

Terms of Reference – Gas Transition Plan

Purpose of this document

1. This document sets out the Terms of Reference for the Gas Transition Plan.
2. This document supports the development of the Gas Transition Plan as indicated in the Energy and Industry Chapter of the Emissions Reduction Plan.
3. The Terms of Reference may be amended with agreement from the Minister of Energy and Resources and Minister of Climate Change as the Gas Transition Plan is developed. Amendments will be published on the Ministry of Business, Innovation and Employment’s website as required.

Table of Contents

Terms of Reference – Gas Transition Plan	1
Purpose of this document.....	1
Introduction	2
Developing the Gas Transition Plan	2
Aims for the Gas Transition Plan.....	3
Structure of the Gas Transition Plan.....	4
Pillar One: Transition pathways for the fossil gas sector	4
Pillar Two: The role of renewable gases	5
Engagement.....	6
Governance.....	6
Timing	6

Introduction

4. On 20 December 2021, Cabinet agreed to develop the Gas Transition Plan (**GTP**) to articulate the transition pathway for the phase-out of fossil gas over time, including where and when renewable gases may be required to offset fossil gas use and associated emissions.
5. Cabinet agreed for the Ministry of Business, Innovation and Employment (**MBIE**) to work in conjunction with Gas Industry Company Limited (**GIC**, the gas industry co-regulator) to develop the GTP.
6. The relevant Cabinet decisions are set out in the following documents:
 - a. Phasing-out fossil gas and repurposing infrastructure for renewable gases: Report back and next steps [DEV-21-SUB-0257]
 - b. Cabinet Economic Development: Minute of Decision [DEV-21-MIN-0256]
 - c. Cabinet: Minute of Decision [CAB-21-MIN-0547.03].

Developing the Gas Transition Plan

7. The GTP should focus on the fossil gas sector and be a key input into the development of the Energy Strategy. Its development has been outlined in the Emissions Reduction Plan (**ERP**) and should be seen alongside other key initiatives in the ERP.
8. The GTP should identify opportunities and benefits and provide a framework to assist in making difficult decisions that Aotearoa New Zealand may face through the transition. The GTP should:
 - a. help inform decision-making and further action by government; and
 - b. help to inform industry on the required investments and work to ensure an equitable transition away from the use of fossil gas.
9. The GTP should cover the first three emissions budgets out to 2035, while signalling the longer-term direction out to 2050, particularly on:
 - a. the fossil gas transition pathways; and
 - b. what is required to facilitate the uptake of renewable gases.
10. While the GTP will be focused on the fossil gas sector, it should consider the availability of gas to the other markets that use it as an input such as:
 - a. Chemical transformation in industrial manufacturing (such as Methanex and Ballance Agri-nutrients).
 - b. Thermal electricity generation – the role of thermal electricity generation in the electricity market is an important issue for the broader energy system, and will be considered through other initiatives contained in the ERP.

Outcomes

11. Several high-level outcomes have been identified to help guide and steer the development of the GTP, and for the reduction in emissions associated with the use of fossil gas as a fuel.
12. The outcomes are intended to inform action and investments in the short-to-medium term as we approach 2035.
13. The Government recognises that these outcomes may need to be balanced against each other over time, as we push towards a more sustainable economy and gas sector. Clear identification of what these outcomes are enables decisions and trade-offs to be made transparently.
14. The desired outcomes for the overall transition for fossil gas out to 2035 are as follows:
 - a. *Sustainability*: Aotearoa New Zealand avoids making decisions that further lock in our reliance on fossil fuels.
 - b. *Energy security*: Security of supply is maintained through the transition, as fossil gas continues to be progressively displaced by renewable, lower emissions, alternatives.
 - c. *Energy Equity*: adverse and unexpected effects on fossil gas consumers are prevented or mitigated and consumers retain access to affordable, reliable and abundant energy. This includes minimising the broader effects on prices paid by consumers, as well as pricing of inputs for businesses as we transition.
 - d. *Emission Reductions*: Aotearoa New Zealand prioritises reducing emissions in the most economically efficient way. The pace of emissions reductions will need to support Aotearoa New Zealand's emissions budgets and 2050 emissions targets.
 - e. *Energy Conservation and Efficiency*: energy conservation and efficiency play a key role in the overall transition.
15. The approach to managing the fossil gas transition will need to be periodically assessed throughout the transition to ensure it remains effective and supports Government objectives. This may be aligned with the process for updating ERPs.

Aims for the Gas Transition Plan

16. The purpose of the GTP is to:
 - a. establish realistic, but ambitious, transition pathways for the fossil gas sector to decarbonise in line with the 2022-2025, 2026-2030, and 2031-2035 emissions budgets, noting the inherent uncertainties involved;
 - b. provide a framework to inform and engage with industry and other stakeholders about the future challenges and opportunities for the sector, and to identify areas where further measures may be required to achieve an equitable transition; and
 - c. establish a strategic view on the potential role for renewable gases, and potential measures for accelerating their uptake.

IN CONFIDENCE

17. The GTP should be used to inform the development of the broader Energy Strategy, where it is clear that the phase-out of gas from the energy sector will be an important consideration. The GTP should also consider other relevant workstreams that are underway, such as the Bioeconomy Strategy and the Decarbonising Industry Plan. It should also take into account other relevant Government objectives, such as the aspirational target to achieve 100 per cent renewable electricity by 2030.
18. These objectives, and complementary workstreams, should be taken into account as transition pathways are developed.
19. The final GTP should set out the work that Government will do to help support an equitable transition as we reduce emissions associated with fossil gas. This will be informed by analysis conducted as part of the GTP and identify areas where changes may be required to achieve the outcomes set out above.
20. It should also recognise that a proportion of the investment and work to transition will be led by the energy industry, who will be the investors in both fossil gas and renewable gas production, along with the supply chain. The final report may contain recommendations for further work for industry to support the transition.

Structure of the Gas Transition Plan

21. The GTP should comprise two pillars:

Pillar One: Transition pathways for the fossil gas sector

22. Pillar One should focus on articulating transition pathways for the fossil gas sector including:
 - a. An analysis of potential transition pathways for the fossil gas sector with a particular focus on the period of the first three carbon budgets (2022-2025, 2026-2030, and 2031-2035), including:
 - i. setting out key uncertainties and decision points that effect the end-state for the sector across the different pathways;
 - ii. high-level projections of emissions from fossil gas use out to 2035 and beyond, with a view to the longer-term trends out to 2050, including:
 - (1) low to medium temperature process heat applications;
 - (2) high temperature process heat generation; and
 - (3) water heating, space heating, and cooking in commercial buildings and households;
 - iii. projections out to 2035 for emissions from gas use across consumer groups, including:
 - (1) where gas emissions are likely to arise on the network; and
 - (2) emissions and demand from major gas users; and
 - iv. projections around gas pipeline services utilisation under different pathways (including implications for legacy gas pipeline infrastructure);

IN CONFIDENCE

- b. Identification of any additional measures and actions that will be required in order to reduce emissions from the fossil gas sector in line with identified transition pathways and Aotearoa New Zealand's emissions budgets, including:
 - i. identifying challenges and further measures that are required to support an equitable transition aligned with our emissions budgets and international obligations;
 - ii. an estimation of transition costs under different transition pathways, including consideration of cost impacts for different types of consumers;
 - iii. an analysis of where transition costs fall; and
 - iv. identifying where transition impacts may not support an equitable transition for consumers and the wider industry, and whether specific measures should be put in place to measure these impacts; and
- c. Development of transition milestones that will help to assess how the transition away from the use, and associated emissions, from fossil gas is progressing.

Pillar Two: The role of renewable gases

23. Pillar Two is intended develop a cohesive view on renewable gas market developments, including how Aotearoa New Zealand could effectively reduce emissions and lower transition costs for fossil gas consumers.
24. While Pillar One focuses on fossil gas, Pillar Two should consider the role for renewable gases (including green hydrogen, biomethane and renewable Liquid Petroleum Gas (rLPG)) to help support the reduction in emissions from this sector.
25. It should include:
 - a. assessing the role of renewable gases against the energy trilemma (while considering other renewable energy options), for example, outlining what strategic role they can play to support security of supply;
 - b. identifying barriers to the uptake of renewable gases in Aotearoa New Zealand where these make sense, and potential measures for accelerating the development and supply of renewable gases. This will need to be considered alongside other workstreams, including the Energy Strategy and the Bioeconomy Strategy;
 - c. assessing the full lifecycle emissions profile of different renewable gases to ensure that they provide genuine emissions reductions;
 - d. assessing the role of carbon capture, use and/or storage, particularly direct air carbon capture, for supporting renewable gas production and emissions reductions;
 - e. developing a cohesive view on if renewable gases could support the non-energy major users of gas, such as Methanex and Ballance Agri-Nutrients; and
 - f. determining how the use of green gases can support the Government's vision for hydrogen and the ongoing Hydrogen Roadmap.

IN CONFIDENCE

26. Pillar Two will also develop milestones to indicate the progress of renewable gas use and emissions implications in Aotearoa New Zealand as we transition.

Engagement

27. Consultation with stakeholders, including industry, non-governmental organisations and other interested parties, should take place at appropriate points in the development of the GTP. Consultation on a draft version of the GTP should occur during its development.
28. Iwi and Māori should be engaged in the development of the GTP to ensure their views are adequately reflected in the transition pathways, and to give effect to the Government's Treaty Partnership obligations. Hui with iwi and Māori on the GTP may also be aligned with those for the Energy Strategy, given the significant linkages between the two.

Governance

29. A Steering Group will be appointed by MBIE to help guide the development of the GTP. To reflect a broad range of views, the Steering Group will comprise appropriate senior officials from relevant government agencies, and GIC.
30. The Steering Group will help ensure that linkages and dependencies are well managed and that the GTP is developed consistent to the Energy Strategy, the Decarbonising Industry Plan and the Bioeconomy Strategy.

Timing

31. The GTP will be a key input to the Energy Strategy. The GTP should be completed ahead of the publication of the final Energy Strategy. A key dependency will be the timeframes for the development of the Energy Strategy.

Stage	Timing
Publication of Terms of Reference for the GTP	May 2022
Targeted engagement with stakeholders	Q3 and Q4 2022
Cabinet agreement to consult on the draft GTP	Q1 2023
Consultation on draft GTP	Q2/Q3 2023
Publication of GTP	End of 2023
Publication of Energy Strategy	By end of 2024