11 December 2023

Hon. Simeon Brown, Hon. Shane Jones
Parliament Building
WELLINGTON

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Dear Ministers

Briefing to the incoming Ministers of Energy, Resources and Regional Development

Congratulations on being entrusted with the Energy, Resources and Regional Development portfolios at this pivotal moment. New Zealand's energy system needs to deliver energy security, drive economic prosperity, and achieve environmentally acceptable outcomes. New Zealand households and businesses need choices of affordable, reliable and sustainable energy sources.

At Clarus, formerly Firstgas Group, we invest in a variety of energy infrastructure assets: electricity lines, gas pipelines, LPG distribution, and energy storage. More information on what we do is provided in Attachment 1. We are continuing to invest in the energy sector to help achieve the shared objectives of resilience, decarbonisation, and economic growth. We are progressing several important renewable gas developments. We are on track to deliver New Zealand's first biogas to biomethane upgrading facility in Q2 of 2024. We have also made great progress toward our hydrogen blend pilot – also a first for New Zealand.

We believe the most important thing the Government can provide to support this investment is clarity and consistency on the sector's direction and the policy tools to achieve our shared objectives. We support the continuation of work on the National Energy Strategy to provide this clarity and improve investment certainty. More specifically, we see three areas where government action can help to promote our shared objectives:

Seizing the biogas opportunity now – 2023 to 2035

Smart use of organic waste can deliver massive benefits across energy, agriculture and waste industries. Our vision to establish a network of regional biogas facilities using mature anaerobic digestion technology is shown in Attachment 2.[1] This would contribute:

- ✓ 6,000 jobs in provincial areas
- ✓ 24-46% of the reductions in biogenic methane needed to meet the 2050 target
- ✓ reduced supply chain risks and lower price volatility for farmers using biofertiliser sourced from anaerobic digestion
- ✓ up to 9% of the increase in renewable energy needed to meet the 50% target for total final energy consumption from renewables
- ✓ 23% towards targets to divert waste from landfills
- ✓ greater customer choices for decarbonising energy use
- ✓ avoided costs greater than $1 billion, if the biogas produced is used by the 290,000 kiwi households currently using natural gas.

While momentum is growing, these benefits will not be delivered by local government or private sector stakeholders under current policy settings. Policy changes are needed to properly value the benefits provided by biogas projects, for example through continued increases in the landfill levy to promote organic waste recycling.

[1] The complete Blunomy report and our submission to MBIE are available at https://clarus.co.nz/about-us/regulatory-compliance

Preparing for the hydrogen opportunity – 2030 to 2045

We expect hydrogen to start to play an important role in the energy mix from the 2030s. Taking advantage of the opportunities in the 2030s needs action now.

Government should undertake a competitive process to establish at least one substantial hydrogen hub (a site where the production and various uses for hydrogen are co-located). The Regional Transitions Plan could be repurposed to give effect to this policy. This would act as a research and development testbed for hydrogen, identify issues within the regulatory environment, overcome coordination problems and attract investors.

Government needs to maintain or increase funding for energy research and development. For example, the University of Canterbury received a grant to study the viability of storing hydrogen underground in depleted gas fields in Taranaki. It is a $12 million study that could be worth billions to the country in securing our future energy supply.

The Ministry of Business, Innovation and Employment has been tasked with completing a review of the regulatory settings to support safe production, storage, transport, and use of hydrogen. We support this work.

Delivering on the enabling role of government – right now

For renewable gases to be valued for their low (or negative) emission characteristics, gas users need a mechanism to trade those attributes. That mechanism is **renewable gas certificates**. The Gas Industry Company needs to oversee progress on renewable gas certificates to give purchasers of renewable gas certificates confidence that certificates are available and achieve what they purport to certify.

Renewable gas certificates can also help address the **unintended consequences** of other government regulations that might otherwise discourage renewable gas developments. For example, the National Policy Statement for Greenhouse Gas Emissions from Industrial Process Heat issued in 2023 contains provisions that aim to reduce emissions from "heat devices that burn any fossil fuel other than coal, unless there is no technically feasible and financially viable lower emissions alternative". It is unclear how renewable gas will be treated in implementing this direction given that the boilers used to provide heat will remain unchanged. A similar issue is present in proposed changes to the Building Code to reduce building operational emissions.

Finally, we note that over eight years ago, the then-Government announced it was **reviewing tree regulations** (the Electricity (Hazards from Trees) Regulations 2003). Had that review delivered the anticipated change, our electricity customers in Tairāwhiti and Wairoa would have suffered fewer, shorter outages in the cyclones and storms of 2023. Electricity customers across the country need a government that will deliver the reliability improvements such a review can provide.

The data and rationale for the above opportunities is available on our website. We welcome the chance to discuss our work, its connections with government work, and to understand your perspectives on how we can work together to achieve shared objectives. We will contact your offices early in the new year to arrange a meeting.

I wish you and your families a very merry Christmas and look forward to working with you in 2024.

Naku noa nā

Ben Gerritsen
General Manager Customer & Regulatory

ATTACHMENT 1: ABOUT CLARUS

Clarus is one of New Zealand's largest energy groups. Whether it's transmission, distribution, supply or storage of energy, the companies within the Clarus group service over half a million homes and businesses of all sizes around New Zealand.

Firstgas connects over 300,000 homes and businesses with natural gas though its gas distribution and high-pressure transmission systems. This essential infrastructure supports New Zealand's economy, so the group is committed to helping customers maximise value from it.

Flexgas provides energy storage services to electricity generators, offering an important source of flexibility to the electricity system and supporting high levels of intermittent wind, hydro and solar generation.

Rockgas is New Zealand's largest LPG retail supplier, providing fast and reliable service through a national network of branches and franchises.

Firstlight Network is the lines company supplying electricity to the Tairāwhiti and Wairoa region, responsible for keeping the lights on across 12,000 square kilometres of the East Coast.

We are also investing in innovative renewable energy solutions such as biomethane and hydrogen, to help New Zealand reach its net zero carbon goals by 2050. Our **First Renewables** business is leading this work, alongside other options that will bring renewable energy to New Zealand homes, businesses and energy-intensive industries in the future.

Clarus was previously known as Firstgas Group.

Firstgas rockgas Flexgas

Firstlightnetwork FirstRenewables

ATTACHMENT 2: NETWORK OF REGIONAL BIOGAS FACILITIES

North Star scenario: a network of regional facilities, covering a large proportion of the North Island to capture the untapped potential

Biogas potential by territorial authority[1]

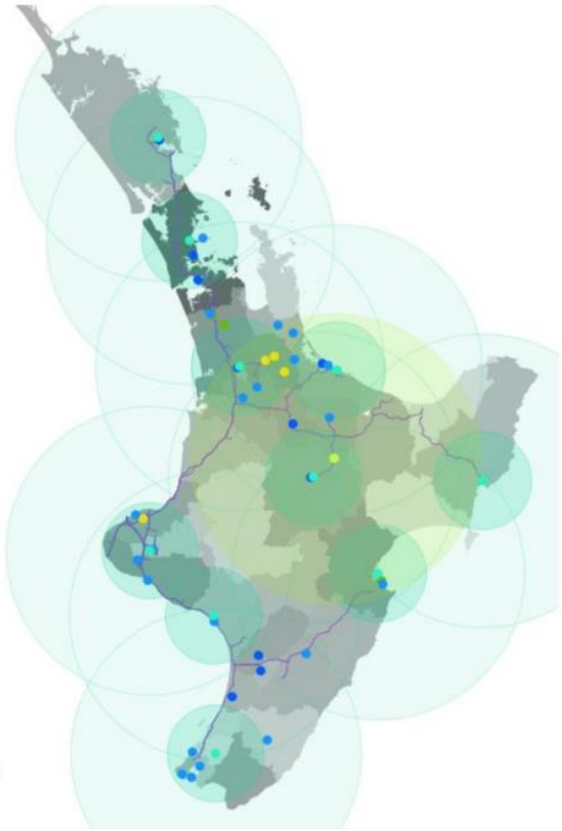
Low — High

Current facilities

- Gas transmission pipelines
- Composting site
- AD site (EcoGas) with 150 km collection radius
- Major WWTP with AD/gas capture
- Other AD site

Vision facilities

- Potential regional facilities (showing 50 km and 150 km radii)
- Additional major WWTPs (>1 Mm^3/yr wastewater) to be equipped with AD/gas capture



[1] Blunomy analysis, based on Gas Transition Plan Biogas Research Report (Wood Beca, Feb 2023) and data on industry and agriculture by territorial authority from StatsNZ

Key considerations

Assumption: maximising biogas upgrading to biomethane for gas grid injection

Corollary: facilities must be within reach (~1km) of the gas distribution network.

Selecting locations to maximise coverage of:

- areas of high population density, based on 150 km policy-defined radius for organic waste (assumption: AD is preferable to composting for highly methanogenic waste)
- industrial feedstock sources (industrial solid and liquid waste)
- areas of high livestock density (swine in Taranaki; cattle in Manawatu, Northland, and Bay of Plenty), based on 50 km estimated economic radius for manure transport
- areas of high arable farming density (maize in Gisborne and Waikato), based on 150 km estimated economic radius for crop residue

Unmapped:

- Landfill sites

Source: Page 17 of Blunomy's *Vision for biogas in Aotearoa New Zealand*