

Submission to **MINISTRY FOR THE ENVIRONMENT** on
“NEW ZEALAND EMISSIONS TRADING SCHEME REVIEW 2015-2016” (APRIL 2016)

INTRODUCTION

1. Straterra¹ wishes to make an additional submission on the New Zealand Emissions Trading Scheme Review 2015-2016 consultation document². The submission deadline of 30 April 2016 is noted. Our submission of 19 February refers.
2. In making further comment, Straterra is prompted by the speech³ made by Hon Paula Bennett, the Minister for Climate Change Issues, at the BusinessNZ Energy Council Asia-Pacific Leaders' Summit, in Wellington, in March:
 - The Minister signalled that the one-for-two emissions reduction unit surrendering obligation applying to industries definitely would be removed;
 - The questions are, she said, “when and how”;
 - Straterra broadly agrees with this framing, and advises that developing policy in answer to these questions will require great care, to ensure a level playing field for NZ industries in a global context.
3. This submission focuses on the NZ coal sector, and proposes a way forward to avoid unnecessary adverse effects on the coal value chain - from producers to users - while meeting New Zealand's climate change policy objectives.
4. We welcome further engagement with Ministry for the Environment officials on any aspect raised in our submission.

¹ Straterra represents NZ minerals production, exploration, research, services, and support
<http://www.straterra.co.nz/about/>

² <http://www.mfe.govt.nz/publications/climate-change/new-zealand-emissions-trading-scheme-review-2015-16-discussion-document>

³ http://www.bec.org.nz/_data/assets/pdf_file/0006/113847/Bennett-says-one-for-two-obligation-to-go-risk-tools-available-Swiss-Re--Energy-News.pdf

CONTENTS

INTRODUCTION.....	1
EXECUTIVE SUMMARY/DISCUSSION.....	2
There is presently no alternative to coal in a wide range of industries and commercial uses.....	2
The coal sector will have to offset their emissions.....	4
Develop principled and effective policies for the coal sector, in a global context.....	4
Achieving a level playing field for NZ industry – the challenge	5
Policy response	6
The “junk carbon” scam is a distraction from the real debate.....	7
Abolish the Energy Resources Levy.....	7
RECOMMENDATIONS	8

EXECUTIVE SUMMARY/DISCUSSION

5. Straterra makes the following key points on the Government’s signalled intention to definitely remove industry protections under the NZ ETS:

- There is presently no practical alternative to coal as a source of reliable, cost-effective, industrial process heat for a wide variety of industries and commercial uses in New Zealand, especially in the South Island, or as a metallurgical input into steel and cement-making;
- Coal producers have no technology available to manage fugitive methane or relevant operational costs, e.g., use of diesel in mining;
- Relevant coal sector emitters will have to offset their emissions, in the context of New Zealand’s commitments under the Paris Agreement;
- It is fair and reasonable for these emitters to expect the New Zealand Government to ensure a “level playing field”, in a global context, for the carbon price faced by these emitters;
- A level playing field can be achieved by benchmarking the phase-out of industry protections in response to: (1) New Zealand gaining access to, or linkage with international carbon markets, (2) real actions taken by other countries towards the global climate change response, and (3) New Zealand developing an auctioning scheme for NZUs to manage the carbon price for parity with our trading partners and competitors; and
- The \$2 a tonne Energy Resources Levy on coal producers should be abolished as anachronistic, and as serving no coherent purpose (discussed under its own heading, below).

There is presently no alternative to coal in a wide range of industries and commercial uses

6. Coal is an essential input into diverse industries and commercial uses in New Zealand:

Electricity generation: Genesis Energy’s Huntly power station operates two Rankine units for coal-fired generation. This residual capacity is available to meet periods of peak demand when

there is insufficient other generation capacity available (the rain does not always fall; the wind does not always blow), and, therefore contributes to managing supply risk⁴.

Steel-making: The Glenbrook mill uses coal and ironsands to make iron and steel. Coal is both a heat source, and a metallurgical input. Steel, with cement, are necessary ingredients for almost all infrastructure, including renewable electricity generation and transmission equipment, e.g., dams, wind turbines, pylons.

Cement and lime-making: Coal is a source of heat and is a chemical input into Golden Bay Cement, and a number of plants making lime for fertiliser.

Food processing: In the South Island, coal is used as process heat in the manufacture of milk powder and other dairy products, meat processing, vegetable canning, salt, gelatine, dried herbs, breweries, and more.

Hothouse horticulture: Tomatoes, rocket, capsicums, chillies, flowers, and numerous other plants and vegetables are grown in commercial hothouses, which are heated during the winter, with associated CO₂ production enhancing plant growth.

Other industrial processing: Wood, timber, other construction materials, wool, and leather are among products processed with the use of coal as a source of industrial process heat.

Heating of commercial facilities: In the South Island, schools, universities, hospitals, museums, laundries, hotels, offices, swimming pools, and other facilities are heated using coal.

7. As a source of industrial process heat, coal is used because it provides users with a cost advantage, being roughly one-third the price of electricity per unit of heat produced. It is significantly lower cost than diesel. It is also a reliable source of energy, and is easy to transport, store and handle, compared to other solid fuels, e.g., wood biomass⁵.
8. As a metallurgical input into steel-making, coal has properties superior to any other source of carbon in the conversion of iron into steel, and is cost-effective. At this stage, coal is an essential input into steel-making. Ditto for making cement and lime.
9. Coal producers cannot mitigate fugitive emissions of methane from coal mines, and have no alternative to the use of diesel in mining operations; therefore, the price of carbon is an impost, unless benchmarked with international carbon prices (when these exist).
10. Developing a carbon price or market in New Zealand in isolation from the carbon price faced by the same industries in other countries would fail to meet a definition of “doing our fair share”.

⁴ <https://www.transpower.co.nz/upper-north-island-generation-decommissioning-report-and-appendices>

⁵ For any industry to switch from coal to wood biomass, issues to consider include a significant increase in trucking requirements because wood biomass typically has a lower energy value than coal, a lower bulk density (meaning more truck movements per unit of heat), is typically more dispersed than coal, and additional capital expenditure is required.

11. If New Zealand coal production closes down or downsizes in response to price and cost pressures⁶ - for whatever reason, including NZ ETS costs - New Zealand coal users will import coal, likely from countries that do not face a carbon price. In our case it is the user that pays the C price, so the use on NZ will pay the price for domestic or imported coal
12. The potential economic consequences of developing climate change policy in New Zealand in isolation from international settings and actions are, insofar as the coal sector is concerned:
 - Downsizing and/or closure of coal mines;
 - Downsizing and/or closure of industrial coal users;
 - The above moving offshore (carbon leakage); and
 - Increased costs of goods and services to consumers;
 - More imports and fewer exports; and
 - New investors not coming to New Zealand.

The coal sector will have to offset their emissions

13. It is accepted that points of obligation need to account for, and offset their emissions, as part of meeting New Zealand's commitments to the Paris Agreement.
14. It is accepted that the NZ ETS is a valid mechanism for achieving the above outcome, amongst other mechanisms.
15. It is accepted that the one-for-two surrendering obligation needs to be removed from industry, at some point in time. As the Minister said in her speech, the questions are: "when, and how".

Develop principled and effective policies for the coal sector, in a global context

16. As a statement of principle, it is fair and reasonable to impose obligations on New Zealand industry, under the Paris Agreement and New Zealand's emissions reduction target, if, and only if there is a level playing field internationally.
17. If a greater carbon price is imposed on New Zealand industries than that faced by our international trading partners or competitors, those industries (including coal production) will move to other jurisdictions, with a loss of economic activity in New Zealand, especially in the South Island, where there is no substitute for coal as a source of industrial process heat (refer to para. 12 of this submission).
18. For that reason, New Zealand will wish to continue to keep abreast of international developments. For example, we note the following recent media reports to illustrate what may be expected from other key countries and groups of countries:
 - The EU hands out 535m free C credits, to hold C price below 5 euro (*Reuters*, March 2016);

⁶ e.g., from the carbon price to be paid in relation to fugitive methane, and the use of diesel as a fuel

- EU aims for 100% free allocation⁷ to all EITE industries (*Reuters*, Feb 2016);
- India plans to double coal output by 2020 (*The Guardian*, Dec 2015);
- Japan, Korea to build 60 new coal-fired plants by 2025 (*Reuters*, Dec 2015); and
- China to produce 3.6 billion tonnes⁸ of coal in 2016, despite plans to close 1000 mines (*Reuters*, March 2016).

19. The above is a small sample of media coverage appearing in international news media on the global climate change response. The overall tenor is that many countries worldwide are striving to balance their climate change response with their economic and social objectives. As a relevant consideration, the projections are that the world will use more coal in the medium term future, not less.

20. The global consultancy firm and think tank McKinsey⁹ updated its projections on renewable energy in March 2016: *“The majority of the planet’s electricity needs will still be fuelled by coal and natural gas in 2040 - despite strong growth in non-hydro renewables such as wind, solar, and geothermal”*.

21. The McKinsey projections are that renewables will account for 17% of global electricity generation by 2040, with coal (31%) and natural gas (24%) continuing as “low-cost and reliable sources of power”. While coal will have dropped in share from 41% in 2012 to 31% by 2040, the growth of the world’s economy will mean that coal output will actually rise from 9,315,000 terawatt-hours in 2012 to 12,433,000 twhrs by 2040, an increase in absolute terms of 33%.

22. There are other sources of projections or analysis on which one could draw, e.g., the World Energy Council, the International Energy Agency, and the World Coal Association.

Achieving a level playing field for NZ industry – the challenge

23. As a general principle, New Zealand should be a good global citizen, and work with other countries; however, that does not require us to be a climate change leader.

24. Domestic policy needs to be developed and implemented with care, aligned with actions taken by other countries. That is to meet a principle of fairness and reasonableness to industry (and to the NZ economy).

25. Consider New Zealand’s situation:

- Agriculture accounts for a large part of our emissions, and is exempt from the NZ ETS;
- The opportunities for emission reductions in the other major sources of emissions - electricity generation and transport - are minimal or minor over the short and medium term;

⁷ In opposition to the direction that NZ is taking towards phasing out free allocation

⁸ This is roughly 1000 times NZ coal production

⁹ <http://www.mckinsey.com/industries/oil-and-gas/our-insights/renewable-energy-evolution-not-revolution>

- The coal sector accounts for 6-7% of New Zealand’s GHG emissions¹⁰. If coal production and use in New Zealand move offshore, there will be an impact on the New Zealand economy, particularly in the South Island, while achieving very little towards meeting our international climate change target to 2035.

25. The New Zealand policy response needs to be smarter than simply removing industry protections, following a set of arbitrary dates.

Policy response

26. Given that points of obligation¹¹ within the coal sector will need to offset emissions through the purchase of units – because there are presently no economically viable, alternative technologies - the key considerations will be the carbon price, and how that price changes over time.

27. The absence of international markets for carbon imposes a significant risk on the NZ coal sector, which is that coal producers and users will face a higher carbon price than that of our international trading partners and competitors. That would be an unfair and unreasonable outcome.

28. Creating a carbon market in New Zealand, or maintaining the NZ ETS in some form, will need to do one or more of the following to address this risk:

- benchmarking with international carbon prices (e.g., via an auctioning scheme to manage the price of NZUs); and/or
- linkage to international carbon markets; and/or
- providing for NZ points of obligation to have access to international carbon markets.

29. As matters stand the NZ ETS does not operate as a well-functioning, competitive market. The chief source of units, the forestry sector, is constraining the supply of units, with the effect that the price has been rising steadily in recent months – currently exceeding \$13 a tonne.

30. It is economically rational, and responsible, for New Zealand to phase out industry protections in response to:

- The development of international carbon markets to which New Zealand has access or to which New Zealand is linked, or the development of international carbon prices, that would provide a benchmark for setting domestic carbon prices;
- Real actions – as opposed to vague promises - that other countries actually take towards the global climate change response, with some measure to take into account the relative economic burden of those actions. To be specific, what is the net cost of climate change abatement actions compared to the resultant reduction of emissions, for different countries?

¹⁰ NZ GHG inventory <http://www.mfe.govt.nz/climate-change/reporting-greenhouse-gas-emissions/nzs-greenhouse-gas-inventory>

¹¹ Points of obligation include: NZ coal miners managing fugitive methane and the use of diesel; and the industrial and commercial consumption of coal in NZ

The “junk carbon” scam is a distraction from the real debate

26. The allegation¹² that New Zealand has benefited from emissions reduction units created fraudulently in Russia and the Ukraine is a distraction from the debate on the global response to the climate change issue.
27. At issue is what the world is doing towards reducing GHG emissions, and the answer, in general, is not much. It is one matter to declare an emissions reduction target in 2015; it is another to implement it at some future date (viz. para. 18).
28. We suggest the Government put the Morgan Foundation report and the media hype it has generated to one side, and concentrate on the problem of creating a carbon price for New Zealand points of obligation that provides a level playing field, in a global context.
29. The creation of international carbon markets does need to be based on real effort, as opposed to imaginary “hot air”; there is no argument about that. But it is not for New Zealand to determine unilaterally what is, or is not, a valid unit. Such decisions should be made internationally, i.e., within the UNFCCC umbrella.

Abolish the Energy Resources Levy

26. If the coal sector is to face a price on carbon - and that is the case currently - the Government should in all fairness abolish the Energy Resources Levy imposed on coal producers under the Energy Resources Levy Act 1976, *“An Act to make provision for the imposition, assessment, and collection of a levy on certain energy resources produced in New Zealand”*.¹³
27. The objective of the Act was stated to be: *“to set the price for energy and various energy resources in New Zealand at a level that encourages the conservation of those resources and gives them relativity with other alternative sources of energy”* (1st Reading, Hansard).
28. This archaic and muddled objective has been superseded by concepts such as free trade and market economics, and the Crown Minerals Act, none of which existed in New Zealand in 1976.
29. The levy on coal production of \$2 a tonne - in a time of relatively low coal prices (c.\$100 a tonne for premium export coking coal), and with a domestic carbon price exceeding \$13 per tonne of CO₂-e (applicable to, e.g., fugitive methane and use of diesel) - has an impact on a mining company’s bottom line, to no coherent purpose.
30. (Note that the ERL Act was amended in 1978 to limit its application to opencast coal mines only. Previously it also covered underground operations. The amendment was to minimise the losses then being incurred by State Coal Mines (later renamed as Solid Energy NZ) on its underground mining operations. The exemption also benefited underground operations run by private coal miners.)

¹² <http://morganfoundation.org.nz/new-report-climate-cheats/>

¹³ ERL Act 1976

[http://www.legislation.govt.nz/act/public/1976/0071/latest/DLM439695.html?search=ta act E ac%40ainf%40anif_an%40bn%40rn_25_a&p=2#DLM439850](http://www.legislation.govt.nz/act/public/1976/0071/latest/DLM439695.html?search=ta%20act%20E%20ac%40ainf%40anif_an%40bn%40rn_25_a&p=2#DLM439850)

31. In April 2009 the Office of the Minister for Regulatory Reform recommended to the Cabinet Economic Growth and Infrastructure Committee the repeal of the ERL Act in 2009, noting that a suitable regulatory vehicle would need to be found¹⁴.
32. It would be a straightforward matter to repeal the ERL Act when amending the Climate Change Response Act 2002.

RECOMMENDATIONS

32. Straterra recommends the Ministry for the Environment to:

- a) Note that the coal value chain in New Zealand cannot transition to cost-effective, lower-carbon technologies and practices at the present time;
- b) Note Straterra's support for the principle that if a point of obligation cannot reduce emissions, it will have to offset them via the purchase of emissions reduction units;
- c) Agree to develop climate change policy in a principled way, and in a way that is economically rational;
- d) Agree that NZ industries should face a level playing field internationally in relation to carbon prices, and international level of abatement effort, as principles by which domestic policy is developed;
- e) Note Straterra's support for the framing of the Government's policy intention around the questions of "when" and "how" industry protections are to be removed;
- f) Agree to phase out industry protections *when, and only when*:
 - New Zealand points of obligation have access to international emissions reduction units, at carbon prices that are global in reach, or pay a carbon price that is benchmarked against international carbon prices, e.g., via an auctioning scheme for NZUs; *and when*
 - Other relevant countries take real steps to deliver on their Paris Agreement commitments; and
- g) Agree to repeal the Energy Resources Levy Act 1976, as not serving any useful purpose, and as the Office of the Minister for Regulatory Reform recommended to the Cabinet Economic, Growth and Infrastructure Committee in April 2009.

¹⁴ <http://www.treasury.govt.nz/regulation/informationreleases/pdfs/egi-09-7.pdf> (paras. 38-41)