-eoliennes/summary-resume-eng.php This copied document to be made available

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#### WIND ENERGY - THE FACTS WIND FARMS AND HEALTH

#### **NEW SOUTH WALES HEALTH DEPARTMENT**

In 2012, the NSW Health Department provided written advice to the NSW Government that stated existing studies on wind farms and health issues had been examined and no known causal link could be established.

NSW Health officials stated that fears that wind turbines make people sick are 'not scientifically valid' and that the arguments mounted by anti-wind farm campaigners are unconvincing. The officials wrote that there was no evidence for 'wind turbine syndrome', a collection of ailments including sleeplessness, headaches and high blood pressure that some people believe are caused by the noise of spinning blades.

#### VICTORIAN DEPARTMENT OF HEALTH

The Victorian Department of Health released two booklets on wind farms, sound and health in May 2013<sup>4</sup>. One focused on technical information about the nature of sound and the other contained community information.

The community information booklet concluded that: **"The evidence indicates that sound can only affect health at sound levels that are loud enough to be easily audible. This means that if you cannot hear a sound, there is no known way that it can affect health. This is true regardless of the frequency of the sound."** 

#### SOUTH AUSTRALIAN EPA INFRASOUND STUDY

A report released in January 2013 by the South Australian Environment Protection Authority (EPA)<sup>5</sup> found that the level of infrasound from wind turbines is insignificant and no different to any other source of noise, and that the worst contributors to household infrasound are air-conditioners, traffic and noise generated by people.

The study included several houses in rural and urban areas, houses both adjacent to a wind farm and away from turbines, and measured the levels of infrasound with the wind farms operating and also switched off.

There were no noticeable differences in the levels of infrasound under all these different conditions. In fact, the lowest levels of infrasound were recorded at one of the houses closest to a wind farm, whereas the highest levels were found in an urban office building.

The EPA's study concluded that the level of infrasound at houses near wind turbines was no greater than in other urban and rural environments, and stated that: **"The contribution of wind turbines to the measured infrasound levels is insignificant in comparison with the background level of infrasound in the environment."** 

#### >> OTHER HEALTH AUTHORITIES

#### THE AUSTRALIAN MEDICAL ASSOCIATION

The Australian Medical Association put out a position statement on Wind Farms and Health in 2014<sup>6</sup>.

The statement said: **"The available Australian and international evidence does not support the view that the infrasound or low frequency sound generated by wind farms, as they are currently regulated in Australia, causes adverse health effects on populations residing in their vicinity. The infrasound and low frequency sound generated by modern wind farms in Australia is well below the level where known health effects occur, and there is no accepted physiological mechanism where sub-audible infrasound could cause health effects."** 

- 4 Department of Health, Victoria, 2013, Windfarms. Available http://www.health.vic.gov.au/environment/windfarms.htm
- 5 EPA South Australia, 2013, Wind farms. Available http://www.epa.sa.gov.au/environmental\_info/noise/wind\_farms
- 6 Australian Medical Association, 2014, Wind farms and health. Available https://ama.com.au/position-statement/wind-farms-and-

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#### >> ACADEMIC RESEARCH

#### MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)

MIT released a critical review of the scientific literature in December 2014<sup>7</sup>. The review took into consideration health effects such as stress, annoyance and sleep disturbance, as well as other effects that have been raised in association with living close to wind turbines.

The study found that: "No clear or consistent association is seen between noise from wind turbines and any reported disease or other indicator of harm to human health."

The report concluded that living in close proximity to wind farms does not result in the worsening of, and might even improve, the quality of life in that particular region.

#### UNIVERSITY OF AUCKLAND INFRASOUND STUDY ON SYMPTOM EXPECTATION

A study from the University of Auckland published by the American Psychological Association in March 2013<sup>8</sup> considered the idea that health complaints from wind farms could be caused by an increase in discussion and awareness of health risk, rather than actual infrasound. The studies tested whether exposure to the anti-wind farm health effects campaign could create a 'symptom expectation' and then actual symptoms in healthy volunteers.

The study exposed 60 participants to ten minutes of infrasound and ten minutes of sham infrasound. Prior to exposure, half of the volunteers were given information that indicated wind farms could cause negative health effects, and the other half were given information on the scientific position that wind farm infrasound does not affect human health.

Before and during the sound exposure, both groups reported their health symptoms. Results showed that the group that had viewed information on negative health effects and therefore expected to feel ill did experience symptoms of illness, while the other group did not.

The study concluded that: **"Healthy volunteers, when given information about the expected physiological effect of infrasound, reported symptoms that aligned with that information, during exposure to both infrasound and sham infrasound."** 

#### UNIVERSITY OF SYDNEY STUDY ON WIND FARM NOISE COMPLAINTS

A 2013 study from University of Sydney Professor of Public Health Simon Chapman examined all complaints made about wind farm noise or health problems at 49 Australian wind farms<sup>9</sup>.

The study found that despite there being 32,677 people who lived within 5 kilometres of a wind farm, just 120 people – or one in 272 – had ever made a formal complaint, appeared in a news report or sent a complaining submission to government. The study also found that some complainants took many years to voice their first complaint, when wind farm opponents regularly warn that the ill effects can be almost instant.

This work supported the findings from the University of Auckland study that anxiety and fear about wind turbines spread by anti-wind farm groups can cause people who hear the frightening information to develop symptoms.

This means that discussion within communities about the alleged health effects of wind farms may trigger the very symptoms about which residents are concerned. If this is the case, media coverage of the wind farm debate must be balanced, so that undue emphasis is not placed on purported health risk.

- 7 Journal of Occupational and Environmental Medicine, 2014, Wind Turbines and Health: A Critical Review of the Scientific Literature Available http://journals.lww.com/joem/Abstract/2014/11000/Wind\_Turbines\_and\_Health\_\_A\_Critical\_Review\_of\_the.9.aspx
- 8 American Psychological Association, 2013, Can expectations produce symptoms from infrasound associated with wind turbines? Available http://psycnet.apa.org/psycinfo/2013-07740-001/

9 University of Sydney, 2013, Spatio-temporal differences in the history of health and noise complaints about Australian wind farms: evidence for the psychogenic "communicated disease" hypothesis. Available http://ses.library.usyd.edu.au/handle/2123/8977 This copied document to be made available

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#### >> INQUIRIES AND COURT CASES

## STONY GAP WIND FARM IN THE ENVIRONMENT, RESOURCES AND DEVELOPMENT COURT OF SOUTH AUSTRALIA

After Goyder Council in South Australia chose to refuse planning permission for the Stony Gap wind farm without grounds, the case went to court in late 2014. During the case, the court heard evidence from Sarah Laurie of the Waubra Foundation and acoustician Steven Cooper, and found both to be lacking. The court then overturned the decision, approving the project almost three years after the development application was lodged.

The decision was very clear in its summary judgement of the initial refusal, finding that: **"There is no basis** for the refusal of development plan consent to the proposed development on the grounds of health effects."

#### FEDERAL SENATE COMMITTEE INQUIRY

The Federal Senate Committee Inquiry into a bill calling for regulation of excessive noise from wind farms investigated health issues in late 2012.

The final report<sup>10</sup> contained the following findings:

"The number of health-related complaints about wind farms is small in proportion to the number of people living near these facilities. The numbers also vary greatly from one facility to the next, for reasons not apparently related to the number of residents in the area."

One of the most interesting pieces of information provided to the committee was a research paper that has since been accepted for publication in the well-regarded journal Health Psychology in early 2013. This paper found that the effects of infrasound can be felt by people not exposed to infrasound but who expected that it would make them feel unwell – a hypothesis that has since been tested by researchers at the University of Auckland (more details above).

The relevant extracts from the Senate committee's final report are below:

"Late in the inquiry process, the committee was provided with recent research, peer-reviewed and accepted for publication by the leading journal Health Psychology, but not yet released. The research comprises a controlled double blind study, in which subjects were exposed to infrasound and sham infrasound... Conclusion: Healthy volunteers, when given information about the expected physiological effect of infrasound, reported symptoms which aligned with that information, during exposure to both infrasound and sham infrasound."

Overall, the Senate committee found that wind farms do not create health problems:

"The committee concludes that, while it is possible that the human body may detect infrasound in several ways, there is no evidence to suggest that inaudible infrasound (either from wind turbines or other sources) is creating health problems. In contrast, there is an established literature confirming the existence of psychogenic, or nocebo, effects in general, and at least one study suggesting they may be responsible for symptoms in some wind turbine cases."

10 Environment and Communications Legislation Committee report http://www.aph.gov.au/Parliamentary\_Business/Committees/Senate/ Environment\_and\_Communications/Completed % 20inquiries/2010-13/renewableenergy2012/report/~/media/wopapub/senate/ committee/ec\_ctte/completed\_inquiries/2010-13/renewable\_energy\_2012/report/report.ashx

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for the sole purpose of enabling its consideration and review as part of a planning **GLEAN** under the Planning and Envi**ENABLE** Act 1987. The document must not be used for any purpose which may breach any convright BayWa r.e invites members of the Jung and surrounding area to a "Drop In" information session regarding future plans for the Jung Wind Farm- Stage 2 project. The proposal is for a larger wind farm at the site near where two turbines were approved last year. The Drop-in session will be held at the Jung Town Hall between 11am – 3pm. Representatives of the project will be there with a variety of information, can explain the project and the benefits for the Jung community as well as answer any questions you may have. If you have any queries prior to the session please contact xxxx. We hope to see you there.

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# **ENERGY** FORMS

Wimmera Plains Wind Farm Information sheets

![](_page_40_Picture_3.jpeg)

![](_page_41_Picture_0.jpeg)

4<sup>th</sup> March 2019

Dear Resident,

#### **Proposed Jung Wind Farm**

We are pleased to update you about our proposal to develop a Stage 2 of the Jung Wind Farm. This letter will introduce you to our proposal and inform you about upcoming house visits, an open day and the planning process. The following information is the first of a series of updates that we will provide about the wind farm planning process and the development process to follow.

#### About the Wind Farm

You may be aware that BayWa r.e. was granted a planning permit for a 2 turbine wind farm adjacent to Banyena Rd in October 2018. Since then BayWa r.e. has lodged a planning permit with Horsham City Council to develop a small solar farm and battery facility in conjunction with the 2 permitted wind turbines called the Jung Renewable Energy Facility.

As part of the abovementioned facility we have been measuring the wind resource using a remote sensing device called a LIDAR. With this device we have determined the wind resource is much better than first expected. It is for this reason that we have decided to begin the planning of a larger wind farm.

![](_page_41_Picture_9.jpeg)

Remote measuring device - LIDAR

The proposed site envelope of the Jung Wind Farm Stage 2 is bounded by Banyena Road to the north, Dogwood Road and Henty Hwy to the west, Greenhills Road to the south and Jung This copied downeat Reachtedtheveitettand is shown on the enclosed map. The wind farm will consist of for the sole purpose of enabling its consideration and review as part of a plawwing partices under the sole junction and the sole of the sole purpose of enabling part of a plawwing partices under the sole junction and the sole of the sole of the sole purpose of enabling part of a plawwing partices under the sole junction and the sole ju

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approximately 47 turbines with a total capacity of around 263 megawatts. It will connect into the 220 kV electrical network which traverses the site. The turbines themselves will be up to 241 m in height and together they will produce enough green power for about 160,000 homes, making their greenhouse benefit equivalent to planting over 1,400,000 trees. The energy and greenhouse benefits of the Jung Wind Farm are shown in the table below.

Energy output per year (estimated)	922,000 MWh
Greenhouse gas abatement per year	922,000 Tones CO <sub>2</sub>
Equivalent number of households supplied	~160,000
Equivalent number of cars taken off the	~210,000
road	
Equivalent number of trees planted	~1,400,000

This site was chosen for the following reasons:

- It receives undisturbed wind flow with strong, consistent wind speeds;
- There are large setbacks to nearby dwellings;
- The existing land use is agricultural and therefore there will be minimal effects on flora and fauna;
- It is in close proximity to the electrical grid; and
- It offers easy access.

#### **Connection to the Electricity Grid**

The wind farm will connect into the existing regional 220 kV electrical network. Additionally, the majority of cables associated with the wind farm will be located underground although there will be an above ground collector system within the wind farm.

#### **Planning Process**

Our planning application for the Jung Wind Farm Stage 2 will be lodged with the Minister for Planning after a thorough consultation program has been undertaken and the site has been fully assessed for environmental impacts. The application will be assessed against the *Policy and Planning Guidelines for the Development of Wind Energy Facilities in Victoria* which set standards and limits covering the following:

- Community amenity;
- Sound compliance;
- Landscape impact;
- Shadow flicker;

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Typical internal collector powerline

Impacts to flora and fauna;
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- Impacts to cultural heritage; and
- Electromagnetic interference.

At the appropriate time, all the planning documents relating to the wind farm will be made available for public viewing at the Horsham City Council Offices and via our project website.

#### **Construction Process**

Once a permit has been issued and financing completed, construction of the wind farm can begin and will take around eighteen months. The construction process can be broken down into three main stages, starting with construction of the access tracks, construction pads, foundations and underground cabling. This stage is the busiest and involves the most people and machinery. Stage two sees the turbines delivered and installed using specialised cranes with highly skilled operators. The final stage involves commissioning and testing the wind farm and connecting it to the electricity grid so that the export of energy can begin.

#### **Community Benefits scheme**

As part of the wind farm development it is important to BayWa r.e. that the local community also benefits directly from having a wind farm in their region. The landowners hosting the turbines are all paid for accessways, substations, wind turbines and hardstands on their land.

As part of the development, BayWa r.e. will initiate a community reference group made up of local community members who will guide the distribution of the proposed annual **Community Fund** which is equivalent to \$1000 per wind turbine (approximately \$47,000 per annum).

After construction is complete the **Proximity Grade 1** benefit will include all habitable dwellings within 2 km of the wind farm. These will receive \$1500 per annum for each wind turbine that is closer than 2 km to their house.

Additionally, after construction, BayWa r.e. will implement the **Proximity Grade 2** benefit which will include all dwellings within 3.6 km of a wind turbine. These will receive a rooftop solar panel system of 5 kW. If your dwelling is within 3.6 km of a turbine but you already have solar panels you can nominate a relative's dwelling (not necessarily in the region) and we will install solar panels on their house. If neither of these options are appropriate we will pay to you the equivalent value for the 5 kW system being \$5,500. A 5 kW solar system will supply the approximate equivalent of the average household requirement of free green electricity for the life of the wind farm.

#### **House Visits**

In the coming weeks, BayWa r.e. representatives will commence conducting door-to-door visits at all homes within 3 km of the proposed turbine locations. If you are not around when we visit, we will leave a note to say we've called in. If you do not live within 3 km of the wind farm but would still like us to pay you a visit, or you are unsure of how far you live from the wind farm,

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simply contact us via phone or email and we will arrange a time for one of our staff members to meet you at your home. Our contact details are at the bottom of this letter.

#### **Open Day**

On the 16<sup>th</sup> of March 2019, BayWa r.e. will host an informal display of information about the wind farm and the wind industry generally at the Jung Hall between 11 am and 2 pm. Here you can meet BayWa r.e. staff who will be happy to answer your questions about the wind farm and the planning process.

#### About BayWa r.e. Wind Pty Ltd

BayWa r.e. Wind Pty Ltd began operations in Australia in 2017 through the acquisition of Future Energy Pty Ltd and its pipeline of wind farm projects. Future Energy was established in 2004 to develop, construct, own and operate renewable energy projects throughout Australia.

BayWa r.e. has various projects under active development in Australia which include 6 wind and 4 solar projects with capacities ranging from 7 to 224 MW.

The Timboon Wind Farm and Yawong Wind Farm have been completed in late 2018. The wind farms that are currently under development include the Ferguson Wind Farm and the Diapur Wind Farm. These wind farms will be constructed in 2019.

For further information please visit our websites at <u>fergusonwindfarm.com.au</u>, <u>timboonwestwindfarm.com.au</u>, <u>yawongwindfarm.com.au</u> and <u>diapurwindfarm.com.au</u>.

For more information about BayWa r.e. and specific projects please visit our website at <u>baywa-re.com.au/en/projects</u>, call us on +61 3 9429 5629, or email us at <u>info@baywa-re.com.au</u>.

Yours faithfully,

#### Peter Lausberg

Head of Development

![](_page_45_Picture_0.jpeg)

#### What is the project?

The proposed Jung Wind Farm Stage 2 is bounded by Smiths Road to the north, Dogwood Road and Henty Hwy to the west, Greenhills Road to the south and Jung Wheat Road to the east and is shown on the enclosed map. The wind farm will consist of approximately 47 turbines with a total capacity of around 263 megawatts. It will connect into the 220 kV electrical network which traverses the site. More details about the project will be made available throughout the development of the project.

# What stage of the project is BayWa r.e. at and when might the project proceed if it gets planning permission?

We are at the pre planning application consultation stage. Based on initial feedback from the community, Council and the Department of Environment, Land and Planning (DELWP), BayWa r.e. is currently proceeding with further expert reports to inform a planning application. Expert reports will be conducted for;

- Planning and consultation
- Landscape and Visual
- Flora and Fauna
- Acoustics
- Traffic Management
- Aeronautical
- Geotechnical
- Heritage
- Electromagnetic Interference

#### What is the timeframe for the project?

Timing for the project is influenced by a range of factors, however a broad program is as follows:

- We expect to lodge a planning permit application late 2019 or early 2020 subject to the timing and findings of expert assessments.
- Securing other regulatory permissions and reaching Financial Close 1 to 2 years after planning permission.
- Construction is expected to take between 1 and 2 years.

# What type of manpower will BayWa r.e require during the feasibility and construction stages and after the wind farm becomes operational?

Feasibility and planning stages for the project will be covered by existing staff and consultants. Construction and Commissioning staff can only be determined once the design parameters have been finalised however this is likely to require 40-60 people. Once the wind farm is operational there will be an Operations and Maintenance requirement. Based on other wind farms, this requires around 10-12 full time staff.

#### What is the noise from the wind farm like?

Pre construction noise monitoring will be undertaken in the coming months. The wind farm This copied doctanets comply with than age e regulations. The Jung township is located around 3km from the for the sole operator of the price will be well below the allowable noise limits.

its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any convright

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#### What would be the expectancy of the life span of the wind farm?

The wind farm will operate for 25 years but may be repowered for a further 25 years.

#### Would there possibly be a stage 3?

Grid constraints are the main hurdle to a larger facility. At this point in time a stage 3 is highly unlikely.

#### Does the project include a substation to connect to the grid?

Yes, a substation will be required that will be within the wind farm envelope. The location has not yet been decided.

#### What is proposed as part of the Community Benefits scheme?

As part of the wind farm development it is important to BayWa r.e. that the local community also benefits directly from having a wind farm in their region. The landowners hosting the turbines are all paid for accessways, substations, wind turbines and hardstands on their land.

As part of the development, BayWa r.e. will initiate a community reference group made up of local community members who will guide the distribution of the proposed annual **Community Fund** which is equivalent to \$1000 per wind turbine (approximately \$47,000 per annum).

After construction is complete (from when all turbines are operational) the **Proximity Grade 1** benefit will include all habitable dwellings within 2 km of the wind farm. These will receive \$1500 per annum for each wind turbine that is closer than 2 km to their house.

Additionally, after construction is complete (within 3 months after all turbines are operational), BayWa r.e. will begin the process of implementing the **Proximity Grade 2** benefit which will include all dwellings within 3.6 km of a wind turbine. These will receive a rooftop solar panel system of 5 kW. If your dwelling is within 3.6 km of a turbine but you already have solar panels you can nominate a relative's dwelling (not necessarily in the region) and we will install solar panels on their house. If neither of these options are appropriate we will pay to you the equivalent value for the 5 kW system being \$5,500. A 5 kW solar system will supply the approximate equivalent of the average household requirement of free green electricity for the life of the wind farm.

#### **Further Questions**

We are always happy to provide further information. Please contact Fi Cotter, our planning and engagement consultant on 0408 587 095 or <u>fi.cotter@energyforms.com.au</u> if you have any questions regarding this project.

For more information about BayWa r.e. and specific projects please visit our website at <u>baywa-re.com.au/en/projects</u>, call us on +61 3 9429 5629, or email us at <u>info@baywa-re.com.au</u>.

We will update our FAQ sheets as needed and include these in regular Newsletters. This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any

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#### Overview

This update is regarding the Wimmera Plains Wind Farm (formally referred to as Jung Stage 2) which was presented to the community earlier in 2019. The project layout has been emerging throughout the year and as a result of the Avonbanks Mine proposal the wind farm layout has changed. All turbines have been removed from that land and an updated layout is attached for your information. Please note that there still may be some modest changes to this layout including some additional turbines. This update is to let you know where the project is at and what to expect in the coming months.

#### What is the project?

The proposed Wimmera Plains Wind Farm is bounded by Kalkee East Road to the north, Dogwood Road and Kelly Road to the west, Greenhills Road to the south and Jung Wheat Road to the east and is shown on the enclosed map. The wind farm will consist of approximately 53 turbines with a total capacity of around 263 megawatts. It will connect into the 220 kV electrical network which traverses the site. More details about the project will be made available throughout the development of the project.

# What stage of the project is BayWa r.e. at and when might the project proceed if it gets planning permission?

We are still at the pre planning application consultation stage. Based on initial feedback from the community, Council and the Department of Environment, Land and Planning (DELWP), BayWa r.e. is currently proceeding with further expert reports to inform a planning application. Expert reports will be conducted for;

- Planning and consultation
- Landscape and Visual
- Flora and Fauna
- Acoustics
- Traffic Management
- Aeronautical
- Geotechnical
- Heritage
- Electromagnetic Interference

#### What is the timeframe for the project?

Timing for the project is influenced by a range of factors, however a broad program is as follows:

- We expect to lodge a planning permit application late 2019 or early 2020 subject to the timing and findings of expert assessments.
- Securing other regulatory permissions and reaching Financial Close 1 to 2 years after planning permission.
- Construction is expected to take between 1 and 2 years.

## What type of manpower will BayWa r.e require during the feasibility and construction stages and after the wind farm becomes operational?

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farm is operational there will be an Operations and Maintenance requirement. Based on other wind farms, this requires around 10-12 full time staff.

#### What is the noise from the wind farm like?

Pre construction noise monitoring will be undertaken in the coming months. The wind farm has to comply with the noise regulations. The Jung township is located around 3km from the project, and the noise will be well below the allowable noise limits.

#### What would be the expectancy of the life span of the wind farm?

The wind farm will operate for 25 years but may be repowered for a further 25 years.

#### Would there possibly be a stage 3?

Grid constraints are the main hurdle to a larger facility. At this point in time a stage 3 is highly unlikely.

#### Does the project include a substation to connect to the grid?

Yes, a substation will be required that will be within the wind farm envelope. The location has not yet been decided.

#### What is proposed as part of the Community Benefits scheme?

As part of the wind farm development it is important to BayWa r.e. that the local community also benefits directly from having a wind farm in their region. The landowners hosting the turbines are all paid for accessways, substations, wind turbines and hardstands on their land.

As part of the development, BayWa r.e. will initiate a community reference group made up of local community members who will guide the distribution of the proposed annual **Community Fund** which is equivalent to \$1000 per wind turbine (approximately \$53,000 per annum).

After construction is complete (from when all turbines are operational) the **Proximity Grade 1** benefit will include all habitable dwellings within 2 km of the wind farm. These will receive \$1500 per annum for each wind turbine that is closer than 2 km to their house.

Additionally, after construction is complete (within 3 months after all turbines are operational), BayWa r.e. will begin the process of implementing the **Proximity Grade 2** benefit which will include all dwellings within 3.6 km of a wind turbine. These will receive a rooftop solar panel system of 5 kW. If your dwelling is within 3.6 km of a turbine but you already have solar panels you can nominate a relative's dwelling (not necessarily in the region) and we will install solar panels on their house. If neither of these options are appropriate we will pay to you the equivalent value for the 5 kW system being \$5,500.

A 5 kW solar system will supply the approximate equivalent of the average household requirement of free green electricity for the life of the wind farm.

#### **Further Questions**

We are always happy to provide further information. Please contact Fi Cotter, our planning and engagement consultant on 0408 587 095 or <u>fi.cotter@energyforms.com.au</u> if you have any questions regarding this project.

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We will update our FAQ sheets as needed and include these in regular Newsletters.

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9th December 2019

Dear Resident,

#### Proposed Wimmera Plains Energy Facility

#### Overview

This update is regarding the Wimmera Plains Wind Farm which was presented to the community earlier in 2019. The project layout has been emerging throughout the year and as a result of the Avonbanks Mine proposal the wind farm layout has changed. All turbines have been removed from land associated with the mine and an updated layout is attached for your information. Please note that there still may be some modest changes to this layout including some additional turbines. This update is to let you know where the project is at and what to expect in the coming months.

#### What is the project?

The proposed Wimmera Plains Wind Farm is bounded by Kalkee East Road to the north, Dogwood Road and Kelly Road to the west, Greenhills Road to the south and Jung Wheat Road to the east and is shown on the enclosed map. The wind farm will consist of approximately 53 turbines with a total capacity of around 263 megawatts. It will connect into the 220 kV electrical network which traverses the site. More details about the project will be made available throughout the development of the project.

#### What stage of the project is BayWa r.e. at?

We are still at the pre planning application consultation stage. Based on initial feedback from the community, Council and the Department of Environment, Land, Water and Planning (DELWP), BayWa r.e. is currently proceeding with further expert reports to inform a planning application. Expert reports are being conducted for:

- Planning and consultation
- Landscape and Visual
- Flora and Fauna

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- Traffic Management
- Aeronautical
- Geotechnical
- Heritage
- Electromagnetic Interference

#### What is the timeframe for the project?

Timing for the project is influenced by a range of factors, however a broad program is as follows:

- We expect to lodge a planning permit application in early 2020 subject to the timing and findings of expert assessments.
- Securing other regulatory permissions and reaching Financial Close 1 to 2 years after planning permission.
- Construction is expected to take between 1 and 2 years.

# What type of manpower will BayWa r.e require during the feasibility, construction and operation stages of the wind farm?

Feasibility and planning stages for the project will be covered by existing staff and consultants.

Construction and Commissioning staff can only be determined once the design parameters have been finalised however this is likely to require 40-60 people.

Once the wind farm is operational there will be an Operations and Maintenance requirement. Based on other wind farms, this requires around 10-12 full time staff.

#### What is the noise from the wind farm like?

Pre construction noise monitoring will be undertaken in the coming months. The wind farm has to comply with the noise regulations. The Jung township is located around 3km from the project, and the noise will be well below the allowable noise limits.

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#### What would be the expectancy of the life span of the wind farm?

The wind farm has a lifetime expectancy of 25 years, after which can be repowered or decommissioned.

#### Would there possibly be a stage 3?

Grid capacity constraints are the main hurdle to a larger facility. BayWa is not considering a larger facility at this point in time and therefore stage 3 is highly unlikely.

#### Does the project include a substation to connect to the grid?

Yes, a substation will be required that will be within the wind farm envelope. The location has not yet been decided.

#### What is proposed as part of the Community Benefits scheme?

As part of the wind farm development it is important to BayWa r.e. that the local community also benefits directly from having a wind farm in their region. The landowners hosting the turbines are all paid for substations, wind turbines and hardstands on their land.

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Additionally, after construction is complete (within 3 months after all turbines are operational), BayWa r.e. will begin the process of implementing the **Proximity Grade** 2 benefit which will include all dwellings within 3.6 km of a wind turbine. These will receive a rooftop solar panel system of 5 kW. If your dwelling is within 3.6 km of a

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necessarily in the region) and we will install solar panels on their house. If neither of these options are appropriate we will pay to you the equivalent value for the 5 kW system being \$5,500.

A 5 kW solar system will supply the approximate equivalent of the average household requirement of free green electricity for the life of the wind farm.

#### **Further Questions**

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We will update our FAQ sheets as needed and include these in regular Newsletters.

Yours faithfully,

Peter Lausberg

Head of Development

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