#### ENVIRONMENT AND CONSERVATION ORGANISATIONS OF NZ INC.

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# **Draft Minerals and Petroleum Resource Strategy:**

ECO's Response to the public consultation questions.

As for 20 September 2019

#### **OUR DETAILS**

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- 3. \*Is this an individual submission or on behalf of a group or organisation?
  - Behalf of group or organisation
- 4. Business name or organisation (if applicable): Environment and Conservation Organisations of NZ Inc (ECO)
- 5. Position title (if applicable): Co-chair
- 6. If you are submitting as an individual or individuals, please indicate which group you most identify with or are involved in?
  - Iwi or hapū
  - General public
  - Environmental
  - Minerals sector
  - Quarrying sector
  - Oil and gas sector
  - Other....please specify
- 7. If you are submitting on behalf of a group or organisation, please indicate which type of group your submission represents.
  - Iwi or hapū
  - Non-governmental Organisation

- Local government
- Minerals sector
- Quarrying sector
- Oil and gas sector
- Research institute
- Other....please specify\_\_\_\_\_\_\_

PROACTIVIELY RELEASED

#### **VISION**

- 8. \*Do you agree or disagree with the overall vision for the minerals and petroleum sector in New Zealand?
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

Draft Vision: "A world-leading minerals and petroleum sector that delivers value for New Zealanders, both now and in the future, in an environmentally and socially responsible way."

#### a. Why?

We welcome the reference to environmental and social responsibility, but the Vision remains focussed on the extraction of virgin materials. We would like to see this vision changed to focus on the reduction of extraction and a shift to zero fossil fuels and maximisation of substitution from exploration and extraction of new materials. The focus should be to maximise renewables with low environmental impact, and maximise the reuse, recycling, recovery of minerals, sand and aggregates, and of plastics etc.

9. What is your vision for the minerals and petroleum sector in New Zealand?

Reduce to zero or very close to it, the exploration and extraction of fossil fuels; transition to low environmental impact and low carbon alternatives materials instead of the extraction virgin materials; the implementation of a programme of substitution, full costing and pricing, and resource reuse, recovery, and recycling and product stewardship and design for resoruce recovery.

The Vision must be to achieve zero net carbon by 2040 and to reduce net carbon substantially by 2050, while ensuring that global temperatures do not exceed 1.5C.

10. How can New Zealand sustainably derive value from its petroleum and minerals resources?

This is a far too limited goal and we reject it. Maintaining intact biophysical systems with zero net carbon by 2040 and milestoneds and halting the decline and allowing the recovery of native biodiversity at all levels and domains (terrestrial, coastal, maine) should be the objective.

Leaving most minerals and all petroleum in the ground maintains option value and does not foreclose most options for the future.

#### **OBJECTIVES FOR THE MINERALS AND PETROLEUM SECTOR**

Do you agree or disagree with each of the following objectives for the minerals and petroleum sector?

- 11. \*Objective for a sector that: "Responsibly delivers value for New Zealand (a) Supporting a productive, sustainable and inclusive economy (b) Supporting New Zealand's transition to a carbon neutral economy".
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

#### a. Why?

This Objective should be to "Achieve" or "Ensure" NZ's transition to a carbon neutral economy by 2040 and a reduction of net carbon by 2050 to not only halt but remove carbon from the atmosphere.

The objective should be also to ensure a productive, sustainable and inclusive society which lives within environmental limits and fosters equity now and to the future.

- 12. Objective for a sector that: "Is productive and innovative".
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

#### a. Why?

We have no problem with productive and innovative, but this is insufficient. This sector should emphasise nonextractive strategies, and wellbeing and flourishing of nature and people.

#### 13. \*Objective for a sector that: "Is effectively regulated".

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

#### a. Why?

NZPAM and its predecessors (Mines Division of the Minisntry for the Environment), has for many decades been captured by the industries they regulate. Much of this is due to the "revolving door" recruitment, the process of "capture" is that it came to see itself as the promoter and champion of mining and petroleum and lost sight of, and indeed deeply resented – the wider social and environmental goaks.

Way back in the days of the NZ Forest Service, I and the Chief Inspector of mines and I were on a forestry panel. I raised the issue of the then Mines Division of the Ministry of Energy being a case of industry capture of the regulators. The Chief Inspector slammed his fist on the table and announced that whatever I said, he considered his role was to promote the industry. Sure enough, when he retired, he made submissions on behalf of the mining industry.

Several other mid level and senior officials at Mines Division, many of whom transitioned into NZPAM, for years campaigned from within the government for mining and petroleum and against those of us voicing concerns about environmental impacts and for resource and nature conservation.

NZPAM has long lost its credibility as a regulator and that function should be relocated with a different cast within the government

14. Are there any other objectives for the minerals and petroleum sector that you would like us to consider in the strategy?

Yes, as above, the end to fossil fuel exploration and mining; to achieve net zero carbon by New Zealand; to minimise mining; to achieve full cost pricing; to shift to promoting resource recovery, reuse, recycling and substitution of low environmental impact products and processes.

Transparency and public participation.

PROACTIVIELY RELEASED

#### **GUIDING PRINCIPLES**

Do you agree or disagree with each of the following principles to guide everyone (including the Crown and industry)?

- 15. Principle: The environment, ecosystems, and biodiversity are respected now and in the long term.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree
    - a. Why?

"respected" is vague and should be replaced with "protected" and in the marine environment, "preserved and protected", consistent with Article 192 of the UN Convention of the Law of the Sea, which is the basis of both our territorial sea and the NZ EEZ and Continental shelf.

16. Principle: Maori cultural interests are understood and respected.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
  - a. Why?

This should refer to Te Tiriti o Waitangi <u>obligations</u>, not just "understood and respected".

- 17. Principle: Support the transition to a carbon neutral economy by 2050.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

#### a. Why?

This should be "achieve", "effect" or "ensure", not "support" which is far too weak.

- 18. Principle: The impact on people, communities and regions are managed in a just and inclusive way.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

#### a. Why?

This is insufficient and it does not allow for public participation, transparency and the luture.

Ensuring human rights needs a specific provision;

Corporate expectations and yes rights, should not be arbitrarily violated, but we have a sovereign obligation and right to change our policies and commitments to ensure environmental protection. Certainty is not a free good.

It is unacceptable and unethical to suggest that action to address the climate-oceans destabilisation and biodiversity crises cannot be addressed or conditions changed because of corporate property expectations and permits. It is totally unreasonable to privilege mining and petroleum mining over the planet and the future.

- 19. Principle: Support a circular economy by meeting resource needs through resource efficiency, recycling and reuse.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

#### a. Why?

This should be elevated to a primary purpose and it

should also include full cost pricing and the avoidance of extraction of virgin materials with prices that suppress resource re-use, recovery, recycling and substitution to low impact renewables.

- 20. Principle: Actions taken within the mineral and petroleum sector should align with the strategic direction of other related sectors and Government strategies.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree
    - a. Why?

This depends on what those strategic directions, strategies and sectors are.

Do you agree or disagree with each of the following principles for the Crown?

- 21. Principle: The Crown honours its duty towards Māori as a Treaty partner, adheres to the Principles of the Treaty of Waitangi and its duty to meet settlement commitments.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree
    - a. Why?

Fine so long as this is not at the expense of the environment and biophysical systems.

- 22. Principle: The Crown receives a fair financial return for its minerals and petroleum.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

#### a. Why?

This is too limited a goal and does not provide for forebearance and non-mining and non-extraction.

This would be much better phrased to be:

"That the Crown receives a fair financial return for any exploration and mining of minerals and petroleum that is permitted and consistent with environmental and social goals."

That removes the presumption of extraction

- 23. Principle: The Crown regulates in a way that is fair, transparent, reasonable and proportionate.
  - Strongly agree
  - Agree BUT it is insufficient
  - Neither agree nor disagree
  - Disagrée
  - Strongly disagree

#### a. Why?

This is fine so far as it goes, but it is incomplete and fails to consider where trade-offs must occur.

Include in the list:

"effective", "transparent and open"; "in the public interest"; "with integrity", "publicly accessible" and with plain English.

In particular, the regulation must be capable of being adjustable in the event that there may be identitified risks of environmental or social harms. As a matter of practice to allow for this there should be conditions and review points that allow for changes of conditions or termination of permits or plans or minerals programmes where the public interest requires that.

- 24. Principle: The Crown honours the rights of current permit holders to continue production or exploration activities under existing permits.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

#### a. Why?

ECO has several objections to this and we suggest how this should be framed instead.

Certainty is important for investors, of course, but it is not as important as avoiding or mitigating risks of environmental harms. Certainty for investors translates to risks to the environment, for other people and the future.

It is NOT self-evident that current permit holders should be allowed to continue their activities under existing permits (and minerals programmes).

When we first engaged with these issues in the 1970's, the application form for minerals permits (privileges) asked in words to the effect of: "what are the expected ecological impacts?" Then it instructed, "if not known, write "not known" '. The space allowed for the response to the questions was just a few lines on an A4 sheet. Once the mid 1980's reform of environmental administration was done, minerals permits no longer went to the (then) Commission for the Environment, so there was little or no informed environmental consideration.

Until the Official Information Act was introduced, for many years, not only were applications not disclosed publicly, these were not even provided to land owners and occupiers. These people were allowed three weeks to object to an application that they were not allowed to see. ECO pressed for changes to this in the 1970s and 1980s.

During much of that time, the only information available to the public was the Land and Survey drafting of the cadastral boundaries of the application. Lands and Survey however typically took at least four weeks to get around to plotting these boundaries, so even that meagre

source of information was not available within the 3 week objection period.

ECO and *Mining Monitor* took on the (unpaid) job of challenging this situation and were much vilified for that. *Mining Monitor* was a fortnightly newsletter that published what we could glean about applications. We fought for disclosure and open government (with the Coalition for Open Govenrment and others) to have at least most of each application publically disclosed.

Despite the fact that *Mining Monitor* published lists fortnightly lists and some details of what we judged to be significant applications, Mines Division provided no formal notification or submissions process.

They still do not provide any submissions process.

The point here is that there is a legacy of largely unscrutinised permits that may have been renewed under the same inadequate conditions still out there since it wan't uncommon for these to have a 35 year term with a right of renewal for a future 35 years for mining.

There are still coal mining and mining permits which are still not subject to much of Resource Management Act.

Several Parliamentary Commissioner for the Environment wrote about the problem with old permits. As the previous Commissioner, Jan Wright, noted in 2009:

"Nevertheless, this investigation has drawn my attention to the persistence of the old regulatory regime for mining. Over a hundred mining licences granted prior to the 1991 enactment of the Resource Management Act and the Crown Minerals Act continue to apply until they expire. In one case, this is not until 2062."

When the right to renew exploration permits (then called prospecting permits) and then an automatic right to uppgrade to mining permits and renew those, are taken into account, some issued back in the 20<sup>th</sup> century may still have many decades to run, sometimes to and beyond 2062.

#### As the PCE noted in 2009:

"Over two decades ago, the first Parliamentary Commissioner for the Environment, Helen Hughes, recommended that all conditions relating to environmental effects in existing coal licences expire in 2001, and thereafter licence holders would be required to apply for consents under the RMA.111 This recommendation was not adopted because existing use rights

were considered to be dominant."

We agree with Helen Hughes' recommendation. No one should have such rights to undisturbed exercise of minerals privileges (the language of the day) for the best part of a century, especially when the acute losses of biodiversity and other aspects of environmental health, and the climate-oceans crisis are known.

Dependable investment condidtions are desrable, but are not a human right and do not trump the health of the environment including that of the climate, oceans and ecosystems, nor the rights of the future.

- 25. Principle: The Crown makes policy decisions based on the best evidence, and accounting for the foreseeable need for minerals and petroleum, both now and for future generations.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree
    - a. Why?

Again, the framing of this is totally inadequate. We identify several problems below.

- The best evidence may be insufficient. The twin principles of "information sufficiency" before any decision to allow activities that might harm the environment are allowed, and the precautionary principle such that decisions under uncertainty where there is a risk of significant harm must be made in favour of the protection of the environment, should be implemented. Evidence is fine of course, but the best information available may not be enough. In those circumstances more research is needed or the application should be denied.
- 2 The ecosystem based approach (if that genuinely references maintaining ecosystems and letting them flourish) with the information sufficiency clause and the precautionary principle are essential elements of modern resource management and in our view must be part of this policy and decision making framework.
- 3 There is no good and compelling reason that the only consideration should be the need for minerals and petroleum now and in the future. Other needs for now and in the future must be part of decision criteria, and that must include impacts on climate, oceans systems, biodiversity, human rights, social and human health, and so on.
- 4 Decision making should recognise that "foreseeable" need is an insufficient

criterion. Provision for decision making in the presence of inadequate knowledge and foresight should be explicitly designed in and review points, cancellation rights for the state, and so on must be provided. Recognition of existence, bequest and option values should be required. The ability to maintain options for society and for regulators is crucial.

5 There should be a requirement for a Stategic Environmental Assessment (SEA). This would require that before any permit to explore or extract (or for ancilliary works) should have to be considered against "do nothing" AND against alternatives such as substitute products, reuse, resource recovery, recycling and so that some judgement of necessity and alternatives is made before permits are issued.

- 26. Principle: The Crown proactively engages and consults with relevant stakeholders and decisions are communicated in a clear and transparent way.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree
    - a. Why?

Replace "relevant stakeholders" with "Treaty partners and the public". This would allow for knowledge, world views and insights not held by the Crown to inform decision making and it would provide democratic process. Openness makes government decision making better, and it increases knowledge of the Crown, as well as enhancing the quality of decisions and the "consent of the governed".

Do you agree or disagree with each of the following principles for Industry?

- 27. Principle: Pursue continuous improvements in health and safety.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

#### a. Why?

Health and safety improvements are of course necessary and essential but they are not sufficient. It is a siloed form of madness to allow activities that damage the environment, water and air quality, climate and oceans and other biophysical processes and human health but only so long as these activities are done safely and carefully.

28. Principle: Strive to implement industry best practice in operations

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
  - a. Why?

Industry best practice is a poor test. Best practice is often not good enough and embodies lags. Far better to implement high performance standards rather than accept that what is done best now is sufficient.

- 29. Principle: Seek innovative ways to improve the resource efficiency of extraction operations; and minimise the negative impacts of these operations.
  - Strongly agree
  - Agree BUT it is inadequate
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree
    - a. Why?
      - 29.1 This should be (for all) to, as far as possible, to avoid resource extraction unless a publicly done, or at least audited, strategic environmental assessment, deems the activity absolutely necessary and that the risks are low.
      - 29.2 Substitution of products (e.g. wood instead of steel), resource reuse, recovery and recycling should be the first choice.
      - 29.3 The kind of mining and the methods and their impacts should also be considered and canvassed publicly, and incorporated in the Strategy which must

consider alternatives to extraction.

We submit that this Resource Strategy and decisions under it should be required to avoid and disallow mining for fossil fuels, to disfavour seabed and hard rock mining, and only to allow alluvial mining subject to low impact tests. Removal of lithium and other minerals from seawater or minerals accumulating plants where this is not at the expense of ecosystems and is low impact could be allowed, so long as impacts a minor or less.

"Urban mining", that is recovery and reuse of resoruces from demolition sites, people's stashed but abandoned electronics, tips, landfills, etc, and requirements for design for reuse and recovery should be strongly encouraged and should be considered before any permits for exploration or extraction should be issued.

Such distinctions between methods must be incorporated in the resource strategy. This should NOT be an exploration and mining strategy, it should be a Resource Strategy.

- 30. Principle: Engage with stakeholders and implement management systems to understand and manage impacts, and realise opportunities for redress where needed
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

#### a. Why?

Once again, this is inadequate. The Strategy should distinguish between the exploration and mining industries on one hand, and the waste avoidance and resource recovery and renewable industries on the other hand.

The language should not be to "understand and manage impacts", it should be to avoid, remedy and mitigate impacts in that heirarchy.

"Implement redress" - that assumes such is possible.

31. Are there any other principles you would like us to consider in the strategy?

The principle of substitution of renewables for non-renewables;

The principle of prior informed consent of land owners, occupiers and Treaty partners and coimmunities; The Precautionary Principle, ecosystem based management; Information sufficiency principles. Principles of human rights.

The principle of human – and corporate responsibility. The principle of transparency and democratic participation – which may be much more than "consultation".

Principle of open and accountrable government. Principle of public good, rather than championing industry interests.

Principles of responsibility and disclosure of the track record of applicants and their principle investors, associates, and parent and sibling companies etc.

The principle of joint and several liability.

#### **ACTION AREAS**

Do you agree or disagree with each of the following Action Areas for the Government?

#### 32. Action Area: Modernising the Crown Minerals Act

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

#### a. Why?

It is unclear what "modernising" is intended to include, so we can't anser your question, but we can say these.

We agree that the regulatory agency should not be an agency to promote the industry.

We agree that the objective should be changed to a Resource Strategy but not a mining or petroleum strategy.

Human rights should be a test.

Human responsibility should be a framework.

Yes, update in the Treaty of Waitangi responsibility

Implement the Strategic Assessment process to test the necessity of the activity and to consider alternative options, products, methods and locations.

Open decisions to the public for input and allow hearings in applications.

Map applications onto maps that have layers to show"

- the nature of the recieving (impacted) environment;
- the tenure:
- the natural qualities,
- any reserve or other protected or significant designation of the area covered and affected so it is easy for the public to understand the implications of the place;
- details of the applicant;
- target minerals
- proposed methods, etc.
- b. What future actions would you like us to consider under this Action Area?

Test mineral imports for human rights compliance and avoid "blood minerals" including fertilisers etc.

As in the paragraph 32 a.

The regulatory agency should not be an agency to promote the industry.

Change the objective to a Resource Strategy but not a mining or petroleum strategy.

Human responsibility should be a framework.
Update in the Treaty of Waitangi responsibility.
Implement a Strategic Environmental Assessment process to test the necessity of the activity and to consider alternative options, products, methods and locations.
Open decisions to the public for input and allow hearings in applications.

Map applications onto maps that have layers to show"

- the nature of the recieving (impacted) environment;
- the tenure:
- the natural qualities,
- any reserve or other protected or significant designation of the area covered and affected so it is easy for the public to understand the implications of the place;
- details of the applicant;
- target minerals
- proposed methods, etc

### 33. Action Area: Securing affordable resources to meet our minerals and energy needs

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

#### a. Why?

It is important that there is not a government organised lowering of the price of minerals and energy since such depression will supress the development of innovative alternatives to minerals and to renewable energy and energy efficiency. Government can subsidise prices for those struggling with energy poverty, but this should not be economy wide.

If steel for instance is subsidised, then wood and other renewable materials will be disadvantaged.

Regulation can inhibit or encourage invention and innovations.

Resource recovery and resuse – eg demolition materials, mining old tips, urban mining etc needs to be encouraged (subject to environmental and health conditions).

There is a good deal of scope for substituion of products and services (e.g. transport mode shifting, phasing out more polluting batteries and substituting others; using lithium from sea water not from the land or seabed).

b. What future actions would you like us to consider under this Action Area?

Require full price costing.

Require Strategic Environmental Assessment
Regulate for innovation and renewables and against GHG
emissions, environmental harms, etc, etc;
Regulate for disclosure to ccustomers and the public of
materials sources and methods of production;
Require independent of the industry labelling and
certification of materials and their production.

#### 34. Action Area: Improving Treaty partnership

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

#### a. Why?

Yes, but MBIE should listen to all Maori, not take on the role of smoothing the road for the mining and petroleum industry.

The ToW must be implemented, not simply "improve" the Treaty partnership.

b. What future actions would you like us to consider under this Action Area?

We	defer	to	Maori	on	this.

#### 35. Action Area: Improving stakeholder and community engagement

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

#### a. Why?

Yes, but not by doing their PR for them or subsidising their advertisments etc to improve their "social licence". The community engagenment should be a statutory requirement for submissions and meetings, NOT simply soft soaping or buying off communities with sports and other sponsorship as in Waihi.

b. What future actions would you like us to consider under this Action Area?

Statutory requirements for submissions with transparent processes, adequate information, etc.

## 36. Action Area: Improving industry compliance

- Strongly agree
  - Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

#### a. Why?

Require Compliance and more, but NOT any requirement to explore and to mine. Remove the Diligence requirements.

Compliance with environmental and human rights conditions.

b. What future actions would you like us to consider under this Action Area?

c.

1 Publicly available monitoring and reporting that is

independently audited;

- 2 Require meaningfully high joint and several liability;
- 3 Disallow the regulator accepting draft text for laws and regulations from the mining and petroleum industry and also for subsidising or gifting to local authorities or communities that might then be disinclined to blow the whistle on misconduct or violations.
- 4 Performance bonds held by the regulator and available to the state and to local government for rapid response in the event of any problems.
- 5 Public and accessible disclosure not only of any suspected non-compliance but also measures taken by the company and the regulator;
- 6 Mandatory taking into account in considering permits and any renewal applications, or conditions, of mandatory disclosure of any violations and prosecutions of companies, both in NZ and elsewhere for any violations of environmental, human rights, legal and other requirements.
- 7 Adding into the Crown Minerals Act or a successor a provision for third party prosections of violations with costs reimbursed to the prosecuting party.
- 8 Funding environmental and community legal aid to the Crown Minerals Act, EEZ & Continental Shelf Act, and other such.



- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

#### a. Why?

Not in mining research and investment. Only into alternatives to exploration and mining, and into the control of impacts.

How mining can be phased out with improved re-use and

recycling of materials.

Research into compliance and liability measures is warranted.

b. What future actions would you like us to consider under this Action Area?

Disclosure of the amount of money spent over the years on government funded PR., industry-relevant research, etc. As well as any royalites, there should be a levy to cover research costs and related costs. Learning from the experience in the fisheries sector, cost recovery should not be linked to the industry being able to heavily influence or dictate the research agenda, the researchers, or to have any relationship with the research agencies and regulators.

38. Are there any other action areas you would like us to consider as part of advancing this Strategy?

Take the opportunity to reconfigure this into to a resource strategy and a strategy to reduce and substitute for minerals resources and to avoid fossil fuel exploration, extraction and mining.

Without that, the Strategy is sadly unsuitable, dreadfully dated conceptually as founded on an extractivist growth model, and misses the vital chance to reconfigure goals and activities in the light of the threats to the future and the environment.

Change the focus to resource conservation and ecologically focussed management.

Recognise that gas is not a bridging fuel and has no place in New Zealand's resource future.

Include the pahsing out of fracking in the Strategy.

39. Are there any other comments you would like to make about the "Minerals and Petroleum Strategy for Aotearoa New Zealand: 2019-2029"?

We do not accept the conceptual framing of this Strategy, though certainly it is better than the currrent purpose of the Crown Minerals Act and the Minerals Programmes. It is a good opportunity to redirect the sector and MBIE's efforts. We urged you to reconceptualise the redirect this.

Economic data and analysis is ad hoc and unsuited to the task of accurately assessing and portraying the importance of the mining and petroleum industry. The figures seem designed to be PR rather than genuine evidence.

The economic data presented does not make the case that the sector is compellingly important for the most part, and it uses inadequate economic aggregates and indicators such as Gross Domestic Froduct and average wages.

GDP is not at all suited to understanding the significance of a capital intensive industry with a good deal of foreign ownership and foreign owned labour, capital and other services.

Net Domestic Product is somewhat better, but still inadequate. A ssector's contribution to Net National Income is better, since that accounts for the leakage of payments to foreign nationals, capital and other foreign input owners. It remain though, a flawed and limited view of national and public policy success.

Outflows (reakages to outside New Zealand) of returns to factors of production should be shown. For instance, when foreign companies repatriate their earnings, such as companies like OceanaGold or Clive Palmer's exploration and mining interests. This outflow should be subtracted from any assessment of the contribution of such activities to New Zealand's economy. This is important when considering overseas applicants' and operators' and their staff repatriating their payments.

We notice also that much of the area in the central North Island identified by GNS ias containing lithium, is now covered by an exploration licence applied for by Clive Palmer's company. This amounts to subsidizing research for an Australian magnet's company.

A dashboard or wellbeing approach is better and is well established in the sustainability and economics literature.

Environmental and social costs must be offset against any income, along with environmental costs.

#### Wages

Average wages are inappropriate as indicators where there is considerable divergence between the highest earners and the lower earners. Measure the

disttribution of wages by quinintile. Measure and compare wages and inout returns for other opportunities to use the same inputs, and do not assume the inputs would otherwise be idle.

Re wages in the industries, measure and compare the medians, not the means. Show the proportion of each quintile not only of income but also of foreign earners.

#### Labour -capital and output ratios:

There is no information supplied of the labour–output or labour-capital ratios in mining and petroleum industries compared to alternatives, such as energy efficiency, resource recovery and recycling.

Significantly, it is likely that the jobs created in the energy and resource recovery and recycling fields are likely to be in the areas in which people already live, and not to be located in places where new infrastructure and housing has to be built, with its legacy of stranded assets. Those may be on oil rigs, diminishing mining towns, etc. Labour is increasingly becoming stranded with skills no longer suited to the new sustainable paradigms, and that too should be a consideration.

Lack of facts or analysis of resource recovery and substitution options. We were disappointed by the lack of empirical information or analysis of the extent to which mineral demand could be supplied from existing materials rather than new mines or cranking up existing ones.

This Strategy, If you genuinely want it to chart a strategy for the future, should provide forecasts, estimates and analysis of how resources can be reused, recycled repurposed and recovered. This should be at the heart of this Strategy, along with the strategy for rapidly phasing out fossil fuels extraction and for minimising mining and exploration.

We urge MBIE to quickly examine and report to government the huge literature and opportunities for resource recovery. We provide some sources, database materials and links.

# Some suggestions and sources to help you redirect the focus of the Resource Strategy

We would love to see MBIE move from statements about resource recovery and reuse, recycling, substitutions to renewables etc, to analysis, strategic intent, empiricism, and so on. This would sit well with MBIE's Innovation side and also with waste and environmental work by the Ministry for the Environment, product stewardship and design for end of life disposal and recovery.

For transition and sustainable resource strategies there are many, many journals, expert groups and other sources of literature, in relation to particular sectors and products, and places.

For a large number of theses, conference papers and posters, and other sources that would provide a good number of ideas and research into a variety of options and domains of materials recovery and recycling. See for instance See <a href="https://nzresearch.org.nz/records?utf8=%E2%9C%93&text=Materials+recovery+and+recycling">https://nzresearch.org.nz/records?utf8=%E2%9C%93&text=Materials+recovery+and+recycling</a>

The attached files and links may provide some useful ways of exploring these issues. We were struck by the usefulness for instance of the work by Dr. Sven Teske of the University of Technology Sydney (UTS), with his very useful slides in relation to his Key Results 5.

We provide here some specific examples and sources for these, though our other commitments crowded out a proper literature review. These are just examples to hand. Hopefully you have the capacity to explore such avenues and offerings from the other submitters.

We found the following work by the Institute of Sustainable Futures at the University of Technology Sydney particularly useful, not only for its empricial content but also for its methodology and its use of graphics to portray options etc. We recommend it. MCEC\_UTS\_Report\_lowres-1.pdf – see attached.

eSee also from Dr Sven Teske, the presentation attached. It can be found at Teske\_Sven\_ISF-Kingston-11-July-2016.pdf The attached files and llinks may provide some useful ways of exploring these issues. We were struck by the usefulness for instance of the work by DR. Sven Teske of the University of Technology Sydney (UTS), with his very useful slides in relation to his Key Results (5) slide.

An example of innovation and insgihts into future demand can be found here with respect to battries. CSIRO, Piotrek and CSIRO to make next-gen lithium batteries for global market can be found at <a href="https://www.csiro.au/en/News/News-releases/2019/Piotrek-and-CSIRO-to-make-next-gen-lithium-batteries-for-global-market">https://www.csiro.au/en/News/News-releases/2019/Piotrek-and-CSIRO-to-make-next-gen-lithium-batteries-for-global-market</a> 12 Sept 2019.

There are many academics and non-government organisations, local and international, who could help MBIE to re-conceptualise this strategy and to move it into a much more modern and planet-respecting paradigm.

The Wise Response Group, Engineers for Social Responsibility, and other expert groups such as those involved in waste and resouce management can no doubt provide you with further ideas and insights from New Zealand and other sources.

Earthworks produced their major report which is referenced in this media release and the text of that below:

https://earthworks.org/media-releases/report-clean-energy-must-not-rely-on-dirty-mining/

Earthworks commissioned the research as part of its newly-launched "Making Clean Energy Clean, Just & Equitable" project which aims to ensure that the transition to renewable energy is powered by responsibly and equitably sourced minerals, minimizing dependence on new extraction and moving the mining industry toward more responsible practices.

"The responsible materials transition will need to be scaled up just as ambitiously as the 100 percent renewable energy transition," **said Dr. Sven Teske, Research Director at the UTS Institute for Sustainable Futures**.

Doing so will require a concerted commitment from businesses and governments to dramatically scale up the use of recycled minerals, use materials more efficiently, require mining operations to adhere to stringent, independent environmental and human rights standards, and prioritize investments in electric-powered public transit.

"The renewable energy transition will only be sustainable if it ensures human rights for the communities where the mining to supply renewable energy and battery technologies takes place," said Elsa Dominish, Senior Research Consultant at the UTS Institute for Sustainable Futures. "If manufacturers commit to responsible sourcing this will encourage more mines to engage in responsible practices and certification. There is also an urgent need to invest in recycling and reuse schemes to ensure the valuable metals used in these technologies are recovered, so only what is necessary is mined."

Minerals extraction already exacts significant costs on people and the environment, fueling conflict and human rights violations, massive water pollution and wildlife and forest destruction. Most of the world's cobalt, used in rechargeable batteries for electric vehicles and phones, is mined in the Democratic Republic of Congo, often by hand in unsafe conditions using child labor. Earlier this year in Brazil, the collapse of two tailings dams at Vale's Brumadinho iron ore mine killed hundreds of workers and local residents. Independent research that analyzes decades of data on mine waste dam failures reveals that these catastrophic failures are occurring more frequently and are predicted to continue to increase in frequency.

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"Solar and wind production is growing rapidly, while the cost of clean energy technologies has continued to fall," **said Danny Kennedy, Managing Director at the California Clean Energy Fund**. "If the clean tech revolution has taught us anything, it is that humanity possesses boundless capacity for innovation. Our task is to establish the parameters within which innovators can innovate to ensure that clean energy is truly clean."

https://earthworks.org/media-releases/report-clean-energy-must-not-rely-on-dirty-mining/

That example was directed to analysis of the need or otherwise to use seabed mining: The report from the Institute for Sustainable Futures is about the demand for metals in the renewable energy sector in the context of whether seabed mining is needed. It concludes it is not. even under the most ambitious renewable energy scenarios. The

report <u>Renewable Energy and Deep-Sea Mining: Supply, Demand and Scenarios</u>, published in July 2016, states: "Even with the projected very high demand growth rates under the most ambitious energy scenarios, the projected increase in cumulative demand – all within the range of known terrestrial resources – does not require deep-sea mining activity." The link to this report is offered to MBIE so that you can see how empiricism and analysis can explore future options.

ECO recalls that the April 2019 UN IPBES Report urged that in the light of the biodiversity crisis, it is imperative that we do not give in to the pressure from vested interests. This is the moment to abandon business as usual since it will lead us to even worse harm to the environment.

We urge the MBIE to change tack and move the resource strategy to an innovative and sustainable path. This is your chance to move away from the past and modernise.

Thank you for the opportunity to make submissions, and your help in supplying this word form and so on.

Your information use and release form with our responses follows.

Yours,

Catherine Wallace.

**ECO** 

[And former senior lecture in public policy and economics, specialising in environmental policy and eclogical and institutional economics]

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  - Yes
  - No

If we can include your submission on the website, can we include your:

41. Name

- Yes
- No

#### 42. Email address

- Yes but ECO Email only
- No

### 43. Business name or organisation

- Yes
- No

#### 44. Position title

- Yes
- No

# 45. Group you most identify with (if submitting as an individual)

- Yes
- No

# 46. Group your submission represent (if submitting on behalf of a group or organisation)

- Yes
- No

	If there are any other parts to your submission that you do not want public on the website please note them below
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