

Performance Measures Quarterly Report for the period ending 31 March 2015

1 Summary

This Report provides an update on the performance measures that Gas Industry Co monitors on a regular basis. The purpose of these measures is to track the performance of the Gas (Switching Arrangements) Rules 2008 (the Switching Rules), the Gas (Downstream Reconciliation) Rules 2008 (the Reconciliation Rules), and the Gas Governance (Critical Contingency Management) Regulations 2008 (CCM Regulations), both in terms of activity related to these governance arrangements and the competitive outcomes that they foster. The Report also tracks transmission balancing actions, as a means of informing Gas Industry Co's work on this issue.

Explanatory details about the charts can be found in the Appendix to this report.

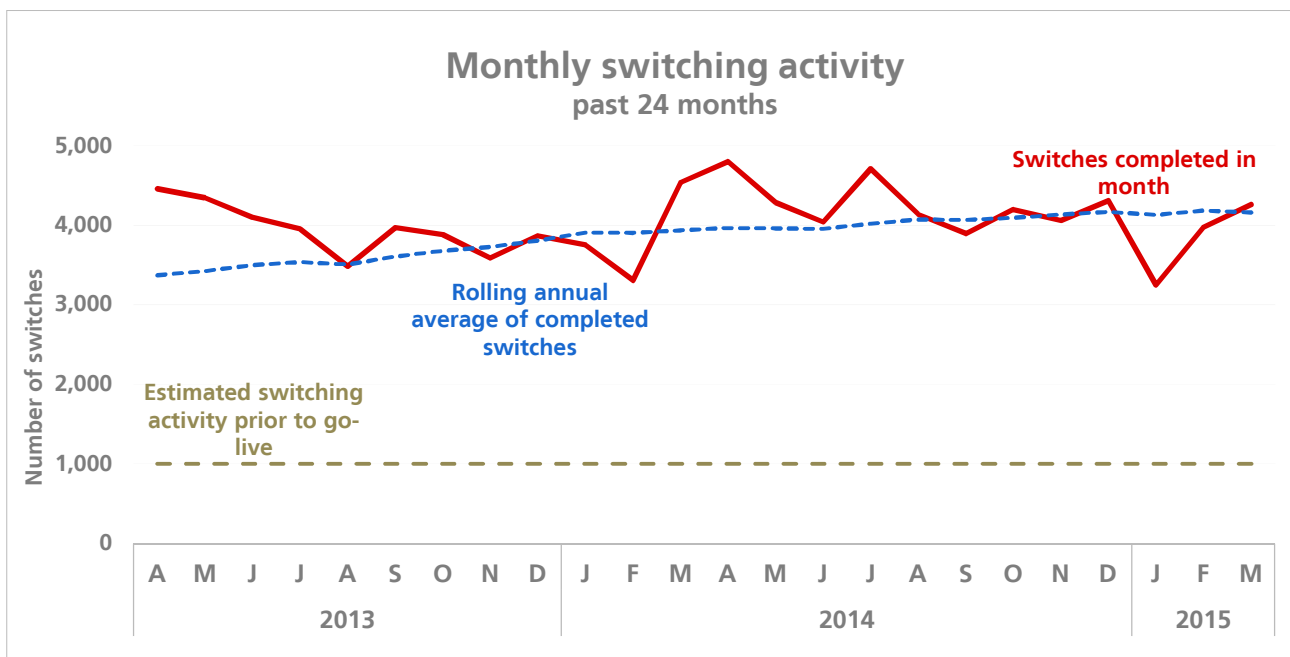
Highlights of the Report:

- The annual rate of switching for the past 12 months is 18.7%, up from the 17.3% switching rate experienced in calendar 2013.
- In the first three months of 2015, 80% of switches were completed in seven days or less, compared with a rate of 50% in 2009.
- 52% of residential consumer sites have switched retailer at least once in the past five years; 64% of small commercial and 73% of large commercial sites have switched at least once.
- Average annual unaccounted-for gas (UFG) over the past year stands at about 1.0% (compared with about 2% in 2009).
- Genesis is the largest retailer by customer share; it is also the largest retailer in the residential and large industrial markets. Nova Energy has the largest share of commercial customers.
- In all regions, the gas retail market has become less concentrated in the past five years, as measured by the Herfindahl–Hirschman Index (HHI), due to new retailers entering the market and smaller retailers increasing their market shares.

- In terms of market share by gas volumes, Nova and OnGas are the largest retailers, reflecting their focus on the industrial and commercial sectors of the gas market.
- Pulse Energy entered the retail gas market in October 2014, increasing the number of retail gas brands to ten. Over 99% of gas consumers are connected to a gate where least seven retailers trade, demonstrating that gas retailers generally are competitive throughout the North Island.

2 Switching performance measures

Chart 1: Monthly switching activity



- Over 4,000 consumers switch gas supplier per month on average.
- The churn rate for the 12 months to March 2015 is 18.7%.

Chart 2: Regional switching activity

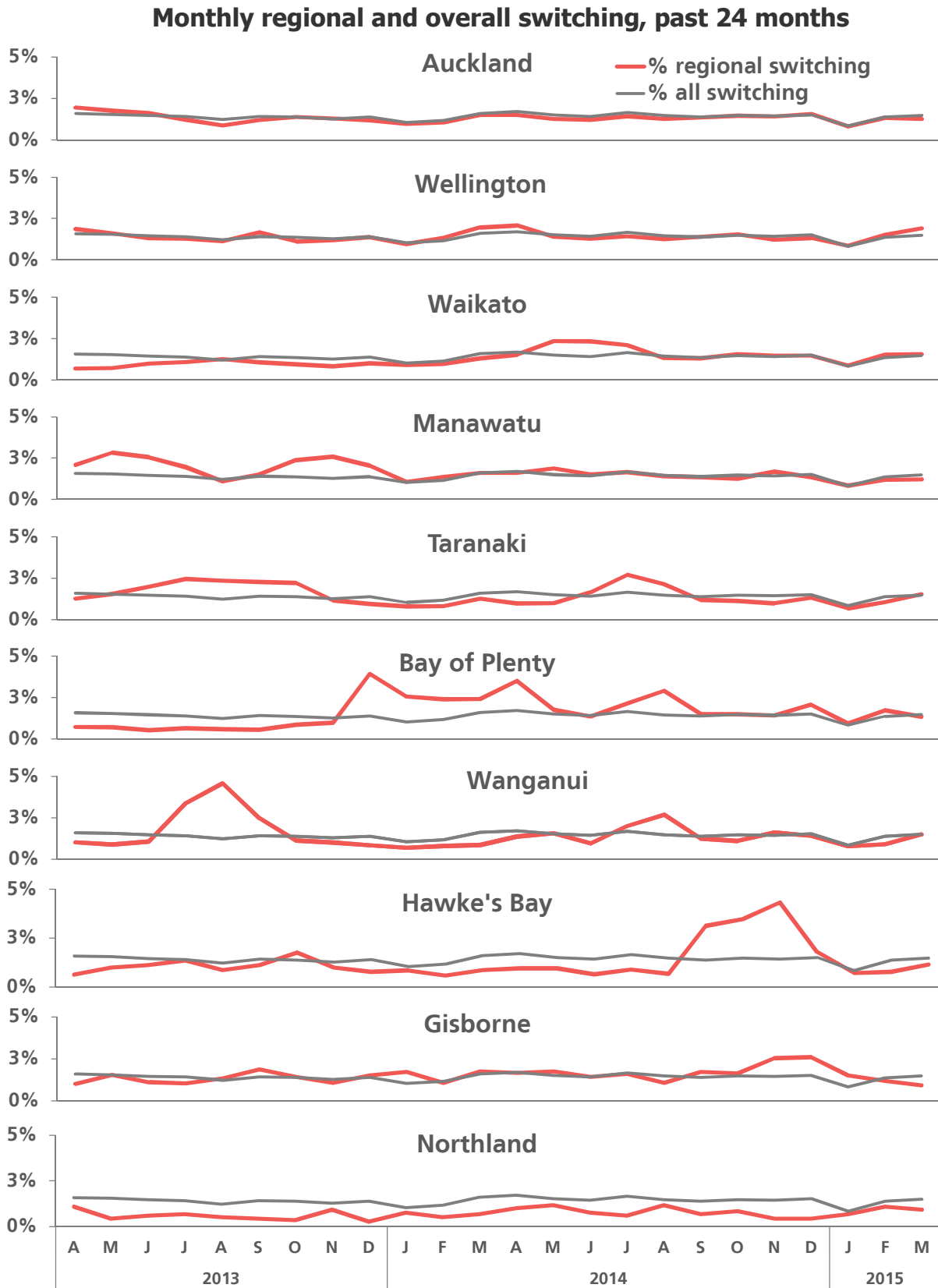
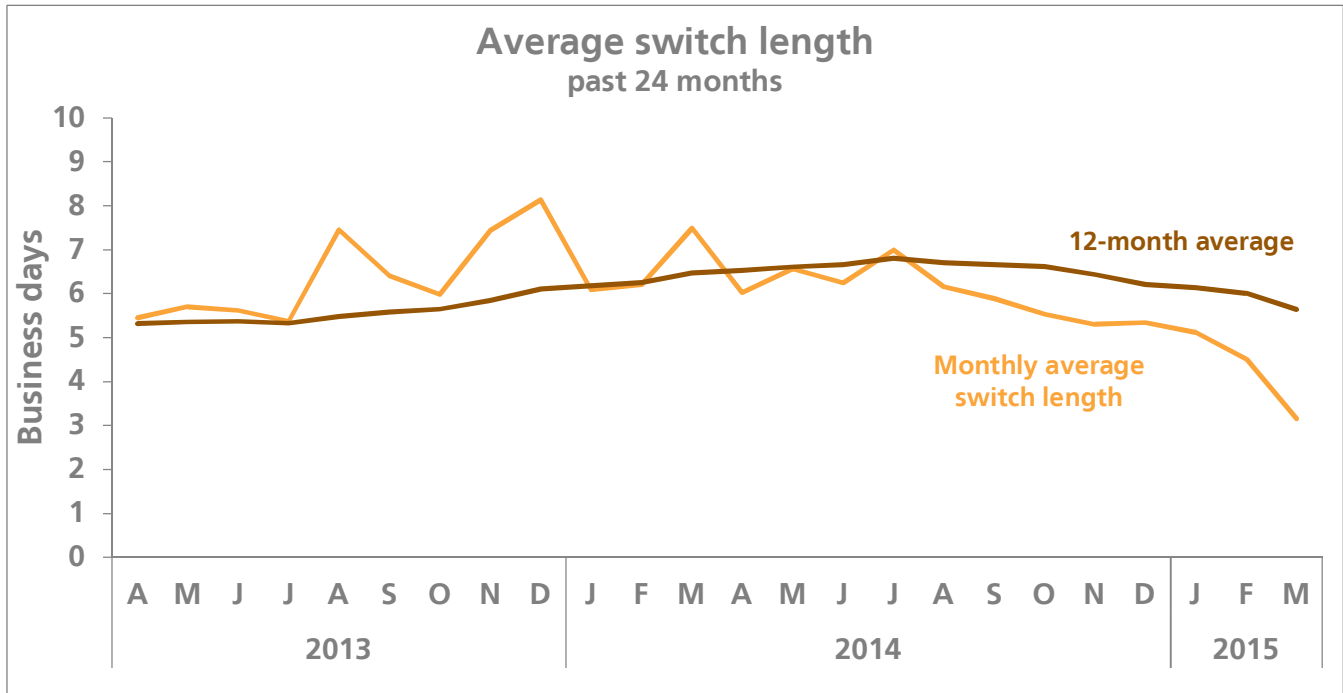
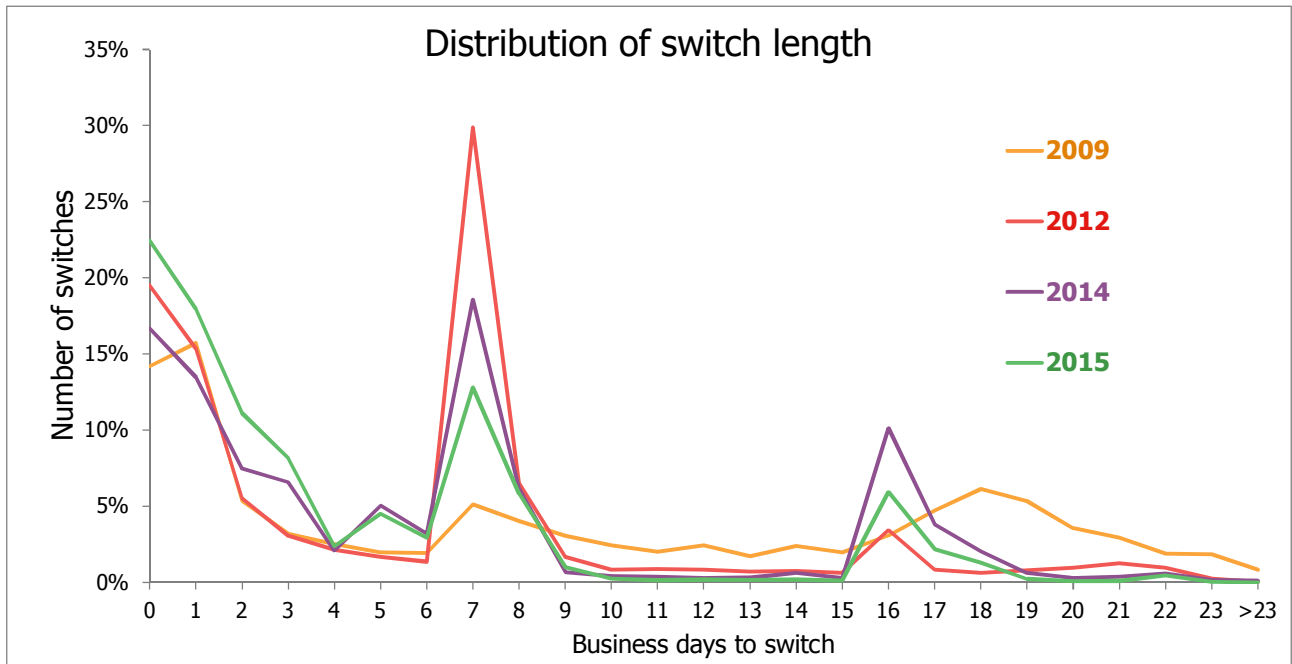


Chart 3: Time to process switches



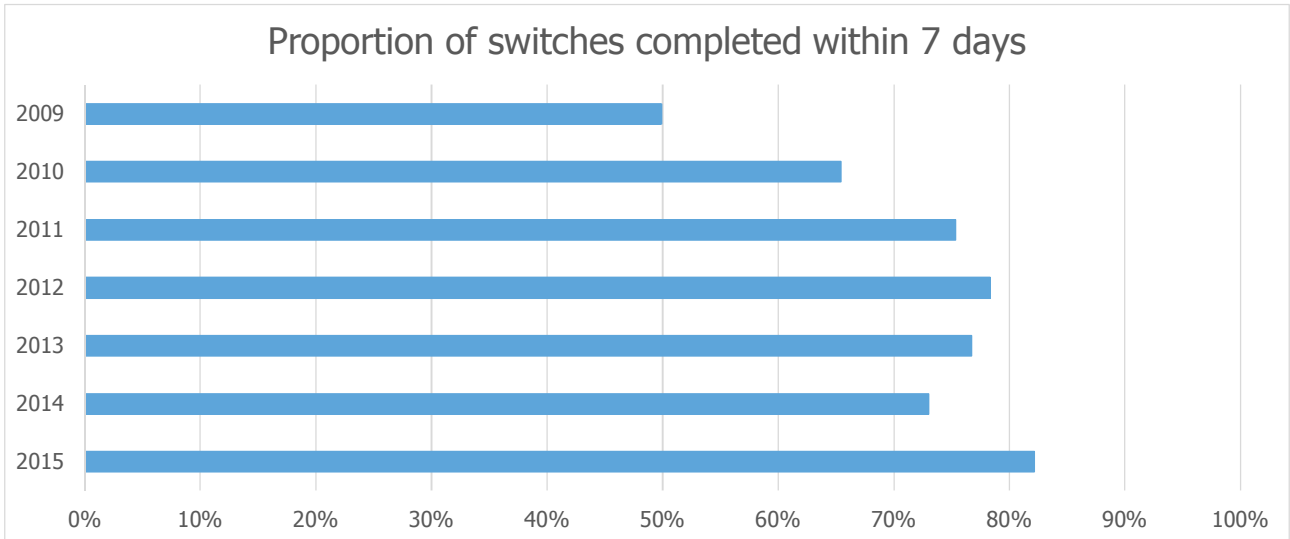
- The 12-month average switching time is about 6.1 business days.
- Note that the switching figures for March are skewed, as they show the completed switches that originated in March. Some March switches have yet to be completed.

Chart 4: Distribution of switching length



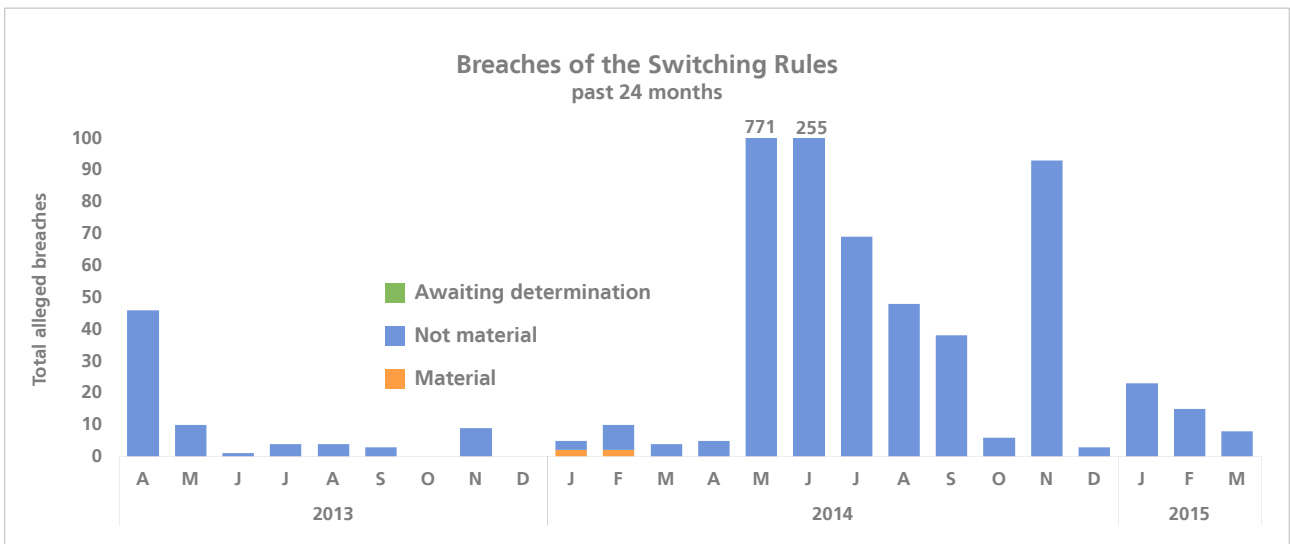
This chart shows the distribution of switching times for the calendar years of 2009, 2012, 2014, and the first three months of 2015. More and more switches are being completed within one day.

Chart 4a: Proportion of switches completed within seven days



This chart shows that the proportion of switches completed within seven days has increased – from about 50% of switches in 2009 to over 80% in 2015.

Chart 5: Number and severity of breaches of the Switching Rules



- Most of the breaches in May and June 2014 relate to delays in responding to switching notices by Contact Energy, when it was in the midst of its IT upgrade.

3 Allocation and reconciliation performance measures

Chart 6: Volumes of unaccounted-for gas (UFG)

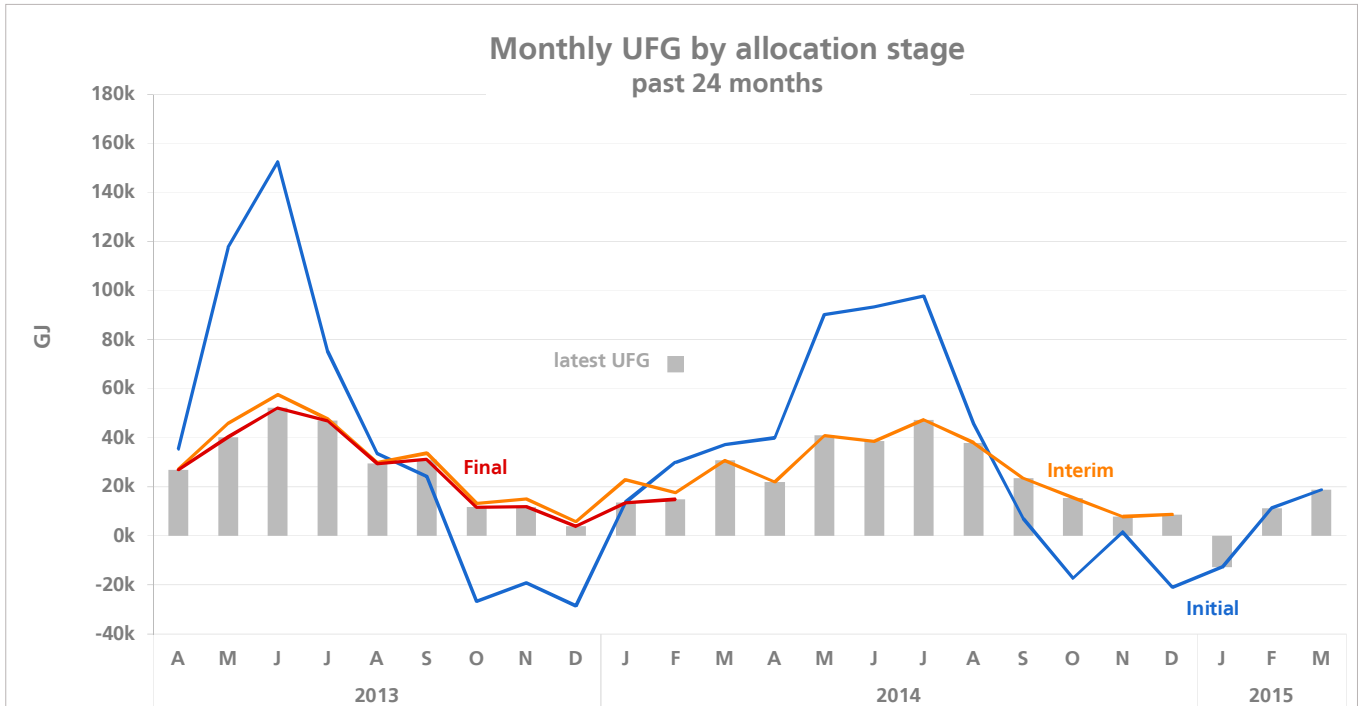


Chart 7: Percentage of UFG

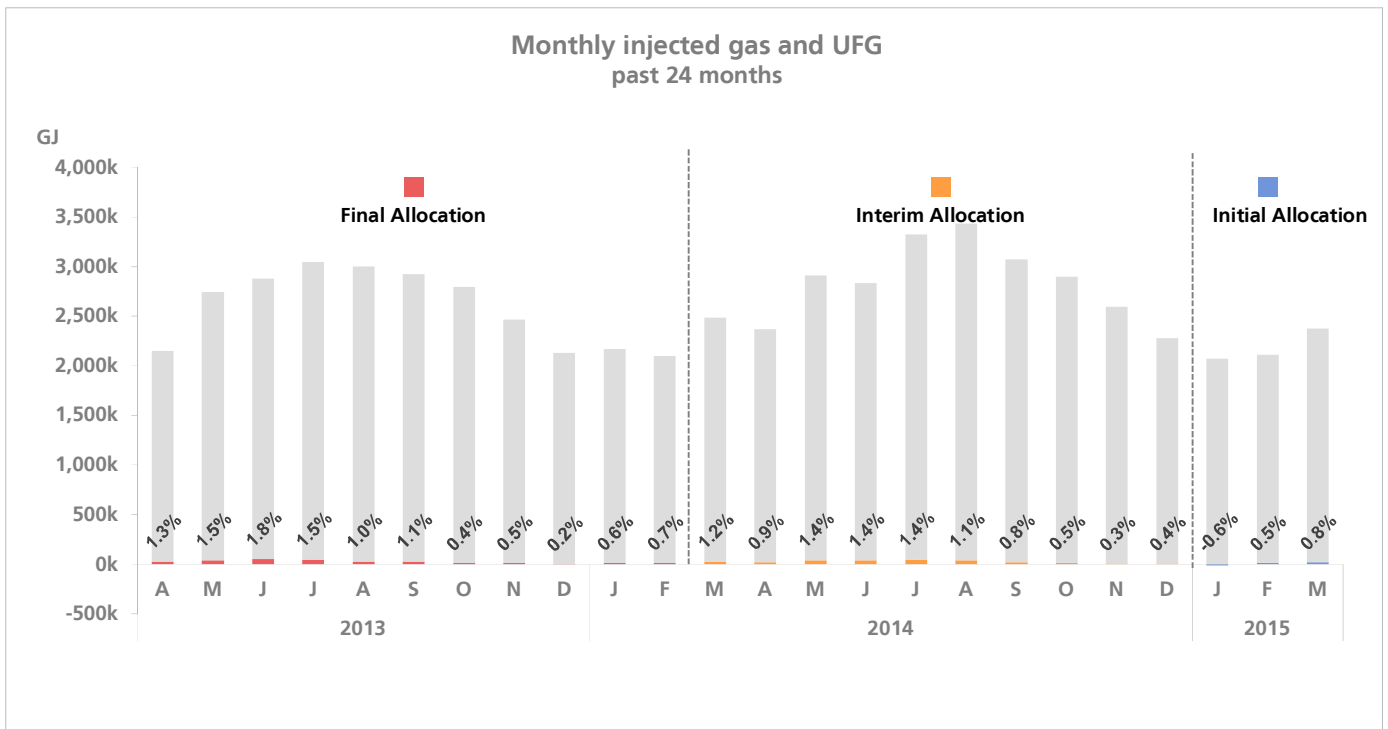
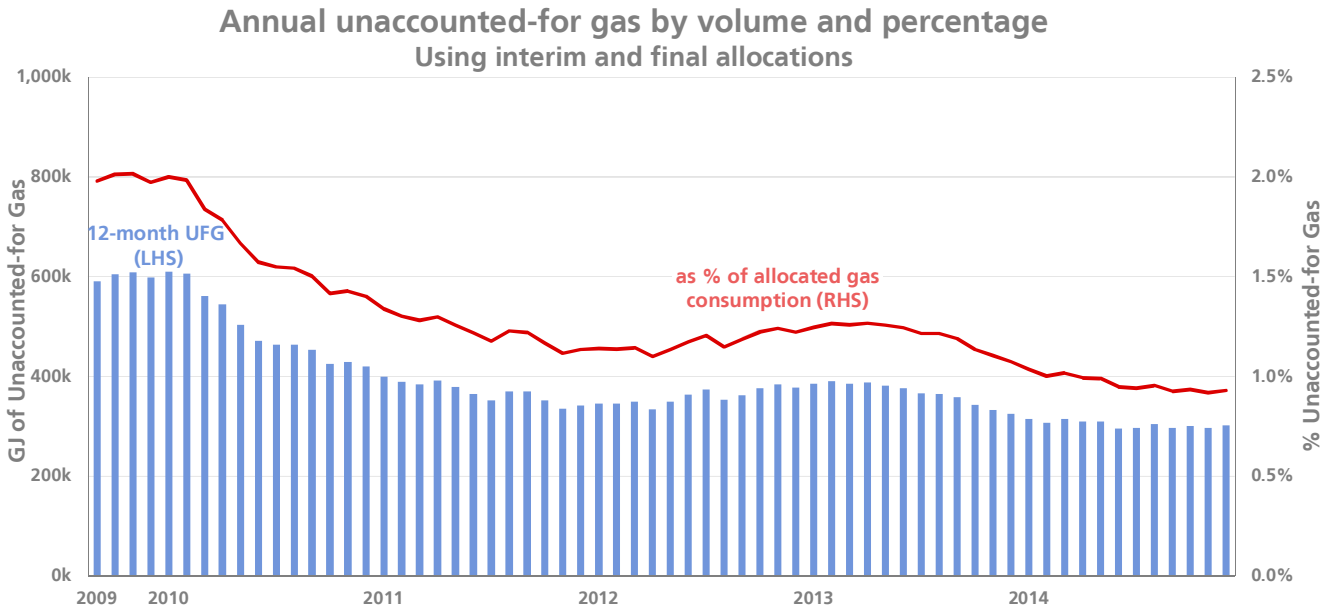
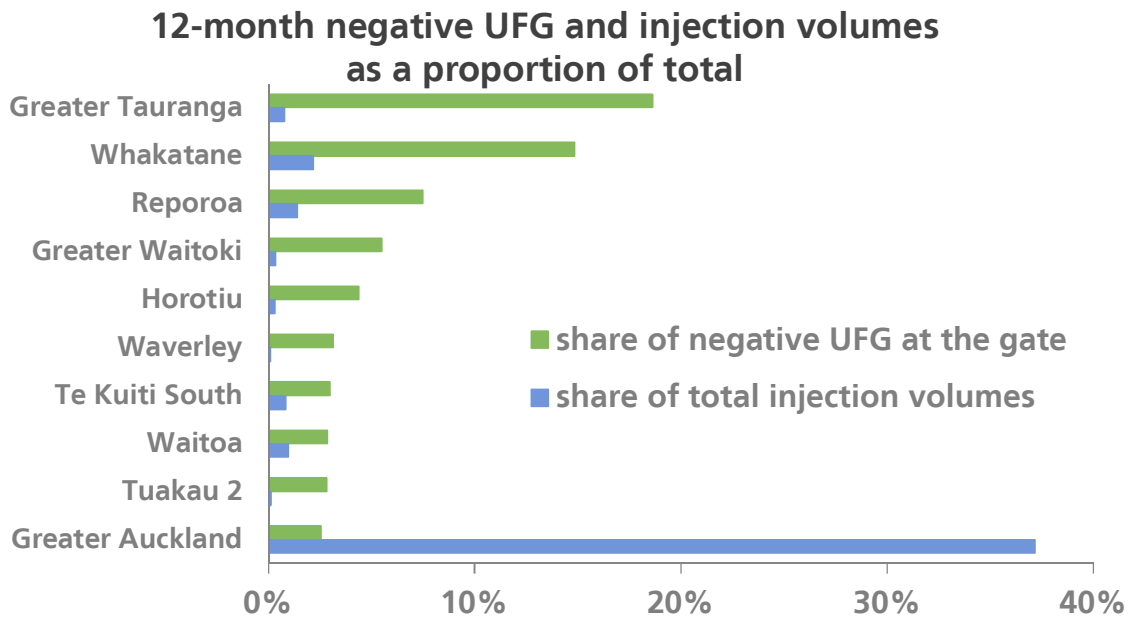
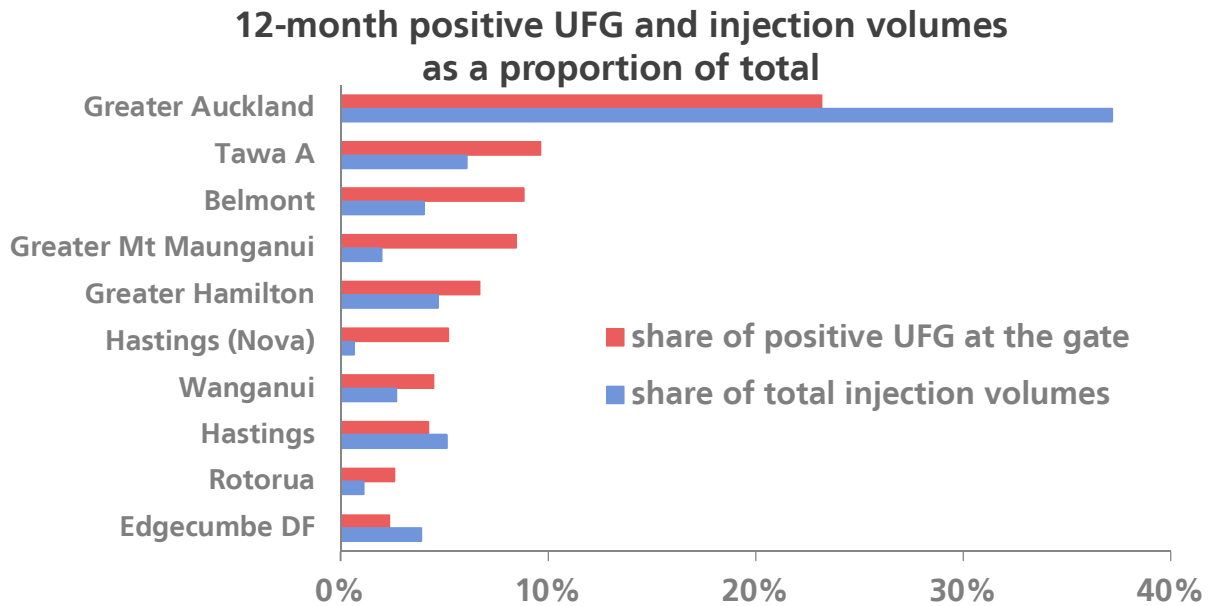


Chart 8: Rolling 12-month UFG



- In volume terms, annual UFG has halved since 2009, decreasing from about 600,000GJ per year to about 300,000 GJ. As a percentage of allocated gas, annual UFG has also halved, decreasing from about 2% per year to just under 1%.

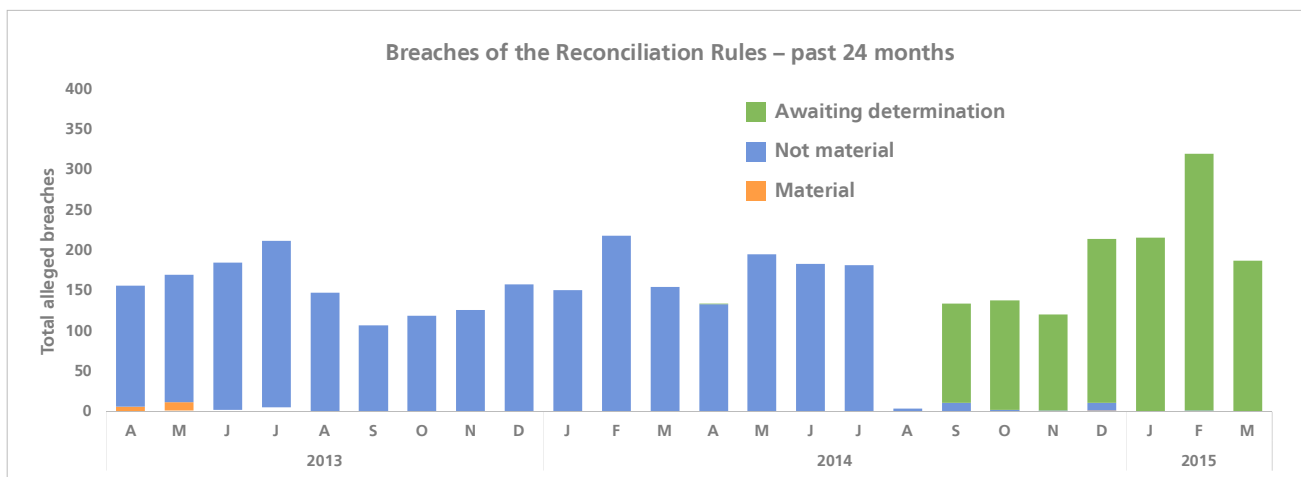
Chart 9: Gas gates where UFG is the highest



- These charts show the gates that experience the largest share of total UFG, compared to their share of total gas gate deliveries at shared gas gates. These charts use 12 months of the most recent interim and final allocation data available: in this case, January through December 2014.
- The 10 gates shown in the top chart account for 76% – about 308,000 GJ – of the positive UFG experienced over the past 12 months.

- The 10 gates shown in the bottom chart account for about 65% (about 68,000 GJ) of the negative UFG experienced in the past 12 months. Seven of the gas gates shown – Whakatane, Reporoa, Horotiu, Waverley, Te Kuiti South, Waitoa, and Tuakau 2 – have been determined to be global one-month gates, since, among other things, they have a high proportion of industrial load. The global one-month methodology assigns a share of the actual UFG experienced in a month to industrial consumers, in contrast to the usual calculation method, which assigns industrial load an annual average amount of UFG.

Chart 10: Number and severity of breaches of the Reconciliation Rules



- The very low level of alleged breaches in August 2014 can be attributed to the Allocation Agent omitting rule 37 breaches in its reporting that month. The Allocation Agent alleged the outstanding breaches in February 2015.
- About 97% of alleged breaches of the Reconciliation Rules in the past year have occurred in relation to rule 37 – the rule that requires initial consumption information submitted by retailers to be within a percentage of accuracy of the consumption information submitted for the final allocation.
- It has proven efficient for the Market Investigator to attempt to reach a settlement on 12-month batches of rule 37 breaches, which is why there are a large number of breaches awaiting determination.

Audits commissioned

Event audits

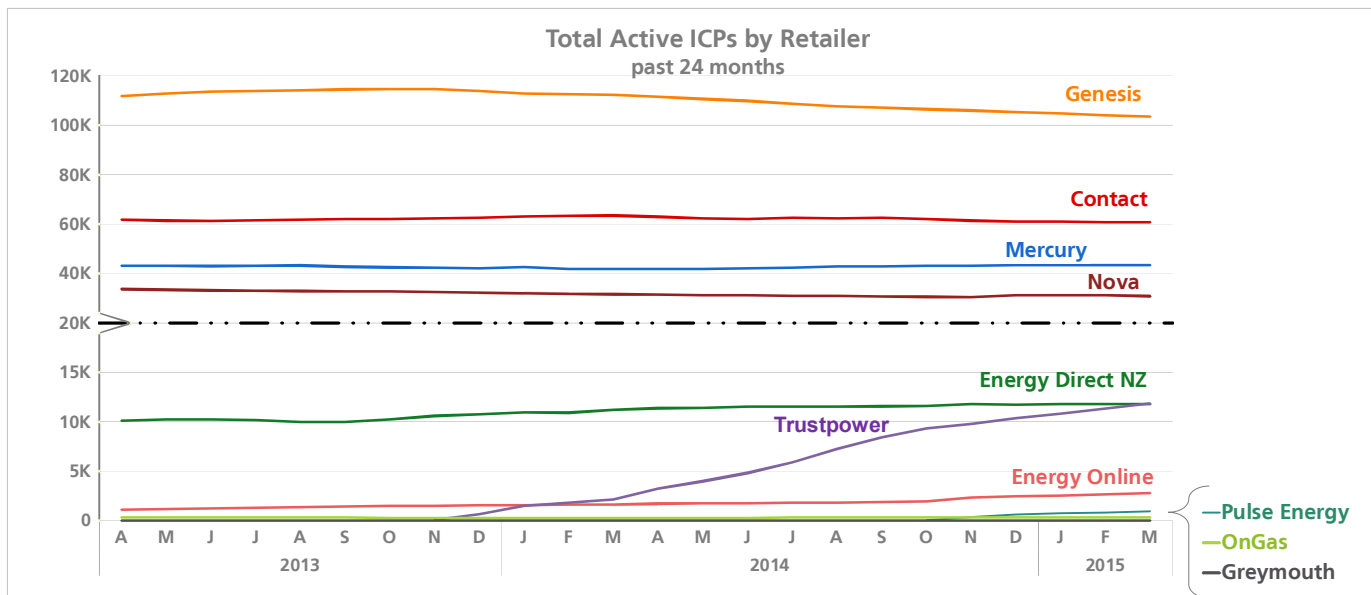
No event audits have been commissioned in the past quarter.

Performance audits

The second round of retailer performance audits is complete and audit reports are available on the Gas Industry Co website.

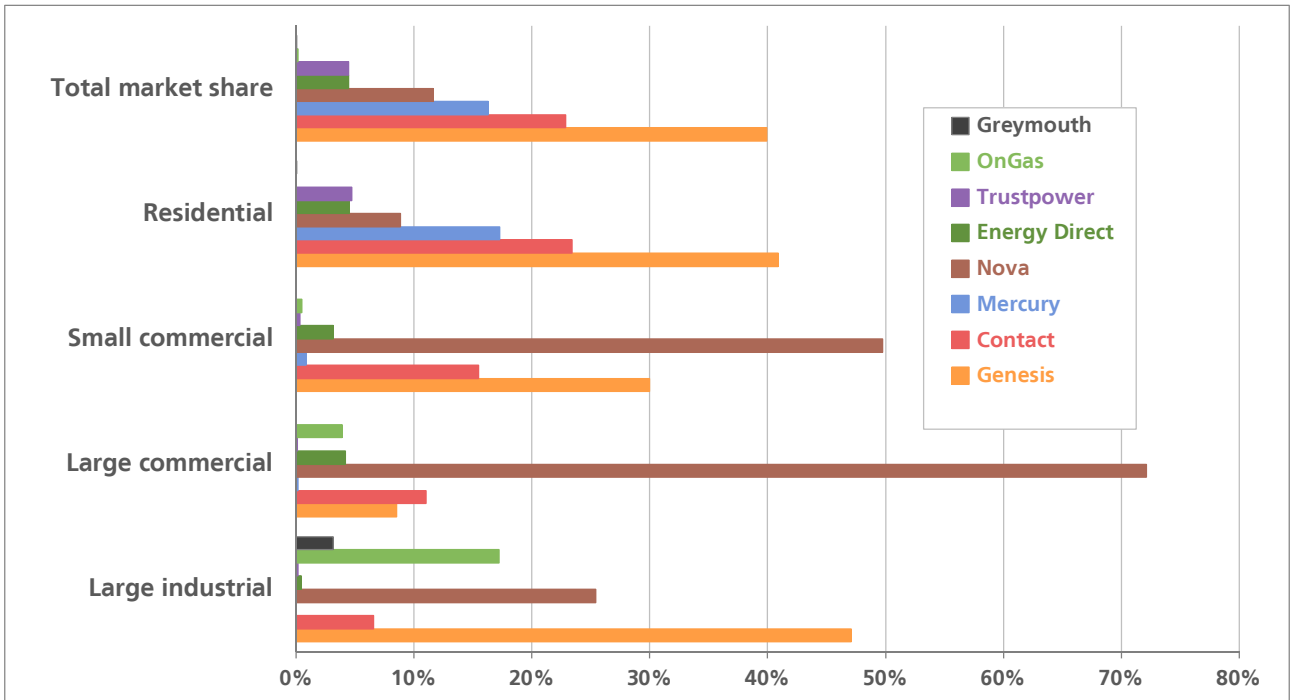
4 Market competition performance measures

Chart 11: Market share of ICPs by retailer



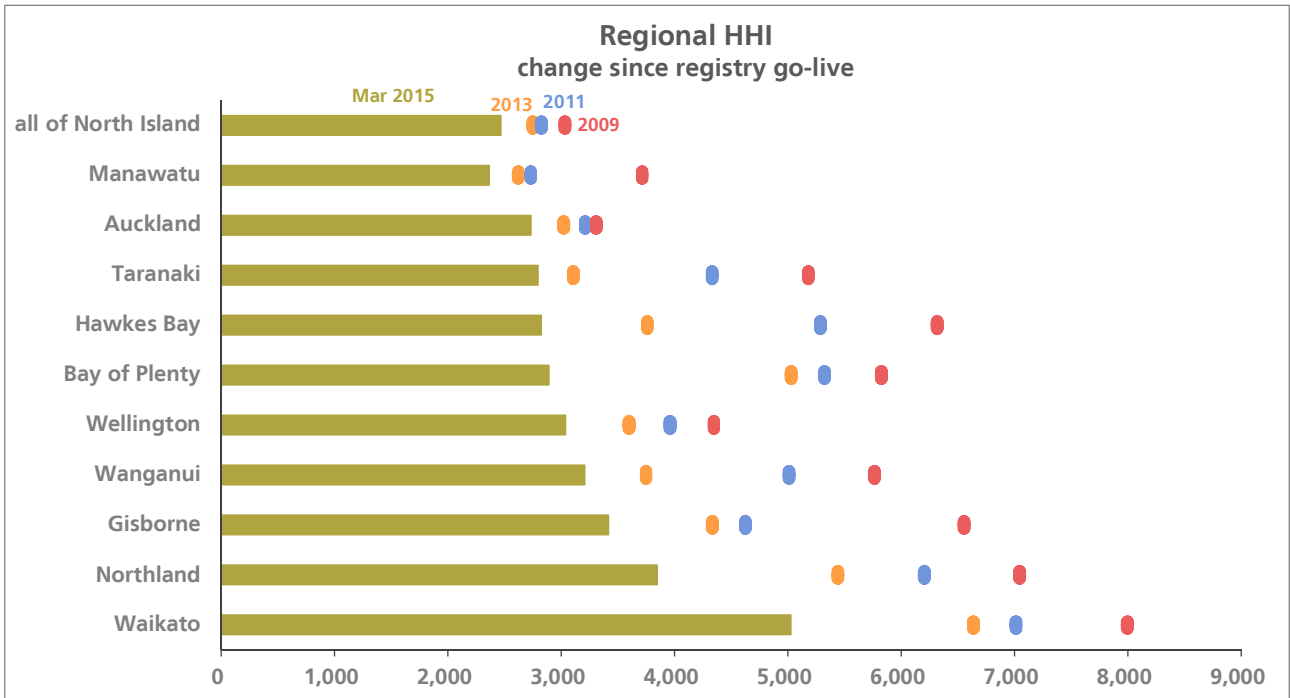
- Pulse Energy entered the retail gas market in October 2014.
- In November 2013, Trustpower entered the retail gas market under its own brand, following the company's acquisition of Energy Direct in July 2013.
- There are ten distinct retail brands, owned by eight different retail companies (Energy Online is owned by Genesis Energy).

Chart 12: Customer Market share by consumer segment



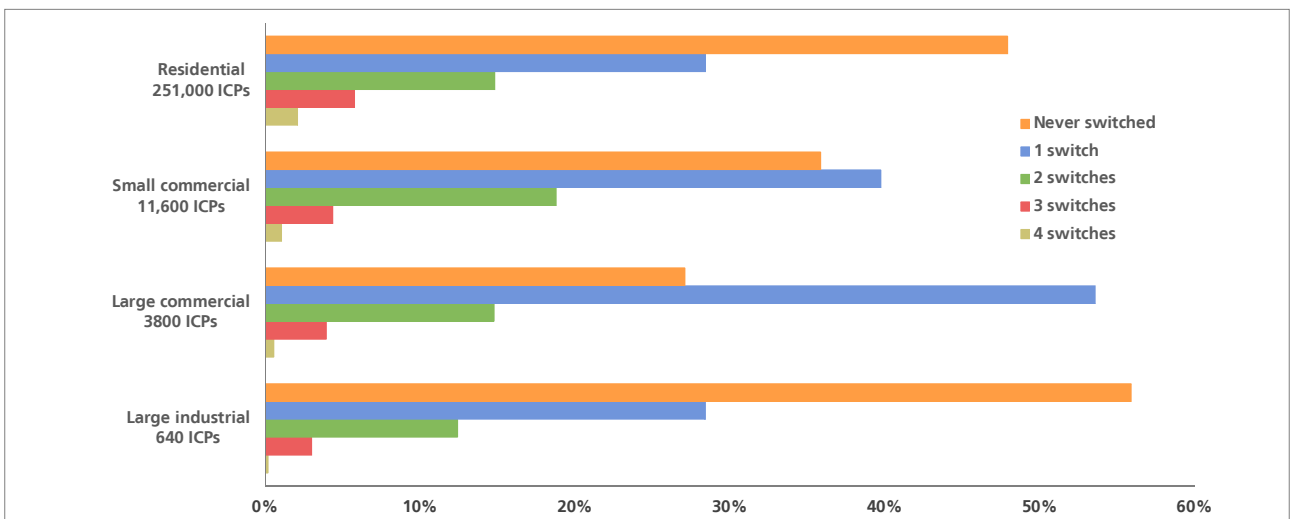
- In this chart, consumer segment is determined by the load shedding category listed on the gas registry for each consumer site. (Energy Online is included in the total for Genesis in this chart.)
- Note that Pulse Energy, which has about 0.4% of the residential market at present, is not shown on the chart.

Chart 13: Herfindahl–Hirschman Index (HHI)



- The HHI has decreased in all regions since 2009, indicating that the retail market is becoming less concentrated across the North Island.
- Nationally, the HHI stands at 2,470, in comparison to 3,033 in February 2009 (the start of the registry).

Chart 14: Switching by consumer sites since 2008



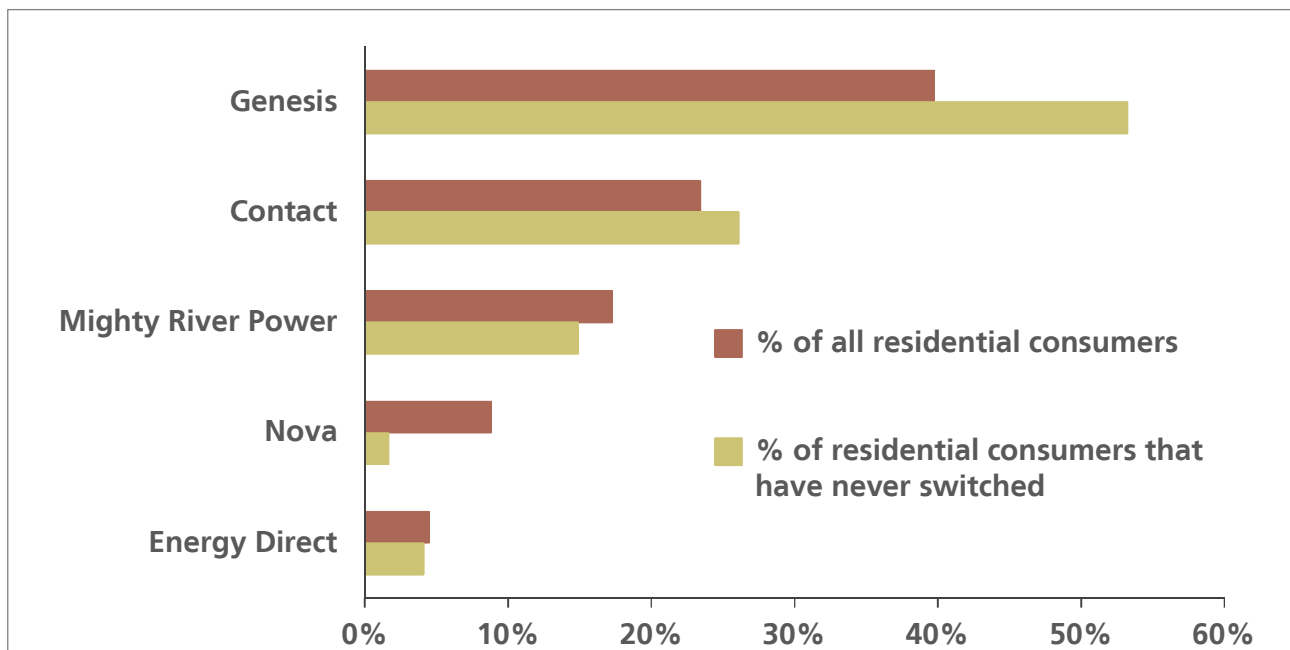
As with Chart 12, consumer sites in this chart and Chart 15 are categorised based on the load shedding category recorded in the gas registry.

- 52% of residential consumer sites

- 64% of small commercial sites
- 73% of large commercial sites; and
- 44% of large industrial sites

have switched retailer at least once since the start of the gas registry (March 2009).

Chart 15: Residential consumer sites that have never switched



- This chart compares retailers' market share of all residential consumers with their share of residential consumers that have never switched. It shows, for example, that Genesis has about 40% of the total residential market, and about 53% of the residential consumers that have not switched retailer since the start of the gas registry in March 2008.
- The chart excludes Trustpower and Pulse Energy, as all of their customers have made at least one retailer switch.

Chart 16: Switching activity by retailer

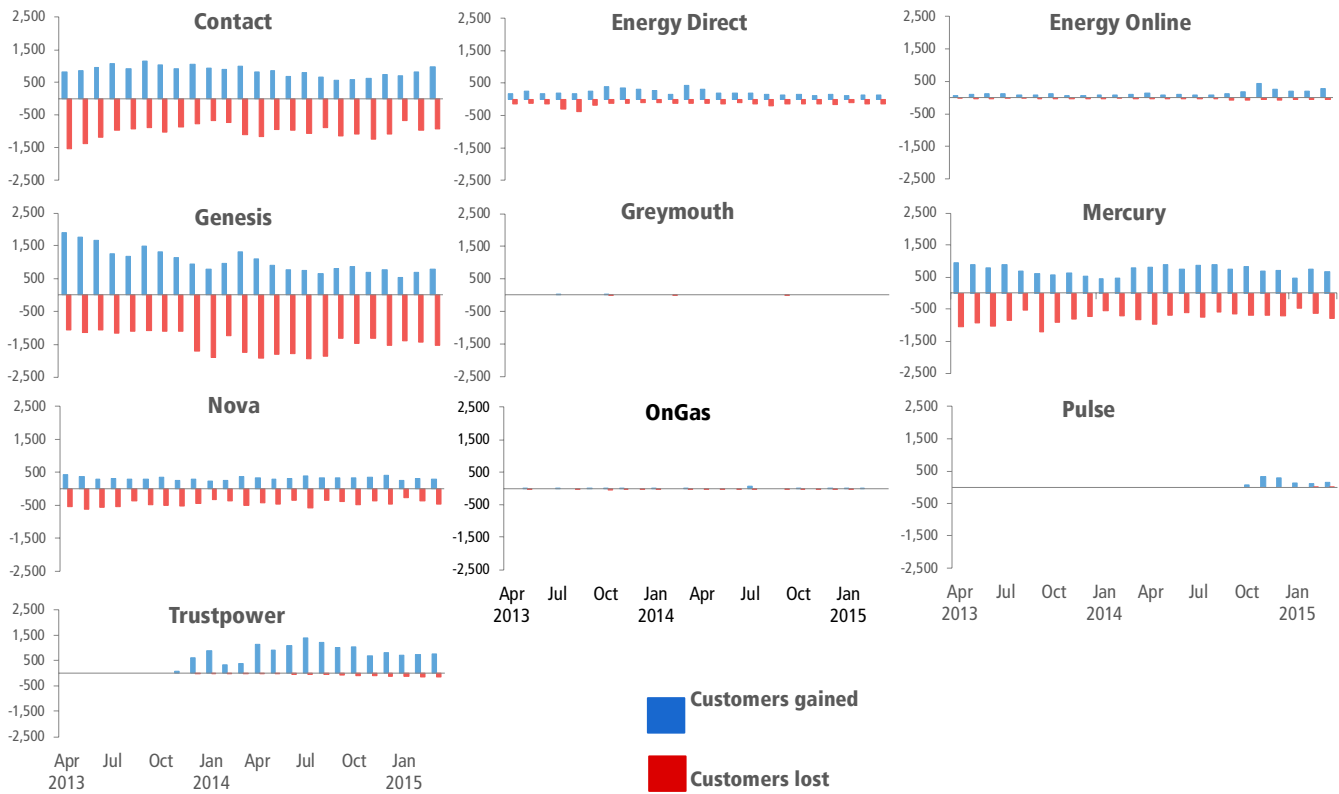
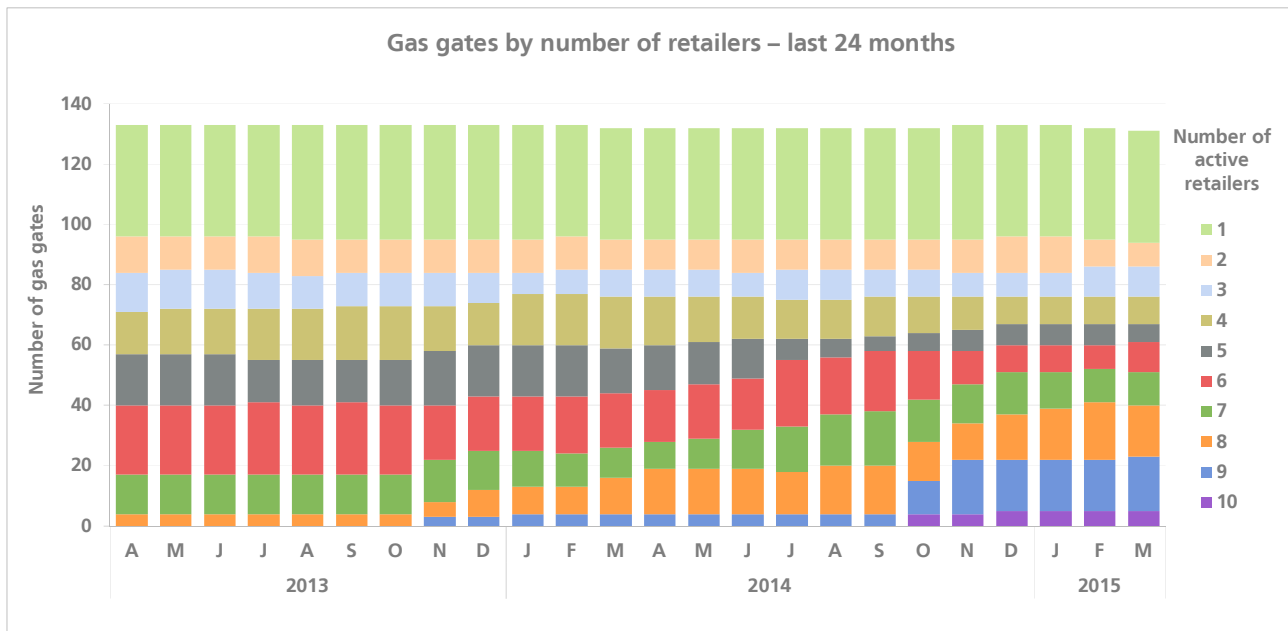
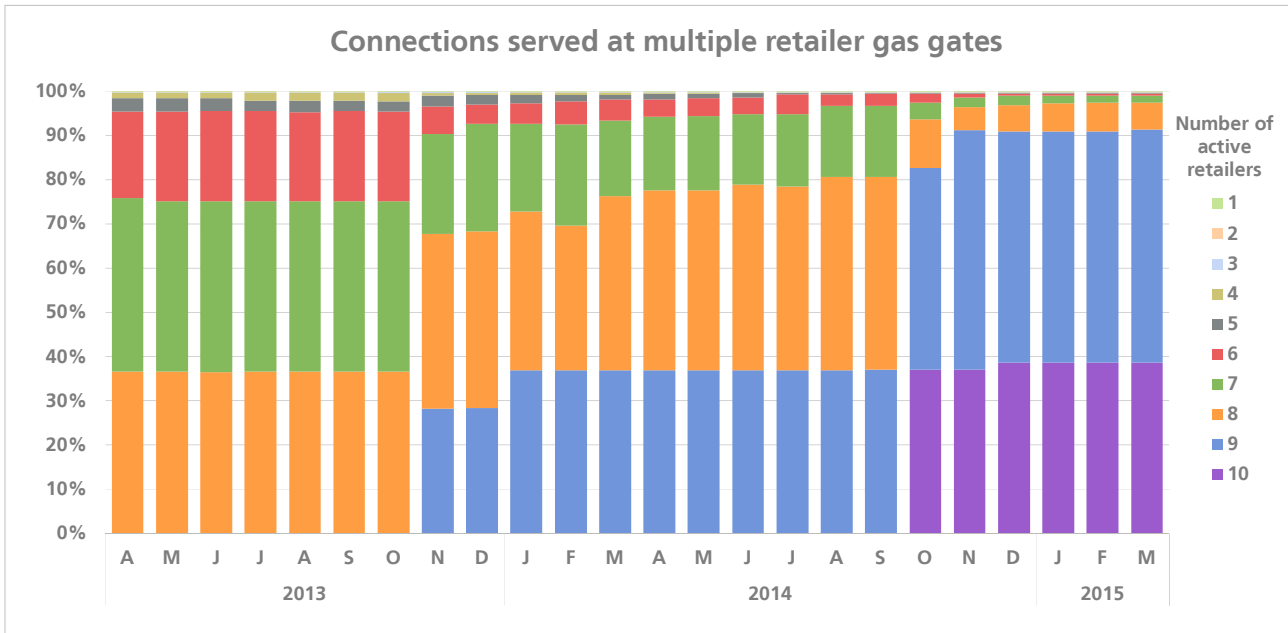


Chart 17: Gas gates by number of retailers



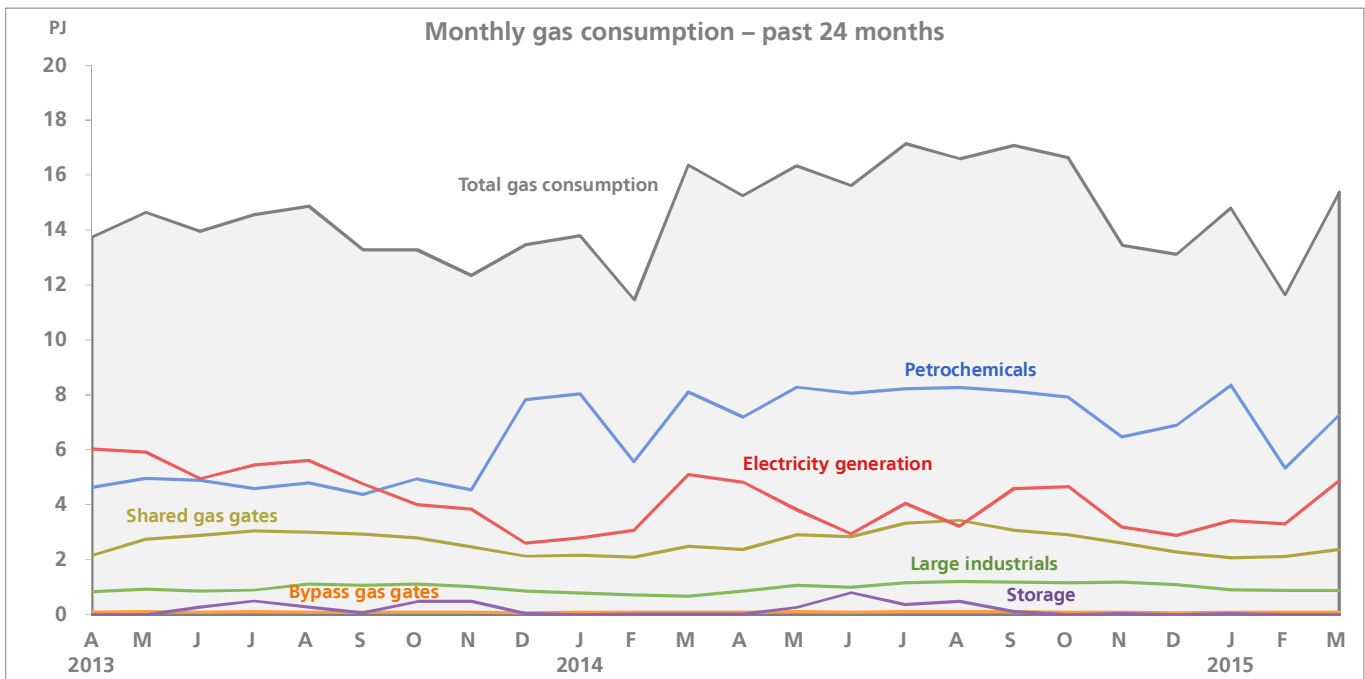
- Trustpower's and Pulse Energy's entries into the retail gas market in November 2013 and October 2014, respectively, mean that there are now ten retailers active at some gas gates.

Chart 18: Connections served by multiple retailers



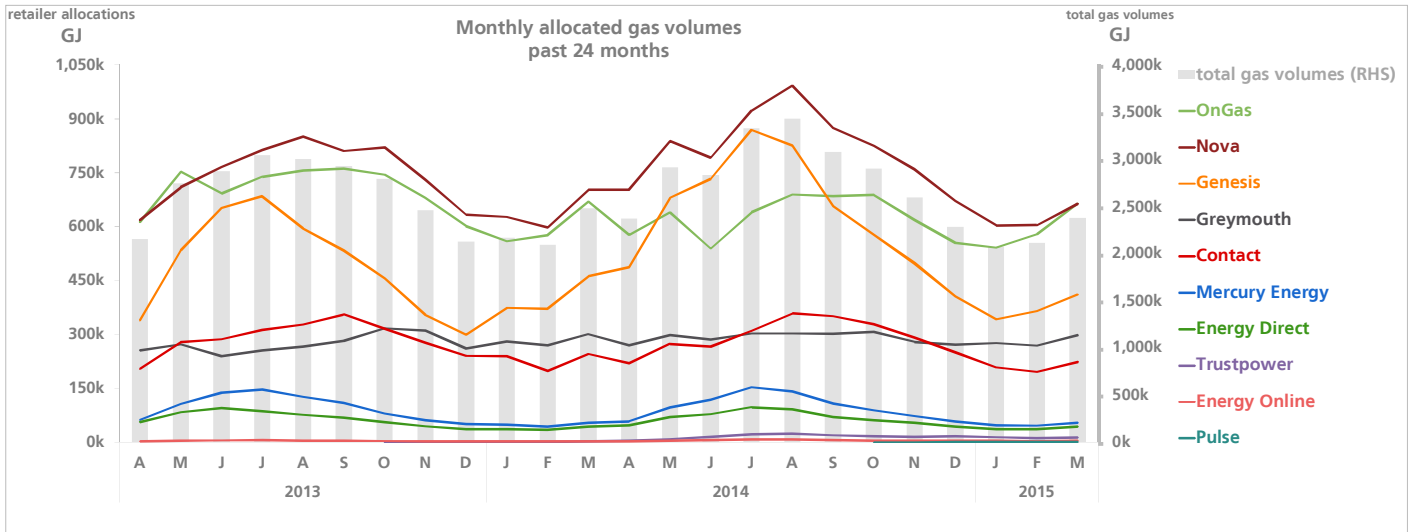
- Over 99% of gas consumers are connected to a gate where least seven retailers trade.

Chart 19: Total gas volumes



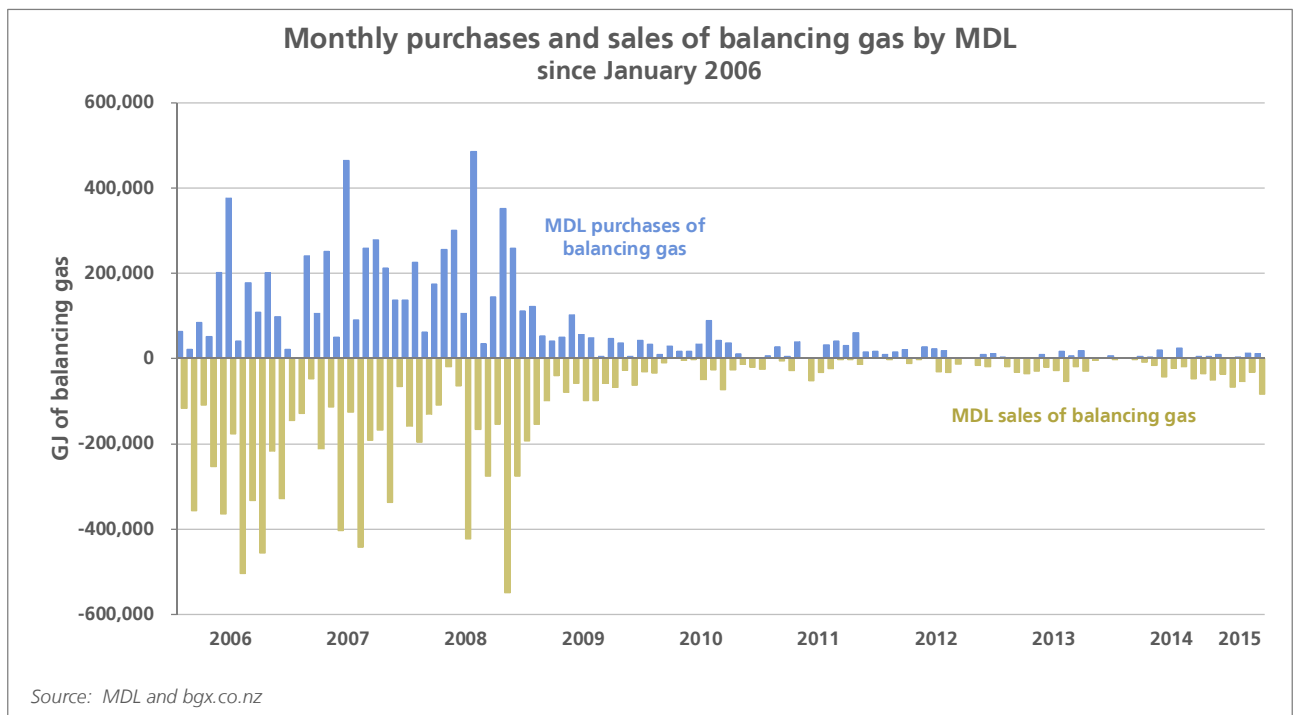
- Gas used for petrochemicals has increased since the end of 2013 due to the restart of Methanex’s Waitara Valley plant and increased capacity at its Motunui site.

Chart 20: Allocated gas volumes



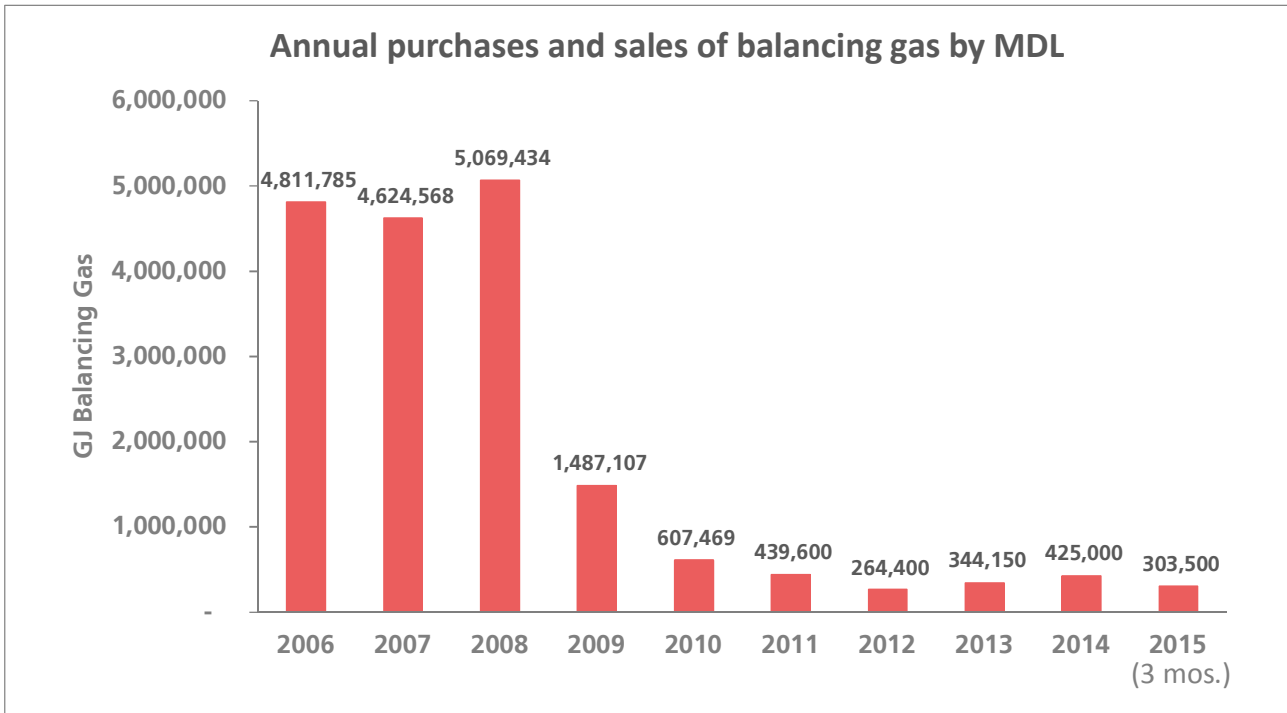
- Nova and OnGas are the largest gas retailers in terms of allocated gas volumes.
- The data are from a mix of allocation stages: Final through February 2014; Interim for March through December 2014; and Initial for January through March 2015.

Chart 21: Balancing gas volumes



Source: MDL and bgx.co.nz

Chart 22: Annual volumes of balancing gas



- On average, balancing gas volumes transacted by MDL have decreased over 90% from pre-2009 levels.

5 Critical Contingency Management performance measures

There were no critical contingencies in the previous quarter.

On 15 April 2015, the Critical Contingency Operator (CCO) issued a notice of potential critical contingency due to very low linepack conditions on the Maui pipeline. The issue was resolved without the need for intervention from the CCO, and the potential critical contingency was terminated the following day.

Glossary

| | |
|----------------------------------|--|
| Critical contingency | A state of emergency on the transmission system characterised by falling or extremely low gas pressures. In such situations, the critical contingency operator has the authority to require consumers to stop using gas in order to balance the system, as set out in the Gas Governance (Critical Contingency Management) Regulations 2008. |
| Direct connect consumers | Large industrial consumers who are supplied gas directly from the transmission system via a dedicated gas gate. |
| Distribution system | System of lower pressure pipelines conveying gas from the transmission system to consumer sites. |
| Gas gate | A place where gas leaves the transmission system. Gas gates (most commonly) lead to distribution systems, which supply a number of different consumers. Some gas gates are direct connects, meaning that they supply a single large industrial consumer. A few gas gates supply private gas networks, which supply the customers of a single retailer. |
| Herfindahl–Hirschman Index (HHI) | Measure of market concentration. Generally, markets in which the HHI is between 1,500 and 2,500 are considered moderately concentrated. Markets with an HHI of greater than 2,500 are considered highly concentrated. For more information, see the Appendix. |
| ICP | Installation Control Point: the point where a consumer installation is connected to the distribution system. Used to describe a consumer site. |
| Move switch | A switch where the retailer supplying gas to a consumer site is changed to another retailer at the request of an incoming tenant or homeowner. |

| | |
|---------------------------|--|
| Reconciliation | The processes by which the volume of gas leaving the transmission system is allocated on a gate-by-gate basis to retailers with consumers at those gates; governed by the Gas (Downstream Reconciliation) Rules 2008. Reconciliation is done on a monthly basis, and each consumption month is calculated three times: in the month immediately after consumption month (<i>initial allocation</i>); four months after consumption month (<i>interim allocation</i>); and 13 months after consumption month (<i>final allocation</i>). |
| Registry | Database of information on consumer sites, including metering information, associated gas gate, and responsible retailer. Used to facilitate efficient and accurate switching. |
| Standard switch | A switch where a gas customer decides to switch the retailer that supplies its existing location. |
| Switching | The processes by which the retailer supplying a customer site is changed to another retailer, governed by the Gas (Switching Arrangements) Rules 2008. |
| Transmission system | System of high pressure pipelines that convey gas from gas processing facilities to a distribution system or to a direct connect consumer. |
| Unaccounted-for gas (UFG) | The difference between the amount of gas leaving the transmission system and retailers' estimates of their consumers' consumption. It is made up of technical losses on the system, metering inaccuracies, and retailer estimation errors. For more information, see the Appendix. |