COMPLETE

Started:	Thursday, November 02, 2023 9:12:50 AM
Last Modified:	Thursday, November 02, 2023 9:27:25 AM
Time Spent:	00:14:35
IP Address:	103.242.70.123

INCOMPLETE

Started:	Tl
Last Modified:	Tl
Time Spent:	0(
IP Address:	1(

Page 3

Q1

Privacy Information

Respondent skipped this question

Page 3

Q1

Privacy Information

Respondent skipped this ques

Page 4: Submitter information

Q2

Name

Emily Levenson

Q3

Organisation and role (if submitting on behalf of a company or organisation)

Horticulture New Zealand, Environmental Policy Advisor

Q4

Email Address

Q5

Are you happy for MBIE to contact you, if we have questions about your submission?

Yes

Q6

Please clearly indicate if you are making this submission as an individual, or on behalf of a company or organisation.

Company/Organisation

Page 4: Submitter informati

Q2

Name

x

Q3

Organisation and role (if s

x

Q4

Email Address

x

Q5

Are you happy for MBIE to

No

Q6

Please clearly indicate if y company or organisation.

Company/Organisation

Page 5: Transitioning our gas sector

Q7

How can New Zealand transition to a smaller gas market over time?

How the transition process occurs will be incredibility important for the ability of businesses to stay open and to protect our indoor supply of fresh fruits and vegetables. Already, growers are noticing market disruption due to uncertainty caused by the government's conversations and intended direction. They have experienced non-renewal of gas supply contracts, pricing increases and uncertainty about future availability. Growers have

Page 5: Transitioning our ga

Q7

How can New Zealand trar

Respondent skipped this ques

Q8

Biogas is one alternative; however, growers are concerned there is not enough volume produced or available to support the current demand and volumes, let alone a significant increase. The Government needs to provide more clarity around volumes, supply and plans to actively increase biogas availability to provide consumers reassurance that this is a realistic transition pathway. Government investment may be needed to make this a viable alternative.

Q8

What is needed to ensure fossil gas availability over the transition period?

Gas network users need to be reassured that there is continuity and reliability in supply. If there is a concerted effort to reduce fossil gas availability, there needs to be clear understanding and availability of viable alternatives such as biogas.

Growers are concerned that if the volume of biogas is not reliably and commercially produced to support a large-scale transition and reduction in fossil gas supply, there will be shortages and vulnerabilities to horticultural operations.

Using a blend of biogas/natural gas could be a good first step to overall reduction in fossil gas use; however, growers need reliability of supply and would urge the Government to maintain gas networks, production and availability of fossil gas until there are sufficient biogas or other fossil gas alternatives available.

Q9

What factors do you see driving decisions to invest or wind down fossil gas production?

Certainty of government direction and support will be one of the main factors that influences infrastructure investment decisions. Awareness varies depending on the scale of the business. Large users and consumers will be more sensitive and aware of political decisions and directions that will help or hinder their businesses. As mentioned in the discussion documents, the two largest users generally dictate the amount of gas produced from the gas fields off the coast of New Plymouth. Large consumers and users will actively investigate alternatives if their operations are at risk due to future fossil gas availability and use these options once their is confidence in their reliability and security of supply.

On the other hand, smaller residential and commercial users may be less engaged with the government's thinking and be more vulnerable to changes that affect the ongoing supply or availability of gas. In sum, the factors are:

- Reliability;
- Security of supply;
- Cost;
- Whether the alternative is directly transferable or replaces fossil gas;
- Risk and government indecision or lack of certainty and impact on private business and market options; and
- Access to CO2 for covered crop growers who harvest the CO2 by-product of gas combustion to use in greenhouses for plants.

Q10

Does the Government have a role in enabling continued investment in the gas sector to meet energy security needs?

Yes

Q11

Could you explain why you gave that answer?

Absolutely, there have already been impacts on horticultural covered cropping businesses who use gas to heat their tunnel houses. Some impacts include:

- Non-renewal of gas contracts;
- Pivots by growers who do not have realistic alternatives;
- Exploration and investigation into alternatives; however, there is uncertainty and an inability to have a definitive timeframe about when these alternatives become available and realistic as there is a lot of testing and R&D needed to identify realistic alternatives.

There have already been impacts on growers who were unable to secure ongoing gas contracts as a result of the uncertainty caused by government direction. We expect the uncertainty caused by government direction would extend to an unwillingness to invest in infrastructure and will have a large scale impact on gas users through the transition.

We agree that there may be a place for importing gas, or increasing gas storage facilities to ensure there is adequate and cost-effective measures to ensure gas consumers are able to be confident they will have access to gas during the transition to a low emissions economy.

Q12

Does the Government have a role in supporting vulnerable residential consumers as network

What factors do you see d

Respondent skipped this ques

Q10

Does the Government hav energy security needs?

Respondent skipped this ques

Q11

Could you explain why you

Respondent skipped this ques

Q12

Does the Government hav fossil gas use declines?

Respondent skipped this ques

Q13

Could you explain why you

Respondent skipped this ques

Q14

What role do you see for g

Respondent skipped this ques

Q15

What would need to be in

Respondent skipped this ques

Q16

Do you think fossil gas car electricity market? Why / V

Respondent skipped this ques

Q17

Do you see alternative tec electricity generation over

Respondent skipped this ques

Q18

If you believe additional in should be funded?

Respondent skipped this ques

Page 6: Key Issues and Opp

Q19

How important do you thir

Respondent skipped this ques

Q20

Could you explain why you gave that answer?

Absolutely. Many residential and smaller commercial premises have gas connections. Furthermore, many in the horticultural community have gas connections as they are rurally based. Having a gas connection provides some reliablility and resilience, especially during power outages or natural disasters.

HortNZ has noted in consultation documents that the residential and small commercial markets have the smallest market share of gas useage, yet have the largest number of connections. This is indicative of the scale of impact across the community at large – each individual connection is someone who will be impacted by changes to fossil gas availability.

There is active and ongoing work by plumbers and developers to install new gas systems, both in new build properties and as part of a property upgrading from a hot water cylinder and/or cooking system. Some of these connections may be into the existing gas network, and others maybe through use of 45kg and 9kg gas cylinder bottles, depending on the location - for hotwater, gas for cooking etc. Rapid changes in gas supply will place an unfair burden on these small commercial and residential consumers with new gas connections who are unaware of government plans. One could argue that it is unethical of government to impose additional cost burden, and consumers should be reassured that the government is not going to place an additional cost and waste burden on residential and commercial gas consumers.

Q14

What role do you see for gas in the electricity generation market going forward?

Reliability and security of energy is very important for the country. We are all reliant on electricity for some aspects of our lives. Any risk to the security and reliability needs to be addressed as a priority. However, there is already risk that has manifested through gas contract renewal for commercial greenhouses. This has resulted in non-renewal of gas supply contracts due to the uncertainty of the future of fossil gas.

Growers need carbon dioxide to aid plant respiration and growth. The by-product of burning natural gas is carbon dioxide, and growers harvest this and redirect the carbon dioxide into tunnel houses. The gas is used for both heating and for production of CO2. Without the addition of the harvested CO2, production drops up to 25% which significantly affects the economic viability of growing covered crops.

Purchasing additional CO2 has two consequences – further eroding the economic viability of covered cropping and increasing the price of crops. Furthermore, purchasing additional CO2 has become problematic as a result of other government decisions, like the closure of Marsden Point oil refinery in March 2023 motivated by the plan to reduce climate emissions.
Growers are able to reduce the amount of gas used in operations through other techniques, such as the installation of screens. Many have already taken these measures and are looking to examples overseas of other growing techniques and technologies to further reduce the need for gas. It is important to note that many of these techniques and technologies can reduce an operations gas consumption, but not eliminate the need for gas for heating and CO2 production entirely.

This is one of the key reasons underpinning the use and reliance of gas in covered crop production and one of the reasons why electricity heating options are not viable.
Arguably, importing fossil gas to supplement domestic supply is counter-productive to the nation's decarbonisation efforts. Firstly, through carbon leakage, and secondly, through the carbon emitted to transport the gas to New Zealand. Biogas blended with fossil gas can help reduce the amount of fossil gas needed to be produced.

Q15

What would need to be in place to allow gas to play this role in the electricity market?

Relying solely on gas is counter productive to energy transition plan goals of moving away from fossil fuels. This also contradicts the efforts made by industry to actively decarbonise.

What is needed is a clear pathway and plan for how gas will be produced or sourced to meet demand in New Zealand. Consideration needs to be given towards acceptance that fossil gas fulfills an essential role in New Zealand's energy profile. This would include fossil gas role in electricity generation – even as a back up source, industries reliant on fossil gas that have no realistic alternatives and those that harvest by-products of combustion of fossil gas to be used within their operations.

Q16

Do you think fossil gas can play a role in providing security of supply and/or price stability in the electricity market? Why / Why not?

Feedback from growers indicates that there have been commercial impacts through non-renewal of gas supply contracts. This is leading to innovative approaches by growers to ensure they are able to access the gas needed to run their operations in lieu of viable alternatives being available.

This uncertainty of supply will be felt by consumers through price fluctuations. Fossil gas availability into the future is dependent on the decisions made as part of the Gas Transition Plan. If existing commercial users are feeling the impacts of the speculation caused by government discussions about decarbonisation, then it is likely that this will flow through to consumers of electricity that has been generated using gas. Speculation and

Do you see biogas being u

Respondent skipped this ques

Q22

If YES, how?

Respondent skipped this ques

Page 7

Q23

How important do you thir

Respondent skipped this ques

Q24

Why did you give this ratin

Respondent skipped this ques

Q25

Do you see hydrogen being

Respondent skipped this ques

Q26

If YES, how?

Respondent skipped this ques

Q27

What else can be done to
gases?

Respondent skipped this ques

Page 8

Q28

How important is a renewa

Respondent skipped this ques

Q29

Why did you give this ratin

Respondent skipped this ques

Q30

What role do you see for tl

Respondent skipped this ques

Page 9

Q31

How important do you thir
fossil gas use?

Do you see alternative technology options offering credible options to replace fossil gas in electricity generation over time? Why / Why not?

Technology and technology potential are two different things. Current technologies do offer viable alternatives for gas free electricity generation. The Government just needs to fast track more hydro dams, solar farms, wind farms, and micro generation. For spot demand, we need to implement something like Dinorwig . However, there is always some form of environmental trade-off with any option. Visual impacts from windmills for example, or flooded valleys for hydro-production.

Technology potential is limitless. There is no certainty, however, on when technologies will be identified, tested developed and then made commercially available. Unless there is certainty and clarity about availability of technology, then this is not a metric that can be planned against with confidence.

Q18

If you believe additional investment in fossil gas infrastructure is needed, how do you think this should be funded?

We do not believe that additional investment in fossil gas infrastructure is needed. Central government has signaled an active transition away from fossil gas. This has already had implications in businesses and their ability to secure their ongoing gas supply contracts.

Targeted funding from income gained through the ETS can help fund innovation and transition research, development and implementation.

Page 6: Key Issues and Opportunities

Q19

How important do you think biogas is for reducing emissions from fossil gas?

(no label) Very Important

Q20

Why did you give this rating?

Assuming 5 is most important – biogas would be a 5.

Biogas and hydrogen are two clean gas-based fuels that can be blended with fossil gas to reduce the volume of fossil gas required to meet demand.

We are aware of two initiatives – First Gas is working on 20% hydrogen in gas, and there is the possibility of biogas like what they are doing in Reporoa to this produce gas and CO2.

Q21

Do you see biogas being used as a substitute for fossil gas?

Yes

Q22

If YES, how?

Depending on the supply availability, we see biogas being used as an alternative in the future.

Page 7

Q23

How important do you think hydrogen is for reducing emissions from fossil gas use?

(no label) Important

Q24

Why did you give this rating?

Hydrogen can have a role to play in the reduction of fossil gas use in New Zealand. As mentioned above, hydrogen can be blended with fossil gas to reduce the amount of fossil gas being consumed.

We believe there may be many options that should be developed as alternatives rather than a focus on one single product. This includes supporting activities that help with overall reduction in use of gas.

Respondent skipped this ques

Q33

What do you think are the storage in New Zealand?

Respondent skipped this ques

Q34

Do you see any risks in the

Respondent skipped this ques

Q35

In what ways do you think emissions from the use of

Respondent skipped this ques

Q36

If you have any other views comment here:

Respondent skipped this ques

Page 10: Options to increase

Q37

What role do you see for g

Respondent skipped this ques

Q38

How important do you thir supply?

Respondent skipped this ques

Q39

Why did you give it this rat

Respondent skipped this ques

Q40

What should the role for g

Respondent skipped this ques

Page 11

Q41

Our position is that LNG ir disagree with this position

Respondent skipped this ques

Q42

Please explain why you ch

Respondent skipped this ques

Q26

If YES, how?

See above and see HortNZ submission on the Interim Hydrogen Roadmap.

Q27

What else can be done to accelerate the replacement of fossil gas with low-emissions alternative gases?

There needs to be consideration of actions that can reduce the need for gas usage –through installation of screens, for example. We would caution whether there needs to be consideration and discussion with industry about the wider decarbonisation efforts and progress and how this can be continued or accelerated.

Page 8

Q28

How important is a renewable gas trading scheme to supporting the uptake of renewable gases?

Respondent skipped this question

Q29

Why did you give this rating?

Respondent skipped this question

Q30

What role do you see for the Government in supporting such a scheme?

Respondent skipped this question

Page 9

Q31

How important do you think carbon capture, utilisation and storage is for reducing emissions from fossil gas use?

Respondent skipped this question

Q32

Why did you give this rating?

Respondent skipped this question

Q33

What do you think are the most significant barriers to the use of carbon capture, utilisation and storage in New Zealand?

Respondent skipped this question

Q34

Do you see any risks in the use of carbon capture, utilisation and storage in New Zealand?

Respondent skipped this question

Q35

In what ways do you think carbon capture, utilisation and storage can be used to reduce emissions from the use of fossil gas?

Growers currently directly capture CO2 from burning fossil gas and use this to aid plant growth. CO2 is necessary for plant respiration and plants take in CO2 and expire O2.

There needs to be recognition of the purpose for which fossil gas in being used in covered cropping – for the production of food crops, fruit and vegetable crops that support the health of people.

Page 12

Q44

Is there any other informa
Transition Plan?

Respondent skipped this ques

Respondent skipped this question

Page 10: Options to increase capacity and flexibility of gas supply

Q37

What role do you see for gas storage as we transition to a low emissions economy?

Respondent skipped this question

Q38

How important do you think increasing gas storage capacity is for supporting the security of gas supply?

Respondent skipped this question

Q39

Why did you give it this rating?

Respondent skipped this question

Q40

What should the role for government be in the gas storage market?

Respondent skipped this question

Page 11

Q41

Our position is that LNG importation is not a viable option for New Zealand. Do you agree or disagree with this position?

Respondent skipped this question

Q42

Please explain why you chose your answer?

Respondent skipped this question

Q43

What risks do you anticipate if the New Zealand gas market was tethered to the international price of gas?

Respondent skipped this question

Page 12

Q44

Is there any other information you would like to provide to inform the development of the Gas Transition Plan?

Fresh fruits and vegetables play an important role in the health of all New Zealanders. Bolstering our domestic production is critical for public health. Covered cropping plays and essential role in making fresh fruit and vegetables available for extended seasons.

Food crops destined for the export market support the transition to a low-emissions economy. The overall low-environmental impact that covered cropping systems offer needs to have recognition and consideration during all energy transition plans.