



2<sup>nd</sup> October, 2017

Inquiry Director  
Low emissions economy enquiry  
New Zealand Productivity Commission  
PO Box 8036  
The Terrace  
Wellington 6143

[info@productivity.govt.nz](mailto:info@productivity.govt.nz)

Dear Steven,

Re: Low-emissions economy issues paper

Thank you for the opportunity to submit to the enquiry into how New Zealand can maximise opportunities and minimise the costs and risks of transitioning to a lower net-emissions economy. We welcome the Productivity Commission's role in independently assessing the options.

Our comments provide a general response to some of the concepts raised and also to specific questions in the Low-emissions economy issues paper.

### **Background on Methanex New Zealand and methanol**

Methanex is New Zealand's only methanol producer, exporting up to 2.2 million tonnes per year from two sites in Taranaki. We are part of Methanex Corporation, the world's largest producer and marketer of methanol. Our operations are a significant contributor to the Taranaki economy and add an estimated \$650 million to New Zealand's GDP each year, providing 1200 jobs directly and indirectly<sup>1</sup>.

Methanol production is a significant contributor to helping achieve New Zealand's target of 40% of GDP from exports by 2025 and its continuing production plays an important strategic role in sustaining the domestic natural gas sector, which is vital –and we believe will continue to play an important role - in providing security of electricity supply and energy for industrial, commercial and residential consumers.

Methanol production is an energy-intensive and trade-exposed industry and may be critically affected by the evolution of climate change policies in New Zealand. Methanol operations generate emissions when natural gas fuel is consumed during the methanol production process and in shipping methanol to customers. Emissions are mitigated as much as possible by constantly seeking incremental efficiency gains in the methanol production process and increasing shipping fleet efficiencies<sup>2</sup>.

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<sup>1</sup> Economic Impact Analysis undertaken on behalf of Methanex by Business and Economic Research Limited ("BERL"), March 2013

<sup>2</sup>2016 Responsible Care & Sustainability Report Highlights, Methanex Corporation, July 2017

We believe methanol will continue to be an important part of the economy for many years to come and, as a product that can be made from both renewable and industrial waste gas sources, has an increasingly important role to play in a transition to a low-carbon future. We recommend watching a short (3 minute) video on the uses of methanol: <https://www.methanex.com/regional-news/new-zealand/methanol-our-lives-video>

The increasing use of methanol as a clean transport fuel overseas, often by blending with petrol, provides reductions in urban air emissions compared with petrol and diesel. In addition it has a role to play in new technologies, such as fuel cell vehicles. We believe fossil fuels will continue to be used in transportation in the coming decades and that lowering transport emissions should include policy settings that allow for and drive alternative lower carbon fuels.

### **Comments on various issues raised: New Zealand Emissions Trading scheme changes and carbon leakage (Questions 20 and 37)**

Methanex recognizes the importance of an economically sustainable transition to a low carbon economy to meet the challenge of climate change. We endorse the Petroleum Exploration and Production Association of New Zealand's (PEPANZ) 2017 report, *Advancing New Zealand's Petroleum Sector to contribute to national prosperity, regional economic growth and global energy sustainability* that recommends:

- A framework for controlling greenhouse gas emissions that is comprehensive, robust, predictable, transparent, and aligned with international approaches. This should seek to incentivise efficiency and lower emission technologies whilst maintaining a level playing field for New Zealand firms that participate in global markets.
- Climate policy measures should ideally be technology, fuel and sector neutral to maximise effect, encourage innovation and avoid perverse outcomes. This includes taking steps to include agriculture in the Emissions Trading Scheme.
- Domestic outcomes are important but should not be pursued to the disadvantage of the New Zealand economy and global outcomes.

We've previously contributed our views on the Emissions Trading Scheme changes and attach our submissions on the latest ETS Review. To recap, we don't support changes that puts at risk trade-exposed businesses, that may have the perverse outcome of carbon leakage and increasing emissions globally if production is displaced offshore by less efficient and higher carbon emitting operations.

We propose:

- The new NZ ETS settings should ensure a carbon price trajectory that strikes the best balance between stimulating emissions reductions and avoiding adverse economic impacts through price shocks.

- Methanex should not be disadvantaged by the NZ ETS, as it evolves, when compared to the carbon obligations faced by methanol producers in other countries. The current competitiveness-at-risk protection (free allocation) is therefore vital. Simply put, without this protection for NZ produced methanol other producers, using coal to produce methanol rather than gas, and with no carbon price constraint, would displace the New Zealand plants, and global emissions would rise as a consequence.
- We would like to see international linkages restored at the earliest available opportunity to provide a stable source of robust cost-effective emissions units, and welcome the Government's recent efforts in this direction. When combined with an auctioning mechanism, these linkages should assist in meeting our Paris Agreement obligations.
- We reiterate our belief that domestic carbon prices should be benchmarked against other jurisdictions to ensure competitive relativity is maintained.
- We urge retention of the current fixed price cap until the overall ETS path is clear and agreed.

### **Opportunities and barriers to reduce emissions in transport and using fossil fuels to generate energy in manufacturing (Questions 10 and 11)**

Scenario modelling by the Business Energy Council suggests emissions from road transport could reduce by at least 60% by 2050 if uptake of low emissions technologies such as electric vehicles occurs, fuel efficiency standards and other measures are introduced and fuel retail prices rise. Longer term, the uptake of electric vehicles will have a significant and important impact on both the future mobility of New Zealand and on the country's transport emissions.

However, there are limits. There are just over 3 million private cars and vans on our roads, 600,000 trucks and utility vehicles, nearly 140,000 motorbikes and 27,000 buses<sup>3</sup>. According to an NZTA study published in October 2016, there could be 550,000 vehicles on our roads by 2030 under a high uptake scenario, but in a more realistic medium uptake scenario just over 110,000 EV's would be in use by 2040.

So while we are clearly constrained in the short term by availability of affordable EV's, and the necessary charging infrastructure, these figures show even in the longer term it will be many years before EV's make up a substantial portion of the vehicle fleet. In the meantime alternative low carbon/clean fuels, such as methanol and biofuels, could be increasingly used in heavy transport, vehicles and in shipping.

To do this we encourage the Commission to consider policy settings to drive the uptake of renewable and low carbon fuels and to ensure the equitable treatment of all fuels in the ETS scheme. For instance, regarding methanol, an increase in the allowable percentage of methanol in blended vehicle fuel would assist in its uptake (currently 3% but potential to go higher, especially in fleets), working with relevant companies to retrofit coastal shipping and inter-island ferries to run on methanol rather than heavy fuel oil.

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<sup>3</sup> NZ Transport Agency Statistics, 31 October 2016

While the range of initiatives and targets that have been implemented to facilitate the uptake of electric vehicles is to be commended, we argue more could be done in this area to drive the uptake of alternative low carbon/clean fuels as part of a broad suite of initiatives.

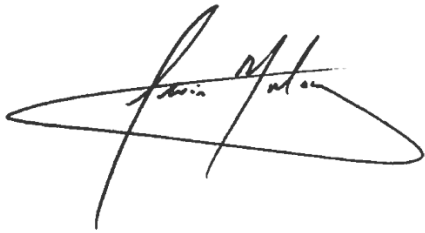
Much more could be done to reduce emissions in the shipping industry. New Zealand could implement internationally adopted regulations to reduce a range of emissions of sulphur oxides, nitrogen oxides and particulate matter emitted in coastal waters, which is growing the demand for cleaner marine fuels around the world. Methanex has invested in seven new vessels for its shipping fleet with engines capable of running on methanol and has been involved with an operational trial in Europe with partners, Wartsila and Stena, who have converted a passenger ferry to run on methanol, which has zero sulphur dioxide emissions as well as low nitrogen oxides and particulate matter.

Research & Development funding schemes should also encourage the reduction of emissions for industry. Methanex's Medicine Hat plant in the United States currently injects captured CO<sub>2</sub> from a neighbouring industrial facility to produce additional methanol. At our New Zealand operations we are investigating the recovery of CO<sub>2</sub> from operations to be reused in the methanol making process thereby creating a more efficient operation. Capital intensive projects such as these are a large commitment and supportive, long-term policies to drive the uptake in carbon recycling technologies and reduce market barriers for low carbon fuels would assist industry initiatives and potentially show New Zealand as a leader in this area. In this regard, the EU Renewable Energy Directive is a model that could be considered for New Zealand.

Overall, we think it important the Productivity Commission keeps pragmatism at the forefront of its deliberations when undertaking its analysis. It can be easy to make presumptions that future technologies will automatically appear in a timely and cost-effective way but this should not be treated as a given. Also needed is a weighing up of the prospects of imposing potentially excessive carbon costs on New Zealand, as a small open economy dependent on inward foreign investment. If domestic climate change policy is not managed carefully there is the risk of net disinvestment occurring, if emissions intensive industries move offshore and are not adequately replaced by sufficient investment in productive low emissions industries.

Thank you for considering our submission. We welcome the opportunity to be briefed on the Productivity Commission's work on this inquiry to date and the chance to have a face-to-face discussion over these matters and contribute to the long-term vision for a low-emissions economy. With that in mind, we extend an invite to the Productivity Commission to visit our site at Motunui at a time convenient. At that time we would like to give you a full briefing on all the work we have underway on alternative fuel pathways.

Kind Regards,

A handwritten signature in black ink, appearing to read 'Kevin Maloney', written over a large, horizontal, oval-shaped scribble.

Kevin Maloney  
**Managing Director**  
**Methanex New Zealand**

**Appendix:**

*New Zealand Emissions Trading Scheme Review 2015/16 Submission by Methanex New Zealand Ltd*

*New Zealand Emissions Trading Scheme Review 2015/16 (Other Matters) Submission by Methanex New Zealand Ltd*