

New Plymouth District Council Proposed District Plan September 2019

Submission from Climate Justice Taranaki, 22 November 2019

1. Climate Justice Taranaki Inc. is a community group committed to justice, action and true solutions to our climate crisis. We raise awareness on social justice issues around climate change which impact disproportionately heavily on the under-privileged and on future generations. We advocate for policies and decisions that alleviate the impacts and empower communities. We support communities in building climate resilience.
2. Climate Justice Taranaki provided feedback on the Draft New Plymouth District Plan in December 2016¹ and on the Draft NP District e-Plan in March 2018². We welcome the opportunity to submit on the Proposed District Plan (hereafter referred to as the Plan).

Climate Change and Resilience

3. We note the increased integration of 'climate change' consideration in the Proposed plan, reflected by the now 19 mentions of 'climate change' across seven sections, rather than just two in the Draft e-Plan. This is a positive development.
4. We are especially pleased to read strategic objective UFD-13(6) "*The district develops in a cohesive, compact and structured way that takes into account the short, medium and long-term impacts of climate change and the associated uncertainty*", and UFD-20 "*The benefits of activities that reduce greenhouse gas emissions are recognised.*" We ask that UFD-20 be strengthened so that planning and consent decisions also recognise and take into account the benefits of activities that reduce greenhouse gas emissions.
5. We encourage Council to incorporate climate change concerns and resilience in other sections also, notably Natural Environment, Tangata Whenua, Ecosystems and Indigenous Biodiversity, Energy, Network Utilities, Transport, and Rural Zones.
6. We support the call from the Council Challenge Action Group, youth and others for Council to declare a climate emergency and assess all planning, policy and development proposals with a climate change lens.

Strategic Direction – Urban Form and Development

7. UFD-13: Edit points 13(4) and 13(5) to, "*enables greater productivity and transition to a circular economy*" and "*enables greater social and cultural vitality and lessens inequality*". The economic growth paradigm is coming to an end. Circular, regenerative or doughnut economy³ offers far greater benefits to social well-being while restoring, or at least avoiding, further degradation of our Earth systems.
8. UFD-20: Strengthen this point to, "*Facilitate and support activities that reduce greenhouse gas emissions with the recognition of their social and environmental benefits.*" It is Council's role and responsibility to lead and support activities that limit our climate impacts, not just recognising their benefits. For example, innovative approaches to resource recovery, reuse, upcycling and recycling of wastes, especially done locally (e.g. plastic wastes for roads)⁴, can make a significant contribution towards greenhouse gas emissions and circular economy.

Energy

9. It is important to recognise that *“The district contributes significantly to the nation’s economy through the extraction of non-renewable energy sources such as oil and gas”*. However, its contributions are rapidly dwindling and becoming costs and liability, notably the failure by companies to decommission installations at the end of life of an oil/gas field⁵. Moreover, fossil fuels are a major cause of climate change, extreme weather events, sea level rise, ocean acidification and deoxygenation, as well as other environmental and social harm⁶. The severity of our climate crisis and the urgency of reducing greenhouse gas emissions demand an end to oil and gas exploration and extraction, and substantive support to build community energy resilience. Failure to do so would result in catastrophic social, economic and environmental destruction, or at the very least loss of opportunities for reshaping our district into a more healthy and sustainable society.
10. We note that, *“Energy efficiency and the use and development of renewable energy are matters the District Plan must have particular regard to under section 7”* of the RMA and that the *“Plan must give effect to the National Policy Statement on Renewable Electricity Generation 2011 which requires recognition of the benefits of renewable electricity generation.”*
11. While there is a role for emerging technologies, we are opposed to the development of brown, grey or blue hydrogen as *“a transition to a low-emission economy”*. We urge caution and comprehensive risk and life-cycle assessments when considering any development of green hydrogen, including comparative analyses against other alternatives such as bioenergy derived from wastes^{7,8}. Please refer to our submission⁹ on MBIE’s green paper - A Vision for Hydrogen in New Zealand for our rationale.

Objectives

12. We therefore ask that **an additional objective** be included to reflect the above climate change concerns, the urgent need to develop community energy resilience, and Council’s obligation to have particular regard of the benefits of renewable energy. We propose the following wordings for the additional objective:

“In recognising our current climate crisis, energy activities that support community resilience are provided for, especially community-scaled renewable electricity generation, storage and distribution.”

Policies

13. ENGY-P1: We do not support further petroleum prospecting due to the demonstrable link between fossil fuels and climate change and associated impacts (See point 9 above).
14. ENGY-P2: We do not support allowing seismic surveys using explosives anywhere.
15. ENGY-P7, P17 and P22: We fully support the requirement for adequate separation from identified features and sensitive activities to ensure conflict between activities, adverse effects and reverse sensitivity effects are minimised.
16. ENGY-P14: We propose expanding this policy concerning small scale renewable electricity generation to include the storage of surplus electricity on site, such as with used electric vehicle (EV) batteries¹⁰ and/or smart micro-grids and peer-to-peer¹¹ power systems.

Rules & Effects Standards

17. ENGY-R3 & R4: On rules concerning separation distances in relation to petroleum exploration and production activities, we are in full agreement with Taranaki Energy Watch (TEW). We ask that Council refer to the TEW submission on the Plan, as well as the Environment Court evidence, findings and decisions over the appeal TEW lodged against South Taranaki District Council on their proposed district plan. Notably, TEW has established case law on oil and gas rules, including separation distance of 250m for a single well and 650m for larger production facilities unless a Quantitative Risk Assessment shows otherwise.
18. ENGY-R3, R4 & R8: While we do not support allowing any new petroleum, exploration, production & electricity generation activities, if such new consents are being considered, there must be full guarantee, including bonds, by the applicants that proper decommissioning of the infrastructure and remediation of the sites will be conducted at the end of life of the facilities. New rules or effects standards have to be introduced for this purpose.
19. ENGY-R5, S1-S3: Small scale renewable electricity generation activities & Energy efficient homes
Expand Rule 5 to include renewable electricity storage.

Moreover, there is huge opportunity for energy savings, emissions reduction and health benefits in the area of house design, notably Net Zero Energy Buildings¹² which produce as much energy as they use over the course of a year. We believe special concessions for consent process should be offered to homeowners to encourage the trial and adoption of energy efficient building designs.

In addition, several councils across Aotearoa, such as Nelson City Council, runs an Eco Building Design Advisor service¹³ which offers ratepayers and residents free, tailored, research-based information for new and existing homes to ensure or improve their energy performance and health outcomes. The Greater Wellington Regional Council offers loans for ratepayers to purchase insulation, to be paid back over nine years through rates¹⁴. We ask that Council provides similar services to New Plymouth ratepayers and residents to help reduce overall energy consumption and community resilience.

Building standards need to evolve to encourage more small-scaled renewable energy generation, energy efficient to net zero energy buildings, including tiny homes with minimal environmental and energy footprint.

Network Utilities and Infrastructure

20. All network utilities and infrastructure are prone to damage by extreme weather events associated with climate change. This must be well recognised in the Plan. The associated objectives, policies and rules need to enable the development and maintenance of networks that are resilient to climate extremes and continue to deliver security to people in all areas of essential services. In some cases, community resilience is better provided for by enabling communities to develop their own independent, or partially self-sufficient, utilities and infrastructure¹⁵, especially for more dispersed communities. Such initiatives^{16,17} already exist and have accumulated knowledge that would be invaluable for our district.

Objectives

21. NU-01: Expand (1) to read *“Effective, resilient, efficient and safe network utilities that provide essential and secure services, including in emergencies such as extreme weather events”*.

Policies

22. NU-P3: We very much agree with this policy which supports the re-use of redundant services and structures, to increase resilience, generate environmental benefits, promote sustainable outcomes and increase utilisation of renewable resources. We urge Council to ensure that this policy with complementary rules will be applied effectively on the ground.

Rules

23. NU-R23 to R30: Three waters

An important aspect of climate change resilience is enabling local communities and businesses to become more self-sufficient in terms of water supply and stormwater and wastewater management. The creation and support for community-based systems would also reduce demand on costly network utilities. Notably, Kapiti Coast District Council's Plan Change 75 requires all new houses built since 2008, to have either a 10,000 litre rain water tank or a 4000 litre tank and a greywater system, to provide a non-potable water supply¹⁸. The Kapiti Coast District Council also offers interest-free loans¹⁹, to be paid back via rates over ten years, for the installation of rainwater tanks or greywater solutions. The Plan Change and loans help to reduce the demand on council water supply and increase community resilience. We urge NPDC to instigate a similar plan change and funding support to the same effects.

24. More proactive efforts into the reduction and retention of stormwater will have multiple environmental and social benefits, including the reduction of flood hazards and waterways pollution and enhancement of biodiversity if wetlands are reinstated or created.

Transport

Objectives

25. TRAN-01: In view of our climate crisis, the urgent need to reduce transport emissions and demonstrable health and social benefits, we propose strengthening and expanding the first objective TRAN-01(3) to *"maximizes opportunities for walking, cycling and scootering, the use of public transport, low-emission vehicles and ride-share networks"*.

Policies

26. TRAN-P2: We support the allowance of having more electric vehicle (EV) charging stations to help facilitate EV uptake and reduce our transport emissions. We would go further and ask that Council stops purchasing anymore new internal combustion engine (ICE) vehicles, avoid unnecessary travel and transition its fleet to electric, starting with light vehicles. The cost savings on fuel and maintenance are well established²⁰.
27. TRAN-P7: Our over reliance on cars and roads have led to huge environmental and health problems, ranging from climate change, habitat loss, stormwater problems and pollution of waterways to obesity and decline in respiratory health. Rather than continuing to add and upgrade the road transport network, we need to reclaim some of the roads and streets for pedestrians, leisure and green space, notably within CBDs and high-density residential areas²¹. This would help reduce stormwater runoff and flooding risks, foster more active lifestyle and also support policy 7(5) by increasing *"opportunity for social interaction, particularly in centres and residential neighbourhoods"*. Considerations should be given to introducing electric shuttles at key connecting points to provide for accessibility, especially providing for the transport of disadvantaged and mobility impaired, as required under policy 7(7).

28. TRAN-P11: New developments should be planned and designed with active transport and green space as priority rather than the usual car and road-based designs. Policy 11 needs to be much strengthened and expanded to these effects.
29. TRAN-P15: Strengthen this policy to actively support (rather than “do not constrain”) the current operation, and the potential revitalisation, expansion and electrification of rail transport networks^{22, 23}.
30. TRAN-P18 & P19: There have been serious adverse effects on nearby residents from increased use by heavy vehicles, notably around Tikorangi by the oil and gas industry²⁴. These should have been avoided or much reduced and better managed by stringent rules, monitoring and enforcement on the ground. The costs of increased need for road maintenance due to high trip generator activities especially heavy vehicles should be borne by the responsible industries and users.

Contaminated Land

31. We remain gravely concerned over the issue of contaminated land, as expressed in earlier submissions. Oil and gas, petrochemical, industrial agriculture and pest control activities using poisons are pervasive across the district/province. Their potential health and environmental impacts and Council’s responsibility for public health has been raised by Taranaki District Health Board, among others.

Policies

32. We urge that Council apply scrutiny and the precautionary principle when identifying, assessing and managing potential contaminated sites. The Hazardous Activities and Industries List (HAIL)²⁵ provided by the Ministry for the Environment requires careful review. It is critical that any such site-specific information is consistently recorded and made public and included in properties’ land information memorandum (LIM)²⁶.
33. With Taranaki Regional Council being the main regulator of contaminant discharges, NPDC needs to work closely with them to ensure that it has all the necessary information to manage landuse. This is becoming increasingly important with the transition away from fossil fuel extraction and production, as more oil and gas sites will have to be retired and remediated for other landuse.
34. In addition to identification and remediation of contaminated sites, stronger planning and regulatory efforts are needed to prevent contamination and its impacts in the first place.

Rules on Glyphosate

35. Applying the precautionary principle, Council should take the lead in avoiding the use of chemicals that have the potential to contaminate land and pose harm to humans and biodiversity.
36. Importantly, we ask that Council refrain from spraying glyphosate-based chemicals on public lands, especially playgrounds and open space for public leisure. The environmental and health impacts of glyphosate are well documented^{27, 28}. Its use has been banned or heavily restricted in many parts of the world²⁹ including Christchurch following the City Council’s 2016-17 annual plan revision³⁰.

Hazardous Substances

37. While it is good to see mentions of risk definition, Risk Management Contours, cumulative effects, separation distance and setback requirements from significant hazardous facilities, the Plan fails to reflect all the key findings, evidence and decisions of the TEW Environment Court Case. We ask that

Council refer to these and adopt the relevant recommendations provided in the TEW submission on the Plan when finalising it.

38. Moreover, it is crucial that Council recognises the increasing vulnerability of hazardous facilities due to heightened risks from natural hazards exacerbated by climate change. This needs to be written into the Plan.

Policies

39. HAZS-P6: Add a sub-policy, *“Regularly review and regularly update the list of identified natural hazard areas, considering the effects of extreme weather events and sea-level rise associated with climate change.”*

Rules

40. HAZS-R2 to R12: Please refer to and adopt recommendations provided in the Taranaki Energy Watch (TEW) submission, based on the evidence, findings and decisions of their Environment Court Case. For example, the proposed 50m setback of a significant waterbody, scheduled site, area of significance to Māori, scheduled archaeological site or Public Access Corridor from significant hazardous facilities is inadequate. The proposed 250m separation distance for sensitive activities is also grossly inadequate if there is more than one petroleum well-head or if there is a production station in the significant hazardous facility concerned.

Natural Hazards

41. We note the prudent inclusion of the effects of climate change in this chapter of the Plan.
42. In addition to the effects of climate change, more recent studies have raised concerns over the growing risks of volcanic eruption involving poisonous hot gases, ash and rock, impacting on areas beyond the Egmont National Park boundary up to 25-30 km towards the coast^{31, 32}.
43. In terms of stormwater flooding, more proactive efforts to reduce stormwater production and increase retention are needed to reduce its occurrence, costs of management and generate co-benefits (See points 24 & 27 above).

Ecosystems and Indigenous Biodiversity

Overview

44. We note the recognition in the Plan of the serious ecological concerns over the scarcity (8.9%) of indigenous vegetation remaining in urban New Plymouth, in terms of species decline and fragmentation effects. Indeed, our ecosystems and biodiversity are at unprecedented crisis and we need to apply the precautionary principle to protect what we still have.

Policies

45. ECO-P1: We support strongly the policy to identify and map areas of significant indigenous vegetation and indigenous habitat and the criteria listed.
46. ECO-P2: We also support strongly the policy to maintain indigenous habitats and ecosystems that are not identified as significant natural areas.
47. ECO-P7: We strongly support this policy also and ask that it be strengthened further by rewording it to *“Encourage and support the active protection, enhancement and restoration of indigenous biodiversity and ecosystems by...”*

48. ECO-P5 & P6: We do not support biodiversity offsets in general because of the immense crisis on our natural ecosystems and biodiversity, and the danger of offsets being misused as an excuse to cause avoidable damage. Notably we do not see how *“significant residual adverse effects can be addressed through biodiversity off-setting...”* as suggested in P5(8). We do not believe that biodiversity offsets can result in *“no net loss”* or *“a net gain”* of biodiversity. P6(4) *“the offset is not proposed to compensate for more than minor adverse effects on highly vulnerable and irreplaceable biodiversity components”* is especially open to subjective interpretation and misuse. If we treat *“cumulative effects”* seriously, then surely, we would not allow any adverse effect on *“highly vulnerable and irreplaceable biodiversity component”*, whether it is minor or less than minor and however the term is being interpreted.

Rules

49. ECO-R2: We question the rationale behind permitting the disturbance and/or clearance of *“100m²”* of indigenous vegetation per site in the Coastal Environment Area *“in any five year period”*.

Subdivision

Policies

50. SUB-P3: Expand this policy to include consideration of projected increase in natural hazards associated with climate change, not just *“existing”* natural hazards.
51. SUB-P4: Expand this policy to encourage and support the provision of standalone or community-based renewable energy systems, water supply and wastewater treatment (See points 16, 19, 20, 23 & 24 above).
52. SUB-P8: We note that this policy is in line with our recommendation points 16, 19, 20, 23 & 24, if made enforceable through dedicated rules and with financial allocation where needed.

Coastal Environment

Overview

53. We note the multiple mentions of climate change and sea level rise which are indeed crucial considerations for the management of landuse and other activities in our coastal environment.
54. The definition of ‘Coastal Erosion Hazard Area’ is based on *“historic rates of sea level rise”* when it should be based on prudent scientific projections under a range of climate change scenarios. Notably the IPCC Representative Concentration Pathways (RCP) 8.5 used in the definition for ‘Coastal Flooding Hazard Area’ is far more appropriate, bearing in mind that IPCC scenario modelling has not well captured the positive feedbacks on the climate system that may hasten sea level rise and worsen ‘super-storms’ (Hansen et al. 2016)³³.

Policies

55. CE-P8: Expand P8(4) to *“where necessary, limiting expansion or instigate managed retreat of existing urban coastal settlements to avoid unacceptable hazard risks to people and properties associated with climate change and extreme weather events.”*
56. CE-P10: We do not support any waiving of the provision of and/or reduction of the width of an esplanade strip or reserve, In the case of proposed subdivision of land that would create allotments adjoining mean high water springs.

57. CE-P12: Strengthen policy 12 to incorporate ‘set back’ or ‘no build zones’ as part of precautionary, adaptive pathway planning to reduce and manage the risks from natural hazards, having regard to the effects of climate change and sea level rise. It is important that the demarcation of ‘set back’ or ‘no build zones’ is based on science and there is no exemption for industries and companies to build, extract, mine or develop the ‘no build zones’ for economic gain in any way³⁴. Rules will need to be developed to give effects to ‘set back’ or ‘no build zones’.
58. CE-P13: Strengthen policy 13 from “*Encourage...*” to “*Support restoration and rehabilitation of natural character, indigenous vegetation and habitats, cultural landscape features, dunes and other natural coastal features or processes*”.

Rules

59. CE-R16 & R17: We are opposed to any new or expansion of petroleum exploration and/or production anywhere due to their effects on climate change, ocean acidification and other environmental and social impacts. These activities should be prohibited, or at least non-compliance, in the coastal environment. A discretionary activity status does not reflect CE-P5 which lists petroleum exploration and petroleum production as activities to be avoided within the Coastal Environment.

Low Density Residential Zone

Policies

60. LRZ-P3: Add “*intensive indoor animal farming*”, “*mining*” and “*petroleum prospecting, exploration, production and waste disposal*” to the list of incompatible activities to avoid.
61. LRZ-P5: We support the encouragement of residential development which provides a range of housing types and sizes, including tiny homes, especially for those on low to moderate incomes. We encourage Council to consult the Kaitake Community Board Plan – a thirty year vision (October 2017)³⁵ especially in relation to planning and landuse management in Okato and Omata.
62. LRZ-P10: We note that this policy is in line with our recommendation points 16, 19, 20, 23 & 24, if made enforceable through dedicated rules and with financial allocation where needed.

General Residential Zone

Policies

63. GRZ-P3: Add “*intensive indoor animal farming*”, “*mining*” and “*petroleum prospecting, exploration, production and waste disposal*” to the list of incompatible activities to avoid.
64. GRZ-P5: We support the encouragement of residential development which provides a range of housing types and sizes, including tiny homes, especially for those on low to moderate incomes. We encourage Council to consult the Kaitake Community Board³⁶ especially in relation to planning and landuse management in Oakura.
65. GRZ-P11: We note that this policy is in line with our recommendation points 16, 19, 20, 23 & 24, if made enforceable through dedicated rules and with financial allocation where needed. We propose expanding this policy to encourage socially and ecologically sustainable forms of ‘urban farming’^{37, 38, 39} to supply food to local communities and markets, nurturing communities and reducing carbon emissions at the same time.

Medium Density Residential Zone

66. MRZ-P3: Add *“intensive indoor animal farming”, “mining” and “petroleum prospecting, exploration, production and waste disposal”* to the list of incompatible activities to avoid.
67. MRZ-P10: We note that this policy is in line with our recommendation points 16, 19, 20, 23 & 24, if made enforceable through dedicated rules and with financial allocation where needed.

City Centre Zone

68. With a just transition to a zero carbon economy as the goal of the nation and Taranaki, New Plymouth has the opportunity and potential to become a modern, innovative, ecological city with a zero carbon footprint and a thriving local community. Vancouver, Copenhagen and Curitiba in Brazil are just a few examples⁴⁰ from overseas that we can learn from.

Objectives

69. CCCZ-4: Expand objective 4 to, *“The structures in the city centre are well designed, innovative and contribute positively to the streetscape and the transition towards a zero carbon economy.”*
70. CCCZ-05: Expand objective 5 to, *“The city centre is an attractive, accessible, ecologically sustainable and safe environment for people to work, live and play.”*
71. CCZ-P6: We advocate a shift away from car reliance to pedestrian domination in the city centre, with electric shuttles provided for the transport disadvantaged and mobility impaired (See our point 27). This way, the demand for parking space will be much reduced, making available space for greenery, social interaction and other activities.
72. CCZ-P8: We strongly support the requirement of using sustainable design methods and mātauranga Māori principles in the design, construction and renovation of structure in the city centre.

Rules and Effects Standards

73. Rules and effects standards on buildings and other structures need to evolve and adapt to enable energy savings, emissions reductions and other ecological benefits (See point 19).

Rural Production Zone

Overview

74. We are gravely concerned about the importance given to extractive industries notably oil and gas, and industrial agriculture especially intensive indoor poultry and pig farms. Oil and gas exploration and production is a dead-end industry which must be phased out, considering its devastating impacts on climate, harm to local communities and environment, and the lost economic opportunities for sustainable alternatives. Industrial agriculture is not sustainable environmentally, socially or economically⁴¹ either. It relies on unsustainable inputs, much of which is derived from fossil fuels (e.g. urea), the destruction of natural forests (e.g. palm kernel) or are conflict related (e.g. Western Sahara phosphates). It is also inhumane to animals.
75. The New Zealand government is putting in place legislative changes and policies for transitioning away from fossil fuels and high emitting agriculture to a zero carbon economy, even though they do not reflect well the urgency of transition^{42, 43}. Locally we have the Taranaki 2050 Roadmap. The

Plan should acknowledge and have regard to the new imperatives rather than adhering to the status quo.

Objectives

76. RPROZ-04: Delete objective 4(4) *“interspersed existing rural industry facilities associated with the use of the land for intensive indoor farming, quarrying, oil and gas activities and cleanfills”*. While these exist in our rural areas at present, they do not constitute the *“predominant character and amenity”* that needs to be *“maintained”*.
77. RPROZ-05: Add a sub-objective, *“the phasing out of intensive indoor farming and oil and gas activities are supported, to facilitate the transition to sustainable productive landuse including cottage industries”*.

Policies

78. RPROZ-P1: Add *“farm forestry”* and *“cottage industries”* to the activities that are compatible with the role, function and predominant character of the Rural Production Zone. Delete *“petroleum prospecting”* from the list.
79. RPROZ-P2: Delete *“mining”* from the list of potentially compatible activities to be managed. Add *“small-scaled resource recovery and recycling operations”* to the list.
80. RPROZ-P3: Add *“intensive indoor animal farming”, “mining”* and *“petroleum prospecting, exploration, production and waste disposal”* to the list of incompatible activities to avoid.
81. RPROZ-P6 & P7: We support the use of *“sufficient separation”* from large-scale primary production and rural industry to sensitive activities.

Rules

82. On rules and standards concerning separation distances in relation to petroleum exploration and production activities, including reverse sensitivity, please refer to the Taranaki Energy Watch (TEW) submission on the Plan, as well as the Environment Court evidence, findings and decisions over the appeal TEW lodged against South Taranaki District Council on their proposed district plan.

Rural Lifestyle Zone

83. RLZ-P3: Add *“petroleum prospecting, exploration, production and waste disposal”* to the list of incompatible activities.
84. RLZ-P25: Mining should be prohibited, not discretionary, in this zone.

Major Facility Zone

Overview

85. We ask that the opening sentence be shortened so it reads only, *“The purpose of this zone is to recognise large-scale facilities that are regionally or nationally significant and to provide for their unique operational needs, while appropriately managing the environment effects associated with each major facility.”* To be clear, while the listed major facilities may have contributed economic benefits to the Crown and a small minority of people, they have not contributed to the social well-being of the community. Rather they have caused harm to human health⁴⁴, the environment (e.g. from fire-fighting foam chemicals)^{45, 46} and social fabric⁴⁷.

Objectives

86. MFZ-O1: Delete “*and social wellbeing*”.

Rules

87. On rules concerning separation distances in relation to Major Facility Zone and/or large hazardous facilities notably petroleum production sites, please refer to the Taranaki Energy Watch submission on the Plan, as well as the Environment Court evidence, findings and decisions over the appeal they lodged against South Taranaki District Council on their proposed district plan.

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- ¹ <https://climatejusticetaranaki.files.wordpress.com/2013/03/cjt-feedback-on-draft-np-district-plan-dec2016-final.pdf>
 - ² <https://climatejusticetaranaki.files.wordpress.com/2018/05/cjt-feedback-on-draft-new-plymouth-district-eplan-16mar2018-full.pdf>
 - ³ <https://www.kateraworth.com/doughnut/>
 - ⁴ <https://www.stuff.co.nz/taranaki-daily-news/news/113269206/new-plymouth-trials-putting-recyclable-plastic-into-roads>
 - ⁵ https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12286939&fbclid=IwAR1CIP-CflbPKcyHU7fln_5EqOW9SyrCunQ1Y6G_A46GXpz551wc7B9ZBO0
 - ⁶ <https://www.psr.org/wp-content/uploads/2019/06/compendium-6.pdf>
 - ⁷ <https://www.bioenergy.org.nz/extracting-value-from-waste>
 - ⁸ <https://www.licella.com.au/what-we-do/>
 - ⁹ <https://climatejusticetaranaki.files.wordpress.com/2019/10/cjt-submission-on-mbie-hydrogen-green-paper-oct19-v3-final.pdf>
 - ¹⁰ https://countysustainabilitygroup.com/2019/11/11/as-electric-vehicles-age-heres-how-the-batteries-are-finding-a-second-life/?fbclid=IwAR1mbrLaeBI1MMm6NBVjChdoS1YZ3IHZ4QZ4qn7Ahm_cEGNHFcjLFh7tcjw
 - ¹¹ <https://arxiv.org/abs/1810.09859>
 - ¹² <https://www.wbdg.org/resources/net-zero-energy-buildings>
 - ¹³ <http://www.nelson.govt.nz/building-and-property/property-land-use/property-ownership/eco-building-design-advisor/>
 - ¹⁴ <http://www.gw.govt.nz/wellington-region-scheme/>
 - ¹⁵ <https://www.stuff.co.nz/business/innovation/95013090/microgrids-the-future-for-pressured-power-companies>
 - ¹⁶ <https://reneweconomy.com.au/horizon-first-utility-to-pull-down-power-lines-and-replace-with-renewable-micro-grids-71053/>
 - ¹⁷ <https://ben.p2power.co.nz/>
 - ¹⁸ <https://www.kapiticoast.govt.nz/whats-on/news/previous-years/2010/interest-free-loans-part-of-water-conservation-strategy/>
 - ¹⁹ <https://www.kapiticoast.govt.nz/services/a-z-council-services-and-facilities/water/water-conservation/water-retrofit-service/water-retrofit-service-faqs/>
 - ²⁰ <https://ungaro.co.nz/stop-wasting-money-on-fuel-ev-economics-explained/>
 - ²¹ <https://imaginemymyrelief.blog/2018/09/18/kaore-he-pahi-there-is-no-bus/>
 - ²² <https://www.stuff.co.nz/business/budget/113093554/budget-nz-1b-kiwirail-boost-first-step-to-revitalise-rail>
 - ²³ <https://thespinoff.co.nz/society/19-08-2019/shrink-time-not-space-how-trains-could-revitalise-the-regions/>
 - ²⁴ <https://jury.co.nz/category/petrochem/>
 - ²⁵ <http://www.mfe.govt.nz/land/hazardous-activities-and-industries-list-hail>
 - ²⁶ <http://www.newplymouthnz.com/Residents/Your-Property/LIMs>
 - ²⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4756530/>
 - ²⁸ <https://www.sciencedirect.com/science/article/abs/pii/S1002016017604302>
 - ²⁹ <https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/where-is-glyphosate-banned/>
 - ³⁰ <https://www.stuff.co.nz/the-press/news/81470129/christchurch-city-council-to-reduce-use-of-potentially-dangerous-weedkiller>

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- ³¹ <https://www.stuff.co.nz/environment/111989099/scientists-find-evidence-mt-taranaki-eruption-could-turn-region-into-the-next-pompeii>
- ³² <https://www.rnz.co.nz/news/national/359980/civil-defence-keeps-closer-eye-on-mt-taranaki-eruption-risk>
- ³³ Hansen et al. 2016. <https://pubs.giss.nasa.gov/abs/ha04710s.html>
- ³⁴ <https://campaigns.350.org/petitions/no-go-to-no-build-zones>
- ³⁵ <https://www.newplymouthnz.com/-/media/NPDC/Documents/Council/Council%20Documents/Plans%20and%20Strategies/Kaitake%20Community%20Board%20Plan.ashx>
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