

Hello, my name is Eric Swinbourn and I am a permanent resident of Naseby. For many years I ran an automotive ^{light eng business} garage in Naseby. I am speaking to my submission today because I am opposed to the proposed Helios Solar Electricity development for many reasons. For some time now I have feared the arrival of a large scale, well funded developer that lacks sensitivity to the wishes of this community which have been made abundantly clear in this submission process. This is a relatively small (120 people in Naseby, 1,800 in the Maniototo) but stable and contented community that hasn't previously had to contend with a political issue of this scale and this will cause rifts that will take a long time to heal. My responsibility is first to the wellbeing of my community and what is appropriate for my home area.

Where to start. Solar generation is undoubtedly a lower emission process than coal, oil or gas generation but not as efficient, stable or clean as hydro. According to Infolink Consulting, and Maysun Solar the life cycle carbon footprint of solar PV systems is 20 to 100 grams CO₂ per kilowatt hour while hydro is 1:30 g of CO₂ per kilowatt hour. The median values from the intergovernmental panel on climate change is 24 v 41 grams of CO₂ per kilowatt hour.

This area is already well served by hydro generation and there is potential for considerably more. Paerau and Falls Dam alone between them generate 67 gigawatt hours per year. Enough at the nationally accepted per capita consumption of 7.9 megawatt hours per year to support 8,480 people. If you add Waipori and Deep Stream this adds another 212 gigawatt hours per year bringing the total to 35,320 people. This is only the local small-scale hydro which while it may have changed the local landscape has in most cases added benefits such as recreational areas, eg boating and fishing,

water flow control and tourist attractions. These are long lasting facilities. Waipori has been generating for 117 years and Paerau for 40 years and will be still generating long after this proposal is consigned to the tip. Trying to compare this with Roxburgh on the basis that the output will be similar is spurious, Roxburgh has been generating for over 70 years and continues to employ local people. The total employed between Roxburgh and Clyde is 87 people. If we accept their figure on power output it will support the needs of 79,000 people. This is not required here. The power will be exported along with the benefits. On the 17th August 2025 according to Transpower the south transfer of power occurred for 6 hours peaking at 131 megawatts but the north transfer was for 18 hours peaking at 465 megawatts. By far the bulk of the power goes north so why not build it further north and save the considerable transmission losses.

Some of my issues with this particular application.

Visual Impact: the impact of this scale of development on a much-admired rural landscape will be far-reaching for those living adjacent to or travelling regularly past the site both during construction and after. Planting will eventually hide some of it but also remove much of the view. This may seem minor to people writing reports from other places but is very real to the local people who live amongst this landscape not to mention the tourists who come to experience the open spaces in a World of Difference. I have often seen people stopped on the side of the Naseby road photographing the Kakanuis. Goodness knows how many people gaze in wonderment at the sight of the clouds rolling over the mountains beyond the fields as they approach Naseby. These are not just opinions. The beauty of the landscape is real to us.

Noise: This is hard to quantify as what annoys some people does not bother others so much. The limits set by regulation do not appear to have had a 24/7 operation in mind. In a setting where the normal noise has been birds stock and the occasional passing vehicle any continuous industrial hum will be annoying. We don't know how far this noise will carry on a still night but I wouldn't want to live close to it. The original application mentioned up to 70db all day. Who will police this and how? What will be the consequences of non-compliance?

Glint and Glare: We have read reports that state the risks from glint and glare will not be dangerous but I have seen no mention of the strobe effect of glint or glare through growing trees along the edge of the road. There have been instances where the trees have been removed because this effect has been so dangerous. Of even more concern to me is the amount of reflected light into our night sky. This does not seem to be adequately addressed in the application. Apparently the best case scenario is that 3% of the light received is reflected. What is the cumulative effect of this over 550,000 panels? Is it equal to 100% of the light received reflected off 16,500 panels? What will be the total lumens value of the reflected light on a moonlit night? Where is this information? The community of Naseby has spent many years trying to gain International Dark Skies accreditation and after several years the CODC have introduced a lighting ordinance in the District Plan prohibiting upward facing exterior lighting and introducing shielded low Kelvin street lighting in Naseby. Where do we stand with this? This facility ^{will affect} several of our viewing sights. It is not just a matter of how much light is reflected but the perception that we didn't do everything in our power to protect the dark skies as promised in our application.

Traffic: The application stated there would be 24 vehicle movements per day and that the traffic wouldn't use Goff Road. I notice that this has been changed and they will ^{now} ~~not~~ use Goff Road. What can we rely on here? The number of vehicle movements doesn't stack up. Many of these will be heavy vehicles and how do the numerous proposed construction workers get to and from the site. We are talking about 550,810 panels, 5819 tracker motors, 25,044 cubic metres of gravel, 9,274 cubic metres of thermal sand, 73 container sized inverters, transformers, thousands of posts, hundreds of kilometres of cabling, kilometres of trees, construction machinery, building materials and portable buildings for a construction base being transported. For example even 100 workers working a full day on site will create about 1,300 litres of sewerage per day or 1 full sucker truck there and back every three days. And what about water tankers for dust suppression etc. Even if every worker came and went by bus, 40 per bus, and the buses parked on site all day, there would still be 10-12 vehicle movements per day for buses alone. This has clearly been understated. Even when the road use is light in your estimation the CODC struggles to keep the Ranfurly Naseby road in good condition. While we are talking traffic, has any consideration been given to the shading of the road by additional planting, and the likelihood of ice on the road. Trees have already been removed from beside this road for this reason.

Batteries: As the original application was clearly lacking in protective measure against the risks posed by grid scale battery energy storage systems the installation of batteries has been removed from the application. This has removed one of our areas of concern. But what assurance do we have that they won't be allowed in the future via a non-notified consent. If there is no such assurance then our objection to the risks associated with BESS still stands.

Community: The benefits to the community are hard to quantify. The bulk of the employment will be for people outside this community and there seems to be virtually no long-term employment. The bulk of the expenditure on equipment and materials will be for items manufactured overseas. We have previously had groups of 40 or 50 people in the area for 2 to 3 months for film projects and this has had short term financial benefits for some but also put considerable strain on our infrastructure and services. This doesn't even begin to touch on our concerns for 'end of life' restoration. It is hard to see long-term benefit to our community.

There are so many areas of concern that I don't have time to address them all. I would just like to finish with this thought. A quote from Central Otago, A World of Difference website. "but for many what they love about the Maniototo is the space to wonder. Here nature is at its finest. The wide skies of purest blue, the intrigue of Santa's Beard, and the rare Taieri Pet, unique cloud formations that cling to hillsides and mountain ranges. The craggy splendour and stillness. The dry as a bone sweep of the plain drifting towards distant ranges. This is the Maniototo"

No mention of a convenient place to stick a large scale industrial plant. I don't expect people who don't live here to understand this, but we do.