Submission on the Stratford District Council Stratford District Plan Review: Managing Energy Resource Development and the Effects of Climate Change

Prepared by Climate Justice Taranaki, 7th March 2014

Tēnā koutou, tēnā tātou,

Kei te mihi atu tēnei rōpū ki a koutou o te Kaunihera o Whakaahurangi.

Ki runga – Ki raro – Ki waho – Ki Roto – Tihei Mouri Ora!

1. INTRODUCTION

Climate Justice Taranaki (CJT) thanks the Stratford District Council for the opportunity to contribute to the District Plan Review by providing comments on the discussion document "Managing Energy Resource Development and the Effects of Climate Change", and for including CJT as a stakeholder. CJT is an independent community group, without any paid personnel. The submission has thus been prepared in an entirely voluntary capacity.

Reading through the document, CJT finds encouraging signs of goodwill and practical proposals towards reducing the impacts of oil and gas development on local communities and supporting renewable energy and energy efficiency. By comparison, there seems to be little on managing the effects of climate change, and there is nothing on energy conservation or the effects of current energy systems on climate change. While the latter is due to constraints from the RMA, the issues still need to be considered and documented.

CJT is concerned about the timing of this consultation being ahead of the Parliamentary Commissioner for the Environment's final report on her investigation into fracking. It would have been far more appropriate and effective for the consultation on this discussion paper and the District Plan Review to begin straight after (rather than before) the release of the PCE's report.

With the above constraint in mind, CJT takes this opportunity to comment on the discussion document and offer our knowledge and views. Our emphasis is on support for the transition to renewable energy, energy efficiency and conservation, sustainable communities (including public transport and advocacy) and reducing the impacts of the fossil fuel industry on communities and the planet.

For simple referencing, we have used the same section numbers as the discussion documents when providing comments and suggestions. We have also provided hyperlinks (underlined) in the main text where sources of information and references may be found.

1.5. Possible Changes

CJT proposes new objectives, policies and methods under the following headings:

- Petroleum-based energy
- Renewable energy
- Energy efficiency and conservation

- Climate change

New and/or revised standards and assessment criteria will be needed under Natural Hazards, in view of short to long-term climate change impacts. Assessment criteria and information required will also need to be revised under Transportation in relation to hazardous substances.

Details are presented in section 8.

CJT calls for redefining "mineral exploration and/or production" as Non-Complying or Discretionary Activity (instead of Limited Discretionary or Controlled) throughout the Rural Zone. Bear in mind "exploration", as defined by Crown Minerals Act 1991, includes drilling, and in practice as in Taranaki, includes fracking.

Recent oil and gas activities and research (both in Taranaki and overseas) have shown the scope of effects are often unclear and/or unpredictable; such as cumulative effects on seismic activity and increase in traffic and transportation of hazardous materials. Some effects have been shown to be "more than minor", as in the cases of contamination of water, air and land and the health impacts on people and animals.

CJT calls for "petroleum exploration and/or production" in the Residential Zone and Business Zone to be Prohibited, and in the Rural/Residential Zone to be Non-Complying. There is little doubt that especially in high density areas, the effects from noise, traffic and especially risks from hazardous substances, are more than minor; and in sensitive areas such as schools, such activities should definitely be Prohibited.

CJT agrees with the new standard for flaring associated with petroleum exploration or production be contained by a flaring combustion chamber, with considerations on safety, emissions and noise (see section 8.4.5.). Offering people double/triple-glazing or hotel stay are not practical solutions as rural people work outdoors and noise can stress both people and farm animals.

CJT supports including assessment criteria to recognise the benefits of renewable energy, renewable electricity generation and associated critical infrastructure, considering also environmental and social impacts at source (e.g. materials mined overseas).

Assessment criteria will also need to consider the negative impacts of large scale projects (e.g. mega dams) and the resulting habitat destruction or loss of productive land and amenities, or wind/solar farms and the impacts they may have on neighbours and wildlife. Such projects should be categorised as Discretionary or Limited Discretionary.

Indeed, the demand for "dams and/or groundwater takes for water storage and/or export" will likely increase with water shortages resulting from the effects of climate change and current increases in water use due to increasing dairy conversions.

CJT supports including assessment criteria which provide guidance on what constitutes good consultation in relation to Te Tiriti o Waitangi (signed by almost all iwi involved) and not the Principles of the Treaty (written up by a latter government, which was never agreed to by Maori), and on identifying adverse effects in relation to these issues and the relationship of iwi with their taonga generally. Many iwi and hapu express frustration with councils using the historic places trust staff instead of local Maori authorities and with companies calling introductions over a cup of tea "consultation". There are too many restrictions over what is considered a waahi tapu such as the 50m radius rule.

“Adverse effects on archaeological sites” should also include the wording “waahi tapu” as these can sit outside the scope of archaeological sites eg. Punawai and places of spiritual importance. The term “principles of the Treaty of Waitangi” should be correctly replaced with “kaitiakitanga and Te Tiriti o Waitangi” as this is the document recognised under international law. The principles were not agreed to by iwi.

CJT does not agree with the removal of the reference to consultation with “neighbours within a 1km radius of the proposed site/s” from mineral extraction assessment criteria. Instead, CJT argues strongly for “integrated management” between the regional and district councils, involving joint assessment, hearings and decision making on consent applications where proposed activities are inextricably linked. Through such an integrated process, different criteria (some involving greater distances and Areas of Review) will be considered depending on the nature of the activities and the effects. See section 8.5.2 B.5.7 for detail.

2. REGULATORY & POLICY FRAMEWORK

2.1. Resource Management Act

CJT has substantial reservation on the Resource Management (Energy and Climate Change) Amendment Act 2004. E.g. The “efficiency of the end use of energy” can include such things as urea made from methane/natural gas, which is often over applied on farms and ends up polluting waterways and poisoning soil, not to mention its high output of nitrous oxide (320+ times more harmful than carbon dioxide).

Re “the effects of climate change”, while consent authorities cannot have regard to the effects on climate change, is it not possible to record this as a requirement of a consent application for possible use if laws change and for monitoring purposes for the Emissions Trading Scheme? This would be one way forward towards tackling climate change issues within the confines of current laws.

2.4. New Zealand Energy Strategy

2.4.1. Summary

The NZ Energy Strategy pays lip service to promoting renewable energy while investing hugely in supporting and promoting the fossil fuel industry. The Strategy considers NZ becoming a net exporter of oil by 2030. This is only possible through production in basins outside of Taranaki with the use of extreme drilling such as fracking and deep-sea exploration. Rather than addressing how to reduce the countries’ demand - or dependency one could argue - the strategy largely focuses on increasing the production to meet the existing and growing demand.

In our view it is unwise to plan the energy needs of over 4 million people in 10-year periods as is the case with the Government's strategy. Furthermore, it is important to stress that the document you refer to is a 'political strategy', not a 'let's-find-solution strategy'. With its strategy, the Government would rather join fellow government's stuck in the fossil fuel century than those who are moving forward and taking the impacts of climate change seriously and our collective responsible to address them (ie. leaving fossil fuels in the ground).

2.4.3. Environmental Responsibility

The ETS may have encouraged some investment in renewable energy but it has failed completely in reducing the use of carbon-intensive forms of power – as many fore-warned.

If councils wish to truly prevent and protect communities from the effects of climate change then councils need to tackle fossil fuel extraction and energy conservation head on.

The massive future costs of not doing so compared to the short term benefits now, are well researched and documented. Council are encouraged to read these documents (Stern,2006; Garnaut, 2011) and lobby government to change their current legislation around these issues. Beyond climate change, councils need to seriously consider whether we want this generation to take what's left of precious petroleum resources that should be for the use of many hundreds of generations to come, if used prudently and fairly. The past handful of generations have used up the vast majority of global natural resources that should have been a sustainable resource for future generations and the rest of the species we share this planet with.

There are many well researched arguments against renewable energy and energy efficiency being sufficient to cope with current rising energy consumption. Think of the replacement of fuel for cars in Auckland on a weekday morning for example. These market solutions also continue to promote and provide for current unsustainable energy consumption and the capitalist economy which is inherently unsustainable because it relies on infinite growth from finite resources, thus falling on un-repayable debt schemes that eventually will collapse, devastatingly so. Promoting and supporting **energy conservation** should be the number one priority.

2.5. PCE Report on Hydraulic Fracturing (Fracking)

Indeed the PCE's report must be considered thoroughly during the District Plan review. CJT urged council not to commit to substantial changes in the District Plan until the PCE's final report is released. Consultation period should give time to allow the public to consider the PCE's final report and recommendations in their submissions on the District Plan and related documents.

Please see CJT's detailed submissions to the PCE (CJT, Nov 2012; CJT, Aug 2013; CJT, Nov 2013).

In Taranaki Regional Council (TRC)'s draft submission on the current discussion paper (within Policy and Planning Committee meeting on 5th February 2014), a quote from the PCE's interim report was provided: *"that the environmental risks associated with fracking can be managed effectively provided, to quote the United Kingdom Royal Society, 'operational best practices are implemented and enforced through regulation'"*. Yet the next sentence in the PCE's report: *"But at this stage I cannot be confident that operational best practices are actually being implemented and enforced in this country"* was omitted. Instead of acknowledging that improvements are needed in operational practices, monitoring and enforcement, and referring to peer reviewed scientific publications, TRC lists its own reports and studies. Despite numerous compliance issues at various sites, the council concludes that the risks to the environment are minor.

2.7. Regional Policy Statement for Taranaki

2.7.1. Overview

The Policy Statement aims of "promoting an adequate supply of energy..." should state exactly how long the time frame is that they envision this for, given the finite petroleum resources in our region that the council wishes to promote using and presumably exporting offshore.

3. STRATFORD DISTRICT PLAN

3.1. Relevant Provisions

3.1.2 Electricity Transmission and Distribution

Consideration should be given to placement of infrastructure near residences and workplaces so as to avoid health impacts from electricity transmission. Underground laying of cables should be seriously considered to preserve visual amenity and reduce hazards.

3.1.5 Managing the effects of climate change

There are various predictions for climate change in Taranaki but the one it seems we can be sure of is chaotic and more extreme weather patterns. It is therefore very disappointing to see council considering how to "exploit" increased rainfall as their main focus. It is also disappointing to see the narrow scope of the council's predictions of climate change effects, for example no mention of increased wind issues; soil erosion from drought, rain and wind; stress on plants, animals and soil; social and economic changes and stress; changes to transport needs; changes to resource availability; and population changes. There is no mention of promoting preventative, conservative or protective activities. We would like to see these issues better addressed.

3.2. Resource Development and Consenting

3.2.2. Oil and Gas

CJT does not believe there is a problem with including "neighbours within 1000m" in consultations. Some of these neighbours, even those further afield, could potentially be adversely affected, especially re traffic (noise and safety), transport of hazardous goods and pollution.

CJT proposes the direct involvement of SDC in the negotiation of approvals when landowners, land occupiers and affected parties are approached by consent applicants (companies). The added costs involved should be covered by the applicants as part of the application. The council's role will be to ensure that affected parties are made fully aware of their rights – such as arbitration – and the detailed, unbiased information of what the application may mean to their land and lives. This will also help to prevent affected parties being misinformed and pressured by consent applicants into signing away their rights; including access agreement and silence (confidentiality) order.

It is wrong that the current regulations discard all of the affected parties' rights (including the next landowners') once they have signed the approvals, e.g. report on or speak publicly about the effects (often unexpected) of the activities. This has become a serious barrier against investigating the true effects of oil and gas activities on people's health, both in Taranaki and overseas, and only serves to fragment communities. If affected parties have concerns or object to the proposal, they should be supported in making their submissions, by way of legal and expert help. An affected party should not endure costs to protect themselves from adverse effects from consent applicants. When considering the costs of delay to the consent applicant, this should be balanced against the financial costs, time, energy, stress and potential adverse affects on affected parties.

The Feb 2013 Director Community and Environmental Services' report to Council requires some reality checks. It is hard to believe that *"effects from wellsite activities have reduced significantly over the past 20 years..."* See The Jury Garden blog on Tikorangi and CJT's google map on Taranaki's oil and gas sites.

3.2.5. Managing the Effects of Climate Change

The way it is written, this section is entirely reactionary rather than proactive and prevention-focussed. It is good then to hear of increasing wetland habitat protection as this is obviously one method of reducing the effects of flooding and drought, and providing biological refuges as wetlands naturally provide water storage and act as biological nursery grounds. The economic benefits of this are huge.

4. PROVISIONS TO REVIEW

4.4. Assessment Criteria and Information Requirements

Decommission plans need to be included in all project plans, as part of the information requirements. There are many oil and gas sites that have been abandoned or improperly shut down. Comprehensive, legally binding decommission plans need to be written into proposals and regulations before any works begin.

Mitigation plans need to be thoroughly tested and independently proven and critiqued before being allowed to be used. Mitigation plans have been proposed and approved with no trials being properly undertaken, with sometimes disastrous effect.

It should be a requirement to stipulate whether any financial or other inducements were given by companies to any affected parties who sign agreements. It should also be documented if any contracts were signed, especially for compensation. We hear too often of affected parties signing confidentiality/silencing contracts so that they can receive compensation from companies. This does however cover up important incidents of public safety that need to be documented for future prevention.

As highlighted in the PCE's interim report on fracking, in NZ, *"to a considerable extent, companies appear to be not only regulating themselves, but monitoring their own performance".* This has resulted in widespread environmental problems, breaches in consent conditions and the lack of transparency and accountability in Taranaki's oil and gas sector.

CJT hereby calls on independent monitoring to be mandatory and technical assessments and studies be peer reviewed. A more efficient and faster reporting regime should also be possible, given that we live in the digital age.

5. STAKEHOLDERS

5.1. Summary

CJT seeks advice and clarifications on the expected role of stakeholders. How will stakeholders be involved in further discussions and consultations re the District Plan Review and decision-making in managing energy resource development and the effects of (and on) climate change?

It is clear that iwi - such as Ngati Ruanui - who have produced an Environmental Management Plan play a special role in resource management.

How do other 'interest' groups and the commercial sector participate?

Furthermore, it'd also be beneficial to have regular workshops between council and interest groups (maybe twice a year), to discuss where things are going (.e.g. whether they are on a path in accordance with the District Plan) and how interest groups could assist or work with SDC staff and councillors.

CJT suggests that more iwi authorities and interest groups be added to the stakeholder list to provide further expertise and opinion.

Iwi authorities

Since the boundary of the Stratford District includes Maunga Taranaki, more iwi need to be included for consultation. These include Taranaki Iwi, Poutama and Ngati Mutunga. It would be really good to see active hapu and the community of Parihaka also consulted, especially where iwi have not settled their claims and therefore iwi authorities do not necessarily hold mana over hapu. This would therefore include the hapu of Te Atiawa, Taranaki iwi, Ngati Maru and Nga Ruahinerangi. There are of course other iwi to consider such as Ngati Awa who have overlapping claims with other iwi. This is not to cause confusion but to ensure that all living iwi can protect their taonga as required by Te Tiriti o Waitangi. Pakakohi and Tangahoe (refer to WAI 758 (Pakakohi) and WAI 142 (Tangahoe) should also be included.

Interest groups

Coal Action Network of Aotearoa (CANA)

Formed in 2007, CANA has a vast amount of knowledge around coal mining and its implications for climate change. With companies like Solid Energy operating in the District looking to coal seam gas extraction, CANA's input would be invaluable.

Te Uru Pounamu

Te Uru Pounamu is a newer group working on oil and gas issues in Taranaki. Their perspective and input into the council's discussions would be extremely helpful.

East Taranaki Environment Trust

The trust's core objective is to enhance kiwi habitat through pest management in East Taranaki. The interests of the native wildlife and biodiversity need to be addressed within this policy and are best articulated by those who voluntarily dedicate their time to make a difference.

Friends of the Waitara River

The Waitara River forms the SDC's northern boundary. It is important that the voices of this long-standing community group are considered.

350 Aotearoa

350 Aotearoa is the New Zealand arm of the international climate movement 350.org, which aims to unite the world around climate change solutions. Their mission is to inspire climate action in communities across New Zealand. 350 is one of the world's key groups in addressing climate issues.

Generation Zero

Generation Zero, a youth-led organisation, was founded with the central purpose of providing solutions for New Zealand to cut carbon pollution through smarter transport, liveable cities and independence from fossil fuels. It is clear that today's young people are facing many challenges. They should be part of the discussions and decision-making.

5.6.5. Climate Justice Taranaki

We feel the description of CJT does not reflect our vision and work correctly. We request it be revised to the following wording:

Climate Justice Taranaki (CJT) is a community group which campaigns on the issues of climate change and social justice, including the drivers of climate change and their increasing impacts on the environment and people. Since the end of 2010, CJT has had a strong focus on opposing hydraulic fracturing and the disposal of drilling waste on agricultural land. CJT calls for a nation-wide ban on fracking, an immediate stop to further fossil fuel exploration and an effective energy transition strategy.

6. CLIMATE CHANGE AND RENEWABLE ENERGY DISCUSSION DOCUMENT

The two discussion documents are closely linked, with potential overlaps. How will the discussion outcomes be considered together and inform the district plan review?

7. ISSUES

7.2. Economic

The comparison between jobs created by the oil/gas and dairy industry is biased and hides the important numbers that really counts. According to BEPL (2007) *Taranaki Industry Projections*, in 2006 the dairy industry employs 6,160 FTEs (14% of regional employment) and contributed to $732 million GDP. In other words, for every million $ generated by the dairy industry, 8.4 jobs were created/supported whereas in the oil/gas industry ($741M, 817 FTEs), each million $ only created/supported 1.1 jobs.

Bearing in mind the figures quoted in the paper are for 2006, more up to date figures on GDP and jobs would be helpful. Venture Taranaki (2010) *The Wealth Beneath Our Feet* listed 3,206 FTEs, $1,684 M GDP for oil/gas and 6,436 FTEs, $678 M GDP for dairy. Again, many more jobs are created in the dairy sector (9.5) than the oil/gas sector (1.9) for each $1 m of GDP.

A comparison of the type of job and who the workers are needs to be taken into account. It is common for Taranaki workers to work for both industries (oil/gas and dairy) and it would appear that many of the full-time, higher-paid workers in the petroleum industry come from outside Taranaki whereas locals seem to be more often employed on short contracts, having to work for non-petroleum industries as well.

So in terms of job creation and social justice, the argument for oil/gas does not stand.

Royalties to NZ government are among the lowest in the world. http://www.tagoil.com/new-zealand-operations.asp and http://www.newzealandenergy.com/Why-New-Zealand/Fiscal-Regime/default.aspx

Importantly, the mining industry relies on speculation and is full of uncertainties. It creates a boom and bust economy where short term gains are made by a few while the majority remains poor or are worse off, as has been shown worldwide, notably many parts of the USA and Australia and even NZ.

The issue of "costs to remedy or mitigate effects of the exploration and extraction" is very much under-stated and requires thorough discussion, especially when losses by impacted sectors such as agriculture and tourism, long-term environmental impacts, health effects on neighbouring communities, drop in local property values and insurance problems are accounted for.

7.3. Geographic

In terms of limitations, proximity to aquifers and active fault lines are important considerations for drilling oil or gas wells and for fracking, not to mention proximity to homes in relation to risks from hazardous substances.

Micro-hydro and small hydro is considered far more sustainable, efficient and environmentally safe than large dams.

Why are solar and other forms of renewable energy such as methane digestion from effluent ponds and rubbish dumps not mentioned?

7.5. Air, Land and water

The unbundling of consenting process between regional and district councils (and between different stages of oil/gas development) is a major problem because it fails to provide an accurate overall assessment of the risks and effects on nearby communities (affected parties) and environments. This issue has been pointed out in the Parliamentary Commissioner for the Environment (PCE)'s interim report on fracking and CJT's second submission to the PCE (Aug 2013).

CJT strongly supports SDC's proposal to advocate for joint hearings and joint processing of consents concerning related and inextricably linked activities.

Furthermore, CJT advocates a more proactive approach to planning whereby sensitive areas are designated well in advance to exclude drilling and fracking in such areas, if fracking cannot be banned and further oil/gas exploration is to be continued.

7.6. Riparian Margins and Indigenous Flora and Fauna

CJT supports a requirement of an esplanade strip (5-10m width) of protected margin on all river banks and stream beds as a condition of land use consents, especially for infrastructure development. A 1m wide strip either side is not sufficient to protect waterways. CJT advocates compulsory riparian fencing and planting on all farmland with a minimum 3-5m boundary each side, wider still for steeper ground, where sufficient vegetation is absent or unprotected.

7.7. Kaitiakitanga, Treaty of Waitangi, and the relationship between Iwi and their Taonga

CJT recognizes the need of some guidance and assessment criteria in the District Plan to inform decision-making concerning adverse effects in relation to Kaitiakitanga, Te Tiriti o Waitangi, and the relationship between iwi, hapu and their taonga. It is good to see acknowledgement of understanding spiritual importance for Maori. Understanding whakapapa connections to 'nature' and all life and their wealth of knowledge of the Taranaki environment and biology is also of importance for working with many indigenous peoples, who could provide council with much insight into assessing adverse effects as they have done with developing the nationally accepted stream health assessment methods (SCHMAK). We will leave this for iwi and hapu to determine with you.

7.8. Noise

CJT believes that any activities associated with petroleum exploration should be classified Discretionary (not Controlled or Permitted) because it has been demonstrated time and again that the effects are more than minor and consent conditions cannot always mitigate adverse effects.

CJT does not agree to the exemption on noise level (40dBA) for petroleum exploration activities in the Rural Zone. Moreover, the accumulative impacts of noise from multiple wellsites and associated infrastructure and traffic in the vicinity must be taken into consideration. To offer greater protection to rural residents and minimize conflicts, a boundary of 50m or more depending on the acoustics of the specific environment from a dwelling is preferred (over the current 20m).

Indeed petroleum exploration is now beyond the scope of the District Plan which must be carefully and thoroughly reviewed in light of the current and projected situation in regards to oil and gas development.

It is unreasonable to assume that communities (rural or residential) impacted by petroleum and other mining activities “wish to provide for” the activities imposed on them.

7.9. Glare

The new requirement for flaring chambers is a positive move towards lessening light disturbance to rural dwellers. But do all flaring chambers substantially reduce noise and emissions of toxic contaminants to air?

It is of great importance that SDC work with TRC to consider the real effects from flaring on nearby residents, workers and livestock, before granting any new consents, for flare pits or chambers.

CJT requests targeted studies and longterm monitoring of health trends including birth outcomes among communities (people and livestock) near to and distant from drilling and flaring sites, to generate empirical data needed to detect health effects from such sites.

Another important point is the impact of fugitive emissions (gases that have been vented or flared) on climate change which is largely unaccounted for. It is ironic that while the industry and central government continue to call natural gas a "clean energy" source, knowingly allowing fugitive emissions, when they should be made to apply technology to capture such greenhouse gases and invest in truly clean energy sources.

Although council cannot have regard to the effects of emissions on climate change under the restrictions of the RMA, it can restrict and control the inefficient use of energy, with massive amounts of gas, light, and heat energy being wasted by oil and gas operations.

7.10. Visual Amenity

The listed outstanding natural features and landscapes defined later in this document is far too limited. It should *at the very least* include native forest and wetland sights and views of rivers. For Maori this could also include views of waahi tapu.

7.11. Hazardous Substances

Hazardous substances are indeed fraught with danger and hazards. The critical point is that many of the hazardous substances, notably fracking chemicals, contain undisclosed components – trade secrets. The few that have been disclosed contain known carcinogens and other harmful substances, some highly toxic at levels below detection limits.

CJT's first submission to the PCE (Nov 2012) highlighted the problem of non-disclosure of fracking chemicals and the weaknesses of the HSNO Act in form and implementation. CJT's second submission (Aug 2013) gave an example of landuse consent for drilling of new wells being granted by New Plymouth District Council despite permitted effects ratios as per the Hazardous Facility Screening Procedure being exceeded many folds, and the very close proximity of the site from nearby homes and a school. Surely the degree or magnitude of deviation of the calculated total effects ratio from the permitted levels must be taken seriously when making decisions on activity classifications and approval.

CJT questions how the transfer of responsibility for enforcing HSNO to WorkSafe New Zealand may improve the situation or ensure greater guarantee of safety for people, livestock and the environment?

Clear guidance on councils' role in managing risks from hazardous substances would be paramount, as is genuine capacity building for councils including institutional support, technical and financial resources.

It is important to recognize the complexity of the issues: varying combinations of chemicals and their combined or synergistic effects, new chemicals are being invented or patented all the time, the range and variability of naturally occurring toxic, explosive and radioactive substances being brought up in drilling processes, new knowledge in chemical effects disrupting the human endocrine system, to list a few.

SDC's existing District Plan section A6 Hazardous Substances is of great relevance. E.g. A6.4.4 "*Monitoring* of changes in legislation, technology, products and processes relating to the transportation, storage, use and disposal of hazardous substances" should be given greater emphasis and resources in implementation.

The routing and timing of transport of these materials also need to be considered as CJT members have personally seen company vehicles transporting radioactive material (declared on vehicle signage) in between multiple rural school buses going on their routes. They have also heard of explosives being helicoptered over houses and stored near school bus stops. This is not acceptable. These are currently permitted activities e.g. for seismic surveying.

While perhaps not SDC's jurisdiction, it should be pointed out that hazard plans need to be a requirement on work sites, as it has been noted that some, if not all sites, fail to do so and therefore put workers at risk.

7.13. Natural Hazards

CJT believes some activities (e.g. oil/gas well drilling, fracking, deepwell injection) should be banned from land prone to natural hazards. "Tightly controlled" is not adequate, especially where the risks and consequences are significant.

CJT urges Council to apply the precautionary principle in earnest when assessing risks and consequences and making decisions on risky activities, in view of the already escalating climate change effects. Assessments must look beyond the present, with considerations of different scenarios on the mid to long-term horizon.

It is true that the extent to which an activity can exacerbate natural hazards may vary hugely and there is not always clear scientific evidence. But there have now been substantive evidence and scientific research on induced seismicity (including damaging events) related to deepwell injection of drilling wastes, in US Ohio (Kim, 2013), Oklahoma (Keranen et al. 2013) and elsewhere. At least one study has demonstrated that areas subjected to frequent deepwell injection are more prone to earthquake triggering from large remote earthquakes (van der Elst et al., 2013). Based on the precautionary principle, such activities should be banned in seismically active areas and areas of uncertainty.

Notably, deepwell injection sites that have been in operation for decades are more sensitive and prone to induced seismicity because of the substantial change in pressure and stress caused by the fluid injection over the years. It is therefore essential to consider the cumulative effects of activities in an area when considering consents approval and conditions.

7.14. Transportation

The issue of roading and road maintenance cannot be ignored. Costs of road repairs due to petroleum industry damage in the USA is in the billions. CJT supports SDC's push for oil/gas companies to pay for the costs of road upgrade and maintenance as part of the consent conditions to drilling new wells and building production and associated infrastructure, as was attempted for Tag Oil's Southern Cross wellsite.

The issue of transportation is interlinked with noise and safety (hazardous substances), as such should be considered coherently. Just last month, US regulators have ordered emergency tests on oil extracted from a fracking site in North Dakota, after a series of explosions (with fatality) elsewhere involving the transport of unclassified crude oil. The US Department of Transport said the rail transportation and crude oil industries were allowing "unsafe practices" to create "imminent hazard."

Taranaki has already had at least one oil spill recently from an overturned tanker that spilled its contents into the Awakino River. Some oil was recovered but most washed out to sea.

Are NZ authorities prepared and equipped to manage the transport of hazardous substances around NZ, especially in close proximity to schools and homes? What is the role of SDC in managing such hazards to avoid dangerous accidents?

7.15. Heritage Resources: Waahi Tapu Sites and Archaeological Sites

See sections 1.5 and 7.10.

8.1. Issue and Objectives

8.1.1. Background

CJT sympathise with the SDC for the complex and challenging responsibility placed on them with regards to the range of government policies, statements, laws and strategies which in effect are often contradictory and unrealistic.

Notably, the Resource Management (Energy and Climate Change) Amendment Act 2004 Section 6 basically precludes councils from considering the effects of greenhouse gas emissions of an activity on climate change. Ironically, "managing the effects of climate change" but not the effects on

climate change, a constraint imposed by the RMA and the government, is like trying to put out a fire while pouring fuel on top!

Indeed, it is obvious that the central government is hell bent on expanding fossil fuel exploration and extraction as shown by the substantial investment (e.g. research), slack regulation (even law change / regulatory capture) and PR (including job ads) offered to the industry, while real investment and economic incentives for renewable energy, energy conservation and efficiency technologies are negligible to nil.

CJT argues strongly for **energy conservation and reduction in consumption** which are absolutely essential. The NZ Energy Efficiency and Conservation Strategy 2011-1016 notes that in 2011, the government set up the Green Growth Advisory Group, one of its task is to consider "options for our small and medium sized businesses to move to a lower carbon economy…". Indeed, if we are truly concerned about the effects of climate change, we must be committed to reducing our effects on climate change (by cutting carbon dioxide emission and consuming less) which, together with renewable energy and clean technology, will hopefully reduce the likelihood and severity of climate catastrophes.

The truth is that even the world's best renewable energy and so-called clean technology at the moment are fraught with environmental and social issues, notably dependent on finite resources (e.g. rare earths) and in some cases, driving land grabs in poor nations. And even with all the renewable energy and technology we have, the energy crisis can never be resolved with unchecked rise in energy demand, driven by a growth-based economic system which ignores the limits of Earth's resources.

8.1.2. Possible New Objectives

CJT recommends amending and expanding the proposed objectives to:

PETROLEUM-BASED ENERGY

To minimise the adverse effects of non-renewable, petroleum-based energy use and development on the environment and communities, while providing for such energy exploration, development, production and distribution, until such resources are phased out in entirety.

RENEWABLE ENERGY

To facilitate the use and development of renewable energy and contribute towards achieving the national renewable electricity generation target (90% by 2025), while minimising the adverse effects of renewable energy use and development on the environment and communities.

ENERGY EFFICIENCY AND CONSERVATION

To promote and support energy efficient development, low-carbon travel patterns (including public transport), and initiatives that enhance energy conservation and reduce energy demand.

CLIMATE CHANGE

To provide for, pro-actively avoid, prevent, manage and as last resort appropriately mitigate the adverse effects of climate change, based on thorough research and independently critiqued trials or proven indigenous knowledge, including:

- Increased rainfall, and associated flood and landslip hazard events;
- Increased effects of drought and demand for water and associated demand for water storage and management; and
- Increased frequency of destructive storms and associated hazards, infrastructure damage and utility failure.
- Increased stress and harm on plants, animals and soils (depletion in particular)
- Increased social, economic and political stress in communities

8.2. Policies

8.2.1. Background

CJT considers it would be best to not limit or give special status to any particular form of renewable energy. However we support promotion of small and community-scale/owned REG activities as these can be less energy intensive to set up and more efficient in respect of transmission losses and maintenance, and more accessible to poorer and/or isolated rural communities, in comparison to large REG projects.

All renewable energy needs to be assessed for its impacts on the environment and communities. As mentioned these technologies can come with major problems. One in particular is diversion of carbon matter or food resources to biomass energy production which causes problems for food affordability, for soil carbon storage and the creation of ecologically inferior mono-crops.

Another is water diversion and interruption of waterways for dams which can damage habitat, flood community infrastructure and agricultural/important lands, prevent native fish migration or in some cases *cause* problems with migration of unwanted species up fish ladders. Any re-diverting of waterways holds serious concerns for Maori who are aware of mauri of waterways needing to flow how they need to flow.

We would welcome promotion of REG activities around waste dumps, in particular effluent ponds to capture, store and utilise methane emissions.

8.2.2. Possible New Policies

CJT notes that the Taranaki Regional Council (TRC), in its draft submission discussed at its Policy and Planning Committee meeting on 5th February 2014, suggested that the words 'especially renewable energy' be removed from the first policy in this section. To put it bluntly, we think that the TRC is still stuck in the dark ages when it comes to energy, and time and again, assumes its role as an apologist for the oil and gas industry. The TRC seems to suggest that all a local authority needs to do is wait for consent applications to appear in the inbox (or mailbox) and then apply the RMA on a case by case basis. Where is the vision in that? Where is the passion for a healthier community and planet? Is it not timely, given the problems we face as humanity, that we take some bold moves for the sake of our environment?

Indeed, the TRC's comments should be taken with a grain of salt. To quote: *"The Council scrutinises the oil and gas sector very carefully, but enforcement interventions are significantly less common*

than for other sectors." This is the same council that allowed hydraulic fracturing to take place in Taranaki without any resource consents for 20 years! Of course there are no enforcement interventions if you don't regulate the industry.

CJT recommends amending and expanding the proposed possible new policies to:

PETROLEUM-BASED ENERGY

To phase out the exploration, development and production of petroleum-based energy resources, and the associated production, transmission and distribution of electricity.

To manage the remaining petroleum-based activities in a way which minimises adverse effects on the environment, reduces wastage and ensures access for as many generations as possible.

RENEWABLE ENERGY

To recognise the national, regional and local benefits of the use and development of renewable energy.

To provide for the location, operation and technical constraints of the use and development of renewable energy and electricity generation while preventing, avoiding, or as last resort, minimising affects on the environment and communities.

To recognise and provide for the development, production, storage, transmission and distribution of renewable energy (e.g. transport fuel) and renewable electricity in the district.

To promote and provide for household and community-scale renewable electricity generation activities.

ENERGY EFFICIENCY AND CONSERVATION

To promote energy efficient development subdivision patterns, site orientation and building design, planting, access to public transport and sustainable waste disposal such as natural composting systems with methane capture technologies.

To promote and support low-carbon travel patterns (including public transport).

To promote and support community-based initiatives that enhance energy conservation and reduce energy demand.

To promote and support district and regional wide energy conservation programs and low carbon economy.

CLIMATE CHANGE

To ensure that land use and development is **planned** and controlled in a manner which is sensitive to the consequences of climate change.

To provide for land use and development which addresses the adverse effects of climate change, especially:

- The storage and management of harvested water, involving wetland restoration where possible.

- The management of flood and landslip risk, and the associated environmental and health effects from compromised sewage, hazardous substances and contaminant storage and treatment systems, through protection and replanting of native vegetation.
- The preparedness and management of hazards and infrastructural and utility damage from destructive storms, especially those associated with the oil and gas industry.
- To assist communities and biota to adapt to the stresses of climate change.
- To promote soil conservation through such methods as no-plough overplanting systems and biological farming methods.

This section is closely linked to the current District Plan sections A6 Hazardous Substances, A8 Natural Hazards and A12 Network Utilities.

8.3. Methods

8.3.2. Possible New Methods

CJT recommends amending and expanding the proposed possible new methods to:

PETROLEUM-BASED ENERGY

Rules, activity standards and assessment criteria shall be designed to provide for and minimize adverse effects from the development, operation, maintenance and upgrading of any new, existing and consented petroleum-based energy activities (including associated waste disposal).

Research and long-term monitoring programs shall be conducted to assess and detect any adverse effects on the environment and local community wellbeing from the development, operation, maintenance and upgrade of all petroleum-based energy activities; the result of which will form the basis of revisions (if/where needed) in rules, activity standards and assessment criteria.

The notion of avoiding 'reverse sensitivity effects' requires explanations. For example, it is now well known that fossil fuel mining reduces the resale price and opportunities of farmland (and rural properties) and also poses difficulties re insurances. People living nearby to fossil fuel production, although not necessarily deemed 'affected parties' may be adversely affected. Hence should the notion of 'reverse sensitivity effects' not be applied for all forms of land use development?

Rules, activity standards and assessment criteria shall be designed to control buildings, structures, earthworks and other works that could adversely affect the operation of existing or consented energy activities, including the control of subdivision and land-use development to avoid reverse sensitivity effects.

The capacity of the road transport network to absorb increases in traffic will be modelled and will form the basis of a traffic allocation system tied to resource consents for breaches of traffic generation standards.

RENEWABLE ENERGY

Household and community scale: Rules, activity standards and assessment criteria shall be designed to provide for and minimize the adverse effects of the development, operation, maintenance and upgrading of household and community-scale renewable energy activities.

District scale: Rules, activity standards and assessment criteria shall be designed to provide for and minimize the adverse effects of the development, production, transmission and distribution of renewable electricity generation activities (e.g. solar, wind and biomass from farm, forestry or landfill wastes) in the district.

Rules, activity standards and assessment criteria shall be designed to provide for research and exploratory-scale investigations for renewable energy activities, focussing on productivity, efficiency and any effects on the environmental and local communities.

Where particular adverse effects of renewable energy are not fully known or uncertain, the precautionary principle shall apply, in determining a resource consent application and imposing any consent conditions, to avoid such effects.

Where previously unknown adverse effects emerge during any renewable energy and electricity generated activities, considerations shall be given to the use of adaptive management measures and change in consent conditions, to remedy or mitigate any such effects and avoid further effects.

Enhance the uptake of proven renewable energy and electricity generation systems at household and community scales through economic instruments such as rebates, the dissemination of relevant information and appropriate training.

CJT has reservation on “offset measures and/or environmental compensation” to be offered by a consent applicant because all too often such offsets fail to truly compensate for the adverse effects or losses, and become purely “justifications” for environmentally and socially damaging development.

ENERGY EFFICIENCY AND CONSERVATION

Rules, activity standards and assessment criteria shall be designed to provide for energy efficient development subdivision patterns, site orientation and building design.

Conduct a review and redevelopment of the current roading network to enhance its safety and friendliness for cycling and walking , with considerations of linkages and expansion of current public transport network.

Promote and especially support rural community shops and services such as schools and hauora to provide for their communities and thus reduce the need for transport of goods and people.

Provide support such as training, grants and other opportunities for community-based initiatives to advocate, demonstrate and enhance energy conservation and reduce energy demand.

CLIMATE CHANGE

Rules, activity standards and assessment criteria shall be designed to avoid or minimise the risks of adverse effects from climate change, notably extreme weather events, when considering any landuse and development applications in natural hazard-prone areas.

Rules, standards, conditions and terms shall be reviewed and designed to ensure resources (e.g. bond, insurance) are available to cover losses that have eventuated from the damage and failure of energy related infrastructure during extreme weather events.

8.4. Rules and Standards

8.4.1. General Energy Provisions

CJT argues that all mineral (petroleum included) prospecting, exploration, production and associated waste disposal activities should be Discretionary, and that the matters over which discretion is reserved for must be effects-based and considering the cumulative effects wherever relevant.

The review and application of rules and standards relating to noise, glare, and the use, transport and storage of hazardous substances should be done coherently due to the interlinkages among them.

As mentioned earlier, SDC and TRC should review/assess related consents together, so all effects are considered coherently when consent conditions and decisions are made, to minimize adverse effects from these activities on the environment and local communities.

The greatest risk and challenge in the entire process, other than continued exploration, production and unabated use of fossil fuels itself, relates to the assessment and management of **hazardous substance storage, transport and disposal**. To effectively avoid, minimize or mitigate the adverse effects of hazardous substances, CJT believes the following are required:

- a legal system that guarantees 100% public disclosure of all chemical components involved in the activities (especially those involved in fracking);
- the knowledge of environmental and health effects of the chemical components are available/revealed;
- the precautionary principle is adhered to when making decisions where the above pre-requisites fail;
- clear definitions of institutional roles, institutional capacity building and effective coordination and transparency.

For issues which do not appear to have any effects-based triggers for assessment, notably "relationship of iwi with their taonga", special provisions should be given for genuine consultation and partnership with concerned iwi in decision making.

Rules and standards to land use and development in natural hazard-prone areas are becoming more and more crucial, as hazards relating to climate change are increasing in frequency and magnitude. Please see section 8.3.2 under climate change.

8.4.2. Renewable Electricity Generation

CJT does not agree to council's proposal of listing "biomass electricity generation" as a permitted activity.

The phrase "biomass" electricity generation requires clarifications, because the impact on the environment and other sectors can vary a great deal, depending on the source of the "biomass". Please see section 8.2.1 re CJT's reservation on some forms of biomass electricity generation.

8.4.3. Zoning

It would indeed be desirable to list petroleum activities as Prohibited or Non-complying in the Residential Zone. Equally important is to have such activities listed as Discretionary and have clear

rules and standards, such as distances of such activities from dwellings, workplaces and waterways, in the Rural and Rural/Residential zones.

8.4.4. Possible New Rule Provisions

B1.2.1.2 Controlled Activities

CJT does not support the export of water and council listing it as Controlled Activities. Given the real likelihood of increasing rate and severity of extreme weather events including droughts, keeping water in the region must be a priority, whether it is for water security of ecosystem maintenance and restoration. Moreover, the idea of selling water brings in serious privatisation issues.

Can small-scaled biofuel generation from food, farm or forestry waste be considered Controlled Activities?

B1.2.1.3.1 Matters to which Discretion is Reserved

The location of proposed mineral exploration and production activities in relation to neighbouring dwellings should be expanded to include neighbouring workplaces (e.g. milking sheds and paddocks) and places of importance (e.g. national park).

"Affected parties" needs to be broadened to acknowledge the scope and effects of multiple sites and those on transport routes, in schools or in recreational areas in particular.

The term waahi tapu needs to be added to archaeological sites.

Ideally consultation with kaitiaki could extend beyond just iwi and preferably hapu to other active community conservationists.

B1.3.5 Non-Complying Activities or Prohibited Activities

The wording in this section appears to refers primarily to discretionary rather than non-complying or prohibited activities.

CJT calls for all fracking and associated activities be Prohibited in all Zones.

8.4.5. Possible New Standards

CJT supports the compulsory use of flaring combustion chambers but advise to include "or other proven technologies that avoid or substantially reduce energy wastage, contaminant emissions, noise and other effects". Importantly, standards will still need to be set in relation to pollutant loading, efficiency, emission of contaminants and distance to dwellings and workplaces. Notably, there is a particular safety concern re enclosed combustion chambers because they "can create an explosive environment". More research and discussion of this and other technologies is required.

B2.1.9 Noise and Vibration

Some explanations, written for the layman, about this wind turbine noise standard would be helpful for the public. Note noise problems could be mitigated in part through tree plantings and earth-moving. If affected parties suffer from noise levels then levels and/or mitigation needs to be reassessed.

B2.1.13 Lighting and Glare

The fixed standard of 10 Lux appears overly simplistic and does not take into account variation in sites and site-specific effects. Again if affected parties suffer from light levels then mitigation

should be made possible and the effects reassessed. It should be noted that the duration and colour of lights can have major effects on the health and productivity of nearby plants, especially agricultural and native vegetation. Ensuring, for example, one night a week or one month a year of lights off could be a welcomed reprieve for neighbours/affected parties, especially in rural areas and especially during Puanga for Maori.

B2.5 d) *Flaring:*

The flaring combustion chamber does not address the issue of energy wastage. Its effects on emission/contaminant reduction and sound issues require closer examination.

B2.10 Activities Involving Transportation of Good and/or Products

Some good and products are hazardous (e.g. explosive crude oil). How will the transport or traffic movements of such substances be regulated? Some sensitive areas (e.g. near schools, hospitals and industrial areas) and residential areas should be avoided altogether.

New standards will be needed for landuse and development consents in hazard-prone areas, especially in view of short to long-term climate change impacts.

8.5. Assessment Criteria and Information Requirements

It is unclear what exactly the issues are re the reference to consultation in assessment criteria for mineral extraction activities. Section B5.7 in the Plan refers to "the extent of consultation with any person or body who may be affected, including (but not limited to) landowners, neighbours within a 1km radius of the proposed site/s, and iwi authorities, and the outcome of this consultation…" CJT does not see any substantial inconsistency with the effects-based nature of RMA decision-making for notification decisions, as long as thorough effects-based assessments involving affected and potentially affected communities are conducted (e.g. effects of increased heavy transport on communities, amenity values, safety hazards with or without hazardous substances; loss of usable farm areas, etc.)

8.5.2. Possible Changes to Assessment Criteria

New assessment criteria will be needed for landuse and development consents (especially re mineral extraction) in hazard-prone areas, in view of short to long-term climate change impacts.

B5.1 General Assessment Criteria

The "breach of activity standards" should not be necessary (except in very rare cases) if the standards are designed well. Breaches should not be allowed especially for mineral (petroleum) exploration and extraction because these activities do not support the national strategy and target for renewable energy.

Please replace "Treaty of Waitangi" with "Te Tiriti o Waitangi and the UN Declaration of the Rights of Indigenous Peoples" and include the wording "properly and respectfully" for consultation.

B5.7 Mineral Extraction

CJT does not agree with deleting the reference to "neighbours within 1km radius of the proposed site/s" and propose to add "in some cases, neighbours further afield may be consulted as potential affected parties". The latter is of particular relevance where fracking and/or deepwell injection activities are involved. Notably the TRC has applied a 1km radius when assessing groundwater effects from fracking related activities (TRC doc 1219404, 2013) and a GNS report (Zemansky, 2013)

recommends TRC to adopt a 1.6km radius “Area of Review” when considering deepwell injection proposals. The important points here are “affected parties” and “joint review and hearings between SDC and TRC”, in other words “**integrated management**” when assessing related activities on the same site.

CJT argues for independent peer reviewed assessments to determine affected parties when dealing with the effects associated with storage and transport of hazardous substances and other complex issues.

CJT requests adding “land occupiers on site” (e.g. tenants or workers) to the text. Occupiers of sites should be considered affected parties not just owners.

Affected hapu should always be consulted where possible, not just iwi authorities.

8.5.3. Possible Changes to Information Requirements

B6.5 Mineral Extraction

Add “complete list of all hazardous substances involved in the activity, including fully disclosed components and their hazard classifications”.

B6.9 Activities Involving Transportation of Good and/or Products

Add “detailed contents, hazard classifications and quantity of all goods and/or products to be transported”.

Additional comments

The levels and application of fines following infringement and breaches of consent conditions need to be discussed in the document. Currently, the consequence of breaches and failure to perform is far too weak to deter similar incidences. E.g. a $750 fine for an activity associated with a multi-billion dollar industry is hardly going to prevent it from happening or happening again.

For further information and questions about this submission, contact Climate Justice Taranaki at climatejusticetaranaki@riseup.net or visit us on http://climatejusticetaranaki.info/