New South Wales Government
Independent Planning Commission

CAROLYN EMMS **OBJECT** Submission No: 177000

Organisation:	*Rainforest Reserves Australia*	Key issues:	*Land use compatibility,Visual impact,Other issues*
Location:	*Queensland 4884*		
Submitter Type:	*I am a member of the local community who would be particularly and directly affected by the proposed development*		
Attachment:	*Birriwa Solar Farm_Presentation.ppt*		

Submission date: 6/2/2024 11:15:19 PM

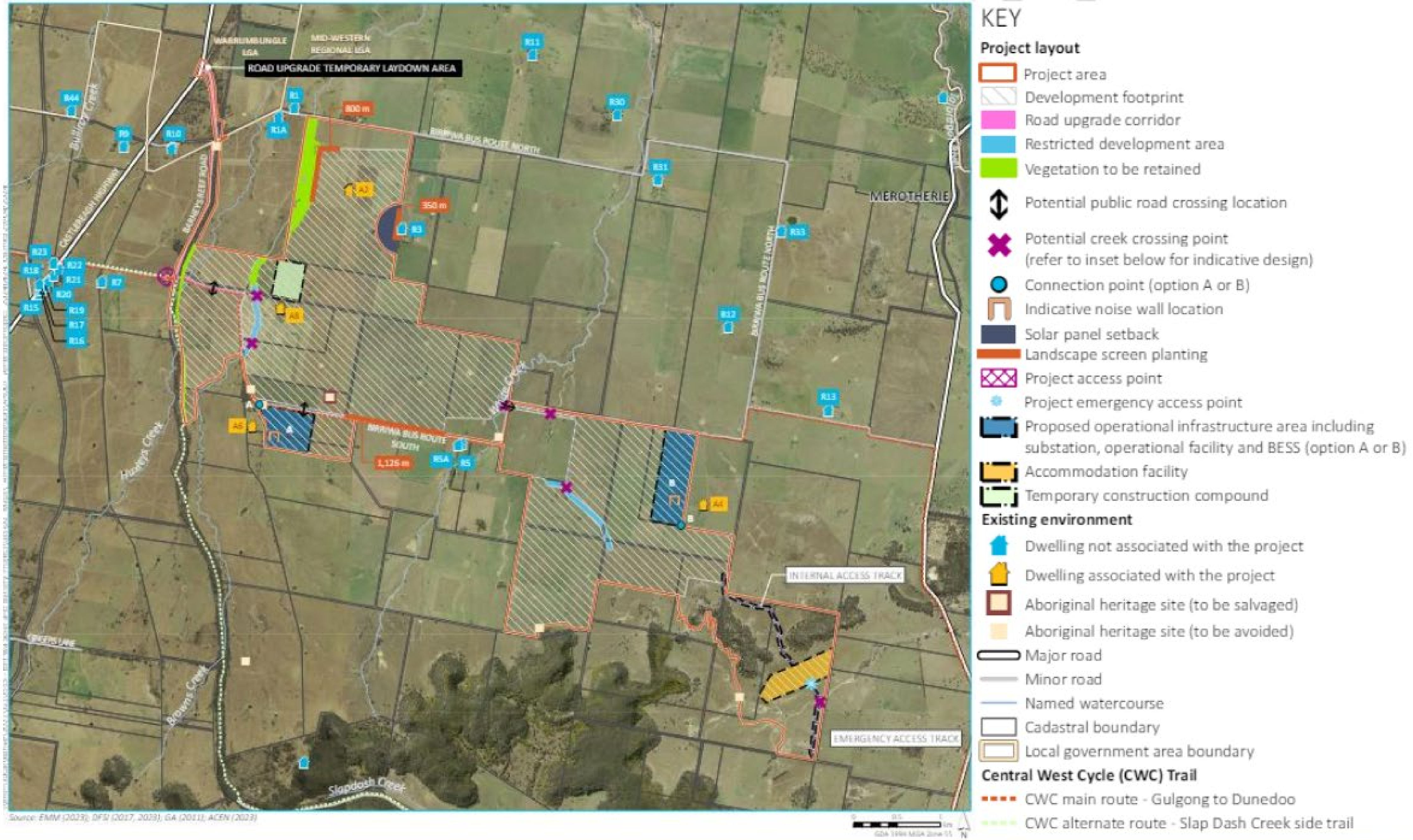
Please see attached submission

Birriwa Solar Farm Proposed site

- located 15km south west of Dunedoo within the CWO REZ

Rainforest Reserves Australia

APPENDIX 1:
GENERAL LAYOUT OF DEVELOPMENT



Source: EMM (2023); DFSI (2017, 2023); GA (2011); ACEN (2023)

A large scale solar farm and centralised battery energy storage system BESS – 600MW for two hour duration.

- 28 month construction period incl 3-7 months for accommodation camp
- total site area 1535ha - sale & BESS area 1159ha, accom camp 38ha

- development footprint requires clearing of 405.71ha of native plant community types
- 22 non associated residences within 2km of the development footprint (yet classified as a
- sparsely populated rural area) - closest non associated residence is 250m to the south
- site is largely cleared agricultural land used for sheep and cattle grazing and cropping
- several watercourses traverse the site including Huxley Creek, Browns Creek & White Creek

Facilities Design and Development Guidelines

- A solar energy facility should not lead to:
  1. the loss of productive, state-significant agricultural land
  2. the loss of vegetation, habitat or species of environmental importance
  3. the loss of cultural heritage or landscape values of significance
  4. increased exposure of the area to fire, flood or other natural or environmental hazard

- A solar facility should be located:
  5. away from the floodplain of a major water course or wetland
  6. where it has ready access to main roads

Solar energy facilities (planning.vic.gov.au)

DELWP Guideline: A solar energy facility should not lead to the loss of productive, state-significant agricultural land

Agricultural Land

- This proposed solar farm is identified as Agricultural Land

Lithium-ion Battery

- The Solar Facility is proposing lithium-ion battery storage
- Lithium-ion batteries can catch alight without warning and are extremely complicated to extinguish
- Lithium-ion battery fires release dangerous toxic fluoride gases, with unknown consequences as the technology is relatively new (refer link)
- Sometimes, CFA Brigade has no training or knowledge regarding lithium-ion battery fires
- Is it responsible to propose such a large toxic battery in a Special Water Catchment Area?

Toxic fluoride gas emissions from lithium-ion battery fires | Scientific Reports (nature.com)

The impacts to koalas, regent honeyeaters bats, and existing vegetation should not have to be sacrificed for this proposal. unacceptable

- Regent honeyeater, and koala habitat should remain untouched. No doubt there are many other native species that are found in the area. The ‘heat island effect’ will have a negative impact on flora and fauna

Regent honeyeater

High quality farming land should not be sacrificed for a large scale industrial solar factory. The visual amenity will impact tourism and community: Why is this speculative proposal even considered?

- This area delivers priceless views, and pretty streams in conjunction with highly productive farms
- Stephen Wilson, Energy Engineer, energy economist, spoke at our recent James Cook University Event Please set aside 20 minutes Professor Stephen Wilson https://youtu.be/bZT5WjnT4fE
- ." Stephen will discuss what a power system is, how it works, and why he thinks Australia's current 'Plan A' is destructive and dangerous. In his brief talk, Stephen will share some insights from his professional and academic experience in the worlds of university research, commercial strategy, and government policy.
- testing the market to destruction (House of Reps inquiry, 2019) and that our current energy policy and plans for our electricity systems is "a perpetual recession machine" (CIS event, Sydney, Jun 2023). Stephen's talk will be grounded in the basic physical principles on which engineering systems work. But don't worry: an engineering or science background will not be needed to follow the talk.

Contaminants in soil from existing solar panels

- "Soil Analysis Panel Run Off" is from beneath the solar panels.
- "Soil Analysis Control" is taken from the same site uphill from the solar panels where the run-off doesn't reach.
- Take particular notice of the **Lead levels** that have **increased by over 10 times (22ppm to 254ppm)**
- On these comparative tests it calculates to a **1154% increase in Lead**
- The Gallium levels have also increased significantly
- Two other different test site results have showed substantial increases in both Lead and Gallium levels

RESULTS OF SOIL ANALYSIS

2 samples supplied by WB Hunter Pty Ltd on 31/05/2023. Lab Job No. P1351.
Samples submitted by David Verhulst. Your Job: P 7-94845.
365 Honour Ave CORONA NSW 2646

	Method	Soil Analysis Run Off	Soil Analysis Control
	Job No.	*P1351/3*	*P1351/4*
Silver (mg/kg)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	<1	<1
Arsenic (mg/kg)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	5	5
Lead (mg/kg)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	254	22
Cadmium (mg/kg)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	<0.5	<0.5
Chromium (mg/kg)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	14	14
Nickel (mg/kg)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	6	5
Selenium (mg/kg)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	0.5	<0.5
Mercury (mg/kg)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	<0.1	<0.1
Aluminium (%)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	0.74	0.76
Gallium (mg/kg)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	6.14	3.79
Indium (mg/kg)	1:3 Nitric/HCl digest - APHA 3125 ICPMS	<0.1	<0.1

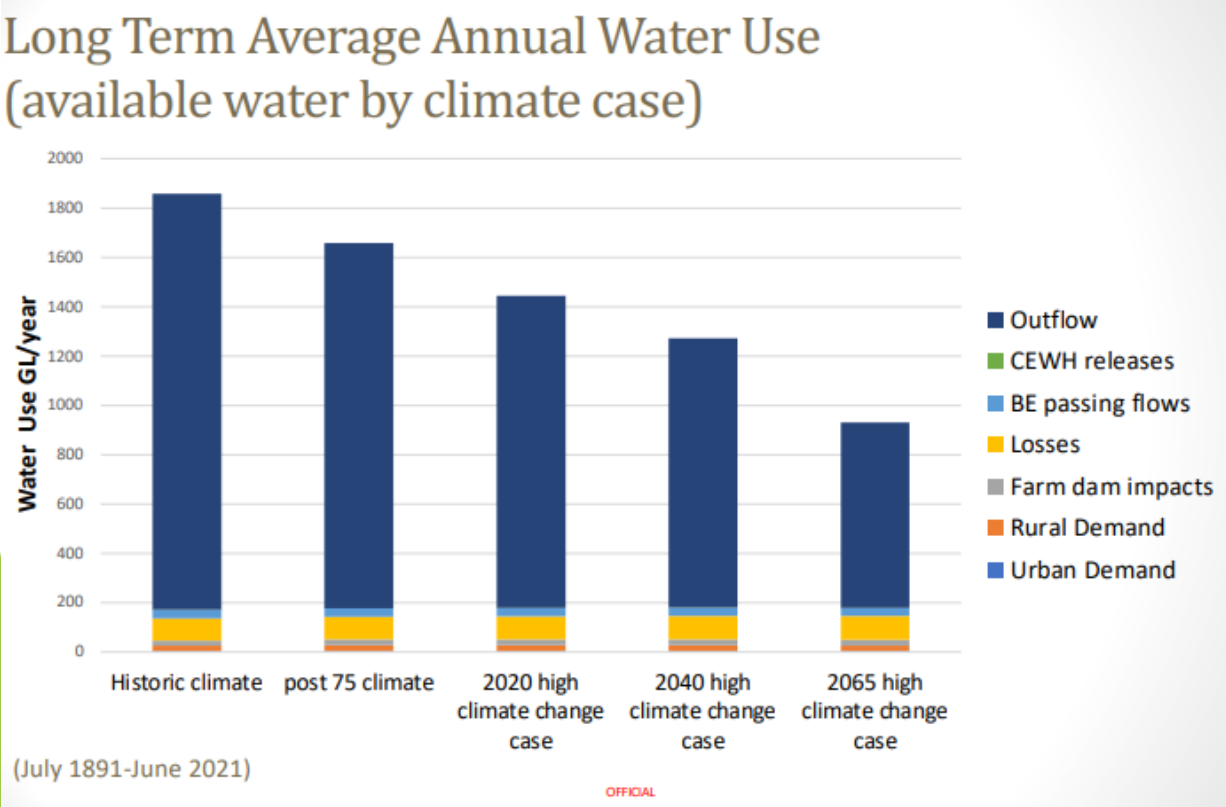
Evidence of existing solar panel degradation Bobinawarrah site 14/10/2023

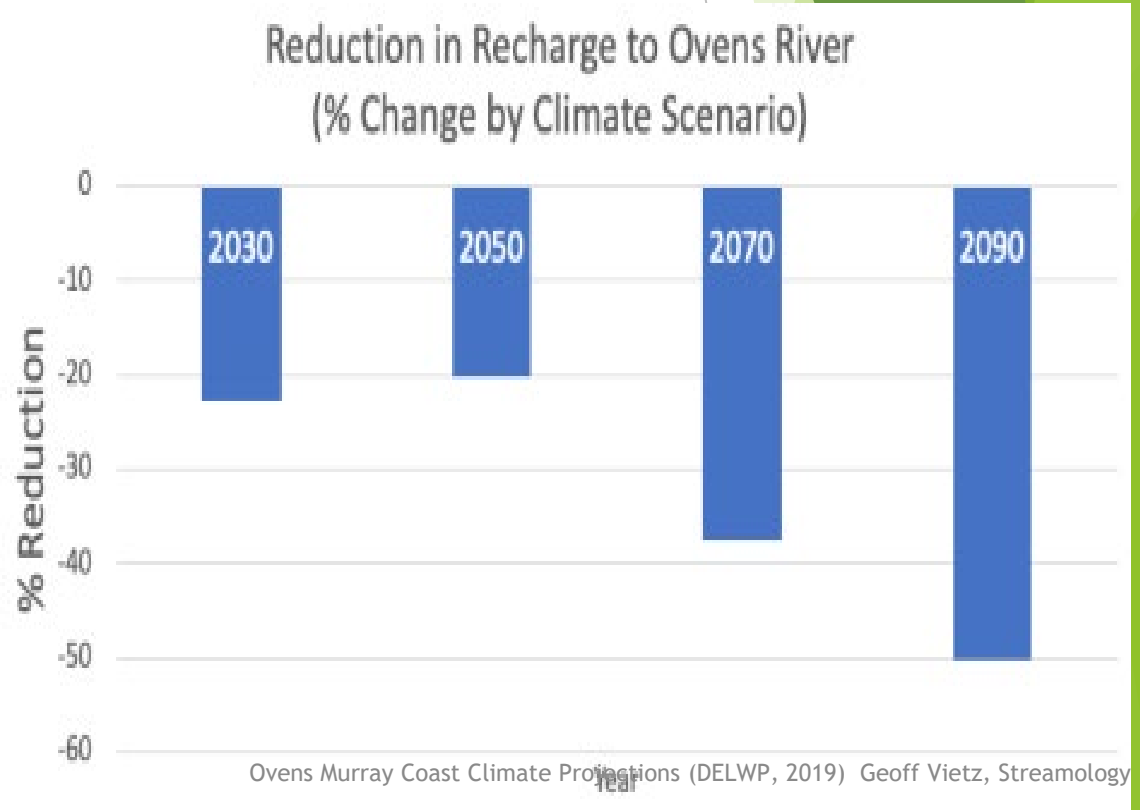
Run off corroding galvanised post

Solar panel breaking down after 10 years

Climate Change induced Rainfall reduction

- Projected outflow for 2065 from the ovens catchment is almost halving due to climate change according to Ovens Murray Coast Climate Projections (DELWP 2019)
- Ground water recharge is projected to halve by 2090
- The government forecasts heighten the need to ban solar facilities on prime agricultural land, as the forecasts paint a bleak future for irrigators





Ovens Murray Coast Climate Projections (DELWP, 2019) Geoff Vietz, Streamology

Social Licence to Operate (SLO)

- The term ‘social licence to operate’ (SLO) describes a “level of acceptance or approval continually granted to an organisation’s operations or project by the local community”
- There is a consensus that this industry is :
  - “Deceitful, untrustworthy, dishonest, greedy”
  - “Proponents evasive and unable to answer some questions satisfactorily”
  - “Completely oblivious to local community and land owners”
  - Surveys indicate there are only a few beneficiaries.

https://www.planning.vic.gov.au/__data/assets/pdf_file/0025/621970/community-engagement-and-benefit-sharing-in-renewable-energy-development.pdf

Decommissioning

How long will the solar farm operate for and what will decommissioning the site involve?

The solar farm would have an operational life of around 30 years. As the project nears its project end life, a decommissioning strategy will be prepared. Decommissioning the site would involve removing all infrastructure from the site, including any in ground structures or footings and rehabilitating the land back to its original use.

- There is no plan on decommissioning this site (refer MCSF website)
- Proponent claims a 30 year lifespan, and that the site will be rehabilitated to its original state after this period. Given the removal of old stand eucalypts, and soil degradation and over a thousand acres of industrial development, this will not be achievable
- Research undertaken by our community group has found that an industrial energy facility on farm land will have lease options well beyond the '30 year' term, and more likely for as long as solar energy is a viable source of power
- There is no financial estimate for decommissioning, and there is no bond paid to secure this process
- The owner of the operating facility will likely be a $2 shelf company. This creates great unease in our community.
- Who cleans the site up if the site burns or is unviable and the company files for bankruptcy?

https://www.meadowcreeksolarfarm.com.au/community

Fact or Fiction

- The claims that this will power 300,000 homes
- Is this calculated at its maximum output?
- Is this what the farm will produce every year for its lifetime?
- Due to darkness and cloud cover in the North East a solar farm only has an average output (capacity factor) of between 10-25% of its rating

Dangerous Precedent

- If the proposed solar facility is approved, despite it going against many DELWP guidelines
- , the developer will have created a mould for other developers to follow…

Our children's future

- Our elected representatives need to put politics aside and focus on building a better sustainable Australia for future generations
- For our economy to function, we need affordable food and energy
- We can construct a solar farm anywhere, but our secure food production is restricted to high rainfall farming land
- As our country's fossil fuels and minerals deplete, Australia will become increasingly more dependant on agricultural exports
- At present we are hypocritically exporting record amounts of fossil fuels whilst covering farms with solar panels and clearing land in our pursuit of net zero
- Our community cannot believe that our government would be so irresponsible to have only guidelines, not regulation to govern where a solar farm can be constructed
- The community is mentally stressed, as we have the foresight to understand the large scale disaster that will unfold over time if this proposal is approved in any form
- We are meant to be in a democracy, so please listen to your constituents and get the regulation in place so we can all move forward in harmony, not in the extremely divisive environment that has been created

Media Coverage

Farm insurance fear over solar neighbour

SOLAR QUERIES

CFA captain seeks further consultation on operational response to proposed solar farm

WANGARATTA Chronicle

More thought needed on renewables push

Locals have seat at the table in renewable energy review

Groups share "disappointing" levels of community consultation on some projects in Indi

SOLAR BATTLE

Concerns over proposed $750m solar farm prompt upper house action

Valley residents take their solar factory protest to the Minister

NEWS

Solar plan sparks fury