



ADAM GRESHAM

OBJECT

Submission No: 189665

Organisation:		Key issues: <i>Energy transition, Land use compatibility, Visual impacts, Biodiversity, Traffic, Heritage, Water, Hazards and risks, Decommissioning and rehabilitation</i>
Location:	<i>New South Wales 2618</i>	
Submitter Type:	<i>an individual making a submission on my own behalf</i>	
Attachment:	<i>Submission Wallaroo Solar Farm 31 July 2024.docx</i>	

Submission date: 7/31/2024 4:53:19 PM

Please find attached a Submission of Objection to the Wallaroo Solar Farm in its current state.

Submission to Independent Planning Commission re: Wallaroo Solar Farm SSD-9261283. Development of a 100 MW solar farm and associated infrastructure, including battery storage facility.

Dear Independent Planning Commissioners

We wish to provide a submission opposing the Wallaroo Solar Farm Proposal in its current state.

We reside on one of three, 4 hectare (10 acre) properties in the Wallaroo district with frontage and entry via Gooromon Ponds Road. The close proximity of our location to the ACT is substantiated by Wallaroo having an ACT postcode. We primarily use ACT services and amenities as they are more accessible from our location. We use the NSW rural bus service to transport our three children to and from school on weekdays and use the Gooromon Ponds Road and Wallaroo Road, as it is the only access route, on multiple occasions at different times a day to commute to and from work and attend extracurricular activities.

There are many facets to our opposition to the proposal. This submission intends to raise with you our, and our communities, concerns in relation to the inadequacy in process, a lack of a well-considered, practical and evidence based project, impacts on the biodiversity of the proposed site particularly in relation to adjacent land use in the ACT, the visual impact and safety of the residents living in close proximity to the proposed site, safety and impact on Wallaroo and Gooromon Ponds roads during the construction phase and ongoing impacts relating to maintenance, and the broader long term impacts on the ACT/NSW region.

In assessing the viability of the Wallaroo Solar Farm Proposal we believe the Yass Valley Council opposition and over 50 public objections, indicate clear opposition and should carry weight in the decision making. Most objectors are not experts or well acquainted with Planning and Development rules, guidelines and processes. To understand some of the technical jargon and acronyms in technical report has been challenging and we believe limits the capability of some interested parties in having a voice. Even the volume of information and repetition makes analysis difficult. E.g. the EIS on Aboriginal Cultural Heritage.

The points we raise for independent consideration in relation to the State Significant Development assessment of the Wallaroo Solar Farm proposal, under the Environmental Planning and Assessment Act 1979 (EP&A Act) are as follows.

Renewable Energy Projects and Consultation

We are supportive of clean, affordable and reliable renewable energy for Australia's future energy system and understand the complexity and urgency by Governments to shift from coal-fired power and bring renewables online quickly to maintain supply. We support the NSW Government objective to reach Net Zero by 2050 and the necessity of a significant increase in renewable electricity production to deliver a reliable system as coal production exits the market.

We agree with the Grattan Institute's views of Government policies are focusing on achieving a percentage of electricity production from renewable sources, distracting policy effort from the objective: delivering a reliable system that meets emission targets at the lowest overall cost for consumer¹. The heightened sensitivity of Governments to not experience energy reliability issues has led to favouring

¹ [Keeping-the-lights-on-Grattan-Institute-Report.pdf](#)

interventions, and to choose interventions that create the immediate appearance of ‘doing something about reliability’ rather than addressing underlying causes.

We believe the Wallaroo Solar Farm is a hasty response to the urgency, due diligence has not been undertaken for site assessment, selection and decision making. For example we are not aware of feasibility studies of the site and surrounding sites has been conducted.

The *Keep the Lights On* report by the Grattan Institute refers to communities that haven’t previously hosted energy infrastructure being confronted with a new wave of development interest. This is the Wallaroo residents and extends to although in our view not appropriately recognised residents of ACT residing on the ACT/NSW border. In line with the *Keeping the Lights on* report, we are concerned about disruption and loss of amenity during both the development and operation phases, and about the lack of early engagement and transparency from the applicant.

In 2016, the Finkel Review of energy security recommended the establishment of Renewable Energy Zones (REZs) to minimise transmission connection costs. This idea has been adopted by the NSW, Victorian, and Queensland governments.

In NSW, EnergyCo oversees strategic planning for each Renewable Energy Zone (REZ), and coordinates tenders for building and accessing transmission. The idea is that centralising planning and coordination could enable transmission and generation to be built quickly, cheaply, and in an orderly manner.

EnergyCo² Website does not identify the South-East region of NSW as a REZ and states

‘We will endeavour to achieve a balance between electricity, agriculture, heritage, visual amenity, mining and other land uses within REZs. The benefits of the REZs will be shared with communities, including First Nations people and communities, in a coordinated and thoughtful way.

As previously noted we are not aware of feasibility studies or activities to consider ‘balance’. The Wallaroo Solar Farm proposed site is prime farming land, adjacent to threatened species habitats and the visual amenity impacts haven’t been appropriately remediated.

The recent Community Engagement Review Report to the Minister for Climate Change and Energy³ December 2023 highlights that the energy transition cannot succeed without community participation and effective engagement over a long and sustained period of time, and presents recommendations to address known and anticipated challenges facing communities across the country. NSW has the opportunity to be at the forefront of implementing the recommendations of the report to optimise successful community engagement and reach the transition needs on schedule.

Our assessment of the Wallaroo Solar Farm Proposal and overall transition against the themes outlined in the report:

Themes with recommendations	Wallaroo Solar Farm Proposal
Theme 1. Improve community engagement by motivating developers to achieve best practice and only selecting reputable developers for new project developments.	Poor engagement practices has led to distrust, lack of due diligence to determine the proposal site, lack of trust in the applicant due to inaccuracies and contradictory information has led to the feeling the applicant cannot be trusted to tell the truth, lack of accountability if compliance and performance falls below the

² [What's involved in a Renewable Energy Zone? | EnergyCo \(nsw.gov.au\)](https://www.energy.nsw.gov.au/what-is-a-renewable-energy-zone)

³ [Community Engagement Review Report to the Minister for Climate Change and Energy \(dceew.gov.au\)](https://www.dccew.gov.au/communities/engagement-reports)

	expected standard, lack of cultural awareness and culturally safe and effective engagement.
Theme 2. Reduce and eliminate unnecessary community engagement by selecting the best project sites, and avoiding poor and inappropriate sites.	A poor site selection process and anxiety surrounding the uncertainty of whether or not the project will proceed or when it will proceed, make for a poor engagement experience. There is inconsistent land use mapping to identify and address competing land use issues.
Theme 3. Reduce and minimise the need for elongated community engagement by re-engineering planning and environmental assessment and approval processes.	Poor project planning and environmental approval processes.
Theme 4. Reduce unresolved and lengthy complaints by ensuring best practice complaint handling, backed up with a new, relevant ombudsman scheme in each state.	
Theme 5. Improve community understanding of the need for the transition, including what is to be deployed in their region as well as where, when and why. Ensure appropriate governance is in place to manage the broader impacts of the transition as well as oversight of projects of national significance.	<p>There is a lack of clarity about the plan for the transition. There is concern about the cumulative impacts for regions that would host large numbers of projects (ACT and South East NSW has multiple) and little information from authorities.</p> <p>Implications for roads and bridges haven't been addressed – the predicted high volume of oversize, overmass (OSOM) vehicles necessitates either road widening or additional overtaking lanes (such as pullouts). There will also be a need for bridge repairs and maintenance, along with road service upgrades and repairs and sealing of gravel roads. These are in both NSW and the ACT jurisdictions.</p> <p>Lack of accurate information on transport volumes.</p>
Theme 6. Improve acceptance of the transition changes and impacts by engaging the community to identify opportunities and enable sustainable benefit sharing. These opportunities include local economic development in conjunction with numerous other opportunities that will benefit the broader community.	The need and opportunity for the energy transition to deliver lasting benefits to First Nations peoples, ACT residents in neighbouring suburbs and Wallaroo residents isn't evident.

As a Wallaroo resident directly impacted by the Wallaroo Solar Farm, the applicant has not kept the community informed about the progress, performance and compliance of the project. Current status and progress of the proposal has been communicated mainly by NSW Planning.

We believe good consultation and community engagement hasn't been undertaken and is essential due to the community living with the long term impacts. The requirement of extensive and broad consultation has not been met. Consulting with organisations in close proximity to the proposed site has not occurred.

Inadequate Administrative Functions undertaken by NSW Planning

Due to the Wallaroo Solar Farm proposal bordering the Australian Capital Territory, cross border impacts and regional collaboration should have been considered more thoroughly. The NSW Cross-Border Commissioner has reported they have not received any correspondence or consultation requests from Wallaroo Solar Farm. Detailed assessment of the Wallaroo Solar Farm development proposal by key State and Commonwealth agencies was undertaken with NSW agencies, however there is little, to no evidence of Assessment responses from the ACT Government departments and agencies that represent or interact with the areas closely impacted by the Wallaroo Solar Farm proposal, such as, ACT Government Agencies covering transport, all aspects of environment, planning and sustainable development, economic development, tourism and fire and rescue.

We believe the scale and impacts of the project and the stipulated guidelines call for assessment proportionate to the scale and impacts of the project, meaning broader engagement than to date.

While Legislation, plans, policies and guidelines may be interpreted as NSW State based and therefore not applicable, this project is unique in its proposed site location on the ACT/NSW border. We believe Government constructs shouldn't limit or be a reason to exclude obtaining key advice to make an informed and balanced assessment.

The NSW State Significant Development Guidelines – October 2022⁴ states that:

*Prior to determination, they are subject to a comprehensive assessment with **extensive community participation**. The Department of Planning and Environment (the Department) co-ordinates this assessment*

Community participation with the South West NSW Region and Canberra Region has been inadequate and certainly not extensive. Advertising events in the Canberra Times is an outdated approach to reaching communities for engagement. The advertising and notification of the Independent Planning Commission Public forum, date and time (e.g on a week day, in ACT/ NSW school holidays) and at a location 30 minutes from the Wallaroo Solar Farm site where the majority of impacted community members reside is not conducive to achieving opportunities for representation.

ACT/NSW Border

The ACT and NSW Memorandum of Understanding (MOU) for Regional Collaboration signed as recent as March 2024 refers to the importance of collaborating to improve access to services, build community resilience and develop the economies of cross-border communities⁵.

With ACT an island within NSW this collaboration is essential between ACT and the South East Region of NSW, with reciprocal arrangements well established across multiple settings including health care, emergency services and economic impacts.

The Guiding Principles of the MOU are intended to reflect the shared values and the common commitment of both jurisdictions to address the diversity of challenges and opportunities within the regions. Of significance is dot point seven of the Guiding Principles stating that the ACT and NSW Governments will pursue a borderless approach that optimises best outcomes for communities of the Canberra Region.

⁴ [State Significant Development Guidelines – October 2022 \(shared-drupal-s3fs.s3.ap-southeast-2.amazonaws.com\)](#)

⁵ [ACT-NSW Memorandum of Understanding for Regional Collaboration](#)

We believe the ACT/ NSW border has been intermittently applied or ignored throughout the proposal at convenience to support justification of the Wallaroo Solar Farm proposal. For example buffer zones used in other NSW cities and towns, distances from urban dwellings and adjacent to an ACT Nature Reserve.

Planning

We refute any claims the Wallaroo Solar Farm is of good project design. Site identification has not been a result of thorough analysis and good wholistic planning. The proposed site is not the result of a feasibility study or analysis in choosing a suitable site and there is a land use conflict with existing and approved uses of the land and adjacent land.

From the evidence supplied we are not convinced that the Wallaroo Solar Farm is of a robust layout and measures to mitigate impacts have been applied. As outlined in this submission, the sensitivity of the site, strategic planning context, community views and the likely impacts of the project have not been appropriately considered.

The proposed site is immediately adjacent to the ACT Border and adjacent to the ACT Jarramlee/ West Macgregor nature reserve⁶ and Gooromon Grasslands Offset⁷ areas. These sites are of significant importance, a stronghold of the Golden Sun Moth and other grassland-dependent species.

The Wallaroo Solar Farm proximity of approximately 750 meters north-west of the ACT suburbs of Dunlop, Flynn and Macgregor poses significant visual impact on the adjacent ACT residents and possible bushfire risk. The remediation actions proposed of landscaping will only partially resolve this concern due to the gradient and fall of the land on the proposed site and elevation on neighbouring sites.

Energy transition is an emerging science with long term impacts not yet realised and due to the pace, research is not keeping abreast. In our view it is an education piece. The potential bush fire risk of the Wallaroo Solar Farm proposal, less than a kilometre within the vicinity of built up areas/ urban sprawl can be mitigated by relocation to less impactful site.

The likely impacts of the development, including the environmental impacts on both the natural and built environments, and the social and economic impacts in the locality have not been appropriately assessed or appropriate adjustments made to mitigate potential risk.

The approval of the Wallaroo Solar Farm in the current proposed site would set a precedent for other future applicants proposing sites within close proximity to urban and built up areas. Other solar projects have located themselves well away from existing urban areas, whereas this proposal is located on the ACT perimeter, the City of Canberra. Examples of distances in regional area:

- a. Springdale solar farm is 8 km from the town of Sutton
- b. Gunning solar farm is 12km southwest of Gunning
- c. Blind Creek solar farm is 8km northwest of Bungendore
- d. Goonumbla Solar Farm is 10km west of the town of Parkes
- e. Wyalong Solar Farm is 7.5 km northeast of West Wyalong
- f. Williamsdale solar farm is 20 km south of Canberra

We have not been able to find anywhere else in Australia, a solar farm located under 6 kilometres from residential homes or under 6 kilometres from residential homes and within another state or territory's jurisdiction.

⁶ [Jarramlee-West MacGregor Grasslands Nature Reserve - Parks ACT](#)

⁷ [Gooromon Grasslands Offset Areas - Environment, Planning and Sustainable Development Directorate - Environment \(act.gov.au\)](#)

Applicant Engagement with local Aboriginal and Torres Strait Islander Groups

We consider any claims that the Ngunnawal people have been appropriately consulted on the Wallaroo Solar Farm Proposal as invalid. The ACT Aboriginal and Torres Strait Islander Elected Body is the peak body representing Aboriginal and Torres Strait Islander people of the region. There is little evidence of consultation with this body and again lack of 'over the border' community engagement despite the Ngunnawal and Ngambri people being the traditional custodians of the land.

The organisations listed as consulted in Environmental Impact Statement, and our comments in bold:

- Ginninderra Aboriginal Corporation – **on internet search no results**
- Goodradigbee Cultural and Heritage Aboriginal Corporation – **located in Sydney**
- Gulgunya Ngunawal Heritage Aboriginal Consultancy (GNHAC) – **on internet search no results**
- King Brown Tribal Group
- Konango Aboriginal Cultural Heritage Services – **located in Sydney**
- Merrigarn Indigenous Corporation – **registered in Sydney, on internet search no results**
- Muragadi Heritage Indigenous Corporation - **located in Sydney, relevance?**
- Murri Bidgee Mullangari Aboriginal Corporation - **located in Sydney region**
- Ngambri Local Aboriginal Land Council (Ngabri LALC)
- PD Ngunawal Consultancy
- Onerwal Local Aboriginal Land Council (Onerwal LALC)

We question the validity of this list and the applicability of their relevance in consultation on the Wallaroo Solar Farm. The Environmental Impact Statement is an exhaustive 171 page technical report. Diagrams identify heritage sites within 1 kilometre and conveniently exclude identifying heritage sites on the proposed site.

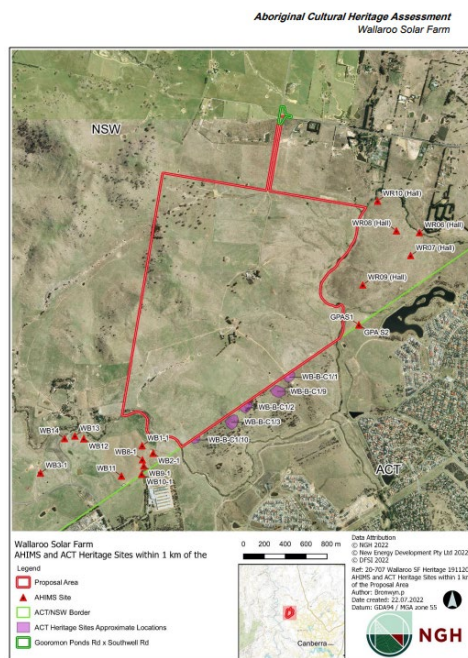


Figure 2-6. AHIMS Sites in proximity to the Proposal Area.

Extract from the EIS: Aboriginal and Cultural Heritage Assessment⁸

⁸ [Wallaroo Solar Farm \(nsw.gov.au\)](https://www.nsw.gov.au) EIS: Aboriginal and Cultural Heritage Assessment

Biodiversity/ Environment

We believe the principles of ecologically sustainable development have not been met.

We question whether the Wallaroo Solar Farm proposal requires Commonwealth approval under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) in addition to any State approvals under the EP&A Act.

A recent ACT Government transcript from the ACT Government Budget Estimates Public Hearing on 23 July 2024⁹ refers to a letter from the ACT Chief Minister, Barr to NSW Premier, Minns about the Wallaroo Solar Farm. The letter outlines ACT community member and the ACT Environment, Planning and Sustainable Development concerns around visual impact, the need for appropriate mechanisms to manage bush fire risks and ensure no negative impacts on the adjacent ACT nature reserve. It also refers to the public hearing not likely to be convenient for many people and a missed opportunity to hear from interested parties on both sides of the border.

Of significant concern is the reference in the letter to the concerns raised by the ACT that seem to have not been taken into account by the proposed conditions, in particular, in relation to the ACT's position that a buffer from the Jarramlee Nature Reserve should be established.

This evidence has caused anxiety from a lack of trust in the applicant and little comfort or assurance that concerns raised have been acted upon, and the applicant's commitment to remediation activities listed, and compliance.

PROOF

Yass Valley Council area. I noted that the proposed solar farm would be located immediately adjacent to the ACT border and approximately 750 metres north-west of the ACT suburbs of Dunlop and Macgregor. I went on to say:

I understand that the project is currently being considered by the New South Wales Independent Planning Commission to determine the outcome of the planning application.

I want to recognise the importance of renewable energy projects and solar energy in reducing greenhouse gas emissions and supporting the transition to net zero energy. However, concerns have been raised by both ACT community members and the ACT Environment, Planning and Sustainable Development Directorate around the visual impact of the proposed farm on adjacent ACT residents, as well as the need for appropriate mechanisms to manage bushfire risks and to ensure that there are no negative impacts on the adjacent ACT nature reserve.

As part of the Independent Planning Commission's process, a public meeting will be held in Murrumbidgee at 10 am on Thursday, 18 July. Given the impact of the proposed project on ACT residents, and that a significant proportion of the Yass Council residents commute into the ACT on a daily basis, this timing may not be convenient for many people.

It would be unfortunate if the timing of this important community engagement meant that interested parties on both sides of the border missed their chance to attend and engage with the process. I would appreciate your support in ensuring that the planning processes provide opportunities for our cross-border communities to provide input into the decision-making on this project.

Further, the issues raised by the ACT on the draft instrument of consent seem not to have been taken into account by the proposed conditions—in particular, in relation to the ACT's position that a buffer from the Jarramlee Nature Reserve should be established. I would appreciate advice on whether these comments will be addressed. The best contact in my directorate on this matter is Lessie Croke, Deputy Director-General, Policy and Cabinet. Thank you for your consideration of this matter.

MR CAIN: When was that letter sent?

Mr Barr: I sent that on 16 July.

MR CAIN: You have read that letter. Are you happy to table a copy of that letter?

Mr Barr: I have read the letter out; I think that is sufficient.

MR CAIN: Are you happy to table a copy of the letter?

Mr Barr: I have read the letter out; I think that is sufficient.

MR CAIN: That is a "no" to tabling the letter?

MS ORR: I think he has answered the question.

Mr Barr: I have read the letter out, word for word.

Estimates—23/07/24 P221 Mr A Barr and others

Page 221 of ACT Government Hansard¹⁰

⁹ www.hansard.act.gov.au/Hansard/10th-assembly/Committee-transcripts/est24.pdf

¹⁰ www.hansard.act.gov.au/Hansard/10th-assembly/Committee-transcripts/est24.pdf

The National Nature Positive Plan: better for the environment, better for business 2022¹¹ reports an alarming story of environmental decline. It is a call to action to take environmental laws from being nature negative, where we oversee an overall decline in our environment, to nature positive, where we protect our land and leave it in a better state than we found it. This is not a choice between protecting the environment or economic development.

Nature positive is a term used to describe circumstances where nature – species and ecosystems – is being repaired and is regenerating rather than being in decline. The **Nature Positive plan** refers to three fundamental principles:

- **the need to better protect Australia’s environment and prevent further extinction of native plants and animals.**
- faster decision-making and clear priorities to provide certainty to project proponents, de-risk investments and promote sustainable economic development.
- **a commitment to restoring public accountability and trust in environmental decision-making** through an independent EPA, regular reporting on progress towards environmental goals and making environmental data publicly accessible

This is relevant to the Wallaroo Solar Farm proposal because the adjacent ACT Nature Reserve comprising of the Jarramlee, West Macgregor Nature Reserve and Lot 2 Wallaroo Road, the Gooromon Grasslands are part of the Gooromon Grasslands Offset Areas.

The Gooromon Grasslands Offset Areas are located on the north western boundary of the ACT in the district of Belconnen. The reserves border rural grazing land within both the ACT (agisted and leased land) and NSW (freehold). It is also less than 200 metres from the suburbs of Dunlop and West Macgregor.

The NSW freehold land referred to above is the proposed site for the Wallaroo Solar Farm.



Picture: Gooromon Grasslands

¹¹ [Nature Positive Plan: better for the environment, better for business \(dceew.gov.au\)](https://www.dceew.gov.au/nature-positive-plan)

The significance of the Gooromon Grasslands Offset Areas is Jarramlee, West Macgregor and Lot 2 Wallaroo Road have complementary conservation objectives concerning Matters of National Environmental Significance (MNES), protected under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Specifically the Golden Sun Moth (*Synemon plana*). Other MNES present on the sites include Natural Temperate Grassland (of the South Eastern Highlands) (10.7 MB) and Superb Parrot (*Polytelis swainsonii*) (315.9 KB)

Recognising that the offset sites also support other natural and cultural conservation values, the secondary objectives for the offsets sites are to:

1. Maintain habitat connectivity for woodland birds
2. Contribute towards the persistence of a local population of the Canberra Raspy Cricket (*Cooraboorama canberrae*)
3. Manage potential Pink-tailed Worm-lizard (*Aprasia parapulchella*) habitat
4. Improve protection and restoration of ecological values throughout the riparian corridor
5. Respect and foster Aboriginal connection and management of Country
6. Facilitate the development of a Ngunnawal Cultural Landscape Framework.

The Gooromon Grasslands Offset Areas are also important for connectivity to other nature reserves, areas and threatened fauna.

Connectivity - Remnant patches of Natural Temperate Grassland and Golden Sun Moth habitat within the Gooromon Grasslands also extend into the Dunlop Grassland Nature Reserve to the north-east.

Gooromon Grasslands is part of an extensive area of Natural Temperate Grassland that extends across the northern ACT. The area includes the Gooromon Ponds Creek and Ginninderra Creek, which converge within Jarramlee and are feeder creeks for the greater Murrumbidgee River Corridor. Gooromon Grasslands protects a relatively isolated patch of Golden Sun Moth habitat within Canberra's rural urban fringe. **This Golden Sun Moth habitat supports one of the largest known populations of Golden Sun Moth in the ACT.**

Other Threatened fauna in the Gooromon Ponds Grasslands include:

- Canberra Raspy Cricket (*Cooraboorama canberrae*)
- Diamond Firetail (*Stagonopleura guttata*)
- Dusky Woodswallow (*Artamus cyanopterus*)
- Flame Robin (*Petroica phoenicea*)
- Hooded Robin (*Melanodryas cucullata*)
- Little Eagle (*Hieraaetus morphnoides*)
- Painted Snipe (*Rostratula benghalensis*)
- Rainbow Bee-eater (*Merops ornatus*)
- Sacred Kingfisher (*Todiramphus sanctus*)

- Striped Marsh Frog (*Limnodynastes peronii*)
- Spotted Grass Frog (*Limnodynastes tasmaniensis*)
- White-browed Woodswallow (*Artamus superciliosus*)
- White-fronted Chat (*Epthianura albifrons*)
- White-winged Triller (*Lalage sueurii*)

The golden sun moth (*Synemon plana*) is listed as critically endangered under the Australian Government Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Listed threatened species and ecological communities are a matter of national environmental significance. Under the EPBC Act an action such as a development will require approval from the minister if the action, such as a development proposal has, will have, or is likely to have a 'significant impact' on a matter of national environmental significance.

Examples of **mitigation measures for the golden sun moth** - Minimising Impacts include reducing the impact of construction works by **employing an appropriate buffer** around golden sun moth habitat (for example **100–200 m around breeding habitat**), restricting vehicular movement during times of high soil moisture, and when adult moths are flying.

Page 7 Habitat connectivity¹²

Table 3: Significant impact thresholds for the golden sun moth

Ecological element affected	Impact threshold	Comment
Large or contiguous habitat area (>10 ha)	Habitat loss, degradation or fragmentation >0.5 ha	Habitat is a similar or connected area within which the golden sun moth is found during surveys or known from records. The function of the area may include, but is not limited to: feeding, breeding, dispersal.
Small or fragmented habitat area (<10 ha)	Any habitat loss, degradation or fragmentation	Small areas of habitat are more likely to suffer significant impacts from loss, degradation and fragmentation than larger areas. The limited dispersal ability of the golden sun moth means habitat areas separated by >200 m are effectively isolated and should be considered as separate habitat areas. Extremely small, isolated and degraded habitat patches (for example <0.25 ha) may support populations of golden sun moth but are unlikely to contribute to the overall ecological health of the species.
Habitat connectivity	Fragmentation of a population through the introduction of a barrier to dispersal	Barriers to dispersal could include: breaks in habitat of >200 m; structures that prohibit movement (for example buildings, solid fences).

¹² [Significant impact guidelines for the critically endangered golden sun moth \(*Synemon plana*\) - Nationally threatened species and ecological communities EPBC Act policy statement 3.12 \(agriculture.gov.au\)](#)

Table 4: Examples of mitigation measures for the golden sun moth

Avoiding impacts	<ul style="list-style-type: none"> Retain habitat patches known or likely to contain the golden sun moth, and manage for the species (see 'Managing habitat' below). Re-site roads or easements so as to avoid habitat disturbance. Use trenchless installation of pipelines by subterranean tunnelling at a depth of >0.5 m. Conduct temporary or discrete activities at a time when they will not have a negative impact on the golden sun moth population. For example mosaic management such as patch burning or staggered weed control measures designed to avoid affecting the whole population at the same time. Avoid introducing trees or structures that could encourage predatory birds to nest and breed.
Minimising impacts	<ul style="list-style-type: none"> Reduce the impact of construction works by employing an appropriate buffer around golden sun moth habitat (for example 100–200 m around breeding habitat), restricting vehicular movement during times of high soil moisture, and when adult moths are flying. Design fences to: <ul style="list-style-type: none"> allow the passage of golden sun moth adults, and limit birds perching close to habitat patches, to limit predation on golden sun moths. Maintain previous management regime, or adapt it in a temporal and spatial mosaic so that experimental and adaptive management can be applied. Avoid shading (from buildings, landscaping or other structures) in the middle of the day (in winter between 0900 and 1500 hrs) to minimise negative effects on soil temperature and moisture. Maintain hygiene on maintenance and construction vehicles and machinery passing through golden sun moth habitat, to ensure that weeds are not spread. Avoid landscaping that would introduce weeds or non-Indigenous plants into site.



Figure 1-2: Proposed Area



Figure 1-1: General location of the Proposal Area

Images from EIS: NGH Archaeological Technical Report – the location of the Wallaroo Solar Farm.

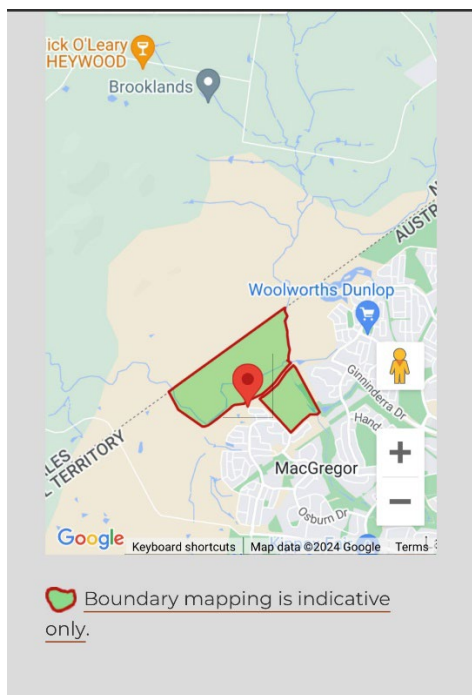
The Wallaroo Solar Farm EIS: Biodiversity Development Assessment Report¹³ states that the on page 42 and 45 that the Golden Sun Moth species was excluded from further survey assessment. On page 49 the report is contradicting, stating the results of field surveys on the Golden Sun Moth. On page 42 the presence of the Golden Sun Moth on the proposed site is referred to as 'unlikely', despite the large population and habitat of the Golden Sun Moth adjacent in the ACT and in NSW in the Gooromon Ponds Grasslands Offset. The Gooromon Ponds Grasslands have not been considered in the Assessment, or any possible habitat connectivity from the Grasslands. The ACT is a small finite land area with large components of Commonwealth land throughout. The likelihood and projections of the ACT requiring further future offset sites to balance planning development and urban density increases, as the city rapidly grows city has also not been considered.

All images in the Biodiversity Development Assessment Report do not identify the ACT Nature Reserve and the proximity to the proposed site. The Commonwealth Governments Nature Positive strategy is a stronger commitment to protecting and preventing threatened species extinction. The Wallaroo Solar Farm proposal adjacent to the ACT Nature Reserve doesn't support the national interest and commitment to **better protecting Australia's environment and preventing further extinction of native plants and animals.**

Page 5 of the Conservation Advice for *Synemon plana*¹⁴ states that:

sites where the Golden Sun Moth is found are generally flat or gently sloping and exposed to full sun. Increases in shading, such as from trees or buildings, can negatively affect the temperature, moisture and plant characteristics of a site. Eighty-eight percent of habitat in the ACT occurs in areas without trees or in very sparse woodland (Mulvaney 2012; OEH 2012; ACT Government 2017).

This indicates that any Golden Sun Moth habitat that may be on the proposed site is not conducive to co-existing with the shading from solar panels. There is also an emerging field that studies how renewable energy, a key response to climate change, can in turn alter regional weather patterns.



¹³ [Wallaroo Solar Farm \(nsw.gov.au\)](https://www.nsw.gov.au) Biodiversity Development Assessment Report

¹⁴ [Conservation Advice for *Synemon plana* \(Golden Sun Moth\) \(environment.gov.au\)](https://www.environment.gov.au)

Jarramlee-West MacGregor Grasslands Nature Reserve - Parks ACT¹⁵.

ACT Golden Sun Moth Action Plan [Grassland-Strategy-Final-WebAccess-Part-B-5-Golden-Sun-Moth.pdf \(act.gov.au\)](#)

Fire Safety and Lack of Consultation

With professional experience in urban and rural firefighting, we have concerns about the close proximity of the project's infrastructure to the urban interface.

Lithium-ion batteries store lots of energy and burn with a ferocity that expels fatal toxic and explosive gasses into the atmosphere. Due to the location of the proposed project, if the panels or batteries rupture or there is a bushfire in the area that affects the proposed site (which the surrounding area is prone to), there is a high potential for a catastrophic incident where the short- and long-term health and safety risks for residents and emergency service workers involved are high. This could also have a major effect on businesses such as those in the nearby wine district.

Fire safety not only makes good sense from a community safety point of view, it's also a good risk management business solution. The fact that the ACT Fire and Rescue service and the ACT Rural Fire Service (who are major stakeholders in relation to fire risk that involve the ACT) have not been engaged, increases the dangers if a critical emergency happened on this site.

The proposed site's location brings a high risk of fire to Canberra suburbs as the prevailing wind comes from the west. Residents of Canberra are very aware of fires entering and impacting suburbs from the west, given the 2003 Canberra firestorm that killed four people, injured hundreds and destroyed 510 properties. Afterward, Emergency Service Agency Commissioner Dominic Lane warned Canberrans 'not to be complacent that such a catastrophic event could never happen again and said living in the bush capital "comes with an element of risk"'. The McLeod Inquiry into the 2003 Canberra Bushfires, led by Ron McLeod, examined the operational response to the fires. One of the key findings was the significant threat posed by a fire approaching from the western side of the ACT.

The ACT and surrounding region also experienced significant fires in 2019-20 that have had a major impact on how residents feel regarding fire related incidents. With Climate change causing increasing and erratic weather patterns, and more prevalence of fires starting from natural causes such as lightning strikes, there is a constant fear due to what has happened in the area over the past 21 years. Community concern is not only about fires that start on the Wallaroo Solar Farm proposed site, but also with fires starting on other sites and travelling to the proposed site and how that will impact their health and wellbeing.

In the NSW Rural Fire Service (NSWRFS) operational Protocol for Incidents Involving Photovoltaic (SOLAR) Arrays and Battery Electric Storage Systems (OP 1.2.22) document [OP-1.2.22-Photovoltaic-Arrays.pdf \(nsw.gov.au\)](#), it states:

"7.3 Solar Farms and Large-Scale Installations Development Planning and Approval.

- Developers of large-scale installations should consult with NSW RFS and FRNSW during the development application process (as per NSW Planning's "Large Scale Solar Energy Guideline.")

¹⁵ [Jarramlee-West MacGregor Grasslands Nature Reserve - Parks ACT](#)

- NSW RFS will advise the developer of design features required for installations planned for bush fire prone land.

Pre-Incident Plans.

Districts and Brigades should work with the management of large-scale solar installations in their areas, to develop appropriate plans and familiarisation activities, for the event of:

- A nearby bush or grass fire potentially impacting the installation
- A fire within the installation
- A fire within the installation escaping and causing a bush or grass fire. Large scale solar facilities must have an emergency management plan which should be shared with the local District office.

Attention must be drawn to whether the facility is for generation and transmission, battery storage of power, or both.”

Neither ACTF&R and ACTRFS have been consulted. As major/relevant stakeholders, the lack of consultation with them decreases the chances of a satisfactory level of fire safety (for the duration of the project and beyond) and has not allowed them to investigate the risks to their community. This is relevant as the ACT residents in this area will be impacted the most in an emergency.

Lithium technology is relatively new, and we are still learning how to deal with these types of fires. This technology has outpaced the development of fire and emergency management standards and guidance, so we need to be very cautious on what we do with them.

The National Council for Fire and Emergency (AFAC) has endorsed the Victorian volunteer Country Fire Authority (CFA) guidelines for renewable energy facilities- “Renewable Energy Facilities Guidelines and Model Requirements 2033”, <https://www.cfa.vic.gov.au/ArticleDocuments/1933/240207-CFA%20DGMR%20Renewable%20Energy%20Facilities%20v4.2.pdf>

for reference while fire services across the country develop their own guidelines. ACTF&R are currently utilising this document when in consultation with stakeholders regarding renewable energy facilities.

Page 8 of this document references the Victoria Planning Provisions, Clause 13.02-1S (Bushfire Planning) [13.02 BUSHFIRE Victoria Planning Provisions Planning Scheme - Ordinance](#)

This document states:

Give priority to the protection of human life by:

- **Prioritising the protection of human life** over all other policy considerations.
- **Directing population growth and development to low-risk locations** and ensuring the availability of, and safe access to, areas where human life can be better protected from the effects of bushfire.
- **Reducing the vulnerability of communities to bushfire** through the consideration of bushfire risk in decision making at all stages of the planning process.

Identify bushfire hazard and undertake appropriate risk assessment by:

- Considering and assessing the bushfire hazard on the basis of:
 - Landscape conditions - meaning conditions in the landscape within 20 kilometres (and potentially up to 75 kilometres) of a site;
 - Local conditions - meaning conditions in the area within approximately 1 kilometre of a site;

- Neighbourhood conditions - meaning conditions in the area within 400 metres of a site; and
 - The site for the development.
- **Consulting with emergency management agencies and the relevant fire authority early in the process to receive their recommendations and implement appropriate bushfire protection measures.**
 - **Not approving development where a landowner or applicant has not** satisfactorily demonstrated that the relevant policies have been addressed, performance measures satisfied, or bushfire protection measures can be adequately implemented.”

Plan to strengthen the resilience of settlements and communities and prioritise protection of human life by:

- Directing population growth and development to low-risk locations, being those locations assessed as having a radiant heat flux of less than 12.5 kilowatts/square metre under *AS 3959-2018 Construction of Buildings in Bushfire-prone Areas* (Standards Australia, 2018).
- Ensuring the bushfire risk to existing and future residents, property and community infrastructure will not increase as a result of future land use and development.
- Achieving no net increase in risk to existing and future residents, property and community infrastructure, through the implementation of bushfire protection measures and where possible reducing bushfire risk overall.
- Assessing and addressing the bushfire hazard posed to the settlement and the likely bushfire behaviour it will produce at a landscape, settlement, local, neighbourhood and site scale, including the potential for neighbourhood-scale destruction.
- Assessing alternative low risk locations for settlement growth on a regional, municipal, settlement, local and neighbourhood basis.

Areas of biodiversity conservation value

Ensure settlement growth and development approvals can implement bushfire protection measures without unacceptable biodiversity impacts by discouraging settlement growth and development in bushfire affected areas that are important areas of biodiversity.

The above referenced points clearly demonstrate that all recommended bushfire risk assessments have not been taken into consideration during the application stage, as ACTF&R and ACTRFS have not been consulted. This leads to the question of validity/accuracy in any documented fire risk assessments that have been completed by the applicant. Under work health and safety legislation, designers have a duty to ensure that buildings and structures are safe and without risks to health.

Page 8, of the above mentioned (CFA) guidelines for renewable energy facilities, also states that “Consultation with CFA for fire risk management for renewable energy facilities in high-risk environments must occur at the facility planning and design stage.”

Page 16, Section 4.2.1 -Emergency Vehicle (Fire Truck) Access, of the (CFA) guidelines for renewable energy facilities, has model requirements for the provision of adequate fire truck access to and within facilities to assist fire authorities to respond to areas safely and effectively within the site that may be threatened by fire.

Page 20, "Solar Energy Facilities", state that a fire protection system must be provided for solar energy facilities. The fire protection system must be designed in consultation with fire authorities to allow a safe, adequate response to the risks and hazards at the facility.

As stated previously, regarding the above points, without consultation with ACTF&R and ACTRFS (who also have a Memorandum of Understanding with FRNSW for cross border incidents) the due diligence from the applicant is questionable.

Construction phase

Traffic

We also raise concerns with the use of Wallaroo Road, Gooromon Ponds Road, and Southwell Road for the project.

Wallaroo Solar Farm's response to RFI queries on June 27th, 2024, state there are 2 sizes of heavy trucks that will be utilised in the project. One heavy truck (B-Double) is 23.9 metres long, by 2.5 metres wide. The other heavy truck is 56.6 metres long, by 4.2 metres (trailer) and 5.7 metres (beamset) wide. These trucks will use Wallaroo Road (from the Barton Highway), Gooromon Ponds Road, and Southwell Road as means of access to and from the project site. The project will push 20 or so heavy vehicle trucks on average 24 times per day (40 times at peak) along these roads, with the total use of all vehicles over the course of the project estimated at 10, 336 times. Due to the standard of the roads already, we have grave fears for the condition of the roads used during the project, and the damage that these vehicles will cause them, that will affect the condition of our own personal vehicles we currently use on these roads every day. There has been no information delivered by the applicant or government, as to who is responsible for the added decline of the roads due to the project, which have a direct impact (including financial) to the residents of Wallaroo.

Wallaroo is right on the northwestern border of the ACT. It is the only ACT postcode where part of the land is in the ACT, and the other part is in NSW. There is only 1 road that goes in to Wallaroo (Wallaroo Road), from the Barton Highway in the ACT, with no other public means of getting out. The roads are typical narrow country roads with gullies on the edge and potholes all along. There are 56 kids that catch the school bus from the side of the road outside their property, twice every school day, with the bus frequently stopping on the road in front of the property driveways. There is little to no verge and very limited room on the side of the road, especially on the eastern side of Gooromon Ponds road, for kids to safely wait while vehicles pass.

There are bike riding groups that come through frequently, horse riders, lots of local and visiting L and P platers, as well as 40,000 visitors (conservative estimation) per year to our wineries. Due to the project, the influx of these trucks will become a major safety concern for all that use it, especially due to the size of these vehicles. Vehicles towing horse trailers are not uncommon in this area, and the width of the roads will not be suitable or safe for both this type of vehicle and the Heavy trucks involved in the project. For example, the width of Gooromon Ponds Road, outside of our property, is 5.3 metres across both lanes (see above stated truck dimensions). There has been no information from the applicant to state the financial and long-term impacts the project will have on established local businesses (e.g. wineries and riding schools) due to the major increase in heavy-vehicle traffic during the project. The ACT region is small enough where word of mouth is very influential, which could affect a great number of stakeholders of this project.

The Amber Traffic Impact Assessment, dated April 2023, [Wallaroo Solar Farm \(nsw.gov.au\)](https://www.nsw.gov.au) states that "Amber commissioned a turning movement count survey at the intersection of Barton Highway and Wallaroo Road in order to determine the existing traffic conditions at the intersection. The survey was

undertaken on Tuesday 9 February 2021 from 5:30am to 9:30am and from 4:30pm to 7:30pm. The peak hour survey results are illustrated in Figure 2 and are summarised below:”

We have questions over the validity of this survey, and disagree with the authors of the document, as it was conducted over 2 years prior to the release of the document, and the time it was conducted was during the Covid-19 pandemic, which would not give an accurate account of vehicle use due to the percentage of residents potentially working from home, as per normal during that time.

The Amber Traffic Impact Assessment part 5.2 – Wallaroo Road/ Gooromon Ponds Road, also states:

“A swept path assessment has been prepared for the intersection using the software package ‘AutoTurn’. The swept path assessment is shown within Appendix F and shows that two B-Doubles are able to pass at the intersection. Accordingly, the intersection is considered to be suitable to accommodate the type of vehicles expected to access the site during construction and no road upgrades are required.”

From our measurements (as stated 5.3 metre width across both lanes), there is no possibility that 2 of these vehicles will be able to pass each other on this road safely. It is also worthy of note, that there is a gully on the eastern side of this road, with a considerable fall to the below ground level.

It is also worthy of note that there is a sign, at the above-mentioned intersection, that states there is a 5-tonne limit on vehicles accessing this road. This has not been mentioned in any documents provided by the applicant.

There was also comment provided by local resident of approximately 50 years, Bernie O’Brien, at the NSW Government Independent Planning Commission Public Meeting on 18th July 2024. He raised major concern with the safety aspect of the Gooromon Ponds Bridge, which is situated on Wallaroo Road east of the intersection with Gooromon Ponds Road. From his knowledge of the bridge, as an applicant of the original tender process, his concerns raised were towards safety and structural integrity with heavy vehicles crossing the bridge and the impact on residents if there was any structural collapse of the bridge. We cannot find any documentation from the applicant, that provides any reference to the bridge, nor the load rating or any feasibility of using the bridge for the project. This is vital information as the bridge is on the only entrance and exit for the residents of Wallaroo.



Photo: Wallaroo Road bridge taken from the intersection with Gooromon Ponds Road.



Photo: Wallaroo Road and Gooromon Ponds Road intersection including the '5-tonne limit on vehicles accessing Gooromon Ponds road' sign.

Integrity of the Report

From all of the above information, we believe there is enough evidence to question the integrity of the applicant and application in maintaining due diligence for the completed stages of the project. There is a large number of questionable aspects to this proposal, and we have no confidence in the applicant or the tendered process to be able to support the project in this location. The applicant appears to have lacked honesty, openness, and transparency in their dealings with stakeholders. They have lacked the

knowledge of which relevant stakeholders should be engaged and have been unable to earn and sustain public trust (of a high level) due to their actions, or lack thereof, taken during the process. Alarming, there are also fears as to how the landscape and infrastructure will be left at the end of the rectification process, due to the lack of due diligence and accountability of the applicant to date.

For example:

- Short notice, poor timing and not much publicity around the Independent Planning Commissions Final Public meeting on Thursday 18th July 2024,
- The applicant being told to invite certain special interest groups from NSW and the ACT, and still didn't. A local community group stated last week in the ACT Select Committee on Estimates that they have had no consultation at all, and this is the area that is hundreds of metres away from the battery storage systems.
- Ambiguity around the rectification process at the end of the project.

In conclusion, we are not saying that the project should be scrapped as we are supportive of renewable energy. What we are saying is the Government should investigate further, with all relevant stakeholders, to provide a more honest, open, and transparent engagement process and based on the evidence find a new location. This would allow for the opportunity to deliver a suitable project site, that best reflects the needs of the community, that can deliver the renewable energy targets of Government and reduce the long-term negative impacts to the ACT/South East NSW region.

Thank you for the opportunity to provide feedback. We are willing to meet for further discussion if required.