PETROLEUM EXPLORATION & PRODUCTION ASSOCIATION OF NEW ZEALAND

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Submission on the Process Heat in New Zealand technical report

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PEPANZ Submission: Process Heat in New Zealand

Introduction

1. This document constitutes the Petroleum Exploration and Production Association of New Zealand's (PEPANZ) submission in respect of the Process Heat in New Zealand technical report[1].

2. Established in 1972, we are the industry association of the upstream oil and gas sector. We proudly represent the companies that explore for, and produce, New Zealand's oil and gas resources. Our members produce an estimated 95 percent of New Zealand's petroleum. We also represent more than 50 associate member companies who provide a wide range of goods and services to the industry.

Focussing on low emissions

3. Para 4 states that "*Addressing emissions reductions in process heat can be achieved directly through two means, improving the energy productivity of existing processes, and fuel switching (i.e. increasing the proportion of renewable energy used to supply heat).*"

4. We consider that, although subtle, it is critical that the language "low emissions" be preferred over "renewable energy". This is because climate change is driven by net emissions. Not all renewable energy is low emissions, and there are low emissions ways to produce energy.

Viability

5. Para 5 states that "*Viable opportunities for process heat users to reduce emissions already exist and can be deployed in a short timeframe*." The use of the word "viable" here may not be the most accurate, given certain options may be technically achievable but not necessary economically achievable and therefore in fact unviable in practice.

Market failure

6. We consider that the focus of interventions should always be on addressing genuine market failure, as technically defined. We agree that greenhouse gas emissions are a negative externality that can be managed through efficient market-based instruments. Under Barrier A, the report asserts that "the cost of emissions is not fully priced" but without providing evidence that current emissions pricing does not manage the externalities. We consider that if this is a premise of action, clear evidence of market failure in process heat (i.e. that emissions pricing is too low to drive efficient choices) should be provided.

7. Other barriers are arguably not market failures but are driven by commercial circumstances or possibly inadequate information (although not necessarily actual information asymmetries leading to market failure).

[1] https://www.mbie.govt.nz/have-your-say/process-heat-in-new-zealand-opportunities-and-barriers-to-lowering-emissions/

Interventions in the absence of demonstrable market failure are unlikely to lead to net positive outcomes and come with the significant risk of unintended consequences and we would urge caution.

The role of gas in the electricity sector

8. Natural gas plays a critical firming role in enabling the largely low emissions electricity sector and is important for maintaining stability and affordability of electricity. If there is a preference for electrification of process heat, then the role of gas in electricity production should be acknowledged and retained.

9. We agree with the astute observation from the Productivity Commission that policy makers must be mindful of perverse outcomes and unintended consequences:

> Under current technology and technology costs, reducing emissions from electricity generation will likely entail an increase in wholesale electricity prices. Rising electricity prices, if substantial, could dissuade adoption of emissions-reducing technology in process heat and in transport, as well as increasing costs throughout the economy.[2]

Gas as a lower emissions fuel

10. The report identifies that "natural gas is a relatively inexpensive fuel source and has a lower emissions intensity than coal or diesel". Natural gas is therefore a useful replacement for higher emitting fuels where lower emission sources are not viable. However, the Crown Minerals (Petroleum) Amendment Act 2018 which ends new petroleum exploration outside of onshore Taranaki puts a serious question mark over the viability of switching to natural gas, because there is less than 10 years of reserves and a ban on new exploration.

Gas in the South Island

11. The report states that:

> There are no natural gas networks in the South Island. Even if gas fields were discovered off the South Island's coast, the costs to build the infrastructure for a reticulated gas network in the South Island are unlikely to be justified by the potential demand for the gas. However, we understand several companies have indicated their potential interest in using gas onshore in the South Island in the event of a gas discovery.

12. This is a legitimate question and concern given the current lack of gas infrastructure. We would urge officials to consider the *Barque Field Development Economic Impact Assessment*[3] prepared by Martin Jenkins. Chapter 3 on Field Development Scenarios shows, contrary to the Process Heat report, that an economically viable gas-to-shore scenario exists.

[2] Finding 13.3, page 400. https://www.productivity.govt.nz/sites/default/files/Productivity%20Commission_Low-emissions%20economy_Final%20Report_FINAL_2.pdf

[3] https://www.nzog.com/dmsdocument/333