

QUARTERLY UPDATE

Quarter ended 31 December 2020

About us

Gas Industry Company 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.

We have revamped the way we share what we do

We report to the Minister of Energy and Resources every quarter with an update on our current or upcoming work programmes and the state of the gas market. Gas users, suppliers and other regulators also have an interest.

We have re-styled this Quarterly Update to make it more useful

We're putting a clearer focus on need-to-know information. The first section reports developments in the gas sector. The second section informs you about the work we are doing.

- We're removing content that is repeated from one period to the next.
- This report should be a quick, worthwhile update.

We try to provide first-rate advice

Gas Industry Company applies our breadth of knowledge about the gas sector in New Zealand to analyse issues and keep decision-makers informed. Our website has further information about who we are and what we do: www.gasindustry.co.nz

1. Gas Today

Current information Disclosure arrangements are working well with further improvements under review

Current information disclosure arrangements —specifically the upstream industry’s voluntary disclosure of information under its Industry Code, put in place last year— have been working well.

We released our Draft Statement of Proposal (Draft SOP) for gas production and storage facility outages in December. This paper is an assessment of various long-term options for the disclosure of gas production and storage facility outages. The Draft SOP includes a review of the Industry Code as well as a regulated alternative. Submissions on this paper will be used to develop the final Statement of Proposal which will recommend an option. (See below).

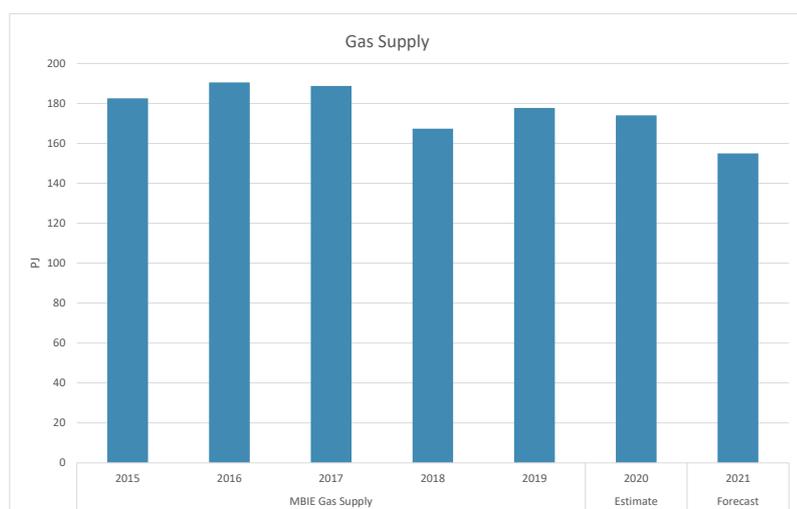
Some industry players are proactively providing information beyond minimum disclosure requirements

In late 2020, the Pohokura field joint venture disclosed that the field will produce significantly less gas in 2021 than at its peak production rates. This disclosure went above and beyond industry code requirements applying to short-term outages. The initiative provides energy markets with considerable forward notice to prepare for the lower gas volumes. This proactive disclosure demonstrates a willingness of industry players to share information generally.

Locking in information disclosure gains

The Gas (Information Disclosure and Penalties) Amendment [Bill](#) is expected to pass in 2021. Among other things, the Bill enables the option of regulated information disclosure arrangements if these are required.

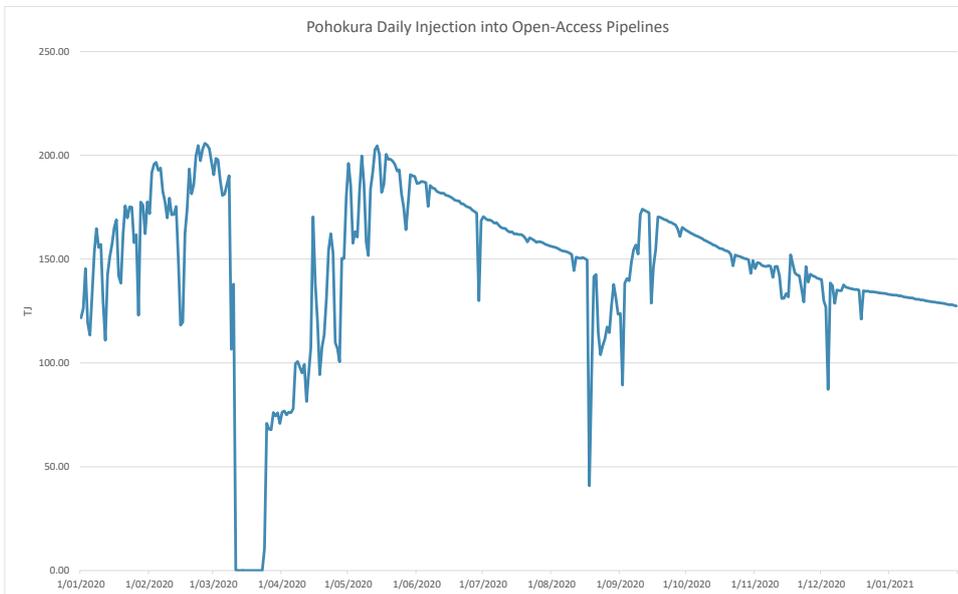
Total gas produced in 2021 will be down compared to 2020



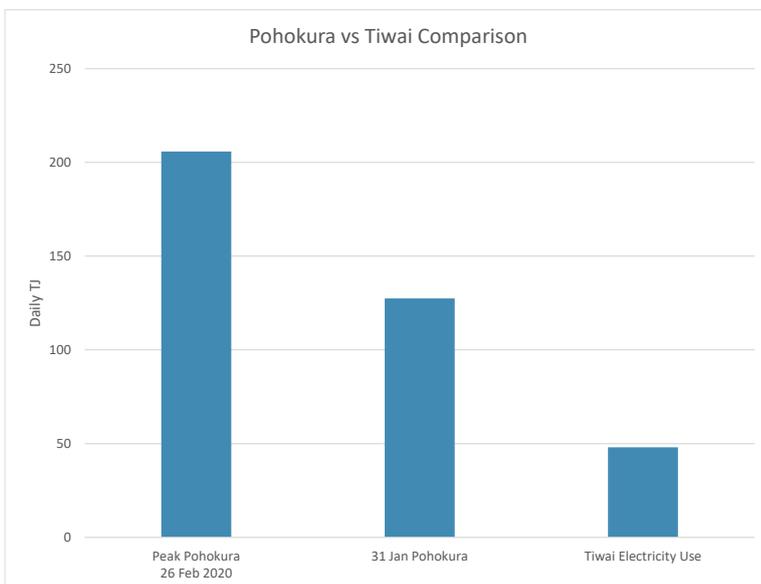
Gas Industry Company expects 150-160PJ of gas to be used in 2021, compared to 174PJ in 2020. Several fields are producing less gas than last year, most notably the country’s largest field, Pohokura, which is down by about a third.

Pohokura field production decline is faster than expected

Production from Pohokura exceeded 200TJ/day at its peak. So far in 2021 production has dropped to around 130TJ/day.



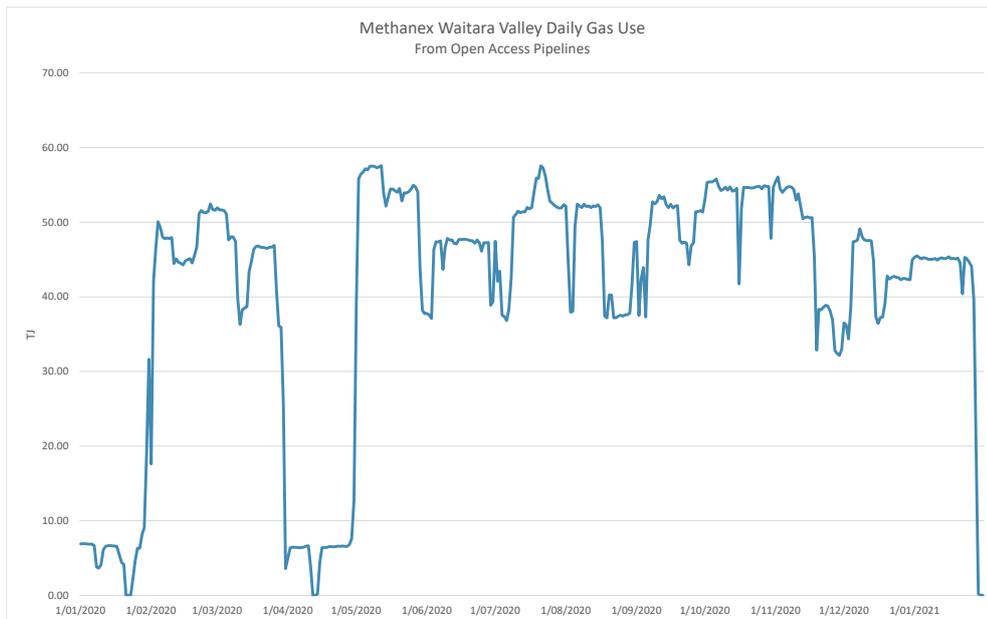
By way of comparing the energy value of the production decline, the Tiwai smelter has been using around 48TJ/day (13.5GWh) of electricity. While the two are not directly comparable due to losses in using gas to produce electricity, the below graph provides a comparison of raw energy value.



The Pohokura reduction is due to subsurface issues impacting well performance.

Methanex is idling its Waitara Valley plant

Methanex has announced it will idle its methanol manufacturing plant in Waitara when the plant's certification expires in the first quarter of 2021.



Methanex has idled plants in the past, including between 2008 and 2013. It also mothballed its Motunui production units after the Maui redetermination in the early 2000s.

The Methanex demand response means there is enough gas available

Electricity generators have received early notice of the reduced availability under disclosure regimes and this provides them with ample opportunities to respond. There should be no significant impact on electricity prices as a result, as the costs of generating and the gas itself have not changed.

Sufficient gas is available to support normal electricity generation

In December 2020, Contact Energy announced that it would receive less gas for generation from Pohokura.

This reduction affects the volume of gas that will be used in electricity generation this year, but the most important role of gas in electricity is peaking supply when renewable availability is limited. Gas Industry Company assesses that enough gas is available for normal intermittency requirements this year.

Gas prices have not significantly changed

Because most gas is supplied under long-term contracts, there have been few short-term price responses to the reduced 2021 supply. The cost of producing gas has not changed. Spot gas prices varied from \$15-16/GJ in mid-December to around half that price in mid-January, before increasing again subsequently.

But some industrial users are experiencing tight contractual conditions

Industry participants have told us market conditions are uncertain for a number of larger gas consumers, particularly for those seeking new gas supply contracts in 2021. Major users contract gas for high temperature process heat. Gas supply agreements between wholesalers and larger consumers are evolving and a period of transition for commercial arrangements is underway, where price and terms are being re-negotiated.

Investment in existing fields will relieve pressure soon

Gas producers are continuing to invest steadily in developing additional gas. On-going field development at the Mangahewa and Maui gas fields is expected to unlock more supply during 2021. This will ease some of the pressure on gas availability if investment continues.

Some new production was delayed by covid-19, but sufficient investment is occurring to provide medium-term confidence in supply.

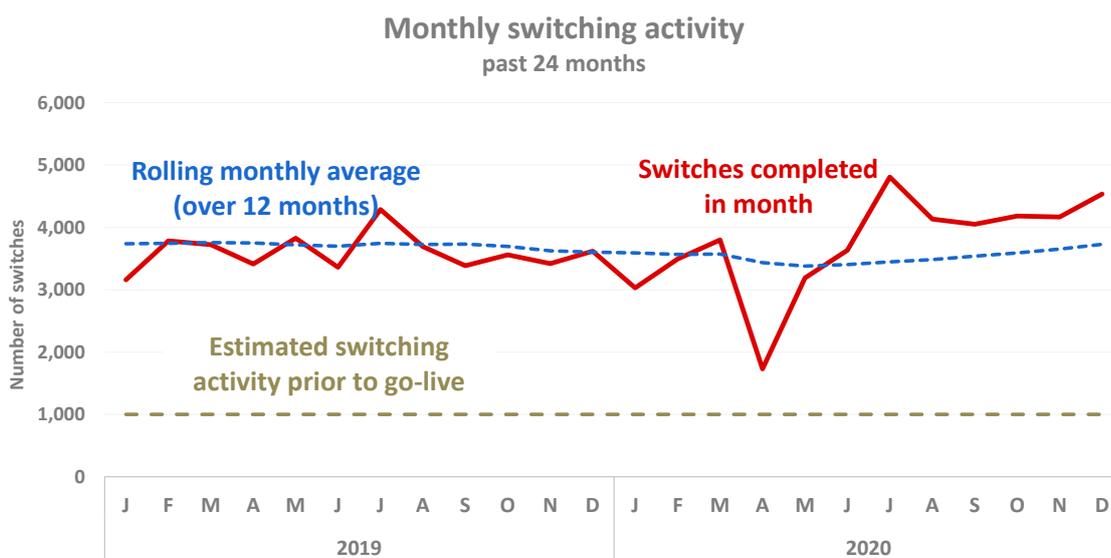
Gas switching shows the residential gas market is working well

The rate of gas switching continues to accelerate, demonstrating that the market is working efficiently and competitively.

In the past 12 months, there have been an average of 3,866 switches completed per month, which translates to an annual churn rate of about 15.3 percent.

The number of switches each month appears to be accelerating.

	October	November	December
2019	3648	3524	3707
2020	4313	4289	4646



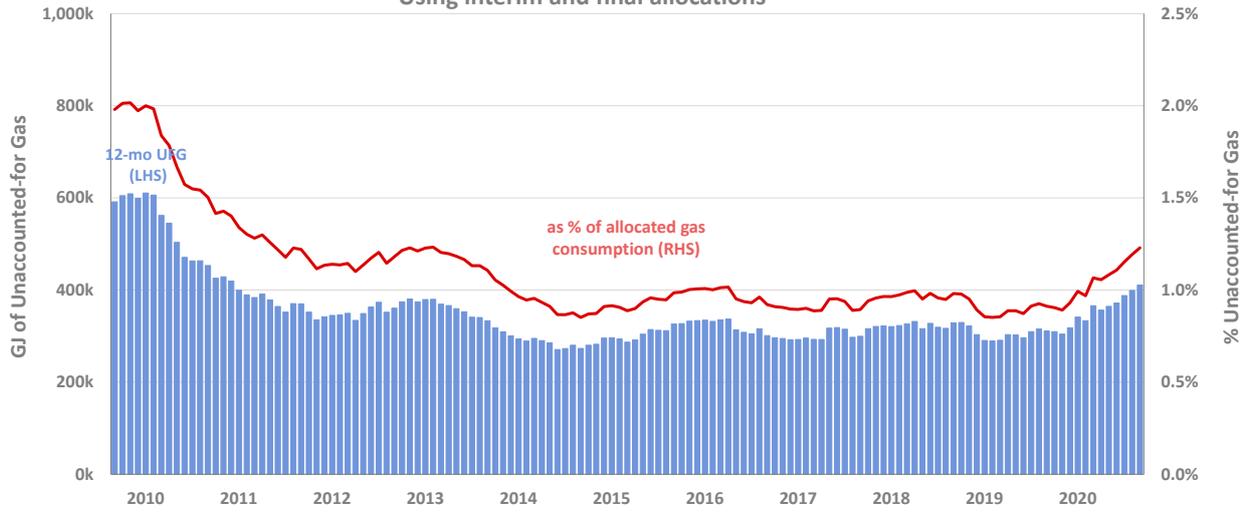
Around 72 per cent of consumer switches are completed within three business days and 98 per cent are completed within seven business days. This is a substantial improvement over 2009, when only 39 per cent of switches were completed within three business days and 50 per cent within seven.

Unaccounted for gas losses

Unaccounted for gas is supplied into the system but not used by any end customer – for example, gas lost in transmission.

In 2009, 2 per cent of gas was unaccounted. Annual average unaccounted for gas over the past year was down to about 1.2 per cent.

Annual unaccounted-for gas by volume and percentage Using interim and final allocations



2. Our Work in Progress

We're looking into security and certainty of gas supply in New Zealand

Gas Industry Company has begun an [investigation](#) into whether current market, commercial and regulatory settings that provide for gas availability and flexibility are fit for purpose in supporting the transition to 100% renewable electricity.

The project was initiated by the Minister of Energy and Resources and the response is due by mid-2021. The response will set out current arrangements, identify any potential issues, and propose a work programme to address any issues identified.

Our Statement of Intent for the next two financial years will be published in March

Our SoI process includes establishing a work programme and associated costs for the following financial year with indicative activity for at least the subsequent two years. The work programme costs are principally funded through market fees under gas governance rules and through annual Levy Regulations.

The co-regulatory model relies on industry and government input to develop the Statement of Intent and we have found early engagement with stakeholders on strategic and work priorities to be invaluable.

Gas in a renewables-rich future report

We have been preparing a paper examining the role of gas in a renewables rich future, particularly over the next 15 years. The paper will focus on the commercial arrangements and investment structures required for gas availability and deliverability to meet demand under a range of possible futures. This report will be completed in early 2021. We expect that this project will feed into the security and certainty of gas supply in New Zealand investigation which was initiated by the Minister of Energy and Resources.

Short-term supply and demand study

We have engaged Concept Consulting to carry out a 5 year supply and demand study of the gas sector, with a specific focus on electricity security of supply. This report will be completed in early 2021. As well as providing information about the status of electricity security of supply in response to gas availability, we expect that this project will feed into the security and certainty of gas supply in New Zealand investigation which was initiated by the Minister of Energy and Resources.

Electricity Price Review recommendations assessed for gas

The 2019 Electricity Price Review recommendations did not extend to the gas industry, however Gas Industry Company has nevertheless consulted on whether the 32 recommendations are applicable to gas markets.

On 6 November 2020, we released a consultation paper *Extending the Electricity Price Review's Final Recommendations to the Gas Market – An Assessment*. We are currently reviewing submissions from a wide range of stakeholders and intend to publish our final recommendations in early 2021.

Information Disclosure draft Statement of Proposal out for submissions

Following discussions over information disclosure rules, Gas Industry Company is seeking submissions on the draft *Statement of Proposal (SOP) for gas production and storage facility outages*. Submissions close at 5 pm on Thursday 4 March 2021.

We are developing separate papers on two issues where further work is required:

- whether major gas user outage information should be included in an information disclosure regime.
- whether there are information transparency and asymmetry issues regarding contract price and volumes in the wholesale gas market and options for how these might be addressed

Hydrogen regulatory issues investigation

Through its statutory role as the co-regulator of all gases, Gas Industry Company has begun a workstream to engage with industry around early-stage regulatory issues. As a first step, we engaged PwC to undertake a high-level survey of the regulations and legislations that may apply across the hydrogen value chain. The survey has highlighted the various regulatory agencies that may have regulatory responsibilities and what their responsibilities may be. This has set us up well to begin our next stage - engaging with the various agencies to create a common understanding of the future regulatory landscape.

Hydrogen and biogas certification

Gas Industry Company has also reviewed options for the development of a robust and credible certification system for biogas and hydrogen. This work could provide greater optionality for the gas industry transition.

GAS INDUSTRY INSIGHTS

Gas production and major user consumption

Gas production and consumption charts showing gas output from most major fields, and the consumption of gas by several large users are updated three times a week and can be found [here](#).

ABOUT US

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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