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**From:** no-reply@mbie.govt.nz  
**Sent:** Friday, 25 October 2019 2:10 p.m.  
**To:** [REDACTED]; Hydrogen  
**Subject:** Hydrogen green paper - submission

Submission on Hydrogen green paper received:

## **Introduction**

### **Name**

Alan

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### **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?**

The public transport sector could make the most beneficial use of hydrogen rather than the private vehicle fleet, therefore nationalised local city bus companies and rail operations have a role in the storage and transport of hydrogen.

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

It is dangerous and therefore the use of hydrogen is better utilised in larger well managed facilities typical of public bus and rail operations, where the size allows independent OHS staff and other specialised engineering staff to be employed.

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

Public busses, and the train system. Energy Storage.

### **What is the role of Government in developing the complementary role of electricity and hydrogen?**

There is a national defence aspect such that in the event of a break down in international trade, or competition for resources, we are not wholly reliant on Lithium and other components of Battery Electric vehicles. Hydrogen is something we can create ourselves with our renewable hydro and wind electricity. The government needs to work on allocating safe space for hydrogen storage facilities, both near electricity sources where it could be generated and in cities.

### **What are the challenges for achieving this complementary role of electricity and hydrogen?**

Engineering and Safety.

### **What are the opportunities for this complementary role of electricity and hydrogen?**

Public Transport. Energy storage.

### **What is the role of Government in supporting hydrogen use for the transport sector?**

Safe locations, education training for hydrogen engineering. Nationalisation of rail and bus fleets such that we can convert to BEV and hydrogen fleets.

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

Its too dangerous in general , and inefficient to use hydrogen for the private fleet, such as making petrol stations in housing areas, serve up hydrogen.

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

Public transport, busses, and trains

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

If hydrogen can be used in steel making, and to dry milk powder we need to have our research institutions prove that usage, and mandate it for NZ Steel and Fonterra.

**What are the challenges for using hydrogen in industrial processes?**

Engineering and Safety.

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

Steel making  
Drying Milk

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

Regulation. Stop all new private natural gas connections. Announce a sunset for natural gas

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

Safety

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

Replace industrial processes using natural gas by hydrogen. Simply stop use of residential gas, starting with wealthy areas first.

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

This is secondary to the primary aim of decarbonising and making NZ less reliant on fossil fuel imports.

**What are the challenges for hydrogen if produced for export?**

Safety.

**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.**

The cutoff of natural gas for residential needs to start with the wealthy households who can afford solar, and the change back to electric hot water.

**What are the opportunities for hydrogen if produced for export?**

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**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](http://www.mbie.govt.nz). Can we include your submission on the website?**

Yes

**Can we include your name?**

**Can we include your email address?**

**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)?**

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

**OIA warning**

**If there is information in your submission that you wish to remain confidential, please note them below:**