

Quarterly Update

October 2022

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 production volumes in the quarter have been slightly below volumes of a year ago, with a production increase at Pohokura slightly offsetting lower production compared to the same quarter a year ago from the Maui and Kupe fields.

Gas Industry Co continues to urge caution about gas availability over the coming winters, although field operators are continuing to commit development investment to maintain required volumes.

Although high lake levels this year have eased demand for gas to support renewable electricity generation, most gas volumes are fully contracted under long term contracts and are therefore unavailable for electricity generation (outside of supply emergencies).

Our 2021 <u>Gas Market Settings Investigation</u> advised that improvements are needed in commercial arrangements to ensure sufficient volume and flexibility of gas supply is in place far enough in advance to promote security of supply for electricity. Our Investigation report said improved arrangements would provide increased predictability for major gas users' operations, noting that arrangements are needed specifically for the electricity generation sector (rather than other major users), because it is generators' operations that need the volumes of flexible thermal fuel supply.

We understand that MBIE is progressing work on options, with close collaboration across regulatory agencies to provide stable, consensus outcomes.

We advise industrial and commercial customers with upcoming contract renewal to 'go to market' for supply well in advance of the contract expiring, to reduce the exposure risk associated with low hydro inflows impacting on gas supply in Q2, 2023.

Gas Transition Plan work continues

Targeted engagement with industry is taking place alongside workstreams looking at transition options as Gas Industry Co continues its work with MBIE on a draft Gas Transition Plan. The plan has two complementary pillars - one looking at transition pathways for natural gas focusing on budgets to 2035, and the other focused on low emissions gases and emissions capture.

Work on both pillars is well-advanced amid optimism that alternatives may be viable that provide faster emissions reductions than the emissions reductions budgets. Emissions budgets anticipate that some gas use remains even in net zero-2050. Three options exist to reduce CO_2 emissions from the natural gas sector:

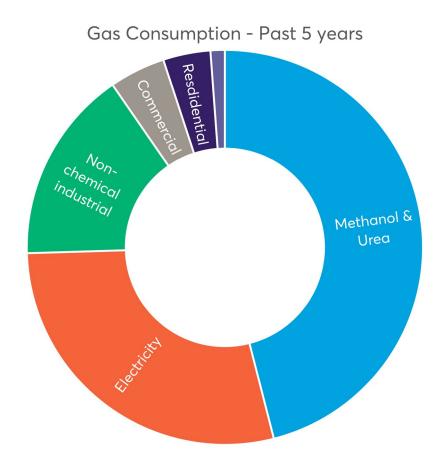
Low emissions gas such as biogas, and emissions capture technology (although there
are cost impacts and there is a limit to how much renewable gas can be produced);

- Switching to electricity or other non-gas fuels (but there are cost consequences for many users and a continued carbon component to non-gas thermal fuels).
- Exiting where neither fuel switching nor low-emissions options are available, which may present wider social and economic costs, especially in regional communities.

The draft transition plan is expected to surface options and trade-offs. It will be released for public consultation in the second quarter of 2023, for finalisation in late 2023 as an input into the government's energy strategy due in 2024.

2. Gas Industry Insights

Only 4% of gas is used by households and 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.

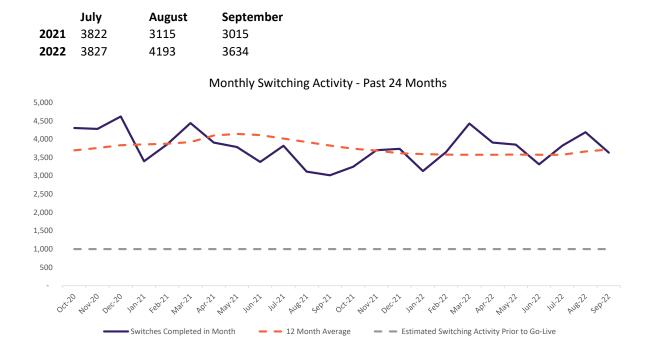
Market analysts looking for detail about prices can quickly locate emsTradepoint daily gas prices and delivered quantity.

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

Quarterly Data

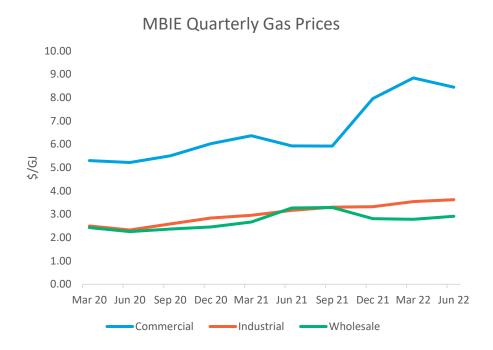
Residential switching still sits an annual churn rate of 14%

Over the past 12 months an average of 3,586 switches per month were completed, which translates to an annual churn rate of about 14 percent.



Around 81 per cent of consumer switches are completed within three business days and 97 per cent are completed within seven business days.

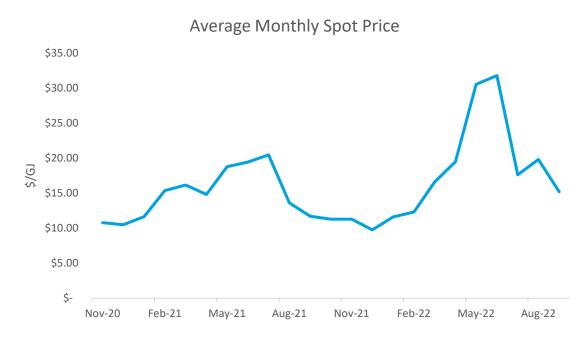
Quarterly Gas Prices show Commercial pricing has risen due to constrained supply



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, of which around 95% is traded via long-term bilateral contracts.

Commercial prices rose steeply from September 2021 to March 2022 but have levelled off in the quarter to June 2022. Meanwhile, gas prices for larger users, which is represented by industrial and wholesale prices in the above graph, have continued to rise steadily over time, with wholesale prices rising slightly in mid-2021.

Monthly Spot Prices do not reflect trends in the contract market

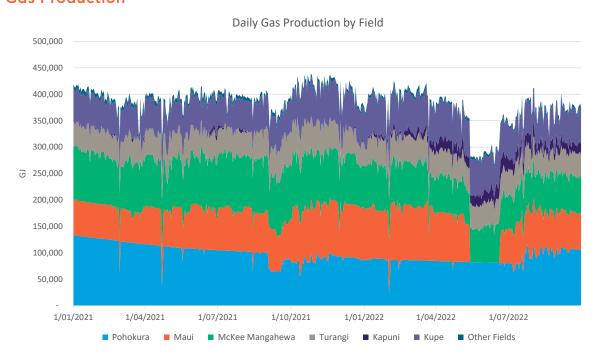


^{*}Spot price includes daily trades and forward prices.

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 2020.

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

Gas Production



^{*}Excludes private pipelines.

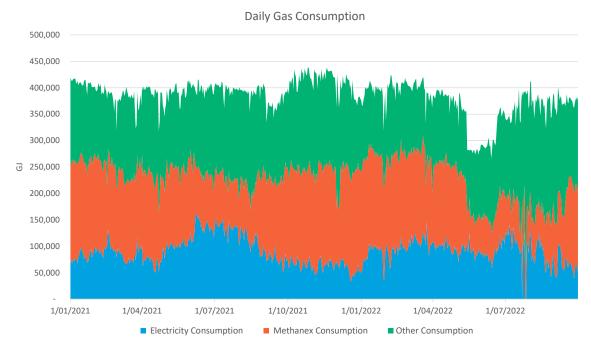
This graph breaks down the production of gas delivered through the open access pipeline network by field.

While Maui has restarted from its full outage last quarter its production has not reached its previous levels. Maui averaged 75 TJ/day this quarter, compared with 100 TJ/day in the quarter ending March 2022.

Pohokura's production has lifted over the quarter, producing an average of 98 TJ/day, compared 82 TJ/day for the June quarter. While the much the quarter was quite unstable production has been more stable, albeit slowly declining, from mid-September.

Kupe's production was down slightly, producing 60 TJ/day this quarter compared with 67 TJ/day in the June quarter.

Daily Gas Consumption affected by production outage



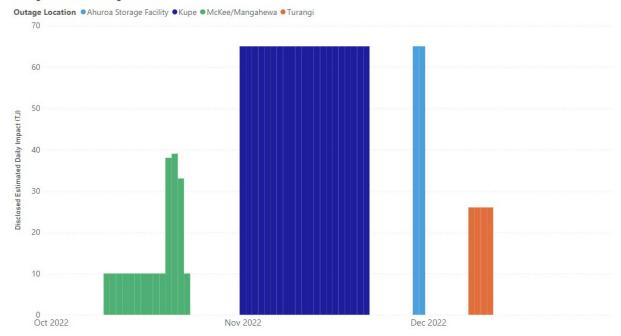
*Excludes private pipelines

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.

Methanex's consumption fell considerably during the June quarter in response to an outage at Maui but recovered in the second half of September.

Upcoming planned outages





This graph shows the planned outages at gas fields and storage facilities between October and December 2022. For more information on planned gas production outages, see our website.

3. Our Work in Progress

Gas Transition Plan

The Emissions Reduction Plan includes work to develop a <u>Gas Transition Plan</u> to drive emission reductions from the natural gas sector. The plan will be a key input into a broader Energy Strategy, showing how emissions from gas can be reduced in line with targets in emissions budgets, legislation, and in New Zealand's international commitments.

Gas Industry Co is working with the Ministry of Business, Innovation and Employment to develop the plan. The Ministry is engaging with consumers, non-government organisations, other interested parties, and Treaty partners. Gas Industry Co is engaging closely with industry as the plan develops.

Work to develop the plan commenced in May 2022. Public consultation on the plan is expected around mid-2023 before it is finalised and published in the second half of 2023. The Energy Strategy is expected at the end of 2024.

Current workstreams include detailed work on

- Transition pathways for natural gas, focusing on the first 3 budget periods (to 2035).
- Uncertainties and decisions that need to be made about infrastructure and costs.
- A cohesive view about developments in renewable gas markets.
- The role of green hydrogen, biomethane, renewable LPG and emissions capture.

The focus of work is to develop scenarios and define options and tradeoffs that help decision-makers understand how the emissions budget could be met, including market and regulatory tools and costs. Where alternatives are promising, but there is insufficient confidence that technology will be ready in the budget timetables, those options will not form part of the pathway for the first three pathways.

The Gas Industry Co Annual Report was published in September

Our Annual Report process includes a reflection on the past financial year's work programme, upcoming strategy, financial statements, corporate governance, and co-regulation.

The Annual Report was delivered to the Minister, then gazetted and published on our website.

Electricity Price Review Final Guidelines

We published our final <u>guidelines</u> to align the gas industry's processes with the Electricity Price Review's recommendations for the electricity market.

Our workstream involved several rounds of consultation with industry, culminating in three recommendations proposing the introduction of new guidelines for gas industry participants. We

will be monitoring industry alignment with the guidelines and the outcomes of this monitoring will be used to inform any additional work that we undertake in this workstream.

Gas (Facilities Outage Information Disclosure) Rules published

The Gas (Facilities Outage Information Disclosure) Rules 2022 have been published.

The Rules have been made under Section 43Q of the Gas Act. The Rules come into effect on 1 April 2023. Gas Industry Co is currently investing in an enhanced Information Disclosure website to make it easier for participants to comply with new regulations.

The rules can be found on our website, here.

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 or head to our website www.gasindustry.co.nz