

I **strongly object** to the Middlebrook Solar Farm proposal.

My family has owned our farm “Brooklyn” for 21 years and I have lived on the property for over 8 years on and off during this period.

I currently reside in the cottage on the farm [noted as Receptor 15 in the EIS] and conduct beef cattle breeding & stud sheep breeding primary production enterprises on the property. Additionally, I conduct my legal practice from home. Accordingly I am present on the property 24 hours a day, 7 days a week.

My house looks directly south at the proposed solar farm development and my office also faces the development site including the 6ha substation.

The EIS indicates this project is differentiated from others as there is “no greater than low visual impact for any residence” (page xxiv). I strongly disagree with this objective assessment as it fails to take into account several factors:

- Farming enterprises are undertaken outdoors and therefore the proposed solar farm site is in direct eye-line of my family during all daylight hours.
- Operating a business from home, the proposed solar farm site is in direct sight of my office and I am subjected to the visual pollution during business hours as well as during personal time.
- The classification of what constitutes a “scenic outlook” is very dispassionate and fails to recognise that I, my family and our neighbours choose to live where we live because of the very outlook which the proposed solar farm will be taking away. For someone who does not live here to be able to make a decision on paper and take away our highly valued rural outlook without compensation simply because they do not hold farmland in as highly regarded manner as do we is extremely disappointing and unjust. Every neighbour who is impacted by the proposed development should be entitled to a subjective assessment for their particular situation rather than have a blanket “low impact” rating imposed on them when it affects not only their daily lives but also the market value of their properties.

I am also extremely concerned about the amount of dust the proposed development will generate. The soil types found in the Loomberah area are highly fertile yet form almost a powder when dry. The very limited number of vehicles that traverse Marsden Park Road and Middlebrook Road each day currently cast plumes of dust over our farmland and houses, however given it is only local traffic and very infrequent we have learnt to live with this local phenomenon.

The 400 strong proposed workforce for the solar farm construction will significantly increase the level of traffic on the gravel roads and therefore the amount of dust thrown into the air and across our paddocks and residences. Page 32 of the EIS indicates there will be 166 vehicle movements per day during the construction phase and this is a conservative estimate utilising shuttle buses, which we submit will be extremely unlikely. The traffic study in Appendix D3 indicates that during peak hour currently only 6 vehicles enter or exit Middlebrook Road (page 7). During construction, the peak hour traffic volume will increase to 35 as a minimum and this could increase by 200+ if the tradesmen working on site do not travel by shuttle bus. Even on the conservative estimate of 35 vehicles during peak hours, this is a 583% increase on current levels. Which in turn means a 583% increase in the amount of dust thrown from the gravel road onto nearby farms and houses. This is both a health issue for people (apart from breathing it in the dust accumulates on our roofs and affects the quality of our rain water) & animals (the dust is inhaled by livestock and it also settles on pasture, crops, dams and livestock troughs where our sheep & cattle are forced to consume it, as well as impacting

on wool fleece quality). It is also an inconvenience as the dust that enters our houses and yards must be cleaned up.

The supposition in the EIS that Middlebrook Road “can accommodate higher traffic” (page 32) fails to take into account the impact of increased vehicle volumes on the dust created and heightened traffic noise which will impact neighbours rather than the road itself.

Then add on the 48km of internal track that will create a further dust burden.

The EIS suggests the dust issue is “manageable” (page xxxiv) by watering the road & internal tracks. Total Eren proposes to obtain the water from “Council’s standpipe”, however Tamworth Regional Council has not confirmed this is possible. Furthermore, during dry times Council advises residents along Marsden Park Road and Middlebrook Road that the gravel surfaces cannot be graded due to a lack of water. It would be unjust if Council is prepared to supply sufficient water for multiple daily water carts to suppress dust to Total Eren. Furthermore, we can categorically indicate that daily watering will do little to impede the dust and only laying a bitumen surface on the road will eradicate all dust in the area. We submit that Total Eren should be required to bitumen both Middlebrook Road (along all sides of the proposed development site) and Marsden Park Road (running from Duri-Dungowan Road to the intersection with Middlebrook Road) to ensure that neighbours are not impacted by increased dust pollution.

I also have safety concerns for people, stock and wildlife due to the increased traffic on Middlebrook and Marsden Park Roads. There has been no mention of the foggy mornings that occur in the area particularly along the creek just after turning off the New England Highway which will reduce visibility and increase the likelihood of accidents.

As a primary producer and holding livestock accreditations for our sheep stud and cattle enterprise, biosecurity is also a worry. With 400+ workers travelling past nearby farms there is a high risk of stock disease or weeds being brought into the area. Will the developer be compensating neighbours if an outbreak occurs due to their workforce being negligent?

The project also brings a heightened risk of theft to local farms. Presently, our neighbours can identify an unusual vehicle or out of the ordinary occurrence due to the limited amount of traffic on the roads. However by adding 400+ workers this will become impossible. This is not to say that the development workforce will be thieving, but rather that it will be easy for would-be thieves to disguise their movements and I fear theft of equipment, livestock and fuel will increase if the project proceeds.

Why are all of these detrimental impacts imposed on the Loomberah community when the area is not in the New England Renewable Energy Zone?

I personally feel that the proposed development is forcing us to ask ourselves “do we stay or do we go?”. There has been negligible compensation offered to neighbours who will now be living in an industrial rather than a rural setting. If farmers hold off selling out, we may see land prices plummet and any capital improvements to farms will likely not be reflected in the purchase price. However if landholders sell out now and the solar farm doesn’t proceed, they have lost the opportunity to continue farming and passing on their asset to the next generation. We are essentially in limbo as we don’t want to make any improvements to our farms (eg. sheds) or houses as there is no guarantee landholders will be compensated for capital works. This presents a real life opportunity cost.

Page 65 of the EIS notes the burden of the “cumulative effects of two proposed solar farms in close proximity” in relation to the proposed Acacia development less than 5km away. From personal experience and witnessing the effect on my own family & friends, I can categorically confirm the proposed Middlebrook and Acacia solar projects are causing high levels of stress and anxiety on local landholders and I fear for the mental health of local residents, particularly neighbouring landholders who feel disenfranchised by this process.

I also note the following discrepancies and issues in the EIS that require further investigation:

(a) The SEARS indicates the key issue “Visual” as requiring mitigation measures “including a draft landscaping plan for on-site perimeter planting, with evidence it has been developed in consultation with affected landowners”.

Page 99 of the EIS shows “potential screen planting for yellow glare” however there is no draft landscaping plan for the entire site contained in the EIS.

Furthermore, any suggestions by Total Eren representatives that tree planting can screen the effects of the proposed development fails to take into account:

- Trees do not grow quickly in the Loomberah area. With our hot summers and frosty winters, only native species are adapted to the climate and these varieties are notoriously slow growing. It is estimated it would take at least 10 years for a White Box or Yellow Box tree to grow the 4 metres required to screen a solar panel.
- Tree planting on the perimeter of the site may after a decade screen the view of the solar panels from the road adjacent to the development, however the houses which are elevated above the site will still see the panels even with tree screening.
- The suggestion that trees can be planted around the nearby houses to screen the view lacks consideration that landholders wish to be able to view their property and the surrounding hills/valleys from their homes. Part of the enjoyment of living in a rural area is to partake in the rural vista which would not exist if trees are planted within several metres of affected homes just to ensure that solar panels cannot be seen.

I therefore submit that a lack of a SEARS required landscaping plan together with failure to consider the impact of screen planting on affected landowners warrants further investigation before the future of the proposed development is determined.

(b) Page xxiv of the EIS notes a Project Differentiator of “continued stock grazing of operational solar farm allowed for”.

However nowhere in the EIS does Total Eren commit to an agri-solar farm.

An agri-solar commitment would give adjoining landholders some comfort in knowing that weeds could be controlled by grazing animals, rather than requiring copious amounts of chemical spraying to combat invasion of weed species. This is however dependent on the host landowner continuing grazing activities under an agricultural co-use agreement.

However at the same time, it is questionable whether agri-solar is possible as there will no doubt be wire/metal/glass fragments on the ground following the installation of the solar panels which could be consumed by sheep grazing beneath the panels and cause illness and/or death. There is also the likely discolouration of wool caused by animals rubbing on the support posts as well as the impact on the boundary fencing as animals rub on the wires.

Input from the Australian Livestock Production Assurance (LPA) programme is also required as to the impacts of agri-solar on the credibility of Australian red meat marketed to the world.

Further investigation is required regarding the heatbank effects on livestock grazing under panels as well as the health impacts of human consumption of meat raised within areas with such high electric & magnetic fields. This could well become an RSPCA issue.

(c) Page xxxi of the EIS indicates the project is “highly reversible”.

It is arguable that not removing cabling or infrastructure below 500mm deep (as noted on page xxvii) plus the cumulative impacts of 30+ years of driving on the same 48km of internal roads (plus the topping “with crushed stone or gravel to minimise dust” [page xxvi]) will have an irreversible negative impact on the ability of the land to be used for high quality agricultural production at the end of the life of the solar development. The soil will undoubtedly be compacted beyond the capability of growing pasture or crops, and should cultivation of the soil be attempted it is possible a primary producer may hit underground infrastructure.

It is therefore possible that at the end of the life of the development, there will be a 530 hectare wasteland akin to a coal mining site however the solar developer will not be required to rehabilitate the land like a mining company would be at the conclusion of operations.

(d) Page xxxvi of the EIS indicates “strategic alignment with existing land uses and land values”.

This suggestion is utterly false.

The Loomberah district contains some of the most highly fertile land in the Tamworth region and is also the “blue ribbon” district in terms of property values, with farms in this area attracting a “Loomberah premium”.

The development of a solar farm will detract from both of these qualities.

Several real estate agents have indicated that farms in the vicinity of the development will be unsaleable for the next 10 years as no purchasers will want to buy in the area, particularly whilst it is an industrial work site.

Following this period, overseas research (Energy Economics by Gaur and Lang, 2023) indicates rural properties can expect a decrease in property value of between 2.5% and 5.8%.

It is typical of the blasé attitude of Total Eren throughout the EIS to simply overlook the de-valuation of adjoining farms by stating there is no Australian research & therefore not addressing this issue or offering meaningful compensation to neighbours.

Meaningful compensation to neighbours, rather than token sums, must be offered by the developer if the project is to proceed.

(e) Page xxxii of the EIS indicates the development will require removal of 2.5ha of conservation significant Box Gum Woodland and removal of 194 scattered trees.

Firstly, the fact that a developer can do this and a farmer cannot smacks of double standards.

Second, the destruction of such native vegetation will disrupt wildlife corridors (for species such as wallabies, koalas, possums, gliders, echidnas as well as birds & insects) which will have a detrimental effect on several fronts:

- Loss of amenity if animals stay away. For example, musk lorikeets breed in the silky oak trees on “Ingalala” (Receptor 4) and travel down the valley to feed on the gums located at “Brooklyn Cottage” (Receptor 15). Will these birds continue to do so with 750,000 solar panels in between that will cause additional heat and reflection that could disorientate, let alone continuing breeding during the construction phase given the noise and additional road traffic that will likely cause many fatalities?
- Pushing of unwanted pests onto neighbouring farms as less access to the solar development land will force grazing/hunting on adjoining properties.
- Reduction of biological controls if the solar panels deter bees or birds from feeding on surrounding farms or the development impacts on their breeding/habitat sites due to clearing of native vegetation.
- Clearing of native vegetation may affect heat & rainfall patterns in the area which in turn will impact on both biodiversity as well as farming pursuits. If adjoining landholders experience a hotter and drier climate as a result of the solar development, what compensation do neighbours receive for cooling their homes & livestock and dealing with reduced rainfall which will require additional purchasing of fodder for livestock or inability to plant crops?

Third, the EIS indicates there will be a biodiversity offset by way of a payment to a Biodiversity Conservation Trust. Such a payment, whilst perhaps “ticking the box” for the development, will not assist in replacing what the developers will take away from the local area as in all likelihood the money will not be spent in Loomberah.

Finally, clearing of native vegetation will reduce the air quality whilst simultaneously compounding the effect of the high traffic volumes as the trees that will be removed would have aided in dust management.

(f) Page xxxiv of the EIS indicates the project would power the equivalent of 153,000 NSW homes. However page 43 of Appendix C1 Community Engagement Strategy indicates production sufficient to power over 160,000 homes.

This would seem to be unconscionable when consulting the community to inflate the power generation capacity by over 7,000 homes as it garners false support for the project.

(g) Page 12 of the EIS notes the proposed development site has “suitable terrain to minimise construction costs”.

The land earmarked for development itself is undulating and sloping, which causes the project to have quite an extensive footprint in terms of vantage points from which to view the solar panels. Further, the surrounding land is within a valley which produces the effect of multiple nearby properties having an extensive view of the visual pollution.

There are many alternative areas within NSW which are flatter and better suited to such a development.

It would seem the developers are purely concerned about their costs rather than the impacts on neighbours and the local community.

(h) Page 14 of the EIS states the “region can be characterised as a quiet rural setting” & page 15 indicates the population of Loomberah is 552 people.

Adding a workforce of 400+ each day will almost double the population of the district on a daily basis which is disturbing for those landowners who will undoubtedly have their “quiet” lifestyle shattered by this proposal without receiving any direct benefit.

(i) Page 22 of the EIS indicates the proposed site is “important agricultural land” and that “all buried infrastructure would be recovered during decommissioning”.

This directly contradicts:

- page xxxvii of the EIS
- page 27 of the EIS
- page 42 of the EIS

which state that cabling below 500mm will not be removed.

Which is it to be – underground cabling removed or not?

(j) Page 41 of the EIS indicates “screen planting would be carried out during the higher rainfall months of winter and spring”.

This shows a lack of research into the local area as the Tamworth area has predominantly summer rainfall and winter frosts hinder plant growth.

(k) Page 39 of Appendix C1 Community Involvement Strategy indicates the Community Benefit Fund will be allocated to the “Forbes local community”.

Forbes is located 400km from the proposed site.

Whilst this is obviously a typographical error it is concerning on several fronts:

- Total Eren has been working on this project for over 3 years and with multiple persons reviewing the proposal, nobody was concerned enough to identify the wrong area was named.

- We understand NGH Consulting is staffed by Registered Environmental Assessment Practitioners (REAPs) who are supposedly qualified to fast track an EIS under the Rapid Assessment Framework. It is disturbing that such “experts” can effectively get a solar project approved when their attention to detail is non-existent.
- it is offensive that such an error could go through several versions of the document (4 in total) – it shows a total disregard for the local people and is representative of the overall theme of the EIS that the good of the many outweigh the concerns of the few.

(l) Appendix D1 Landscape and Visual Assessment is:

- showing a Receptor 1 as a dwelling on page 12. This is in fact a shed and not a house, and ought to be known well to the developer as it is on the development site itself.
- showing a Receptor 23 as a dwelling on page 12. This is in fact a hay shed and not a house.
- showing a Receptor 25 as a dwelling on page 12. This is a derelict house that is not occupied.
- missing the property “Brooklyn” (Receptor 24) on page 50.
- missing the property “Brooklyn” (Receptor 24) on page 52.

The lack of attention to detail smacks of an absence of concern for local landholders.

Given the number of errors in the Landscape and Visual Assessment alone, a further independent Visual Impact Assessment funded by the developer is required before any planning decision is made.

(m) Appendix D4 Biodiversity Assessment Report indicates that koala use trees and potential koala breeding habitat is present (page 46) and squirrel gliders were found on site (page 63).

We also understand koalas have been identified as present on neighbouring properties.

The installation of exclusion fencing as well as removal of native vegetation will severely impact on the ability of these endangered & vulnerable species to breed in the area.

The developer commitment in stated Mitigation Measure B10 (which is actually listed as B9 on page 171 of the EIS – again, a lack of attention to detail on the part of the developer) to conduct further field validation in Spring 2023 should be a requirement before a decision on the project can be made, and this further investigation should be undertaken by an independent entity.

(n) Page xxvii of the EIS indicates a construction workforce of 400. Page 203 of the EIS states “Tamworth has strong capability for construction works and achieving a high proportion of local employment...is considered achievable”.

Page 203 of the EIS indicates the project will “increase [sic] demand for goods and services such as accommodation, food”.

Page 14 of Appendix D6 Social Impact Assessment indicates “there are labour shortages and shortfalls in staff at all levels”.

This demonstrates a conflict:

- If the workforce is to be local, then there will be no significant increase in demand for food or accommodation as the majority of workers will be from Tamworth. Accordingly, there is no significant economic benefit to the district.
- Attracting local workers to this project will create a skills drain on existing Tamworth businesses, including local farms, which will be a negative economic impact for the town.
- If, however, the workforce is to be non-resident construction workers, there will be an increase in demand for housing and health services. The SIA indicates “there is a tight rental market in Tamworth” (page 10) and an “influx of workers may further constrain the availability of accommodation options for residents and tourists” (page 25) which would be “felt most by vulnerable population groups, who are already impacted by rising housing costs and constrained availability” (page 25). The SIA concluded this issue to be of “high significance (ie. likely, moderate magnitude)” (page 25). The SIA also indicated “the health system is already under pressure in Tamworth (page 15)” which is a concern for locals who would be competing with an imported workforce for already scarce healthcare resources.

(o) Pages 114 & 115 of the EIS set out estimated daily vehicle movements.

It should be pointed out that transporting the solar panels to the site from Newcastle Port will essentially involve 1,000 truck loads (being 2,000 vehicle movements) on the New England Highway – this having been estimated using US data indicating 780 panels can fit on a truck or alternatively 380-420 panels per 40ft container. If the solar panels are to arrive on site throughout the 18 month construction period (being 6 days a week x 78 weeks = 468 working days), this equates to over 2 heavy vehicles per day or 4 movements per day. However if the solar panels are to be delivered during a more concentrated period (say, 26 weeks x 6 days = 156 days) this will mean over 6 trucks per day which is 12 heavy vehicle movements or 3 months (72 days) would be over 14 truck loads per day which is 26 heavy vehicle movements which is in excess of the estimated daily vehicle movements in Table 6-13.

The developer should be required to indicate the timeframe for solar panel delivery (together with associated infrastructure such as cabling, transformers, metal posts) and provide a more realistic daily traffic estimate during delivery periods.

(p) Page 272 of the EIS indicates “strict traffic protocols...to regulate traffic speeds” will be implemented as part of a Construction Traffic Management Plan.

Appendix G of Appendix D3 Traffic Impact Assessment also suggests a “speed reduction and additional warning signage on New England Highway”.

Appendix G of Appendix D3 Traffic Impact Assessment further notes “we still trigger the requirement to provide an AUL for the peak construction period”.

Despite the AUL being a requirement, the developer only proposes to install a basic left turn lane (EIS p.xxvi) even during the peak construction period to reduce their costs – without having concern for the inconvenience to locals and users of the New England Highway.

It is unreasonable to impose speed limits on existing road users simply as this supposedly mitigates some of the unacceptable impacts of the project such as dust or unsafe turning procedures sought by the developer in the interests of saving money.

(q) Appendix D2 Noise and Vibration seems to radically underestimate the way sound travels in the Loomberah valley.

The suggestion that 3 pieces of plant operating concurrently (page 10) will only issue 60 Decibels of noise within 80 metres of the development area is ludicrous. A household refrigerator or a quiet conversation is deemed to be 50dB – to suggest 3 graders which operate at 107dB each working at the same time will only equate to 60dB appears misleading when we can hear dogs barking, gunshots or chainsaws working several kilometres away.

Further investigation of the construction noise is required before the project can proceed.

(r) The EIS suggests a Community Benefit Fund will be established to provide money to local projects in an attempt to offset the negative impacts of the project.

Providing a nominal sum to schools or halls does not compensate for the overall detrimental impacts of the project on the Loomberah valley and its residents.

Please come and see our beautiful area on a site visit before any determination is made in relation to the proposed Middlebrook Solar Farm.

As a minimum, the following is required if the project is to proceed:

- (i) Bitumen sealing of both Middlebrook Road (along the entire perimeter of the project) and Marsden Park Road (from the intersection with Middlebrook Road to Duri-Dungowan Road).
- (ii) Locating the substation behind the knoll to lessen the visual impact on neighbours.

- (iii) Meaningful compensation to neighbours to take into account the detrimental impacts of the project including loss of property values, dust and loss of rural amenity.