



Gas  
Industry  
Co.

Quarterly Report

# Quarterly Update

April 2023

Gas Industry Co is the home of New Zealand's gas governance, advice, and data.

Gas Industry Company is the industry co-regulator, working with industry and government for safe, efficient, reliable, fair, and sustainable gas delivery.

# 1. Gas Today

## Security of Supply

Gas volumes remain steady and are being supported by production increases where investment in field development occurred over the past few years. However, demand remains higher than supply.

As charts below show, prices have been increasing as consumers roll of contract and secure new gas in tight market conditions. While field operators are continuing to invest, significant new gas supply is some distance away and we are not yet seeing decreased in demand.

Our recommendation remains in place for customers nearing the expiry of gas supply contracts: They should re-contract early to ensure they are not exposed to potential hydrology issues that could cause the market to tighten still further.

## Gas Transition Plan work update

Cross-government consultation on the Gas Transition Plan is continuing and a public release of a consultation draft is now anticipated around the end of the second quarter.

The consultation draft will present issues in the transition and potential initiatives to facilitate a transition in which emissions reduce while investment confidence is sufficient to deliver secure energy supplies.

Public consultation will be welcomed on the draft ahead of finalising a transition plan towards the end of the year.

## Cyclone Gabrielle tests gas sector

The devastating events of Cyclone Gabrielle in February 2023 tested the gas sectors resilience. Fortunately, gas pipelines, supplies and emergency processes were resilient with no critical contingency outages recorded.

Some local effects were seen where pipelines were potentially affected by washouts and erosion, but urgent management of these risks by Firstgas avoided any supply interruptions.

We would like to acknowledge the efficient and fast work undertaken by industry to ensure that the impacts of this event affected gas consumers minimally.

## Global energy landscape and pricing

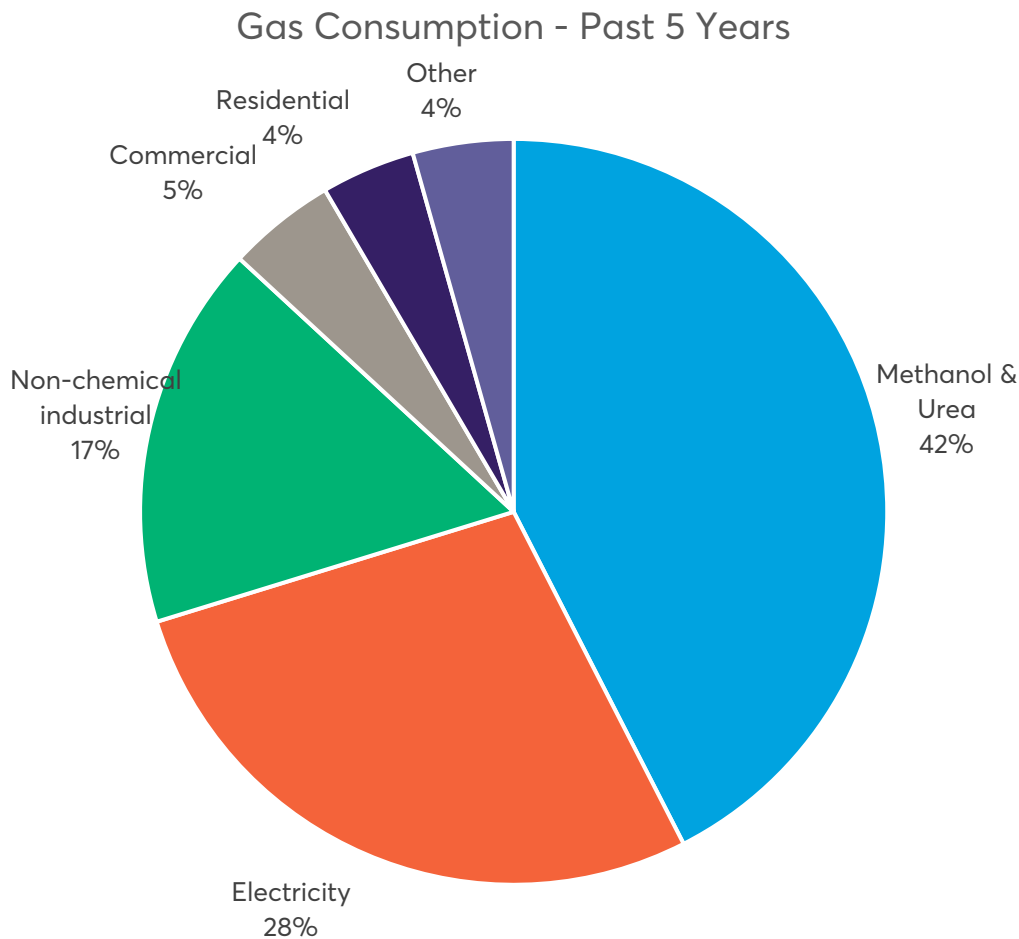
Global energy supply shortages appear to have eased as the northern winter ends and global economic activity is less buoyant, which has eased pressure on prices for now.

New Zealand's gas sector is indirectly influenced by global connections, as considerable volumes are exported and the context for substitutes, such as coal, can have a substitution effect on demand.

Despite pressure easing for now, the long-term global energy risks remain elevated, especially around next northern winter.

## 2. Gas Industry Insights

Only 4% of gas is used by households and 5% by small businesses. About a third is used to generate electricity.



Gas Industry Co has comprehensive gas sector information in our [data portal](#)

Data that is valuable for market participants includes daily gas production by major fields and consumption by the largest users. Monthly information about Ahuroa gas storage is displayed, along with average quarterly gas prices and supply.

Market analysts looking for detail about prices can quickly locate emsTradePoint daily gas prices and delivered quantity.

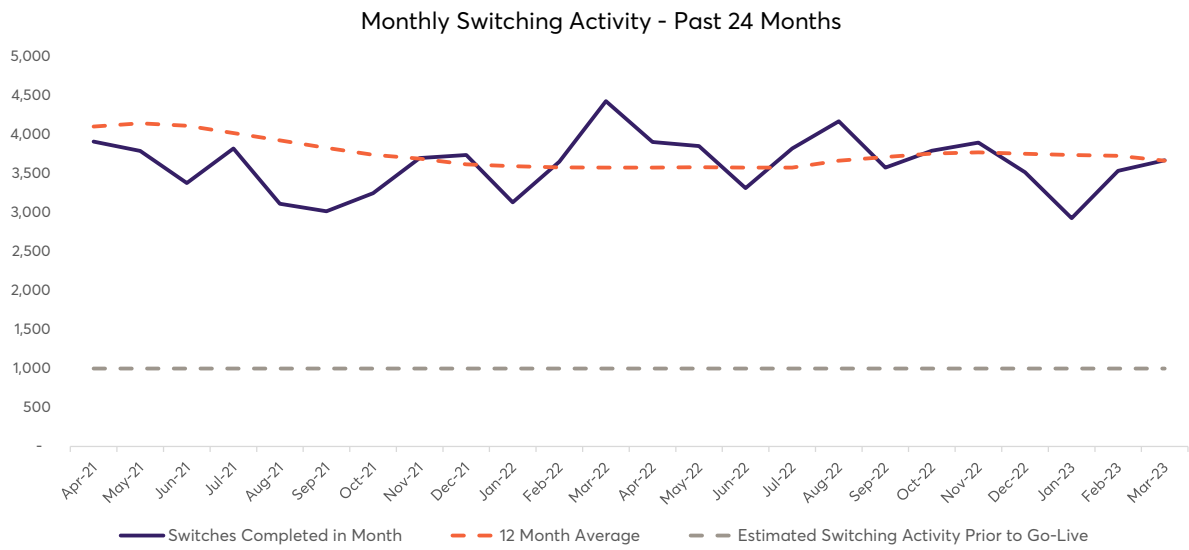
Detail to support security of supply, and help markets understand energy availability is provided through a portal recording planned gas production outages.

## Quarterly Data

### Residential switching still sits an annual churn rate of 15%

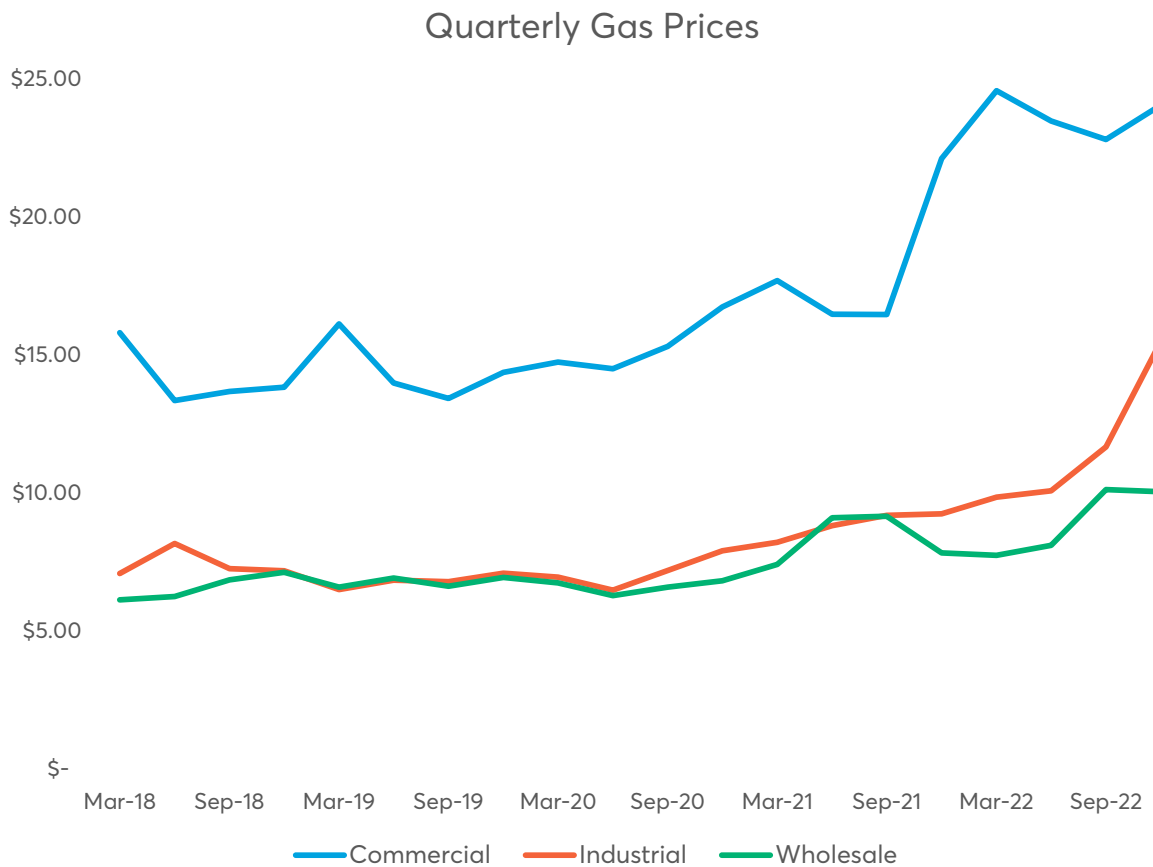
Over the past 12 months an average of 3,662 switches per month were completed, which translates to an annual churn rate of about 14 percent.

	January	February	March
<b>2022</b>	3129	3650	4427
<b>2023</b>	2926	3533	3667



**Around 80 per cent of consumer switches are completed within three business days and 98 percent are completed within seven business days.**

Commercial prices have remained steady over the past year, while industrial prices have increased

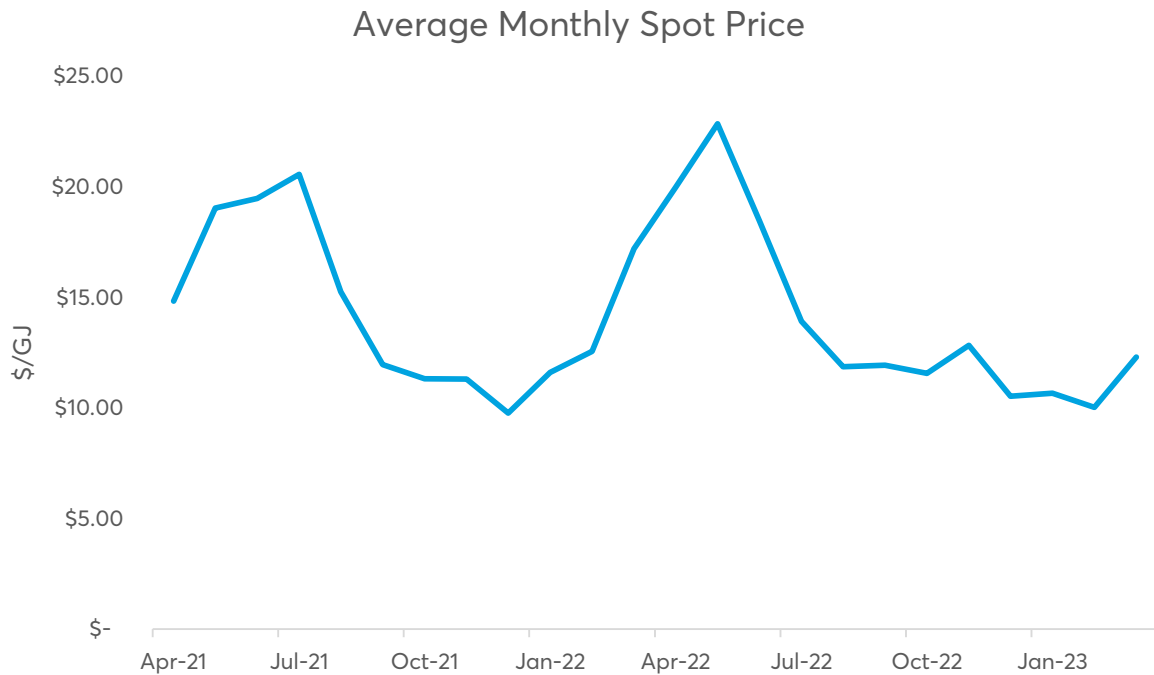


MBIE quarterly prices for commercial, industrial, and wholesale sectors have changed at different rates during the past 12-months. These prices are representative of all natural gas produced in New Zealand.

Around 95% of gas is traded via long-term bilateral contracts. In the chart above, prices rose steeply between September and December 2021 for the smaller volumes of gas being purchased by commercial consumers coming off contract and have remained elevated since.

Industrial prices have rose steadily from June 2020 to June 2022, then increased sharply between June and December 2022.

## Monthly Spot Prices do not reflect trends in the contract market

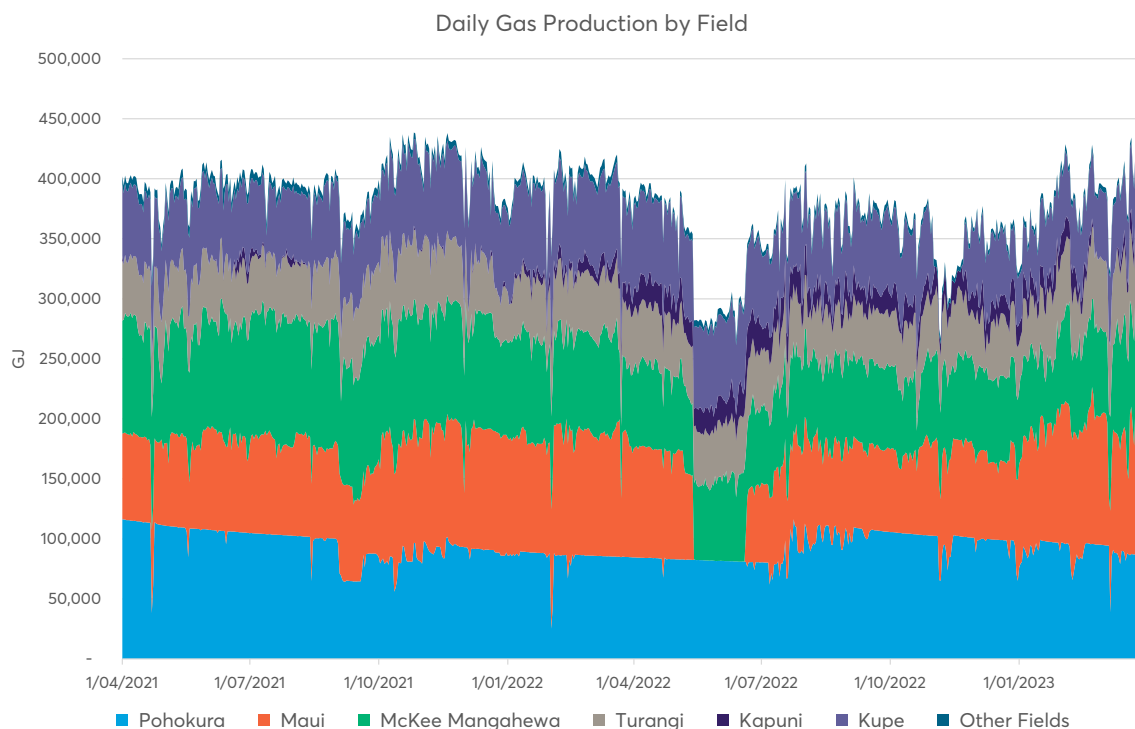


\*Spot price includes daily trades and forward prices.

This graph shows the average, maximum and minimum price per month on gas delivered via emsTradepoint. This covered approximately 4% of the total gas produced in 2022.

Spot market trades are not reflecting the trends in the contract markets.

## Gas Production

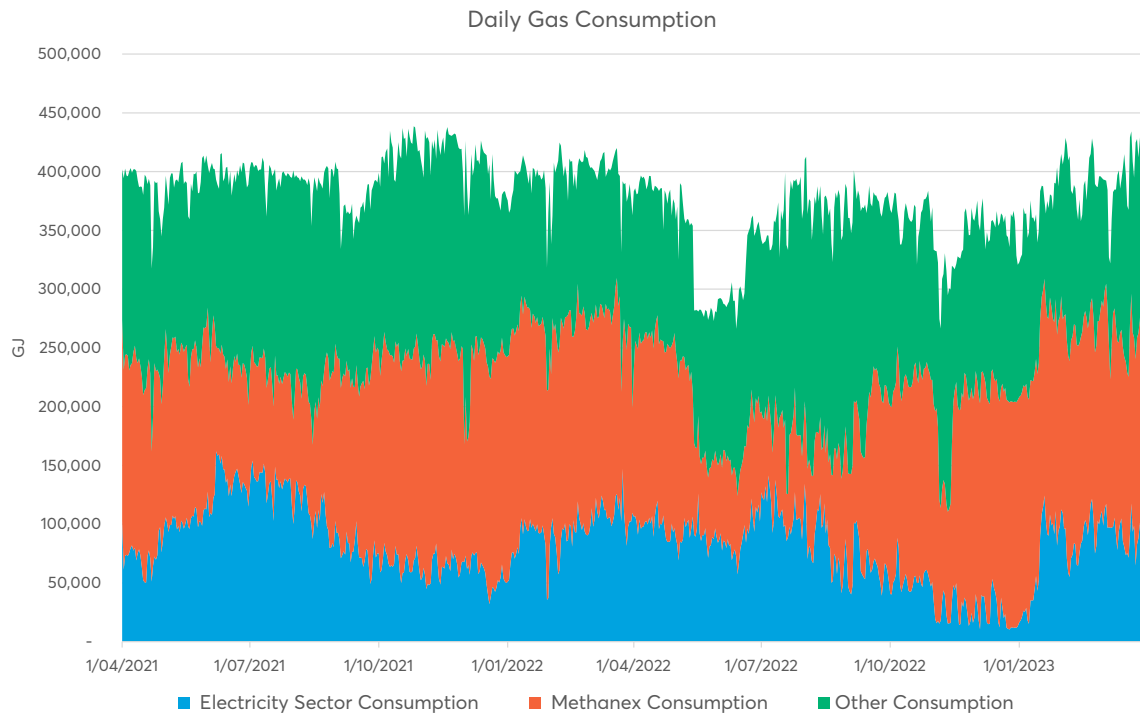


\*Excludes gas sold through private pipelines.

This graph breaks down the production of gas delivered through the open access pipeline network by field.

Maui's production has increased significantly since December 2022, while McKee Mangahewa increased in the second half of March 2023.

## Daily Gas Consumption



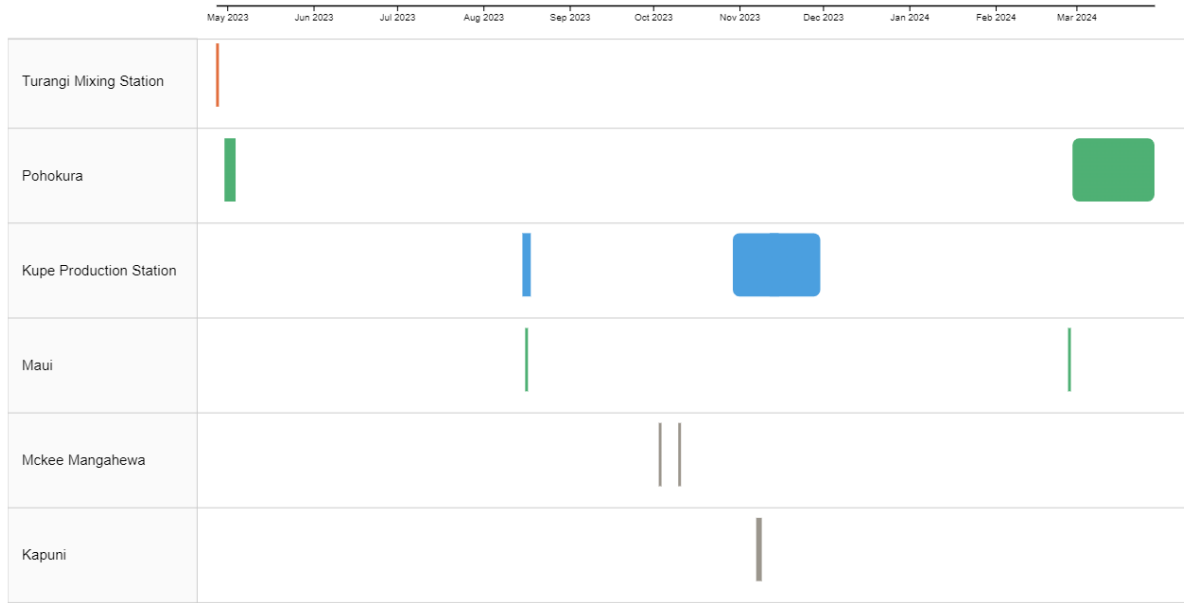
\*Excludes gas transported through private pipelines

This graph breaks down the consumption of gas delivered through the open access pipeline network. The two largest users of gas are methanol production, followed by electricity generation and cogeneration.

Gas used for electricity consumption was low during November and December 2022, but picked back up in January 2023.



## Upcoming planned outages



● Beach Energy Limited 
 ● Greymouth Gas NZ Limited 
 ● OMV New Zealand Limited 
 ● Todd Energy Limited

This graph shows all planned outages that have been disclosed through our new [outage disclosure page](#).

For more information on planned gas production outages, see our [website](#).

## 3. Our Work in Progress

### Information Disclosure Rules and new Outage Disclosure Platform

The **Gas (Facilities Outage Information Disclosure) Rules 2022** came into effect on **1 April 2023**. The Rules require the disclosure of information regarding planned and unplanned gas production and storage outages.

We have developed a new [website](#) to enable gas producers and gas storage owners to make information publicly available in accordance with the requirements of the Rules.

The website provides a more efficient disclosure process and presents disclosures in a manner that is easier for interested parties to use for their analysis. Its design also helps participants to comply with their disclosure obligations.

The new website went live on 1 April 2023 and has been well received by stakeholders.

### The Gas Industry Co Statement of Intent for the next three financial years will be published in July

Our Statement of Intent process includes a work programme and associated costs for the following financial year, and indicative activity for at least the subsequent two years.

Work programme costs are mostly funded through market fees under gas governance rules and through annual levy regulations.

The Statement of Intent is with the Minister of Energy and Resources for comment.

### Gas Transition Plan

As mentioned above, cross-government consultation on the Gas Transition Plan is continuing and a public release of a consultation draft is now anticipated around the end of the second quarter.

### Critical Contingency Exercise

This year's annual Critical Contingency exercise will be on Wednesday 10 May 2023. An overview training was held on Wednesday 19 April 2023 and ran through an overview of the regulations designed as an introduction for new industry participants and a refresher for previous participants.

The Critical Contingency Operator has posted the Participants Brief for this year's exercise - Exercise Karaka - on their [website](#).

## Industry feedback received on D+1 options

The D+1 pilot has been in operation for eight years. It provides allocations of downstream gas quantities to retailers the day after gas has flowed, allowing Firstgas to perform its own daily process, and provide shippers with information to manage their commercial positions on the transmission pipelines.

At the start of 2023 we consulted on options to transition the D+1 pilot into an enduring set of arrangements:

Non-regulatory solutions		Regulatory solutions	
<b>Option 1</b> Alternative daily information	<b>Option 2</b> Contractual arrangements	<b>Option 3</b> Core rule changes	<b>Option 4</b> Broader rule changes
<ul style="list-style-type: none"> <li>Keep daily BPP but discontinue GIC D+1</li> <li>FG uses a different process to establish daily allocations eg specified shipper algorithm</li> <li>Less accurate allocation but easier to operate</li> </ul>	<ul style="list-style-type: none"> <li>Keep D+1 operating under industry agreements without changing Rules</li> <li>Tweak agreements to meet requirements of a long-term solution</li> <li>More flexibility than regulation</li> <li>D+1 allocations could be managed by GIC or Firstgas</li> </ul>	<ul style="list-style-type: none"> <li>Amend Rules to add basic obligations eg supplying data, performing allocations</li> <li>No change to operation of D+1</li> <li>Compliance regs would provide enforcement of obligations</li> <li>Costs recovered through market fees</li> </ul>	<ul style="list-style-type: none"> <li>Make core rule changes per Option 3</li> <li>Make further improvements to D+1:</li> <li>Introduce a threshold for installing telemetry on TOU</li> <li>Merge initial and interim allocation</li> <li>Address 7-day BPP</li> </ul>

Submitters generally supported the proposal to codify the 'downstream' aspects of D+1 into the Reconciliation Rules (Options 3 & 4), but the consultation also surfaced some concerns from industry about the 'upstream' aspects of D+1 and the broader balancing regime. These matters are outside of Gas Industry Co's direct remit as they sit within Firstgas's contractual arrangements (the Gas Transmission Code and D+1 Pilot Agreement) but we will play a facilitation role if required to help the industry move forwards.

Our next step on D+1 is a Statement of Proposal on changes to the Reconciliation Rules to incorporate daily allocation arrangements, which we hope to release midyear.

## Advanced gas meter rollout gaining pace

Advanced gas meters now account for over 10% (around 30,000) of the metering installations serving the mass market. Advanced gas meters are similar to smart meters in the electricity industry that allow customers access to more granular and timely information about their energy consumption.

The rollout is being led by Vector Metering, which is deploying 100,000 advanced meters to Genesis gas customers. There are signs that other retailers and metering providers are also entering the smart metering world.

Gas Industry Co formed the Advanced Gas Metering Infrastructure (AGMI) Working Group last year to work through issues and opportunities arising from the rollout. At a recent meeting we narrowed down the to-do list, with the most significant items being changes to industry systems (the gas registry and allocation system) and associated governance

arrangements to reflect the better-quality data that that will begin to flow through the market.

### Unaccounted for gas

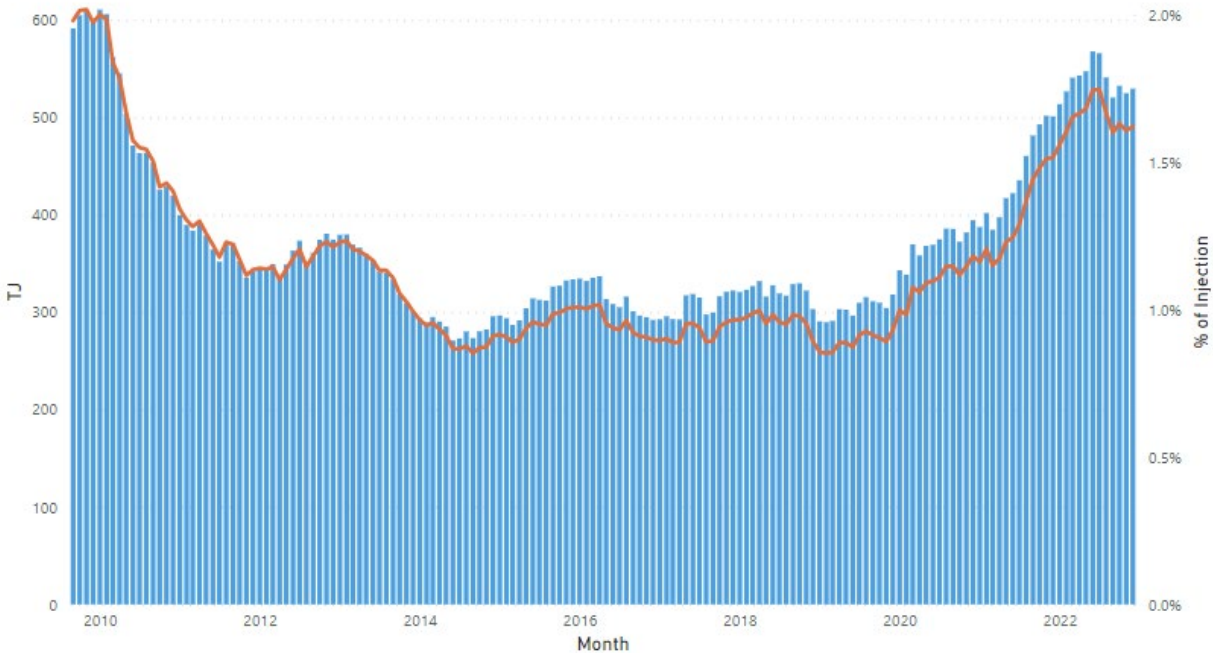
Unaccounted for gas (UFG) is the difference between the volume of gas injected into each distribution network and retailers' submissions for the volume their customers have used. Unaccounted for gas typically arises from retailer estimation error, metering or energy conversion inaccuracies, or technical losses on the system. The cost of unaccounted for gas is spread across all retailers depending on their customer mix.

The below graph shows that UFG (12-month rolling total) has increased significantly since late 2019. In response to this we have carried out a review of UFG at individual gas gates and set-up monthly monitoring of UFG at each gate as new data for gas injections and retailer submissions arrives. This initial work has helped to curb further increases, and as a result we saw UFG peak in June 2022.

However, our work to date has also highlighted that the attainment of regular monthly meter reads for small to medium sized commercial gas users (i.e. allocation group 4) remains a risk for further UFG reductions. We are expecting to receive a self-breach relating to this from one industry participant and are in the process of seeking feedback from all other industry participants, whom have these customers within their portfolios, regarding the regularity of their read attainment for those meters too. This work will inform whether meter read attainment for these customers is a risk that requires more consideration to further resolve UFG.

Rolling 12 Month UFG

● UFG TJ ● UFG % of Injection (right axis)



## Firstgas hydrogen blend trial

As part of its future fuels strategy, Firstgas, in coordination with the other gas distribution businesses, is planning a short-term, hydrogen-blending trial on a small downstream gas network. There are many overseas examples of hydrogen blending in distribution networks, but this will be the first of its kind in New Zealand.

Firstgas is engaging with market participants, Worksafe and Gas Industry Co on the implications of the trial. Gas Industry Co's involvement is predominantly to make sure the downstream reconciliation arrangements continue to operate effectively with the introduction of blended gas to customers on the network.

## Find Us

Gas Industry Co is the industry body that co-regulates gas to ensure New Zealanders enjoy safe, efficient, fair, reliable, and environmentally sustainable gas delivery. We work closely with industry players and regulatory agencies to develop arrangements and regulations.

To get in touch or to find out more about the work we do, please contact us on 04 472 1800 or at [info@gasindustry.co.nz](mailto:info@gasindustry.co.nz) or head to our website [www.gasindustry.co.nz](http://www.gasindustry.co.nz)