

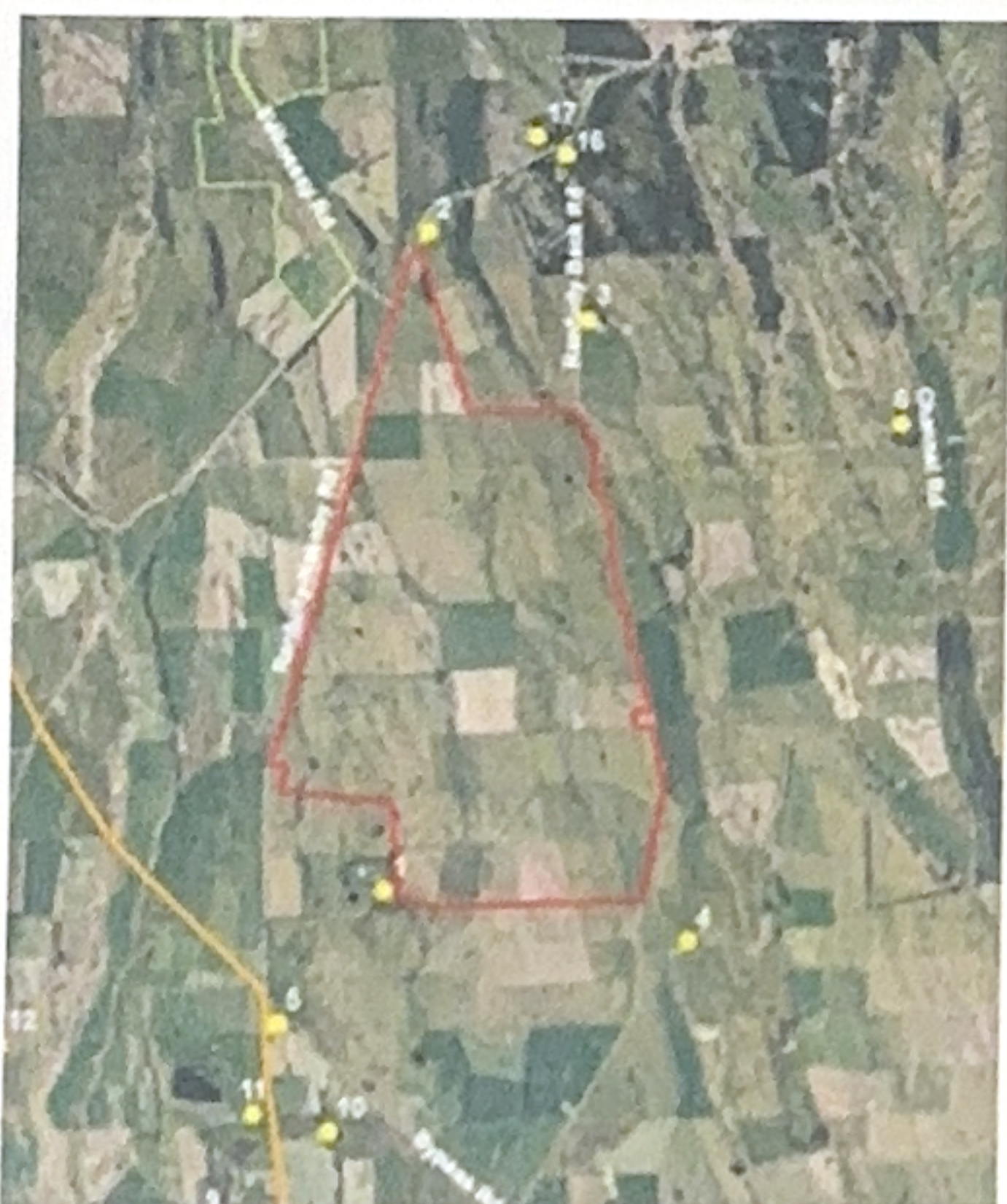


Hi, I'm Tracy Crossan.

I am here today representing the 4 generations of the Crossan family that have been farming the land along the South and South East border of the Helios proposed solar industrial complex for close to 75 years.

My husband (Gavin) and I and our two teenage sons (Hamish and Ryan) are the current occupiers of Dwelling 4 as we are referred to in the Helios application.

My husband's father (a former occupier of Dwelling 4) also resides on Goff Rd.



I don't think anyone can argue that we are the most affected party in this application.

Who in this room would be happy about going from a view of farmland to the view across 5km of glass?



Every negative aspect of this proposal (which there are many), will affect our family throughout the entire lifespan of this project and there is absolutely NO benefit in it for us.

This is why we as a family strongly oppose this development, not only for the impact this will have on 'our' lives, but also the lives of those in the whole Maniototo Community, a community that we care about.

Today I want to highlight the concerns I raised in my submission under a few headings...

INAPPROPRIATE LAND USE AND INDUSTRIALISATION OF THE RURAL ZONE

This development would bring large scale industrial infrastructure into a productive, quiet rural area with significant landscape and amenity values.

This development is incompatible with the values that make the Maniototo unique and would result in widespread and irreversible damage to our environment, community and local economy.

The development has unacceptable impacts beyond the Site boundaries, which have not been effectively mitigated.

This proposal is an inappropriate land use and is the industrialisation of a Rural Zone.

The proposed solar industrial complex represents a major land use change.

What is currently open, dryland farming country – part of a working rural landscape – would become a highly engineered industrial energy site including (but not limited to) vast solar panel arrays, perimeter fencing, security infrastructure, access roads, substations and invertors.

This is not rural in character or function – **it is industrial development being imposed on farmland.**

This change undermines the purpose of rural zoning, displaces food production, fragments farmland, and erodes the rural working landscape that is essential to both our economy and sense of place.

LOSS OF PRODUCTIVE SOILS AND RURAL VIABILITY



The land proposed for development includes productive soils that are still actively farmed, some of which is highly productive.

We are very concerned that once taken out of food production, this land is unlikely to ever be restored to how it is now.

This is short-term economic return at the expense of long-term rural resilience.

This proposal has been promoted as having the ability to continue the sheep farming operation that is currently being undertaken on this land, yet your first job is to remove all internal fencing.

How many sheep are you going to run in this one big paddock? The developers have been asked on more than one occasion what the stocking numbers will be compared to what is there now and I have yet to hear an answer.

Funnily enough, I have spent much time researching the farming of sheep under solar panels and I can't find any studies that concentrates on anything other than 'shade' for sheep.

There is not one study that has been done using 'normal' farming practices on a large scale.

For example, the studies I have read have applied fertilizer by hand, presumably because they cannot spin fertilizer on via a bulky or apply it by air (THIS IS NOT NORMAL FARMING PRACTICE).



Applying fertilizer by hand to over 660 hectares – Yeah right.

Mr Morris in his evidence stated yesterday that there would be no tractors, no mowing and no baling, again not normal farming practise.

What are the re-grassing plans when the grass species run-out which they do very quickly in the Maniototo. How are you going to work up and re-sow the farm?

I don't believe that any thought has been put into this kind of stuff that us real farmers deal with and consider on a daily basis.

Sheep farming under solar panels is just a fanciful idea to appease those with little knowledge of real farming.

Mr Schlichting states that he has only witnessed sheep farming under solar panels in Australia, well here's a big kicker - Meat and Livestock Australia's Integrity Systems Company's LPA (Livestock Production Assurance) have a National On-Farm Assurance programme (same as our NZ Farm Assured Programme here in NZ), something that is very important to us.

This programme in both Countries' permits livestock producers to sell their animals for food consumption and needs to be continually monitored and renewed.

The Australian version of this programme has just been amended to include a new section.

'Food Safety on Your Property'. Question 2.8 asks "Do livestock have access to leaking electrical transformers, capacitors, hydraulic equipment, solar panels, wind turbines, coal seam gas structures or coal mine wastes.?"

If you answer "Yes" to this question you then have to state that you are making plans to restrict access! – SOOO, no sheep under solar panels then if you want to comply with the Farm Assured programme!

So, then the sheep are gone, what or who will maintain the pasture under the panels then?

How long is it going to take until this is included into New Zealand's Farm Assured programme?

Let's learn from what is happening around the World and put a stop to the poisoning of the farm land and animals from renewable energy.

Let's learn from what is happening around the World in the inadequacies of these companies building and maintaining these industrial sites.

State safety authority shuts five solar farms due to fire risk, tells them to mow grass



Solar farms being shut down in Australia en-mass due to noncompliance of their safety obligations. A lack of adequate vegetation management, insufficient fire breaks and vegetation that was simply too high.

A fire that started due to an electrical equipment failure on one solar industrial complex quickly spread due to long, un maintained grass which then led to the shutdown of others until the vegetation was managed and the risk of fire spread was better managed.

Developers not fulfilling their consent requirements.

Should we also mention the Helios Edgecumbe solar farm in the Bay of Plenty that resource consent was granted for and then was very quickly on sold by Helios to Genesis. Helios really cared about that community long term.

I wonder what happened to the Land Owner agreements in that situation?

This land use change application is just that, a TOTAL change in the current use of that land.

LANDSCAPE DEGREDDATION AND AMENITY LOSS

The Maniototo is treasured for its open skies, expansive plains, natural light and long views to the surrounding mountains.

The proposed solar complex would introduce visually intrusive, industrial scale infrastructure. It would create large areas of glare, fencing and metal that are completely out of place in this landscape.

Mitigation planting has been proposed but many of the species chosen are unlikely to survive the local climate. I've looked over the planting schedule, I have a large garden, I've tried to grow many of those proposed species over the last 25 years on the neighbouring property and they just don't survive.

The proposal totally underestimates the slow growth of plants in our area.

Ms McManaway may have sought advice on this, but I have firsthand experience.

Any screening mitigation will take years – I actually doubt that their mitigation planting will ever be effective within the life span of the project.

And... you don't want to start planting until the construction has commenced, obviously there will be absolutely no mitigation to the construction phase.

No-one yet has answered the question as to where the water is going to come from to establish and maintain these plantings. I found that a commonly used formula suggests 38 litres of water is required per week per 1 inch of trunk diameter for new plantings. No one yet has answered the question about the number of plants and therefore no one has worked out the amount of water required.

And, who said that we want to look at trees? Screening itself would block the valued views across the land.

This is not visual enhancement – it is a permanent scar on the Maniototo landscape.

This is our current view from our house...



Ms McManaway's mitigation plan for us includes **US** erecting a 1.8-2.4m hedge along our front fence.

Here is what that would look like...



Who thinks this is, OK? After decades of admiring the mountains, our farmland, our animals and the peace and serenity of our current view, you think it's OK for us to lose that?

Ms McManaway's report also states that due to lower contour level at the Southeast boundary, planting will need to reach 8-12 metres to **BEGIN** to screen panels from our view!!!

AMENITY AND WELL BEING IMPACTS

This proposal would severely degrade the rural amenity values we enjoy including tranquillity and peace, rural sounds and rhythms, open outlook across working land and a strong sense of identity and place.

Construction and operation would bring noise, dust, traffic and transformer hum – affecting both our physical environment and mental wellbeing of both ourselves and our animals.

The development also raises serious health and safety concerns including fire risk, toxic plumes from fires, potential for water contamination, heat island effects, electromagnetic radiation effects – most of which has been lightly glossed over in this application.

There is no clear evacuation or emergency response plan which just highlights the inadequacy of the application, the lack of care or concern by the applicants.

SOCIAL, ETHICAL AND ECONOMIC CONCERNS

This project has no social license. The local community receives very little benefit. A token cash gesture which equates to approximately one day's generation.

Instead, we face increased fire insurance premiums, reduced property values and difficulty selling property near the industrial site.

Increased pressure on our infrastructure, accommodation options, doctors and hospital, all of which are already stretched.

There are no assurances about energy price reductions, or local job creation.

Mr Schlichting states in his evidence that this project will help to enable a zero-carbon future.

Has anyone worked out how much carbon is omitted in the construction of this project and all its componentry, the panels, invertors and so on..

But because all of this carbon is omitted in other countries, does that make it OK, do they have a different atmosphere in China?

Mr Schlichting also says that this project is needed to secure the future of energy generation in New Zealand, yet the Transpower already has a number energy proposals already consented, with many of these being in areas closer to where the generation is needed?

This project is in no way essential.

The people of Central Otago have nothing to prove with regards to power generation. We are well and truly doing our part already.

Mr Schlichting may also wish to elaborate why his proposal is currently on hold with Transpower? Is it in the too hard basket for now, or are you leaving that problem to whomever you sell this consent to, if granted?

PLANNING AND LEGAL FRAMEWORK – RMA PROVISIONS

Landscapes which contribute to amenity and the quality of the environment are required to be given special recognition under various sections of the RMA.



Therefore, the proposal is inconsistent with key principles of the Resource Management Act 1991.

Under Section 5 of the RMA – Sustainable Management

This development does not sustain the potential of rural land for future generations.

This development does not safeguard the life supporting capacity of soils and water.

It fails to avoid or mitigate adverse environmental and social effects.

Under Section 6 of the RMA – Matters of National Importance

6 (A) This development does not preserve the natural character of the land.

6 (B) This development allows inappropriate development in a landscape with significant visual and cultural values.

Under Section 7 of the RMA –

7 (C) This proposal fails to maintain and enhance amenity values.

7 (F) This proposal fails to protect the quality of the environment.

7 (B) This proposal fails to use land resources efficiently, especially where soils and landscapes are finite and irreplaceable 7 (G).

DECOMMISSIONING AND LONG-TERM RISKS

This proposal lacks a clear decommissioning plan; there are no financial guarantees to Council or to the Community that the land will be restored.

There is no evidence that the site could ever be farmed again as it is now. This places the burden of risk on future generations – not the developer.

Given Helio's history of selling off these consents once granted, we have no idea who will be our neighbours when this project comes to the end of its life or if sales have nullified agreements with land owners and consent applications?

There is currently no-where in New Zealand that can recycle ALL of the components of solar panels.

What is going to happen to any solar panels that are broken during construction or panels that are identified as being damaged over the coming years?

Where is all the rubbish created by construction going to go? More landfill?



CENTRAL OTAGO DISTRICT PLAN

This proposal is also inconsistent with the Central Otago District plan which seeks to protect rural character, open landscape values, amenity for residents and visitors and productive land use.

This application was lodged with the Central Otago District Council, and from the Council's website... "a Council made up of members of the public who are elected to represent you and your community."

The Council is entrusted with managing The Central Otago Region.

Our Community Board members that we vote for, again from the website... Their role is to represent and act as advocates for the interest of their respective communities...

Well, this Community has spoken and overwhelmingly have said that they don't want this thing. We are the rate payers here, the ones who have to live here and carry on with our lives.

Who is going to look after and monitor the water that flows underneath and over this land, that then carries on through and over our land and heads down to Ranfurly township?

The same water that runs through a creek in the township that periodically floods our show and sports ground. It's the same water!!!



Our sheep, my horses, drink this water that can clearly be seen here running off the proposed solar complex land, under the road and onto our land.



Another example of water coming down from the proposed site beyond the treeline and onto our land.



And another example...



There is plenty of evidence online of ageing solar panels leaching out harmful and toxic chemicals.

How much of our money has already been spent by both the Regional Council and the Central Otago District Council on capping bores at the end of Ranfurly Back Rd when searching for a future town water supply?

All of the water that is running into those bore sites would have come down underneath this proposed industrial complex.

Any chemicals leached at this complex will be in that supply.



There is absolutely no consideration to our family by Helios or the land owners, none of whom have visited us (the greatest affected by this proposal) to discuss any of the

implications we will experience with this build, or show us empathy given that our lives have and will be changed forever.

We have been lied to and led along the garden path since the very first communication with Helios as outlined in my submission. It took months for us to get a Glint and Glare report (which was promised to us at the Golf Club meeting). And as Mr Logan said yesterday in his evidence or 'opinion,' Glint and Glare cannot be truly assessed until this thing is built.

Mr Logan also stated that in his opinion, there will be no yellow glare (yellow glare being glare equivalent to looking directly at the sun) 'IF' screening is achieved.

Helios is pinning this whole application on Ms McManaway's planting proposal which I have already pointed out, has many flaws.

Mr Logan also yesterday summarized that there will be 'very little' glare. Why should we be party to any glare? Very little, is still glare! We will have to endure this every day, from our house, our road, our garden and during our daily farming duties.

We will get to experience the full noise during construction; the driving of metal stakes being hammered into the hard Central Otago ground. Mr Ibbotson reported on this yesterday and told us what level of sound we could expect from the driving of the piles by the machine that he 'assumed' they would be using.

We will have to experience the extra traffic when trying to run our farming business.

We will get all the dust coming our way, given that we are in the path from the complex in the prevailing wind.

We will have to listen to inverters humming for the next 30 years, along with transformer noise that Mr Ibbotson modelled from an internet search of a similar transformer.



We will get glare as we travel up our road (but you say that's OK, cos it's not a very busy road anyway). It's still a road that we have to travel on every day. It's a road that our teenage sons use daily. Not so experienced drivers who may or may not get glare but it could be absolutely catastrophic if they do!

And that goes for all road users who WILL experience glint and glare on the roads UNTILL the mitigation planting is established.

We will have to live with the fear of fire day and night, for the entirety of this project.

My family, our stock and my Internationally recognised herd of rare Irish Draught horses put at risk.

And, solar panel DO go on fire!



And, so do inverters!



We are now stuck here with no choices. Nobody will want to buy a farm that is within proximatey of this proposal, or with this proposal hanging over its head and certainly no one will want to buy it during construction or operation.

We will have to endure increases in insurance premiums. We have already spoken to our insurer FMG and they have confirmed this. There is no road line, between us and the property on the Southern boundary and on that boundary, we have a lucerne paddock that we harvest hay from, and yes, we will be using a tractor and baler!

We will have to endure decreases in our land value. All around the World neighbours have reported drop in land values when they are beside a solar complex.

I don't believe that anyone in this room would want to be in the position that the Crossan family are.

Our visual amenity will be gone. The view we know and love will be gone.



Mr Schlichting may be able to employ every kind of consultant to say the right thing or have the right opinion on his behalf but what he can't disprove is how we as neighbours feel about this project and how it will affect us.

He doesn't have to live beside it, nor do any of his consultants, so therefore he or they have no way of knowing how this is, and will impact our lives. That cannot be quantified by any of your experts!

I hate what this whole thing has done to our little Community. Families and friendships divided and lost. Helios, you have caused this. You have turned us into people that we never wanted to be. I don't want to be here speaking at a hearing, I want to be farming, riding my horse and enjoying the beautiful, peaceful area that I live in, but you have given me no choice, I need to stand up for my family.

We ask that this application is rejected on the basis that...

It is an inappropriate industrial development in a rural zone.

It is a threat to productive land and local farming livelihoods.

It is damaging to the unique and irreplaceable Maniototo landscape.

It is harmful to amenity, wellbeing and community cohesion.

It is inconsistent with the Resource Management Act and The District Plan.

We oppose placing industrial scale developments in the wrong place and the Maniototo is the wrong place.

I am asking the commissioners to please protect this land, our community and our future.



**CENTRAL
OTAGO**

A WORLD OF DIFFERENCE

Protect OUR WORLD OF DIFFERENCE

Decline this proposal in its entirety.

Nga mihi Nui, thank you.

