From: no-reply@mbie.govt.nz

Sent: Friday, 25 October 2019 1:05 p.m.

To: ; Hydrogen

Subject: Hydrogen green paper - submission

Submission on Hydrogen green paper recevied:

Introduction

Name

Catherine Cheung

Email

Business name or organisation (if applicable):

Position title (if applicable):

Is this an individual submission or on behalf of a group or organisation?

Individual

Please give the name of the group or organisation this submission is on behalf of. What is the role of Government in developing hydrogen for storage and distribution?

I am extremely concerned about the overarching push for hydrogen. With our climate crisis, we need urgent action to reduce greenhouse gas emissions and pressure on natural resources, to pull back from exceeding planetary boundaries. We also need to build societal resilience and adaptation to crises. We do not have the time or luxury for unproven technology and 'Think Big' projects.

What are the challenges for using hydrogen for storage and distribution?

Given the urgency for real climate action, development of brown, grey and blue hydrogen cannot be a genuine or effective transition pathway, because of its reliance on fossil fuels and unproven carbon capture, use and storage. It prolongs fossil fuel exploration, mining and reliance.

What are the opportunities for using hydrogen for storage and distribution?

I ask that MBIE put forward a clear position and instigate legislation to prohibit any new brown, grey and blue hydrogen development.

What is the role of Government in developing the complementary role of electricity and hydrogen? What are the challenges for achieving this complementary role of electricity and hydrogen? What are the opportunities for this complementary role of electricity and hydrogen? What is the role of Government in supporting hydrogen use for the transport sector?

Green hydrogen is extremely energy intensive to produce and store. Consideration of its development and application such as for transport and mobility must first be thoroughly assessed and compared with all other energy options.

What are the challenges when using hydrogen for mobility and transport?

What are the opportunities for using hydrogen for mobility and transport?

What is the role of Government in encouraging the use of hydrogen for industrial processes including process heat supply?

What are the challenges for using hydrogen in industrial processes?

The narratives of 'decarbonising industrial processes' and 'decarbonising gas supplies' are misleading. Like fossil fuel-derived urea, 'green urea' made from green hydrogen will also release

nitrous oxide when applied on farms, facilitate overstocking and fuel climate-damaging industrial agriculture. Blending hydrogen into the existing gas network is full of problems and again, prolongs fossil fuel reliance and status quo.

What are the opportunities for the use of hydrogen in industrial processes?

What is the role of Government in encouraging hydrogen uptake for decarbonisation of our natural gas uses?

What are the challenges for hydrogen to decarbonise the applications using natural gas?

What are the opportunities for hydrogen to decarbonise our gas demand?

What is the role of Government in producing hydrogen in sufficient volume for export?

What are the challenges for hydrogen if produced for export?

The goal of any development needs to be resource conservation, security and resilience, and social wellbeing, not economic profits.

Making green hydrogen for export does not make environmental, social or economic sense.

In addition, we welcome your feedback about the opportunities of hydrogen to Māori and how this will support their aspirations for social and economic development.

What are the opportunities for hydrogen if produced for export?

If you wish to, you can attach a document to this submission.

Use and release of information

We intend to upload submissions to our website at www.mbie.govt.nz. Can we include your submission on the website?

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Yes

Can we include your email address?

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Can we include your business name or organisation?

No

Can we include your position title?

No

Can we include the group or organisation your submission represents (if submitting on behalf of a group or organisation)?

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