

## **Submission against Culcairn Solar Farm – Application number SSD-10288**

I completely object to the Culcairn Solar Proposal & all large-scale PV Solar proposals on agricultural & irrigation land in the Riverina, including- Walla Walla, Jindera, Glenellen, Narrandera, Yanco, Griffith, Wagga Wagga, Junee, Temora, West Wyalong, Mulwala etc.

'Climate change' alarmism, driven by socialist ideology, has led to a foreign, toxic PV Solar plague throughout the Riverina, on our most reliable, best quality food producing land. With a century of generational farming families caring for their land, environment & precious ecology, they have proven their capability & genuine sustainability. This is being severely threatened by Neoen's ghastly PV solar monstrosity. There is nothing essential, useful or valuable about this development to Australia at all. Rather, it would be a most unwelcome intruder, depriving the district & country of healthy Australian benefits & potentially become a toxic waste site for decades to come, perhaps even a century, rendering the whole area contaminated, useless for agriculture & repulsive for residents.

### Mass PV Solar on Prime Land is Not Sustainable - It is Environmental Vandalism

The destruction of the environment & ecology of 1317 hectares of reliable, good quality, food producing land, is the opposite to caring for Australia's environment & genuine sustainability. Neoen claims that their PV assets support economic growth & Australia's sustainability. The actual truth is Neoen's assets support Neoen & Australia's massive future contaminating waste-burden dilemma. In fact, 'sustainability' means: 'avoidance of the depletion of natural resources in order to maintain an ecological balance.'

We have daily experience with Bomen Solar doing the complete opposite to 'sustainability.' They ruined the whole environment, destroyed all of the ecology & turned the productive land into a dustbowl!

Regarding economic growth, Bomen Solar predominantly supports its main shareholder- the Hong Kong Shanghai Banking Corporation, Cheung Kong's economic growth, workforce & associated conglomerate. This French company Neoen, will no doubt be supporting Neoen & their foreign associates.

### Australia's Priority Must Be Healthy Food Production, Not Foreign Company Opportunism For Fictitious Environmental Benefits


Australia's priority must be the retention of our prime agricultural / irrigation land for healthy food production & future food security.

To replace this wonderful land at Culcairn with a toxic PV Solar 'factory' is environmental vandalism! This land has provided extraordinary benefits for the whole region for a century! Vital produce & hay supplies have supported drought areas in NSW & Qld throughout the drought years. Like the Bomen/ Eunony Valley area, the Culcairn area has continued to produce a good harvest, despite 99 % of NSW being in drought.

You can't eat solar panels!

### False Mapping

The NSW Government has used false mapping & flawed policies to enable PV Solar dumps on prime land.



### Solar Developments & EIS's Are Based On Imaginary Claims & Unsubstantiated Outcomes

Solar developers claim that they will "integrate broad-acre PV, heritage, environment, nature-flora & fauna & pastoral farming practices."

They claim that they will provide:

1. Cheap electricity, 2. Jobs, 3. Clean Air.

They also claim their large-scale solar developments "are not expected to have a significant visual impact."

NGH Environmental's project manager- Brooke Marshall, advised me, that in her Environmental Impact Statement assessments, for large-scale solar developments on agricultural land, she factors in her beliefs that-

\* The value of solar to Australia & the local area, is far greater than the value of agriculture.

\*There is far more employment created from solar than agriculture.

\*In the event that a foreign solar company collapses & abandons the solar 'farm' or wind turbine mess & deserts Australia, the recycling value of the remaining 'junk' would easily cover the costs of any clean up or remediation.

This is all complete fantasy & absolute nonsense!

This would immediately be debunked if fact checked.

NONE OF THIS IS TRUE!

### Polluting PV

We have experienced the complete opposite with the invasive, obnoxious Bomen Solar. Considering all of the embedded energy from manufacturing toxic PV in China, the release of the most potent greenhouse gas known to man- Sulphur Hexafluoride SF6-( increasing exponentially due to 'renewables,') transport, construction, the land/water contamination risks, the non- recycling of toxic PV Solar panels & wind turbines, toxic lithium mining & problematic battery disposal, these developments are a massive, contaminating waste burden, with their manufacturing massively polluting Chinese air.

### Foreign Benefit Alone

Money making promoters, foreign developers, electricity companies & infrastructure funds are the beneficiaries of foreign solar development, at Australia's expense.

Australian electricity consumers have only seen increased prices with the introduction of 'renewables.' This will only further escalate with increased infrastructure spending needed to upgrade the grid, due to the introduction of the problematic, fluctuating nature of 'renewables.'

#### No Recycling

Large- scale toxic PV Solar development on food producing land is based on false pretences, fictitious outcomes & non- existent recycling avenues (it is extremely difficult to separate out the hazardous metals & metalloids, so this is cost prohibitive.)

Disused wind turbines are presently not even being recycled, but are just being dumped in landfill.

China won't be accepting their toxic PV Solar creations or wind turbine waste back! They don't know what to do with their own ever increasing stockpiles.

#### Employment For Foreign Owned Workforce

Cheung Kong's own Victorian Beon workforce is constructing Bomen Solar. There are limited, short term roadwork jobs for locals & basically no ongoing employment.

#### Co-Existence With Agriculture is A Farce

The co- existence of agricultural production with the solar development at Bomen Solar 'factory' is a fallacy. There is no possibility of planting productive pasture to feed a flock of sheep. After denuding the landscape, the noxious hairy panic & barley grass will take over & be an increased fire risk. This seed burden will be a nightmare for neighbours who passionately care about their environment, ecology, healthy land & productivity.

Substantial, generational hay production & mixed farming at Culcairn, is under threat from Neoen's ghastly 1317 hectare toxic PV Solar proposal. This area has been reliably providing vital produce & hay supplies for drought areas in NSW & Qld. They, like our Bomen/ Eunony Valley area, have been part of the 1% in NSW which has consistently produced crops for decades, despite the droughts.

#### Astronomical Remediation Costs

The astronomical cost of tens of millions of dollars to ever restore mass toxic PV Solar 'factory' land to it's original condition, including the complete removal of all underground solar components, is not included in 'renewable' costs or factored into energy value comparisons.

#### Failure to Acknowledge Contamination Risks & Consequential Costs

There is a further failure to acknowledge the true broad-scale land/water contamination risks of toxic PV, the consequential damage caused to individual neighbouring landholders, food producing communities & whole districts. Environmental Impact Statements have failed to take these obvious, factual, vital issues into account.

### Failure to Notify Direct Neighbours & The Indigenous Community

Solar developers pretend that they consult correctly, but fail dismally. With our family being direct neighbours to Bomen Solar at Wagga Wagga, there was no personal notice given to us by the developer, Spark Infrastructure, the Wagga Wagga City Council or NSW State Government. We were denied consultation & the opportunity to object in their 'fast tracked' process. It appears common with other solar developments at Culcairn, Walla Walla, Jindera, Wagga Wagga (Metka) etc. too, that any land holder who did not have a dwelling was not contacted.

Considering the fact that we have an orchard, a vegetable garden, BBQ area, a shed & spend long hours on our property, as does a workman, we too are constantly subject to the negative effects of PV Solar.

The local Indigenous community were also not consulted at all, regarding Bomen Solar, despite having culturally significant areas present. Instead, indigenous folk from Cairns were inappropriately used to tick the boxes. These aspects are completely unacceptable, wrong & not due process.

### No Beneficial Evidence

The NSW & Federal Government have no substantiated, peer reviewed evidence, to prove that mass PV Solar developments on productive agricultural & irrigation land, have any measurable benefits to the neighbours, local community, to Australia or to the world at all. There are no proven environmental, ecological, health or economic benefits to Australia. Rather, they have been approved on false assumptions that are not based on reason, experience or factual evidence.

There is a failure to include the costs of the many 'dirty' secrets of toxic PV.

Intelligent, experienced, community minded rural neighbours have been completely ignored by 'state significant' promoting government officials, MP's & developers.

Instead, we are being experimented on with unsustainable, unrecyclable toxic waste dumps!

### Solar is Unreliable & Economically Disadvantageous for Australia

Mass PV Solar on agricultural/irrigation land is a complete waste of an economically prosperous, natural food producing resource (great soil) which contributes extensively to Australia's food supplies & export economy.

The integration of mass solar into the grid will cause electricity insecurity, with unreliable, hazardous 'renewables' threatening Australia's health & wealth.

### Australia Must Have Reliable Base Load Power

Australia needs reliable, economical, base load power generation, owned by Australia, so that Australia can be a productive, self sufficient country, that is not constrained by useless, unreliable, insecure energy poverty. It is completely disingenuous & deluded to claim that these mass PV Solar dumps on agricultural/irrigation land are good for Australia's citizens, Australia's environment & ecology, Australia's economy, or Australia's future.

### S.A-NSW Interconnector

The huge investment into the 'Project Energy Connect' proposal is unlikely to ever lead to lower power prices for customers, improved national energy security or

increased economic activity for Australia's benefit, as claimed. 'Renewables' have only increased prices so far & the massive expenditure on energy infrastructure upgrades to cope with them, affects all taxpayers. "'Renewable' energy will never be base load power," according to COAG's Energy Security Board Chairman Dr Kerry Schott (ABC radio 24th Feb 2020.) She also stated that we need guaranteed reliability & stability with electricity supply & 'renewables' bring complexity to the system. This fudging around with the Interconnector to incorporate disruptive 'renewables,' will disrupt & disadvantage rural NSW, further limiting production & our food security. Australia's manufacturing reliability will be curbed, with many already deserting Australia because of unreliable energy provision inevitability. Australia's economic prosperity, the security of our critical energy network & all reliant on it will be threatened.

With S.A's sole Electricity supplier- **ElectraNet** being a fierce proponent of this Interconnector, this is not surprising at all, when you realise that the main owner of ElectraNet is the Chinese Government- State Grid Corporation of China! With all electricity supply & distribution in S.A & Victoria being majority owned by Cheung Kong & the State Grid Corporation of China, NSW should steer clear of this proposal, fiercely protect the Eastern Seaboard & not become reliant on the energy provision & control of S.A & Victoria. Currently, S.A only has interconnection with Victoria, limiting electricity import & export potential. S.A's Energy Minister-Dan van Holst Pellekaan, talks up the S.A- NSW Interconnector proposal as " a freeway for renewable energy from S.A to the Eastern Seaboard."

In reality, the S.A - NSW Interconnector proposal, incorporating opportunistic 'spongers' with their large-scale 'renewable' energy developments on food producing land, who are proceeding in view of the Interconnector being approved- like Neoen & Bomen Solar, should not be allowed to eventuate. It defies common sense & is a national security threat!

Australia's national security will be at the mercy of the 'renewable freeway' to Chinese energy control.

#### Peer Reviewed Factual Evidence is Required.

It is essential to have a thorough, factual analysis of the health, environmental, economic, employment opportunities- including all associated businesses, & social benefits of Australian agriculture. Compare this to the exclusion of it by the invading, foreign toxic PV Solar plague. This must factor in all embedded energy, environmental impacts, land & water contamination risks & the astronomical waste burden caused by non- existent recycling. Also, we need to see actual facts about any real, measurable benefits of large scale solar & wind energy to Australia's environment, climate, temperature & the world's. Not baseless fantasy propaganda!

#### Toxic PV Manufacturing is Immensely Energy Intensive, Producing Toxic Pollution & The Worst Greenhouse Gases Known To Man

'Renewables' are absolutely not zero emissions!

Hazardous pollution & greenhouse gases are produced from PV manufacturing, PV system components, PV system assembly & eventual decommissioning.

According to the US Department of Energy- Office of Scientific Information, climate affecting, ozone depleting fluorine compounds are used in crystalline silicon

photovoltaic solar cell & film silicon module manufacturing & have very high global warming effects.

The solar industry has become one of the leading emitters of hexafluoroethane C<sub>2</sub>F<sub>6</sub>, nitrogen trifluoride NF<sub>3</sub> & sulphur hexafluoride SF<sub>6</sub>. These three potent greenhouse gases used by PV solar cell fabricators, make carbon dioxide CO<sub>2</sub> seem harmless!

Taking into account all of the embedded energy - extensive use of base load power to create PV solar components, the high volume of harmful waste, liquid, toxic fumes, pollution & greenhouse gases created in the process, mass PV Solar on productive land, is not an environmentally friendly, 'clean & green' energy source in any respect.

Beginning with the processing of siliziam for the panels, which is immensely energy intensive, one square metre of solar module production requires 300kg of coal, which leads to 1,100 kg of CO<sub>2</sub> emissions.

Hazardous, extremely toxic materials such as sulphuric acid & phosphine gas are used, with hexafluoroethane C<sub>2</sub>F<sub>6</sub>, nitrogen trifluoride NF<sub>3</sub> & sulphur hexafluoride SF<sub>6</sub> leaking out in the process. C<sub>2</sub>F<sub>6</sub> is 12,000 times more warming than CO<sub>2</sub> (over 100yrs,) NF<sub>3</sub> is 16,600 times & SF<sub>6</sub> (the most potent greenhouse gas known to man) is 23,500 times more warming than CO<sub>2</sub>.

Whilst CO<sub>2</sub> is naturally occurring, it varies with man's activities & natural occurrences like volcanic eruptions & bushfires. However, the SF<sub>6</sub> molecule is not naturally occurring, but synthesised by humans who are entirely responsible for introducing it into diverse technologies. SF<sub>6</sub> is widely used as an insulating material to prevent short circuits. SF<sub>6</sub> is increasing exponentially from increased 'renewables,' including extra switchgear- switches, circuit breakers etc. in the electricity grid & SF<sub>6</sub> is leaking from wind turbines.

#### Soil / Water Contamination From Toxic PV

Mass PV Solar developments do not belong anywhere near productive agricultural/irrigation land or near rural communities, because of the soil/water contamination risks

There is no long term, Australian, peer reviewed testing & evidence to prove that such large-scale developments will not have dire consequences, serious broad-scale land/water contamination concerns, including effects on the health & wellbeing of all rural residents & workers in the vicinity of these problematic solar 'factories.'

Associate Professor, Dr Geoff Currie, AO, Nuclear Medicine Specialist, CSU Wagga Wagga, states that he would live next to a nuclear power station because of all the historic testing, monitoring & safeguards implemented, but never next to a solar 'farm,' because of the serious soil/water contamination risks & the increased fire risk. Satisfactory, long term testing has not been done in relation to the effects of mass PV.

Toxic PV Solar Panels contain carcinogenic cadmium & chromium, nerve damaging lead & many other hazardous metals & metalloids, which rainwater can simply wash into the soil from fractured solar modules. "Poorly made panels are a high risk in areas that experience extreme weather, including hurricanes & hail. Winds & rain can break the glass allowing chemicals to leach into the soil & then into water

systems," according to Mary Hutzler- (The Institute for Energy Research 25th Oct 2018.)

This leaching can occur from inferior, faulty, storm damaged, fire impacted or aged panels. With inferior Chinese toxic PV breaking down "in as few as 5 years." (Kelly Pickrel-Solar Power World,) evidential proof of absolute safety must be a priority. Productive agricultural areas & rural residents are forcibly being experimented on with known toxic substances. This is unjust & must be accounted for. Who bears responsibility for this? The developer? EIS authors? The NSW State Government? Jinko Solar have a disclaimer included in their information, stating that they cannot be held accountable for any negative consequences which arise from their toxic PV Solar panels.

#### Detrimental Heat Effects From PV 'Factories'

The heat island effect caused by large- scale PV Solar has detrimental effects on the productivity of neighbouring producers- with an increase of 3-4 deg C for up to at least 800 metres. (some other countries with similar conditions to Australia suggest far further than this) With such increases added to our 46 deg C in January 2020, this will be catastrophic for all neighbours of mass PV Solar within this vicinity. It will harm people, animals, crops, produce, dams & their stocked contents.

#### Increased Fire Risks From Mass PV

Due to the intermittent, irregular, unstable nature of solar generation, fires are an increased risk at PV Solar 'Factories' & throughout the network when introduced, causing increased damage to equipment, appliances & infrastructure.

Barley grass & hairy panic will be the predominant fire hazard growth under the panels, in the majority of areas, with these dry weeds easily catching alight & burning like fury!

#### Electromagnetic Radiation Effects

Electromagnetic radiation (EMR) is emitted by solar inverters, "travelling hundreds of feet." This will have serious long term health effects on human beings, & also for all creatures in the vicinity. With long term, generational farming families, including our babies, those of us with a genuine sensitivity to EMR are extremely concerned & require genuine accountability.

#### Continual Dust Creation

Irritating dust seriously affecting the health & wellbeing of surrounding residents, workers & animals.

Constantly coating everything with a dusty film, ruining washing, interfering with outdoor relaxation, affecting machinery parts, covering our fresh fruit & vegetables with dirt.

#### Irritating Noise

Our quiet, peaceful property will now have irritating inverter noise, buzzing annoyingly, thanks to our close proximity to Bomen Solar's unwelcome presence.

### Changes to Water Flow & Increased Water Run Off

Due to the PV Solar development's land clearing, excavations, removal of ground cover, underground interference, plus additions & placement of millions of posts over the whole area, this will considerably interfere with the normal flow of water run off. Neighbours do not want to inherit contaminating surface water & weed seed burdens etc. from solar 'factories.'

### Developer's Claims of Insignificant Visual Impact Are False

Whilst large-scale solar developers claim that the visual impact is 'not expected to be significant,' this is absolute rubbish! Every day we are faced with the traumatic view of the obnoxious, Bomen Solar. This 400,000 panel nightmare is a glaring, inescapable eyesore! It is an extremely upsetting & sickening site /sight to be forced to view daily, with nothing whatsoever to limit our view. The tiniest little specks of trees have been planted, some of which have died.

Tiny specs of trees that will take 20 years to begin to block the view, are totally useless & not a solution at all! We & our children will all be dead before they even partially block out our horrible view!

Much more mature trees/shrubbery is needed & must be established at least a decade prior to any development. Considerable levy banks should be introduced, with dense trees & shrubbery on top.

For those of us who love & care for our land & treasure its wonderful capabilities, it is vital to have any such mass PV Solar development totally screened off immediately.

It is cruel & outrageous, that such a useless development has completely ruined our whole Bomen/ Eunony Valley area, for the sole benefit of Cheung Kong's conglomerate & China's Jinko solar factory.

The Culcairn proposal is far worse than this, with 1.1 million panels covering more than 5 times Bomen Solar & many more kilometres of impact on neighbours. Some landholders would be impacted by multiple toxic PV Solar proposals if they eventuate, which would be absolutely devastating!

### Destruction of Ecology & Land

It has been the most upsetting & sickening experience, to daily be forced to observe the mass PV Solar development of Bomen Solar. This will be the same for all large-scale PV Solar developments, including Culcairn.

\*The natural environment is ruined, with the whole landscape completely denuded.

\*the total destruction of all of the precious ecology.

\*massive excavations & burial of multiple tonnes of solar components.

\*constant jack hammering for months on end, all day, every day of the week until 6pm & on weekends, reverberating so loudly throughout our whole property.

\*Chinese Jinko plastic waste blowing around the whole area, all over our fences, & onto our genuinely clean & green, regenerative, carbon capturing agricultural land.

\*continuous dust & 400,000 Chinese Jinko PV Solar panels, now replacing our once lovely, refreshing, natural view, (except for Robe.)



### Conditions Are Useless

From our past experience with other developments, conditions of tree screening have never been met at Bomen by Robe, for over a decade.

The Bomen ex-Woolcombing is another typical 'do nothing' disaster. After foreign owners left Australia, neither the Government or Wagga Wagga Council have ever done a thing to encourage or force remediation of this contaminated area since 2005!

It appears that failed foreign companies are never held to account, which does not bode well, considering that the majority of mass PV Solar owners/ developers are foreign or pretend Australian, like Risen Energy (Australia)?? with their headquarters in Beijing!?) Neither is Spark Infrastructure (Bomen Solar's owner) an Australian company. Their main owner is the Hong Kong Shanghai Banking Corporation (HSBC.)

### Rich Soil is Australia's Treasure

Rich soil is Australia's heritage & treasure! It is 'state significant' & critical for Australia's productivity. It must be appreciated & protected in as pristine condition as possible, so that Australia continues to have vital food supplies & economic prosperity. Otherwise, Australia will be reliant on China for food as well as toxic PV.

### All Financial Beneficiaries Must Be Revealed

Due to these developments being based on false pretences & fake outcomes, it is essential to have an open & honest, factual investigation into the financial beneficiaries of solar & wind developments & the S.A- NSW Interconnector. This must include all promoters, developers, companies & infrastructure funds, manufacturers, educational institutions like ANU, Think Tanks, ABC media, fake 'scientists,' politicians, ex-Prime Ministers, local councillors, individuals who have used their Government funded advisory roles or research funding to then profit from developments- such as Ross Garnaut, & repeat offenders like Tim Flannery, who use Government funding to manufacture false predictions, which continually fail. This corrupted process will soon reveal the perpetrators, if you simply follow the money!

### Government Benefits Foreign Developers Instead of Australian Farmers

The NSW & Federal Government have enabled developers (predominantly foreign) to benefit at the expense of rural NSW. Federal Government funding from the Clean Energy Council & ARENA enable developers to skew the market with unrealistic offers to buy & lease for solar, whilst long term farming families with keen young farmers, are locked out of this unrealistic market. It would be vastly different if it was a genuine market with a level playing field, as nobody would be covering their productive land with solar 'junk!'

Federal funding should be encouraging worthwhile, genuinely renewable projects, that help Australian farmers & create renewable energy on demand, such as Bio-mass energy from sugar cane waste-bagasse.

Bomen Solar, Wagga Wagga is for China's benefit, through Spark Infrastructure-Hong Kong Shanghai Banking Corporation, Beon workforce, Li Ka Shing's family conglomerate - Cheung Kong/Hutchison Holdings connections. Neoen's Culcairn

development will economically benefit the French company Neoen & their connections, not Australia's economy.

### Conclusion

All of these detrimental impacts of large-scale PV Solar require thorough investigation, reporting, accountability & restoration. Further developments such as Neoen Solar at Culcairn must not proceed, based on the numerous harmful effects & lack of benefit to Australia.

### Photos

Please see attached photos of the Bomen Solar development, which is an absolute eyesore! Their construction has resulted in large amounts of noise, dust and Jinko waste blowing all over our rubbish free property. Contrast this with the photo of the fertile agricultural land next door growing a beautiful canola crop.



Flourishing canola crop on our property





2019 Lupin crop abutting what is now a wasteland of solar panels



One days worth of Jinko rubbish collected, continually blown onto our fences & into our crops.









The black mirage is 400,000 solar panels.

