From:	[redacted]
To:	KapuniGreen
Subject:	Generation Zero comments
Date:	Thursday, 21 October 2021 4:02:10 pm
Attachments:	Feedback on Kapuni Green Hydrogen project- landscape and risk.pdf Commentary on Kapuni Hydrogen Project - Emily Bailey.pdf 21527-LET-001 Green Energy Taranaki FINAL.pdf

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Kia ora,

I have attached, on behalf of Generation Zero, our submission to the consenting panel, as set out in the following schedule of documents.

1. *Feedback on Kapuni Green Hydrogen project- landscape and risk*. This is Generation Zero's comments on the project.
2. *21527-LET-001 Green Energy Taranaki FINAL*. Expert witness comment from Jenny Polich, Principal Engineer, Sherpa Consulting Pty Ltd
3. *Commentary on Kapuni Hydrogen Project* - Emily Bailey. Expert witness comment from Emily Bailey.

We note that our submission is written with support of local Taranaki iwi and hapu, who need to be noted and prioritised with relation to this consent application. We further note that Generation Zero is strongly against the use of hydrogen for urea production.

Please confirm receipt of this email. I am contactable both on this email address, or my personal phone, [redacted] if any clarification is required.

Ngā maankitanga,
Jett Gannaway
Generation Zero

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Sherpa Ref: 21527-LET-001 GREEN ENERGY TARANAKI FINAL

20 October 2021

Attention: **Adam Currie, Generation Zero**

Cc: **Sarah Roberts, Taranaki Energy Watch**

Dear Adam and Sarah

Subject: Comments relating to land use safety planning for Hiringa Energy's fast tracked Kapuni Green Energy Project

As requested, I have reviewed the following documentation in relation to this matter:

- Kapuni Green Hydrogen project Risk Management Process Summary Report Appendix S *(https://www.epa.govt.nz/assets/Uploads/Documents/Fast-track-consenting/Kapuni-Green-Hydrogen/Appendix-S-Risk-Management-Process-and-Quantitative-Risk-Assessment.pdf*)
- PROPOSED CONDITIONS OF CONSENT *(https://www.epa.govt.nz/assets/Uploads/Documents/Fast-track-consenting/Kapuni-Green-Hydrogen/Appendix-O-Proposed-Conditions-of-Consent.pdf)*
- Hydrogen Refuelling Station Generic Quantitative Risk Assessment 503958-RPT-R0004 March 2021

I confirm that I have read the Environment Court Code of Conduct for Expert Witnesses and that these comments are provided in accordance with the Code.

I have also provided a brief statement of my experience relevant to this matter. Refer to Attachment 1.

My comments are limited to the hydrogen (H_2) facilities included in the project relating to the following items:

- Conclusions of the quantitative risk assessment (QRA) in relation to land use safety planning.
- Consideration of cumulative risk
- Some clarifications relating to the proposed conditions of consent.

I have not provided comments on other aspects of the project such as the wind turbines.

Location:

- The hazard study work is typical of the process applied during the design stage of a project in high hazard industries (oil and gas, chemicals etc).
- The QRA was based on a generic layout for the refueling station. It is possible this may change in the final design however the effect on offsite risk would be minor unless a substantial change in inventory was made.
- Whilst there is currently significant research being undertaken into consequence modelling of hydrogen scenarios and some change in recommended approaches may emerge, the QRA work to date is consistent with methods currently available for H_2 modelling. Assumptions have been adopted based on available guidance specific to hydrogen (for example: reference to HYRAM, inclusion of very small leak sizes compared to a typical oil and gas QRA, use of blast curve 10 for containerised H_2 explosion scenarios).
- There is a commitment in Section 4.8 of the Appendix S summary report to ensure separation to the road is sufficient to make sure boundary risk targets met.
- The risk contours show a relatively limited effect area and risk levels are appropriate to the existing industrial or rural land uses. There are no identified sensitive land uses (eg residential) so the location is regarded as appropriate for this type of facility.
- In my view it is unlikely that any reverse sensitivity effects would occur in this location given the existing industrial developments.

Cumulative risk

- Section 4.7 notes that the Operative South Taranaki District Plan (STDP) has been reviewed to understand the cumulative effects for the Todd Energy facilities located across the road from the loadout facility based on Special Map 03. This map (reproduced on following page) only shows the risk contour around the Todd Energy Kapuni Production Station. There is no risk overlay for the Gas Treatment Plant (as it was not available for the STP). However a separation distance of 650m to sensitive locations is required for this facility which would extend over the H2 facilities (see *https://www.southtaranaki.com/repository/libraries/id:27mlbegko1cxbyf94es5/hierarchy/Documents/District%20Plan/District%20Plan%202015/Sections/Section%203%20Rural%20Zone%20Rules.pd*f at digital p.9).There is also no risk overlay for the Balance Ammonia Urea plant as this is not a petroleum facility (and under the STDP risk overlays only apply to petroleum facilities).
- It is possible that either of these facilities have a risk footprint that would reach the proposed location of the hydrogen refueling station.

Areas of the Ballance Plant are subject to a Petroleum Flare Alert Area and a Petroleum Activity Risk Contour which relate to the Kapuni Production Station and the Gas Treatment Plan (Figure 3.6).

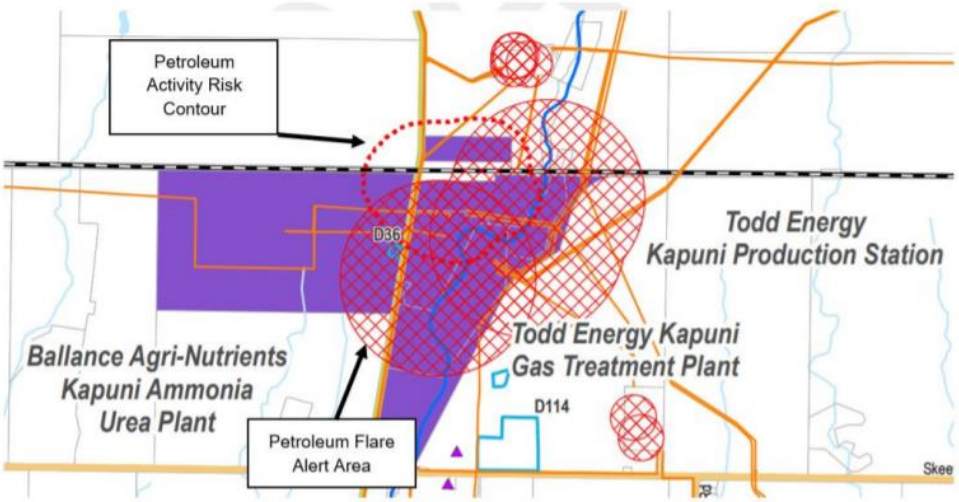

Figure 3.6: Extract from STDP Special Map 03

- As per Section 4.8 the underground section of H_2 piping between Balance and the refueling station was not modelled in the QR. It was noted that if there were a release from the buried piping it is predicted that any release would lose its momentum before it reaches the surface and readily disperse into the atmosphere. This may not be the case for a puncture of the pressurized H_2 pipeline by an excavator or similar (eg machinery working with the irrigation piping). A similar scenario for a natural gas pipeline could result in a large fireball (although I recognise the H2 pipeline is likely to be much smaller diameter and at a lower pressure than gas).
- Section 20 Resource consent information requirements in the STDP for significant hazardous facilities includes (v) as shown below regarding cumulative risk.
    - (e) Whether the risk assessment submitted with the proposal adequately address:
      (i) An assessment of the sensitivity of the receiving environment to any potential risks (ii) A hazard identification and risk management response
      (iii) A quantitative risk assessment for all significant hazardous facilities
      (iv) Whether there is a practicable alternative method of risk management that would present less risk
      (v) Whether the proposal will avoid or adequately mitigate cumulative adverse effects with respect to other hazardous facilities in the area
      (vi) Whether adequate setback is proposed to address the potential risks in the following situations: • Proximity to sensitive activities, including residential zones activities, educational facilities, and community facilities and recreational areas; • Significant areas of indigenous vegetation and habitats of indigenous fauna; • Adjacent waterbodies;

(*See https://www.southtaranaki.com/repository/libraries/id:27mlbegko1cxbyf94es5/hierarchy/Documents/District%20Plan/District%20Plan%202015/Sections/Section%2020%20Resource%20Consent%20%20Information%20Requirements%20and%20Assessment%20Matters.pdf* at digital p.11)

- In my view the cumulative risk associated with all surrounding hazardous facilities has not been comprehensively addressed as required under the STDP. This should be addressed in greater detail and a clearer basis for discounting scenarios involving the H_2 pipeline also provided.

Proposed conditions of consent

- Some of the proposed risk management conditions are ambiguous. For example item 44 (as shown below) requires an ERP but just for the partial hydrogen stream going to Balance and does not cover the pipeline or the refueling station.

- (44) The consent holder must prepare a copy of an Emergency Response Plan for the hydrogen facilities at the Ballance Plant. The Plan shall be provided to the Group Manager - Environmental

- However item 45 requires a Fire Risk Management Plan for the whole Kapuni Green Hydrogen Project.
- It is not known if the consent once received would allow expansion (e.g. additional electrolysers, refuelling facilities) without additional assessment. These would change the risk profile.

As a suggestion, to address these issues:

- Clarify the scope of the ERP to ensure it covers all H_2 facilities
- Consider adding an extra condition of consent that requires provision of an updated QRA based on the detailed design (rather than the generic design) that confirms compliance with all relevant risk criteria, and also assesses cumulative risk in relation to all surrounding facilities. Also require that the QRA be updated for any expansion that increases hazardous substances quantities beyond that considered in the design stage QRA.

Yours sincerely

J. Polich

Jenny Polich
Principal Engineer
Sherpa Consulting Pty Ltd

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Attachment 1: Experience Summary

My name is Jennifer Polich. I am a Principal Engineer at Sherpa Consulting Pty Ltd (Sherpa) based in Sydney, Australia.

My qualifications are a Bachelor of Engineering (Chemical) and a Masters of Environmental Engineering and Management (MEnvEng). I have over 20 years experience in process safety and risk management in the chemical and related industries. I have been employed by Sherpa for over 10 years. I have previously been employed by BOC Gases, Kellogg Brown and Root and Orica Australia Pty Ltd. I am an MIChemE and a certified functional safety engineer, FS Eng (TÜV Rheinland).

My prior experience relevant to this work includes a large number of QRA and land use planning studies relating to development of facilities handling large quantities of hazardous substances in the vicinity of other land uses. Projects in Australia and NZ include:

- WOSL Bulk Hydrocarbon Terminal (Auckland) QRA with proposed adjacent prison development that was undertaken jointly for a Steering Committee comprising WOSL, NZ Department of Corrections and Liquigas.
- QRA for Lyttelton Port in relation to proposed cruise ship terminal.
- QRA for the Wynyard Quarter tank terminals in relation to the change of land use for the Sea+City project (Auckland, New Zealand) and change of use to America's Cup venue 2021.
- QRA and land use planning studies for a number of complex industrial facilities including the Botany Industrial Park complex (Botany, NSW, Australia).
- QRA and land use planning studies an integrated ammonium nitrate manufacturing complex which includes bulk ammonia storage, nitric acid and AN plants, chloralkali and derivatives plants, cyanide manufacture (Qld, Australia).
- QRA and land use planning studies fuel terminal expansions at Port Botany, (NSW, Australia).

I have also provided expert witness advice on similar risk and land use safety planning matters on behalf of various oil and gas companies in relation to the Auckland Unitary Plan process and Christchurch Recovery District Plan, and on behalf of Taranaki Energy Watch for the South Taranaki District Plan.

Comments by Taranaki ecologist, cultural monitor and social justice advocate.

In regards to a consent application with the Environmental Protection Authority (EPA) for the **Kapuni Green Hydrogen Project** under the COVID-19 Recovery (Fast-track Consenting) Act 2020 (the Act), by Hiringa Energy Limited and Ballance Agri-Nutrients Limited (the Applicants).

18 October 2021

Tena ra koutou,

Ko Emily Tuhi-Ao Bailey toku ingoa. He uri ahau no Maniapoto, Ngati Mutunga, Te Atiawa, Taranaki me Ngati Ruanui iwi. Ko Parihaka toku papakainga.

I have a Bachelor of Science degree from Victoria University with a double major in ecology and geography, and a level 7 diploma in Te Reo Maori and Tikanga, from Te Wananga o Aotearoa. I have spent over twenty years working for community organisations on environmental and social justice and in more recent years have serviced contracts for Maori companies or government funded projects to undertake environmental monitoring and restoration work with Maori organisations in Taranaki. Earlier this year I was the main writer of a community organisation's carbon zero just transition plan for Taranaki, in which we spent many months researching hydrogen energy. I have regular involvment with councils, hapu and iwi of Taranaki through my role as one of six iwi representatives on the Taranaki Regional Council's two main standing committees: policy and planning, and consents and regulations. I know the particular area chosen for this proposal as I have undertaken environmental monitoring in the area over the past three years.

Concerns with the Kapuni Green Hydrogen Project.

I have read over much of the documentation for the project proposal and the main concerns I have with the proposed project are:

1. the lack of thorough research, independent review and community consultation due to this project being rushed through under the Covid-19 Recovery Act,
2. the pressure the water take will have on the Kapuni and Waingongoro awa,
3. the cultural impacts on the hapu and iwi nearby,
4. the explosive hazards,
5. the contribution of the project to environmental and climate polluting industries, and
6. the longterm effects on all of the above which may not be evident in this initial proposal.

1. Lack of thorough research, independent review and community consultation.

Hydrogen energy is a relatively new energy storage system that has been trialled for some decades but only in recent years, due to political pressure and dwindling fossil fuel supplies, has it been pursued as a possible option for transitioning off fossil fuels. While this technology is now gaining popularity, the loudest commentators and supporters are the companies who wish to pursue it, namely fossil fuel companies and fertiliser companies who are under pressure to reduce their greenhouse emissions. Other major supporters are the large shipping, trucking and plane companies who are not finding viable energy sources elsewhere for their long distance heavy freight transport businesses. Currently electric cargo ships and planes are only able to transport very tiny loads in very calm conditions.

From here, as an ecologist I ask you to step back and see the bigger picture of this conundrum. All these industries have relied for decades on cheap fossil fuel to extract resources and transport them long distances to be sold. This very activity is what has caused major natural resource devastation

across the planet such as deforestation, over-fishing, soil and water pollution, species extinctions, spread of disease and the many resulting social harms. It is not just the carbon emissions we need to tconsider when we think about transitioning off fossil fuels.

This is where I have concerns about industry led research and consultation without thorough input from broader fields of research and community advocates. I have been at several resource consent consultations where the applicants tell their story and there is no other story told to provide balance. If you offer a struggling hapu free solar panels, riparian plants and some part-time jobs for whanau and claim the project is 'clean and green' then of course there will be support from the community. It's the classic 'beads and blankets' story of colonisation once again.

While there may be expert evidence from independent researchers, these researchers are often or solely hired by these types of industries, and as independent as you may wish to be, the hand that feeds has much influence. As a contractor I know how hard it can be to retain independence and integrity in your attitude while corresponding, monitoring and reporting without jeopardising relationships and future contracts.

More time and more independent processes to allow engagement of independent researchers would offer land owners, tangata whenua and the community the full story so that they could make properly informed decisions on resource consent applications. It is hard enough to do this work when a consent applicant comes seeking approval for their wants, let alone when the Fast Track Act process cuts the time short and removes public notification and wider scrutiny of an application by more organisations.

2. The pressure the water take will have on the Kapuni and Waingongoro awa

I and my colleagues have had the honour of conducting water and environmental monitoring since mid 2019 in the Kapuni and Waingongoro awa catchments from the river mouths to upper parts of the catchments above the Hiringa project site. I am not at liberty to show all the raw data for our testing but I can share some general results.

On average our results from Stream Health Monitoring Assessments (SHMAK), which test several physical habitat factors against in-stream macroinvertebrate communities, showed average overall scores of:

- 7.2-9.8 out of 12, on four monitoring sites over two years of monitoring on the Kapuni awa and connected tributaries which translates as moderate to good conditions.
- 4.8-7.7 out of 12 and 'ahua pai' on four monitoring sites on the Waingongoro awa and one feeder tributary which translates as fair to moderate conditions.

There was noticeable stress from low rainfall in summer months and extreme rainfall in winter months causing severe flooding and erosion in places on both awa.

EDNA testing of water samples and fish surveys across 7 of those sites showed presence of:

- introduced fish species: Brown and Rainbow Trout, and
- native fish species: Shortfin Tuna, Longfin Tuna, (Crans Bullies and/or Redfin Bullies at some sites) (and Torrentfish and Piharau at one site).

This is evidence of very few native fish species being present anymore and potential stress from introduced fish species. Out of interest, fauna observation surveys of birds, mammals, insects and other animals and the eDNA tests, also showed high numbers of introduced species and fairly low numbers of native species remaining both in abundance and diversity.

The Waingongoro and Kapuni awa catchments like many on the Taranaki ringplain, have been subject to major and accelerated deforestation, awa disruption, erosion and wetland drainage over

the past 160 years due to colonial land confiscation and industry use such as oil and gas extraction and intensive dairy farming. Our studies compared to the many historical accounts of the environment, show that these awa catchments are still under much stress with multiple native species losses.

Allowing hundreds of cubic metres a day of water to be taken from these awa for many years just adds to the stress that already exists.

To also take the wai and use electricity to split it into chemical compounds for companies to sell goes against tikanga Maori. There are many accounts from several iwi and hapu in which the notion of mixing different awa artifically or diverting awa from their natural flow paths is offensive and considered to be breaking kawa or laws of nature, which may cause physical or spiritual harm to Taiao.

Both these activities go against the very meaning of Te Mana O Te Wai which is supposed to put commercial interests behind the interests of the wai itself and all those who depend on it.

3. The cultural impacts on the hapu and iwi nearby

The cultural and spiritual impact on the hapu and iwi from damaging these awa and surrounding habitats has been massive, not only due to having their resource base taken away and whanau having to move away from each other and their cultural environment, but through the disconnection to their spiritual base which connects them to Taiao, the natural rhythms and processes of nature, and provides purpose and meaning through kaitiakitanga of Taiao and each other.

The recent Mauri Compass work done by Ngati Mutunga on the Urenui and Mimitangiatua awa showed how historical and current industrial and human activities have devastated the ecology and mauri of the awa. This was instrumental in the declining of further resource consent to Remediation NZ which had and still is causing harm to the awa. This work however took more time and resource than allowed in this Fast Track process.

I believe there will be significant impacts from visual disturbance of the view of their Koro Taranaki from the various marae or other culturally significant sites in the area. It is curious to note that in the visual diagrams provided of the view from each marae, that some of the views are not taken from the positions people at the marae would stand at to view their Koro. The view from Waiokura marae in particular should have the wind turbines directly infront of their Koro Taranaki when standing on the marae, as opposed to how it is shown in the diagram from across the other side of the road where very few might stand.

A particular concern that I will touch on more later, is that while we are considering four turbines now it is highly likely that if this project is approved we may instead see hundreds of turbines in this area. Each turbine of course comes with more roads, pipes, power lines and other infrastructure and activity. I imagine the hapu would have a less favourable opinion on just four turbines if they knew more about what may come further down the track.

Those of us used to resource consent applications are fully aware of how one application can be the door opening to more and more additions to a single consent. Once the door is open, it is near impossible to close.

This is how the industry work the system by getting their foot in the door. The result is mana whenua are left more and more disempowered to protect their resource base and tikanga tuku iho. The impacts of this are again massive. I know of very few of our people who feel confident to

challenge the ‘powers that be’ and it becomes a part of our new colonised culture to just not bother trying as what’s the point when we so often lose. The lack of confidence and mana leads to self abuse, domestic abuse and poor outlooks on one’s future prospects in general. There is much documented research (eg. Leonie Pihama) showing the poor mental and phyiscal health status of Maori, that can be linked to colonisation. Rural comunities in Aotearoa also have high rates of poor physical and mental health. Koro Taranaki is a daily inspiration to many living in Taranaki and any obstruction to views is thought badly of.

4. The explosive hazards.

Despite hydrogen being a well know highly explosive material, there is very little in the consent application addressing the hazards of explosions during hydrogen production, storage, refuelling and transportation. This needs far more research and risk management planning.

5. The contribution of the project to environmental and climate polluting industries.

Hydrogen is well known to have a poor energy return on input (EROI) requiring far more turbines to produce and store hydrogen for use rather than directly using electricity generated by the wind.

A major concern around this project is the direct and indirect links to major polluting activities in the area such as fossil gas extraction, synthetic fertiliser production and the use of hydrogen gas in fuel-cell vehicles and as feedstock in factories that contribute to intensive dairy farming and resource extraction from the area and further afield. Gas extraction, synthetic fertiliser and dairy cattle are all major climate polluters in Aotearoa, plus they contribute to soil and water contamination and increased erosion. There is now also evidence of hydrogen production adversely affecting the ozone layer of our atmosphere which should be of serious concern here in Aotearoa where we have been coping for some decades still with the human-induced ozone hole.

It is clear that the hope is to reduce fossil fuel gas used for synthetic fertiliser and fuel for transportation and factories but according to the data at hand, four wind turbines will only reduce gas use by an estimated 5%. Such a small reduction will only continue major gas extraction and/or installation of many more wind turbines or other low emission energy production systems. Let’s not forget that even wind turbines and solar panels have large carbon footprints through mineral extraction, production, transportation, and replacement and disposed after about 20 years.

Synthetic fertiliser is not a necessary ingredient for agriculture. Regenerative agriculture practices using local, organic products and natural processes can provide far better results without the huge cost to farmers, the greenhouse gas emissions nor the stress to soils and waterways.

This is the same with intensive dairy exports. Current farming models requires inifnaite growth ot create profit. This only works for those who can carry huge debts and amass large farm assets while pushing out smaller farms and fellow members of rural communities. The greenhouse gas emissions from the gigantic herds and the collection, transportation, processing, packaging and shipping of products overseas, are massive. It is not a sustainable nor carbon zero business model. That does not mean dairy farming is inherently unsustainable. There are many small-scale dairy operations in countries like India where a few animals can provide a good income to villagers without impacting badly on the environment. New Zealand’s exported milk products infact damage these small businesses overseas by providing mass produced cheap products that undercut their local products but carry massive hidden environmental costs. In New Zealand we export 95% of dairy products. None of this is necessary nor sustainable business.

6. The longterm effects on all of the above which may not be evident in this initial proposal.

This leads again, to the need to look back at the big picture. Globally we have breached several of our nine planetary boundaries beyond which there would be dire consequence, notably the loss of biosphere integrity and chemical pollution. Climate scientists are warning that we have burned up so much carbon and removed so much carbon sequestration habitat since the mid 1800s that to avoid devastating climate change we need to at the very least reduce our carbon emissions by half by 2030 and reduce quickly further still to draw down the excess carbon we have already emitted into our planet's fragile atmosphere.

That is a mammoth task requiring a major overhaul of our economy to reduce emissions and rapidly restore wild habitat. A few wind turbines serve as greenwashing and will increase our emissions by propping up the continued extraction of fossil gas, the continued production of high N2O emitting synthetic fertiliser and the continued powering of the intensive dairy export industry which is this country's single biggest climate polluter.

If we must have a fast track process for renewable energy projects such as wind turbines then at least use the electricity created to directly power homes and necessary energy needs not the needs of polluting, unsustainable industries via an inefficient, costly and harmful new energy storage system.

Naku noa,

Emily Tuhi-Ao Bailey

Please note that due to time constraints and other work commitments I have been unable to provide references to some of my statements. I would be happy to provide these at a later time if required.

Feedback - Kapuni Green Hydrogen project- Landscape and Risk

Landscape

1. Taranaki Maunga is considered an outstanding natural feature/landscape by the South Taranaki District Plan (STDP). [1] The proposed wind turbines will have an adverse impact on the appreciation of Taranaki Maunga and the surrounding landscape.

2. While supportive of wind turbines as an energy source we have concern about the location of the proposed wind turbines and the lack of opportunity for the public who will be potentially affected to contribute to the decision-making.

3. The Kapuni Green Hydrogen project would have been publicly notified if it had not been accepted for fast tracking through the Government's Covid-19 Recovery (Fast-Track Consenting) Act 2020. [2]

4. Due to the lack of public notification, there has been no opportunity for the public to provide landscape and visual effects evidence.

5. The landscape character level of effects has been described as moderate to high and the nature of the effects as adverse. [3]

6. The landscape and visual effects assessments describe low, moderate and high effects for residential, private, public and marae viewpoints however they do not appear to provide any comparison to the Resource Management Act legal

[1] https://www.southtaranaki.com/repository/libraries/id:27mlbegko1cxbyf94es5/hierarchy/Documents/Agendas%20and%20minutes/Council/Making%20the%20Proposed%20District%20Plan%20Operative%20-%20Appendix%201.pdf at p.392.

[2] https://www.epa.govt.nz/assets/Uploads/Documents/Fast-track-consenting/Kapuni-Green-Hydrogen/191149-COVID-19-RA-Consent-Application-and-AEE-Final_27-Aug-21.pdf at digital p.56.

[3] https://www.epa.govt.nz/assets/Uploads/Documents/Fast-track-consenting/Kapuni-Green-Hydrogen/Appendix-G.1-Landscape-and-Visual-Effects-Assessment.pdf at digital p.5.

descriptors relating to effects such as 'less than minor', 'minor' and 'more than minor'. [4] [5]

7. According 'Te Tangi a Te Manu Aotearoa New Zealand landscape assessment guidelines' high can be described as "significant"; moderate as "more than minor"; and low as "minor" in terms of the Resource Management Act. [6]

8. For example, there were a range of low through to high level of visual effects in the 9 public viewpoints chosen with 6 of the sites having an adverse effect. [7] This means that the public would be considered as having effects that are "minor", "more than minor" and 'significant" yet they have no opportunity to participate.

9. It is also not clear from the landscape and visual effects assessment provided by the applicant how individual landowners in the vicinity of the public viewpoints assessments are considered particularly in light of the effects described.

10. The Resource Management Act requires written approval from parties who are affected by an activity's adverse effects that are minor or more than minor (but not less than minor).[8] It is not clear how the applicant and the EPA will address this.

11. We are concerned that alternative sites such as coastal sites similar to Waipipi have not been considered for the turbines which would have reduced the visual impact on Taranaki Maunga and the surrounding landscape.

[4] https://www.epa.govt.nz/assets/Uploads/Documents/Fast-track-consenting/Kapuni-Green-Hydrogen/Appendix-G.1-Landscape-and-Visual-Effects-Assessment.pdf
[5] https://www.legislation.govt.nz/act/public/1991/0069/latest/DLM2416413.html
[6] https://nzila.co.nz/media/uploads/2021_07/210505_Te_Tangi_a_te_Manu_Revised_Final_Draft_as_approved_5_May_2021.pdf at paragraphs 6.35- 6.42.
[7] https://www.epa.govt.nz/assets/Uploads/Documents/Fast-track-consenting/Kapuni-Green-Hydrogen/Appendix-G.1-Landscape-and-Visual-Effects-Assessment.pdf at p.7.
[8] https://www.legislation.govt.nz/act/public/1991/0069/latest/DLM2416413.html

12. While 4 turbines are being proposed for this project without public notification, we remain concerned that there will be an increase in wind turbines in this area in the future potentially based on the precedent being set through legislated fast-track consenting.

    (i) The landscape and visual assessment identify that the four turbines would not "result in significant adverse cumulative effects." [9] However, there is no reference to a potential precedent effect. The approval of the first four potentially changes the baseline for future assessments.

    (ii) Consent provisions should be considered that recognise the exceptional fast track approval process and should clearly state that should the four turbines be consented these should not affect the baseline with regard to landscape integrity.

    (iii) Any further applications considered under standard consenting procedures should have to ignore the existence of these four turbines within the 'existing environment'. That is, that, even if installed, they do not exist.

Risk

13. We commissioned a risk review of the Kapuni Green Hydrogen project which raised some issues and made some recommendations.

[9] https://www.epa.govt.nz/assets/Uploads/Documents/Fast-track-consenting/Kapuni-Green-Hydrogen/Appendix-G.1-Landscape-and-Visual-Effects-Assessment.pdf