



# Pricing Methodology for Gas Distribution Services

From 1 October 2022 (Pricing Year 2023)

Pursuant to the *Gas Distribution Information Disclosure Determination 2012*



## Executive Summary

First Gas Limited (Firstgas) owns and operates gas distribution networks across the regions of Northland, Waikato, Central Plateau, Bay of Plenty, Gisborne and Kapiti. Our pricing policies seek to maximise network utilisation through efficient allocation of costs, to provide transparency, certainty, and to ensure that all network users benefit from network investments.

Firstgas recovers the cost of owning and operating our distribution networks predominantly through standard prices for gas distribution services, supplemented by 19 non-standard connection contracts. We also earn revenue from capital contributions for new gas connections. For further information on our capital contributions policy, please see our website [here](#).

### Pricing for year commencing 1 October 2022 (Pricing Year 2023)

There have been no substantive changes to Firstgas' Distribution Pricing Methodology (DPM) in the past 12 months.

Firstgas will continue to apply the same pricing methodology for Pricing Year 2023 (PY2023)<sup>1</sup> and has updated this methodology to ensure compliance with the price path set out in the Commerce Commission's *Default Price-Quality Path Determination 2022*<sup>2</sup> (the Determination). This approach results in fixed and variable tariffs for all customer groups increasing by approximately 12%.

We are also continuing to offer a fully variable residential tariff. For the reasons set out in section 11, there are conditions for accessing this tariff option (including only being available for new consumers initially). We consider that this will ensure an efficient allocation of costs is maintained.

Finally, we are continuing to offer a single set of prices across our network. Our substantive review of the pricing methodology in 2017 found that there were no significant cost differences across regions, and we seek to keep our pricing as simple as possible.

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<sup>1</sup> 1 October 2022 to 30 September 2023.

<sup>2</sup> Commerce Commission *Gas Distribution Services Default Price-quality Path*, 31 May 2022.

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## Glossary

|   |   |
|---|---|
| <b>Act</b>                              | The Commerce Act 1986.  |
| <b>Allowable Notional Revenue (ANR)</b> | The revenue determined under the Price-Quality Path Determination that Firstgas is allowed to earn during the pricing year based on historical quantities.  |
| <b>Cost Allocators</b>                  | The measures used to allocate costs / target revenue among consumer groups.   |
| <b>CPI</b>                              | Consumers Price Index, a measure of changes to the prices for consumer items purchased by New Zealand households giving a measure of inflation.   |
| <b>GDB</b>                              | Gas Distribution Business   |
| <b>IDs</b>                              | The <i>Gas Distribution Information Disclosure Determination 2012</i> , consolidating all amendments as of 3 April 2018, published by the Commerce Commission.  |
| <b>ICP</b>                              | An installation control point being a physical point of connection on a local network which a distributor nominates as the point at which a retailer will be deemed to supply gas to a consumer               |
| <b>kWh</b>                              | Kilowatt-hour, a unit of energy being the product of power in watts and time in hours.  |
| <b>DPP</b>                              | The <i>Gas Distribution Services Default Price-Quality Path Determination 2022</i> , as published by the Commerce Commission.   |
| <b>Price component</b>                  | The various prices, fees and charges that constitute the components of the total price paid, or payable, by a consumer.   |
| <b>Pricing Principles</b>               | The Pricing Principles specified in clause 2.5.2 of the <i>Gas Distribution Services Input Methodologies Determination 2012</i> (consolidating all amendments as of 3 April 2018) and included in section 16. |
| <b>Pricing strategy</b>                 | A decision made by the Directors of a Gas Distribution Business (GDB) on the GDB's plans or strategy to amend or develop prices in the future, and recorded in writing  |
| <b>Pricing Year (PY)</b>                | The annual period beginning on 1 October and ending on 30 September.  |
| <b>RAB</b>                              | Regulatory Asset Base, the regulated value of the assets that Firstgas uses to provide gas distribution services.   |
| <b>scm/h</b>                            | Standard cubic metres per hour, a measure of gas capacity based on the flow rate.   |
| <b>Target revenue</b>                   | The revenue Firstgas expects to receive from prices during the pricing year based on forecast quantities.   |

## 1. About Firstgas

First Gas Limited (Firstgas) operates 2,500 kilometres of gas transmission pipelines and more than 4,900 kilometres of gas distribution pipelines across the North Island. These gas infrastructure assets transport natural gas from Taranaki to major industrial gas users, electricity generators, businesses and homes, and transport around 20 percent of New Zealand’s primary energy supply. Our distribution network services approximately 66,000 consumers across the regions of Northland, Waikato, Central Plateau, Bay of Plenty, Gisborne, and Kapiti Coast.

Firstgas is part of the wider Firstgas Group. The Firstgas Group owns energy infrastructure assets across New Zealand through our affiliate Gas Services NZ Midco Limited (GSNZ Midco), a separate business with common shareholders that owns the Ahuroa gas storage facility and Rockgas. Under its gas services brand, GSNZ Midco provides operational and maintenance support to gas infrastructure owners, including other parts of the Firstgas Group.

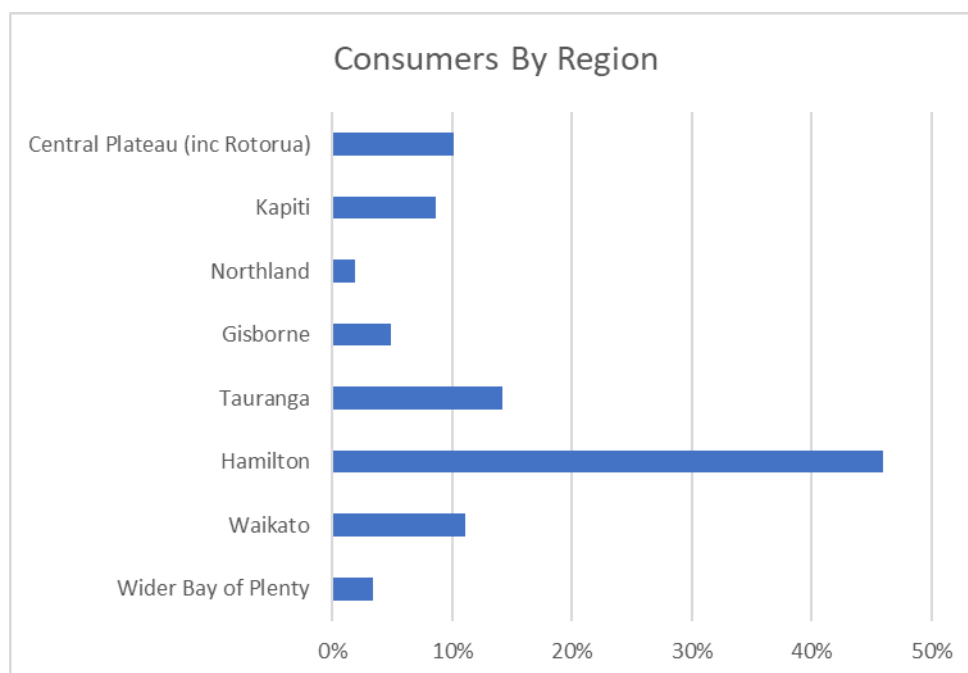
The Ahuroa gas storage facility (trading as Flexgas) is New Zealand’s only underground gas storage facility. Rockgas has over 80 years’ experience providing LPG to over 100,000 customers throughout New Zealand. Rockgas is New Zealand’s largest LPG retail business and supplies its customers with LPG from both domestic and imported services.

Firstgas is committed to helping Aotearoa achieve its climate change goal of zero carbon emissions by 2050. Our gas transmission and distribution networks are ideally placed to support the development, transfer and use of emerging fuels such as hydrogen or biogas. For more information, visit our website: [www.gasischanging.co.nz](http://www.gasischanging.co.nz).

### 1.1 Our approach to distribution pricing

Firstgas’ prices are charged to retailers who then incorporate them into retail bills to end consumers. Due to this industry structure, Firstgas does not have direct control over the cost of energy to consumers.

**Figure 1: Proportion of gas distribution consumers by region (as at 1 April 2022)**



Our gas distribution services are regulated by the Commerce Commission under Part 4 of the *Commerce Act 1986*. These services are subject to price-quality path regulation and information disclosure requirements. Our regulatory disclosures can be found on the Firstgas website [here](#).

Firstgas is focused on increasing the utilisation of our networks and thereby reducing the cost of providing distribution services to individual consumers. We believe that gas has an important role to play in New Zealand's energy future as an affordable, efficient, and environmentally responsible fuel, and are developing our network to be able to service the demand for net zero carbon gas.

## 1.2 Distribution pricing methodology

Every gas distribution business maintains a distribution pricing methodology. The purpose of this document is to describe how the business determines the prices that it charges each consumer group.

The methodology takes the target revenue for the business set by regulation and analyses the underlying costs that build up that revenue. The methodology then sets out how costs will be allocated among consumer groups and non-standard customers.

The methodology is updated annually as part of the annual pricing review, and feedback is sought from all retailers. The final distribution pricing methodology is published on the Firstgas website.<sup>3</sup>

## 1.3 Use of non-standard contracts

Firstgas generally recovers the cost of providing gas distribution services to existing consumers through standard prices. However, Firstgas also offers non-standard pricing and contracts to a small number of consumers in circumstances where standard prices on our distribution networks may not:

- Adequately reflect the costs of supplying a consumer
- Reflect the economic value of the service to the consumer
- Address the commercial risks associated with supplying that consumer.

Non-standard contracts allow tailored or specific prices and non-standard commercial arrangements to be applied to individual consumers on the distribution system.

## 1.4 Contact Firstgas

For any questions regarding the distribution pricing methodology, please contact:

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Regulatory Policy Manager  
[karen.collins@firstgasgroup.co.nz](mailto:karen.collins@firstgasgroup.co.nz)  
04 979 5368

For further information on Firstgas and our gas distribution and transmission businesses, please visit our website [www.firstgas.co.nz](http://www.firstgas.co.nz).

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<sup>3</sup> <https://firstgas.co.nz/about-us/regulatory/distribution/>

## 2. Regulatory context

The development of Firstgas' distribution pricing methodology (DPM) is governed by our regulatory obligations under Part 4 of the *Commerce Act 1986*, enforced by the Commerce Commission. This section outlines the regulatory obligations that are relevant to this DPM.

### 2.1 Requirement to disclose a pricing methodology

The Commerce Commission's *Gas Distribution Information Disclosure Determination 2012* (IDs)<sup>4</sup> requires all gas distribution businesses to publicly disclose at the beginning of each pricing year, the methodology used to determine the prices payable for the provision of gas distribution services.

### 2.2 Alignment with pricing principles

The Commerce Commission's ID Determination requires Firstgas to disclose its pricing methodology and provide:

- An explanation of the extent of consistency of our pricing methodology with the Pricing Principles (which are defined in the Input Methodology)<sup>5</sup> or
- Reasons for any inconsistency between our pricing methodology and the Pricing Principles.<sup>6</sup>

The Commerce Commission's Pricing Principles are provided in section 16 of this DPM, along with an explanation of how we have reflected these principles in this pricing methodology.

In applying the Commerce Commission's Pricing Principles, Firstgas does not rank one objective higher than others but seeks to achieve the best balance between competing principles to achieve our business objectives. This approach will always have an element of judgement involved, and we seek to provide additional detail in this DPM where this judgement has been applied.

### 2.3 Allowable notional revenue

Firstgas' Allowable Notional Revenue (ANR) for each pricing year is calculated in accordance with the Commerce Commission's *Gas Distribution Services Default Price-quality Path Determination 2022* (DPP). The DPP sets a weighted average price cap that applies to Firstgas' gas distribution business. Firstgas' Notional Revenues (NR) must not exceed the Allowable Notional Revenue (ANR).

The term "notional" refers to the use of historical quantities that are used in the compliance calculations. The same (historical) quantities are used in the calculation of ANR and NR.

Target revenue is the revenue that Firstgas expects to receive in PY2023, based on the prices produced by the DPP methodology and our forecast quantities for PY2023 (as opposed to the historical quantities used for ANR and NR).

Further information on the IDs, DPP, and IMs that apply to Firstgas' distribution business can be found on the gas pipelines section of the Commerce Commission website.<sup>7</sup>

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<sup>4</sup> *Gas Distribution Information Disclosure Determination 2012 (consolidating all amendments as at 3 April 2018)*, Commerce Commission, <https://comcom.govt.nz/regulated-industries/gas-pipelines/information-disclosure-requirements-for-gas-pipelines>

<sup>5</sup> Clause 2.5.2 of the *Gas distribution services input methodologies determination 2012 (consolidated all amendments as at 3 April 2018)*, Commerce Commission, [https://comcom.govt.nz/data/assets/pdf\\_file/0029/59717/Gas-distribution-services-input-methodologies-determination-2012-consolidated-April-2018-3-April-2018.pdf](https://comcom.govt.nz/data/assets/pdf_file/0029/59717/Gas-distribution-services-input-methodologies-determination-2012-consolidated-April-2018-3-April-2018.pdf)

<sup>6</sup> Clause 2.4.3(2).

<sup>7</sup> <http://www.comcom.govt.nz/regulated-industries/gas-pipelines/>

### 3. Pricing strategy and objectives

This section outlines the relevant business strategies and objectives that have been incorporated into our review of the DPM.

#### 3.1 Pricing strategy

The *Commerce Act 1986* requires all gas distribution businesses to disclose in their DPM the linkages to a business Pricing Strategy, where applicable, and any changes to this strategy in the preceding years.<sup>8</sup> Firstgas does not maintain a Pricing Strategy as defined in the IDs. We have determined that the establishment of fair and efficient pricing for our network services will be:

- Guided by high-level pricing objectives, as set out below and
- Compliance with the various regulatory frameworks mentioned in section 2 above.

For PY2023, Firstgas has continued to use a “constant price increase” approach, whereby all tariff components are increased by an equal amount relative to PY2022. To ensure that our prices result in an efficient allocation of costs between consumers we compare the revenue we expect to result from our prices for each consumer group to the cost allocation for that group. Table 4 on page 21 these two methodologies, ensuring efficient allocation of costs between consumers.

#### 3.2 Objectives for setting prices

When setting prices, we consider the overarching objectives of our pricing. The objectives need to be weighed up when determining the most appropriate pricing to set for any period. Firstgas does not rank one objective higher than others but seeks to achieve the best balance between competing objectives as required. This approach will always have an element of judgement involved, and we seek to provide additional detail in this DPM where this judgement has been applied.

Firstgas’ DPM has been guided by the following objectives:

##### a) Cost-reflective pricing

All consumers should face prices that are reflective of the costs of providing gas distribution services to them. Prices for new consumers should recover the additional costs of connecting them to the network, including earning a fair return on the investment. This includes an appropriate alignment of fixed and variable revenue with sunk costs and incremental costs.

##### b) Clear and concise pricing structure

A simple pricing structure, with as few pricing categories as required, should allow the prices to be easily understood by both retailers and end consumers. Clear pricing, including full transparency on how prices were developed, should encourage consumers to stay connected and new consumers to connect where economic.

##### c) Encourage efficient growth

Pricing should encourage consumers to connect to and use the distribution network where economic and desirable. Customer growth generally improves asset utilisation since most of the costs of providing gas distribution services are fixed.

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<sup>8</sup> Clause 2.4.4 of the ID Determination.



**d) Achieve full recovery of the ANR**

Full recovery of our ANR ensures that Firstgas is sufficiently resourced to deliver on our Asset Management Plan (AMP),<sup>9</sup> whilst delivering reasonable returns to our shareholders.

**e) Discourage uneconomic bypass or alternative fuels**

There has been significant sunk investment in the existing gas distribution networks. Pricing should ensure that customers with bypass or alternative fuels are not incentivised to make sub-optimal decisions that lead to efficiency losses, where there is available capacity on the distribution network.

**f) Promote price stability and avoid price shocks**

Firstgas' view is that a constant price increase approach for PY2023 minimises the 'price shock' effect for any one customer group over another.

**g) Signal economic cost of service provision**

Firstgas' pricing helps signal to potential consumers whether gas is an economic option for their demands. Firstgas note that pricing is a combination of this pricing methodology and Firstgas' capital contribution policy (available on our website<sup>10</sup>) and that these documents should be read together.

**h) Pass the benefits of new pricing categories directly onto end consumers**

Firstgas is aware that there are different drivers in the gas value chain, from production stations through to end consumers, and that not all drivers in the supply chain are directly aligned. All changes that Firstgas makes to its pricing have the intention of passing the effect on to the end consumers of gas. For this reason, the variable tariff has criteria other than peak load that must be met for a consumer to be eligible.

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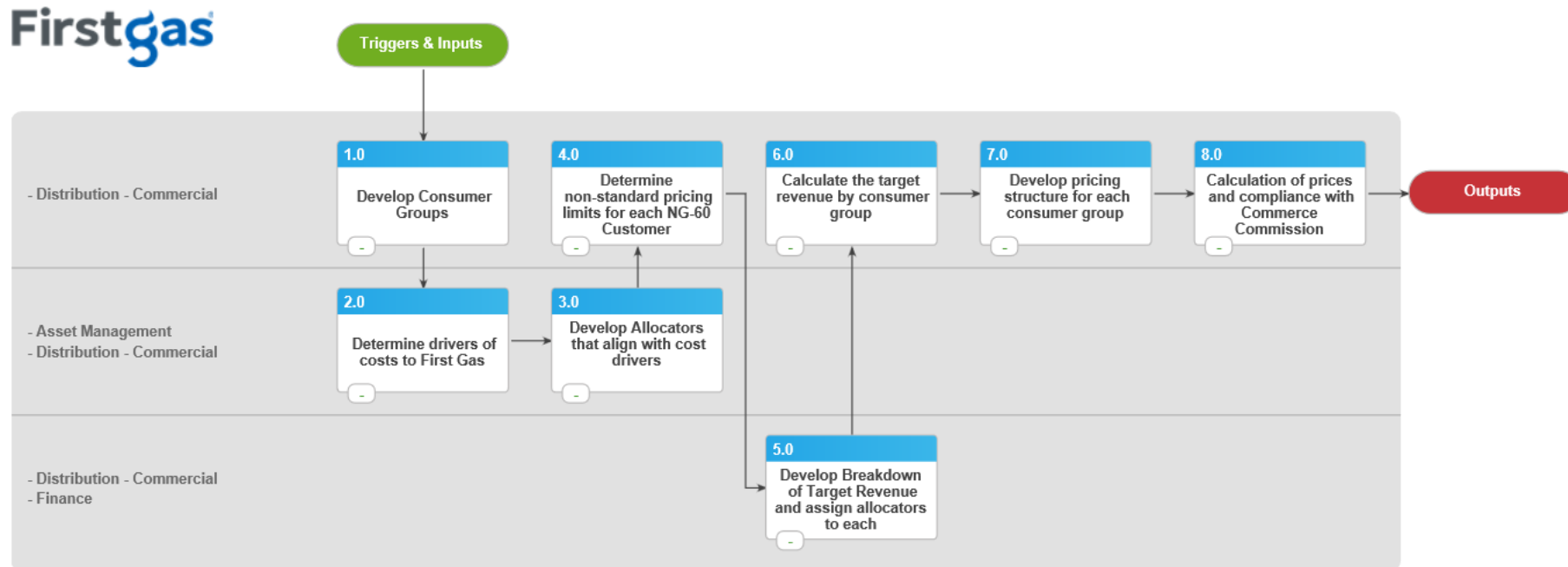
<sup>9</sup> Our Asset Management Plans (AMP) is updated yearly and available on our website here: <https://firstgas.co.nz/about-us/regulatory/distribution/>

<sup>10</sup> Our capital contributions policy is available on our website here: <https://firstgas.co.nz/about-us/regulatory/distribution/>

#### 4. Overview of pricing methodology process

Firstgas' DPM process is summarised in the diagram below and expanded on further in the following sections. This process has involved close collaboration across different functional teams within Firstgas – our commercial team, our asset management team, and our finance team.

Figure 2: Pricing methodology process



## 5. Development of consumer groups

Firstgas has retained the consumer groups that existed upon acquiring the distribution assets in 2016.

Our consumers are divided into four consumer groups based on the maximum flow rate of their connection, measured in standard cubic metres per hour (scm/h). We also have a consumer group for non-standard contracts. Table 1 sets out the five consumer groups that we use for pricing. Consumer groups are mutually exclusive so a consumer can only fit within one group. However, there can be multiple price categories within the consumer group.

Firstgas reviewed the relevance of these consumer groups, and the underlying drivers of each during our 2017 review. We concluded that the historical classifications remain suitable. Consumers within each group have broadly similar demand profiles, responsiveness to price changes and willingness to pay.

**Table 1: Consumer groups**

| Consumer group   | Flow rate (scm/h) |
|------------------|-------------------|
| Mass market      | < 10              |
| Small commercial | 10 < 40           |
| Large commercial | 40 < 200          |
| Industrial       | > 200             |
| Non-standard     | Varied            |

### 5.1 Customers on non-standard contracts

Firstgas currently has 19 non-standard customers across our network. Further details on our non-standard contracts are provided in **Appendix A**.

Firstgas continues to assess requests for non-standard contracts (from new and existing customers) and will transition customers off non-standard contracts onto standard prices when circumstances suggest this is appropriate.

## 6. Allocation methodology

Firstgas maintains a cost-of-service model (or cost allocation model) that reflects the drivers of our business. We reassess the model each year to ensure it remains appropriate for our business. This cost-of-service model seeks to ensure that costs are efficiently allocated across consumer groups (as identified in section 5 above), based on a bottom-up assessment of cost drivers.

The allocation of costs to each consumer group is determined by an assessment of which consumers are the beneficiaries or exacerbators of various costs. For Firstgas, few costs can be directly attributed to an individual consumer group, as most of the costs relate to shared services. These shared service costs can be considered common to multiple consumer groups.

There is no single best way to allocate shared costs. Firstgas has taken a practical approach to cost allocation that uses cost allocators that are measurable based on currently available information. We prepared a full list of potential allocators, then reduced this down to the allocators that are currently measured. This process led several allocators to be removed, such as the average length of pipe per connection for each consumer group. While some of Firstgas' costs are related to the length of pipeline, due to the integrated nature of our consumers including across multiple consumer categories, it is not possible to determine the distinct length of pipeline (including mains) that serves any particular consumer or consumer group.

### 6.1 Allocators selected

The allocators we have used in this DPM are:

- Aggregate (consumer groups) peak monthly consumption (**Capacity**) and
- Number of active ICPs (**Number of Connections**).

Firstgas has proceeded with a **Capacity** allocator using the monthly peak. While we would ideally prefer to measure **Capacity** at a time period that is appropriate to a gas network's operation (daily), data granularity varies across the network, from hourly for Time of Use (TOU) large sites to multiple months for some mass market connections. Monthly peak consumption is the lowest granularity possible that can be provided with consistent and measurable data. If data availability improves, this will be revised in future years.

Prior to 2017, an average peak flow rate (i.e., 5 scm/h per residential load) per consumer for each category was used to determine the allocation. Upon reassessing the costs of the business, Firstgas determined that this was no longer the most appropriate measure. Given usage data is available across the consumer groups (at the monthly level), it is possible to look directly at each consumer groups' impact on the network peak month. Firstgas will continue to investigate options for getting better data to understand the coincident peak load information and each consumer group's impact on the network capacity further in future years.

## 7. Value of allocators

Each of the allocators have had the historical data for the previous year applied to determine appropriate allocation rates for each.

Industrial and non-standard customers have other characteristics that impact the level of cost recovery that Firstgas seeks from each customer. These include considerations such as bypass risk, alternative fuels, and available capacity in the network area. Firstgas determines the revenue expected from non-standard customers for any year before allocating the remainder across standard tariff categories.

One assumption that needs to be made at the start of this allocation process, is what costs non-standard customers contribute towards. Firstgas has applied the non-standard revenue pro-rata across all cost categories. This is not a precise assumption but is easy to implement and avoids remaining costs being weighted towards a particular consumer group.

The remaining revenue is then allocated against the totals of all groups excluding the non-standard consumers. The results are shown in the table below.

**Table 2: Historical figures for determining allocation splits**

| Allocator        | Number of consumers |        | Annual Load    |        | Capacity |
|------------------|---------------------|--------|----------------|--------|----------|
|                  | Units               | ICP    | GJ/year        |        | GJ/month |
| Source           | Schedule 8 IDs      | %      | Schedule 8 IDs | %      | %        |
| Mass market      | 63,872              | 96.8%  | 1,443,000      | 32.0%  | 39.0%    |
| Small commercial | 1,508               | 2.3%   | 467,000        | 10.3%  | 10.6%    |
| Large commercial | 515                 | 0.8%   | 918,000        | 20.3%  | 20.0%    |
| Industrial       | 80                  | 0.1%   | 1,685,000      | 37.3%  | 30.4%    |
| Total            | 65,975              | 100.0% | 4,513,000      | 100.0% | 100.0%   |

## 8. Pricing for non-standard contracts

### 8.1 Level of non-standard contracts in PY2023

As noted above, Firstgas has been seeking to reduce the number of non-standard contracts on the distribution network. We currently have 19 active non-standard customers, two of which are considered to be equivalent to direct connects to the Transmission network. We recover revenue from the remaining 17 non-standard consumers. 15 of the non-standard consumers have discounts on standard pricing due to the criteria in 8.3 below, whilst 2 customers have higher than standard pricing to recover investment costs required to provide distribution services to those customers.

### 8.2 Revenue from non-standard contracts

Firstgas expects to recover notional revenue of approximately \$1,309,000 from the 17 chargeable non-standard consumers in PY2023, which represents 4.7% of Firstgas' revenue for its distribution services.

### 8.3 Criteria for non-standard contracts

Consumers may be assessed for non-standard terms or pricing if they meet one or more of the following criteria:

- The total annual quantity of gas consumed or forecast to be consumed per annum (Annual Quantity or AQ) is greater than 20TJ or
- The AQ is between 10TJ to 20TJ and the consumer's point of connection to Firstgas' gas distribution network is close to the gas transmission system or
- It can be demonstrated that alternative sources of energy (including but not limited to wood, coal or electricity) could meet the consumer's requirements at a lower cost than our standard prices, are technically, operationally and commercially viable, and would have a reasonable prospect of being successfully implemented. In these circumstances, it would be uneconomic to connect the consumer on standard prices
- The cost to serve is higher than the GN04 or GN05 would allow recovery on, and the consumer would prefer ongoing higher charges to a capital contribution.

Firstgas will continue to assess whether to apply non-standard pricing and the corresponding contractual arrangements to new consumers on a case-by-case basis. Generally, if a consumer does not meet at least one of the assessment criteria, they will be subject to published standard distribution prices. Meeting one or more of the assessment criteria does not mean that a non-standard arrangement will apply, but rather that the consumer may be reviewed to determine whether standard pricing and standard contractual terms are suitable, given the consumer's individual circumstances. A full summary of the current non-standard customers is available in **Appendix A**.

Firstgas' obligations and responsibilities to consumers in the event of a supply interruption is the same whether the consumer is on non-standard contracts or a standard contract.

## 9. Target cost allocation and allocators

This table sets out the costs that Firstgas expects to recover in PY2023 broken down by key components, together with the allocator that has been assigned to each cost category for the purposes of calculating the Target Allocation. The cost categories for PY2023 have been updated to more closely reflect our budgeting process.

**Table 3: Target revenue broken down by cost categories**

| Cost Category                                    | Allocator             | Cost allocated (\$) |
|--|-----------------------|---------------------|
| Pass through Costs (Rates, Levies)               | System Peak           | \$991,700           |
| Business Support                                 | Number of connections | \$3,965,000         |
| Service interruptions, incidents and emergencies | Number of connections | \$3,195,000         |
| Routine Maintenance                              | System Peak           | \$746,900           |
| Corrective Maintenance                           | Number of connections | \$477,100           |
| System operations and network support            | Number of connections | \$2,082,000         |
| Regulatory Tax                                   | Number of connections | \$2,858,600         |
| Revaluations                                     | System Peak           | -\$4,000,000        |
| Regulated Return on Investment                   | System peak           | \$7,530,000         |
| Depreciation on Regulated Asset Base             | System Peak           | \$11,350,000        |
| <b>Target Revenue</b>                            |                       | <b>\$29,196,300</b> |

## 10. Revenue allocation by consumer group

Firstgas calculates a target allocation from each consumer group using the allocation methodology discussed in Section 6. The 'Target Allocations' that result from this process are shown in the table below. The 'Target Revenue' percentages show the proportion of revenue that we expect to recover from each consumer group as a result of our prices and forecast quantities. A comparison between Target Allocation and Target Revenue for each group allows for an assessment of the cost allocation efficiency that results from our prices. The table demonstrates strong alignment between Target Allocation and Target Revenue and therefore an efficient allocation of costs between consumer groups.

**Table 4: Target Allocation of Revenue across Consumer Groups**

| Consumer group             | Cost allocated      | Target Allocation | Target Revenue |
|----------------------------|---------------------|-------------------|----------------|
| Small Business/Mass Market | \$17,777,295        | 60.9%             | 65.7%          |
| Small Commercial           | \$1,953,730         | 6.7%              | 6.5%           |
| Large Commercial           | \$3,253,152         | 11.1%             | 10.9%          |
| Industrial                 | \$4,829,662         | 16.5%             | 12.2%          |
| Non-standard               | \$1,382,460         | 4.7%              | 4.7%           |
| <b>Total</b>               | <b>\$29,196,300</b> | <b>100.0%</b>     | <b>100.0%</b>  |

## 11. Development of price categories

The following section provides an overview of the various price categories that Firstgas offers within each consumer group. Firstgas has retained the historical price categories where appropriate and will continue to offer the variable tariff even though no consumers have yet utilised the category. This is to ensure consumer choice, and lower barriers to retailers providing variable charges to consumers.

### 11.1 Mass-market consumer group

The mass market consumer group is split into two subgroups: residential and general/business. Residential consumers are more sensitive to fixed charges. Therefore, the residential group has a lower fixed charge than the general/business. Additionally, consumers are increasingly calling for a variable pricing model for gas when they are consuming multiple energy sources/services from the same retailer.

The subgroups map directly into price categories as set out in Table 6 below.

**Table 5: Price categories within each consumer group**

| Consumer group   | Price category code  | Price category description                                 |
|------------------|----------------------|--|
| Mass market      | GN0R<br>GN01<br>GN0V | Residential<br>General/business<br>New connection variable |
| Small commercial | GN02                 | Small commercial   |
| Large commercial | GN03                 | Large commercial   |
| Industrial       | GN04<br>GN05         | Industrial<br>Large industrial                             |

Additionally, new consumers are using alternative fuels (such as LPG) with higher variable, but lower fixed charges. This is an indication of the residential sector of the mass market group's sensitivity to fixed charges, especially consumers who have low to nil consumption through summer months. Subsequently, Firstgas is continuing its offer of a fully variable network tariff.

To ensure that such a product's benefits make it through to end consumers, the following criteria will apply:

- a) The retailer must not charge a daily fee for the gas services (including network charges, metering and the retailers own internal costs) and
- b) The consumer must be installing either natural gas hot water or central heating and
- c) The connection must be a new connection or reconnection of an ICP that has not been connected for 12 months
- d) Firstgas reserve the right to issue ICPs with under 9 GJ (2,500 kWh) consumption in a 12-month period, or no consumption for 3 plus months with a termination notice for the new connection variable tariff. These consumers will need to be transitioned to a different pricing category within three months, unless evidence is provided showing a change in circumstance that would make them compliant with the minimum usage criteria over the next 12 months.

The variable residential pricing category does not directly align with the high fixed costs associated with running a distribution network. We believe that it reflects the requirements and circumstances of consumers. Additionally, we see this tariff option as an opportunity to increase the number of connections (and network use) by responding to demonstrated consumer preferences, match the cost structure of competitive energy sources, and thus lower the overall cost of natural gas services to all consumer groups.



Firstgas will continue a variable price for at least five years from when the consumer is first connected to ensure price stability. We do not want the consumers making investment decisions based on a model that could change in the short term.

All new connections that are eligible for GN0V pricing will be identified in the gas registry. If the consumer has installed gas hot water, or central heating at the time of connection this will be identified using the tariff code GNFR. This tariff code signals that while the consumer is currently on the fixed/variable tariffs equivalent to GN0R, they are eligible to be transitioned to GN0V.

## 11.2 Commercial consumer groups

The small and large commercial consumer groups map directly to price categories based on load.

## 11.3 Industrial consumer group

The industrial consumer group is split into two sub-groups: industrial and large industrial.

Firstgas has maintained the “large industrial” price category with a higher fixed price (GN05). This price category is suitable for consumers with annual consumption greater than approximately 12,000 MWh per annum, but who do not meet the “stand alone cost test”. Offering this price category reduces the administrative burden of offering these consumers’ individual non-standard prices. Industrial customers may opt for either a GN04 or GN05 tariff depending on their particular connection requirements, however they may not change tariff more than once in any 12-month period.

## 11.4 Overview of price components that Firstgas uses

Each price category has two price components for consumers, a fixed daily price (\$/day) and a volume price (\$/kWh).

**Table 6:** Description of price components

| Price type | Price component | Code | Units  | Description   |
|------------|-----------------|------|--------|---|
| Fixed      | Daily           | FIXD | \$/day | Daily price applied to the number of days each consumer’s point of connection is connected to the gas distribution network. |
| Variable   | Volume          | 24UC | \$/kWh | Volume price, applies to all gas distributed to each consumer.  |

## 11.5 How the price for each component is derived

Firstgas' price structure reflects the price sensitivity of our consumers. The fixed price for each price category increases with consumer capacity and consumption, i.e., the larger the consumer, the higher the fixed price.

Firstgas is aware of the effect of price changes for consumers. As in previous years, a first principles basis has been applied. The fixed and variable nature of our costs has not changed and the previous approach to fixed and variable pricing is sound.

Each consumer group is assessed on their impacts on Firstgas' costs. Small consumers, such as residential households have a higher (energy weighted) marginal cost to serve than larger consumers. It is therefore expected that the proportion of target revenue that is recovered through fixed costs increases as the size of the consumer load increases. The largest consumers (GN05) are on tariff structure that is highly fixed.

When deriving the pricing for the mass-market, consumers' willingness to pay is a significant driver. Small businesses appreciate stable costs and are more suited to a high proportion of fixed costs. Residential mass-market consumers on the other hand prefer to only pay for goods as services consumed. A highly variable pricing model suits these consumers more appropriately. Firstgas has endeavoured to meet consumer expectations by providing a variable tariff option, but only in cases where the variable pricing will reach the end consumer. Given it is not directly aligned with the high fixed costs on our businesses, a variable tariff that is repackaged into a fixed price-based model by retailers is the least efficient outcome. For this reason, Firstgas will retain the existing residential pricing model of high fixed, low variable charges for existing consumers and any new consumer or retailer who wishes to opt for it.

**Table 7: Fixed and variable pricing allocation by price category**

| Consumer group   | Price categories | Fixed prices<br>Daily | Variable prices<br>Volume |
|------------------|------------------|-----------------------|---------------------------|
| Mass Market      | GN0R             | 53.59%                | 46.41%                    |
|                  | GN0V             | 0.00%                 | 0.00%                     |
|                  | GN01             | 57.74%                | 42.26%                    |
| Small Commercial | GN02             | 40.03%                | 59.97%                    |
| Large Commercial | GN03             | 34.91%                | 65.09%                    |
| Industrial       | GN04             | 20.87%                | 79.13%                    |
|                  | GN05             | 68.35%                | 31.65%                    |

## 12. Proportion of Target Revenue by price component

The following table shows the forecast proportions of Target Revenue by price component.

**Table 8: Proportion of Target Revenue by Consumer Group and Price Component**

| Consumer group   | Price categories | Fixed   | Variable | Total   |
|------------------|------------------|---------|----------|---------|
| Mass Market      | GN0R             | 33.36%  | 28.90%   | 62.26%  |
|                  | GN0V             | 0.00%   | 0.00%    | 0.00%   |
|                  | GN01             | 1.98%   | 1.45%    | 3.43%   |
| Small Commercial | GN02             | 2.59%   | 3.88%    | 6.47%   |
| Large Commercial | GN03             | 3.80%   | 7.08%    | 10.88%  |
| Industrial       | GN04             | 1.58%   | 6.00%    | 7.58%   |
|                  | GN05             | 3.18%   | 1.47%    | 4.65%   |
| Non-standard     | NG60             | 3.51%   | 1.22%    | 4.74%   |
| Total            |                  | 100.00% |          | 100.00% |

### **13. Consultation process**

Firstgas has consulted with retailers on behalf of consumers, to discuss the changes to our pricing methodology and the resulting prices proposed for PY2023. The consultation process was conducted in early June 2022. The retailer representing the largest number of ICPs (40% of ICPs) on the Firstgas network provided feedback with no objections to the proposed changes.

Feedback was also received from a smaller retailer representing a group of industrial customers, raising concerns about the pricing increase. These comments related to the nature of the regulatory regime within which the changes are proposed. Firstgas responded to these concerns in a summary document provided to the retailer.

In summary, the feedback received from retailers did not lead to any changes to the proposed pricing for PY2023.

## 14. Impact of PY2023 price changes

Prices have changed in line with the price path set out in the Commerce Commission's *Default Price-Quality Path Determination 2022*. Further information on our annual price review, including why prices have changed is available on the Firstgas website.<sup>11</sup>

**Table 9: Price changes by price category**

| Price category | Number of consumers as at September 2021 | PY2022 prices        |                       | PY2023 prices        |                       | Price change PY2022 to PY2023 |                     |                               |
|----------------|--|----------------------|-----------------------|----------------------|-----------------------|-------------------------------|---------------------|-------------------------------|
|                |  | Fixed price (\$/day) | Volume price (\$/kWh) | Fixed price (\$/day) | Volume price (\$/kWh) | Fixed price change            | Volume price change | Estimated total price change* |
| GN0R           | 61,798                                   | 0.3750               | 0.0218                | 0.4194               | 0.0244                | 11.85%                        | 11.85%              | 11.85%                        |
| GN0V           | 0  | 0.0000               | 0.0532                | 0.0000               | 0.0595                | N/A                           | 11.85%              | 11.85%                        |
| GN01           | 2,074                                    | 0.6900               | 0.0082                | 0.7717               | 0.0091                | 11.85%                        | 11.85%              | 11.85%                        |
| GN02           | 1,508                                    | 1.1910               | 0.0079                | 1.3321               | 0.0089                | 11.85%                        | 11.85%              | 11.85%                        |
| GN03           | 515                                      | 5.2300               | 0.0073                | 5.8496               | 0.0082                | 11.85%                        | 11.85%              | 11.85%                        |
| GN04           | 71                                       | 15.1400              | 0.0069                | 16.9336              | 0.0077                | 11.85%                        | 11.85%              | 11.85%                        |
| GN05           | 9  | 250.6500             | 0.0017                | 280.3444             | 0.0019                | 11.85%                        | 11.85%              | 11.85%                        |

\*For an average consumer on each price category

<sup>11</sup> <https://firstgas.co.nz/about-us/regulatory/distribution/>

## 15. Consistency with pricing principles

The Pricing Principles are specified in clause 2.5.2 of the *Gas Distribution Services Input Methodologies Determination 2012*. The table below assesses the compliance with each criteria.

**Table 10: Consistency with pricing principles**

| Pricing principle  | Description of compliance  |
|--|--|
| <p>1) Prices are to signal the economic costs of service provision, by:</p> <p>a) Being subsidy free, that is, equal to or greater than incremental costs and less than or equal to standalone costs, except where subsidies arise from compliance with legislation and/or other regulation;</p> | <p>Firstgas conducted a complete cost allocation exercise in 2017 to determine the amount of Target Revenue that is recovered from each consumer group. This cost allocation model still accurately reflects Firstgas' business and brings the network pricing in line with the Firstgas costs.</p> <p>By mapping the Target Revenue directly to the cost allocation model, Firstgas is confident that the services are being provided in an economical manner and are subsidy free across consumer groups. Two of the allocators used by Firstgas are tied to consumer load, as constraints from the remaining capacity of the system often drives significant capital investments.</p> <p>Firstgas has assessed the alternative fuel options, especially LPG and electricity, and has worked to ensure prices can be offered in the range between incremental and stand-alone costs. This is challenging for some potential new consumers (low use residential, or highly seasonal mass-market) and the capital contribution policy should be read in conjunction with this DPM to understand how only economic consumers, that will not require subsidies from other users, are connected to the network.</p> |
| <p>b) Having regard, to the extent practicable, to the level of available service capacity; and</p> <p>c) Signalling, to the extent practicable, the effect of additional usage on future investment costs.</p>  | <p>Our prices include the provisions for returns on Capital Expenditure, as allowed by the Commerce Commission, which effectively allocates any investment in system capacity to the users who caused the constraint.</p> <p>Our network uses a single set of prices across all network areas which results in some limitations in compliance with principle 1(b). There were no significant differences identified in the costs of owning and operating networks across the different locations, and we sought to keep pricing as simple as possible. Firstgas will continue to assess this approach as part of the annual pricing exercise.</p>  |
| <p>2) Where prices based on 'efficient' incremental costs would under-recover allowed revenues, the shortfall is made up by prices being set in a manner that has regard to consumers' demand responsiveness, to the extent practicable.</p>   | <p>Firstgas has considered consumers' demand responsiveness and factored that into the DPM. It is difficult to determine the precise demand responsiveness of a consumer group due to the variation between consumers in a group.</p> <p>Firstgas believes that the pricing derived for commercial and industrial consumers under the 'efficient' allocation of incremental costs closely aligns with the demand responsiveness of these consumers. For the few consumers where this does not align, non-standard pricing is an option.</p>  |

| Pricing principle  | Description of compliance   |
|--|---|
|  | <p>The mass-market consumer group however has a slight disconnect between the 'efficient' incremental costs, and some consumers demand responsiveness.</p> <p>The mass-market issue is exacerbated by the fact that the distribution tariffs are only a portion of the costs charged to the end users. Energy costs and retailers' costs and margins are also included.</p> <p>Mass-market consumers have sensitivity to high daily charges, and the proportion of revenue that is recovered through fixed charges (at the retailer level) is substantial and drives some consumers away from natural gas as a fuel.</p> <p>To address this inconsistency between the pure cost allocation and the demand responsiveness, Firstgas is continuing its GNOV tariff, which is a fully variable tariff. To recognise that the purpose is to provide pricing aligned to mass-market consumers demand responsiveness, and aversion to fixed costs, the tariff code has a criterion that no additional fixed charge is applied by a retailer. The pricing must be fed through to the end consumer in a variable structure.</p> |
| <p>3) Provided that prices satisfy (1) above, prices are responsive to the requirements and circumstances of consumers in order to:</p> <ul style="list-style-type: none"> <li>a) Discourage uneconomic bypass; and</li> <li>b) Allow negotiation to better reflect the economic value of services and enable consumers to make price/quality trade-offs or non-standard arrangements for services.</li> </ul> | <p>Our non-standard contracts are continually reassessed to transition as many consumers back to standard network pricing where the justifications for non-standard pricing no longer apply, or the "efficient" incremental costs for a consumer have changed. We also continue to pursue higher-than-standard tariffs in some cases to ensure that there is no cross-subsidisation by existing users of the network.</p> <p>As described in this DPM, the non-standard consumers' revenue is removed from the allocation exercise, along with the non-standard consumers loads and number of connections to ensure all remaining costs are efficiently allocated to standard consumers.</p>  |
| <p>4) Development of prices is transparent, promotes price stability and certainty for consumers, and changes to prices have regard to the effect on consumers.</p>  | <p>Firstgas consults with retailers and key stakeholders when adjusting prices. We continue to make improvements to our pricing methodologies, documentation, and public disclosures in the interest of keeping these disclosures understandable for consumers and to reduce complexity. When considering changes to our pricing methodology, we consider it important to avoid significant step-changes where possible to avoid disruptions to market confidence.</p>  |

## Appendix A: Non-standard price summary

| ICP             | Reason                             | Standard tariff equivalent | Discount to standard |
|-----------------|------------------------------------|----------------------------|----------------------|
| 0008000027NGD9C | Bypass                             | GN05                       | 93.8%                |
| 0008000029NGE07 | Bypass                             | GN05                       | 82.6%                |
| 0008000033NG63B | Bypass                             | GN05                       | 95.0%                |
| 0008000038NG8EF | Bypass                             | GN05                       | 74.9%                |
| 0008000040NGFA6 | Bypass                             | GN05                       | 82.1%                |
| 0008000051NG94E | Bypass                             | GN05                       | 32.9%                |
| 0008000072NG8DB | Bypass                             | GN05                       | 92.4%                |
| 0008000074NG954 | Bypass                             | GN05                       | 94.6%                |
| 0008000080NG849 | Transition to Standard             | GN05                       | 70.4%                |
| 0008000147NGB68 | Transition to Standard             | GN04                       | 52.1%                |
| 0008000249NGBF0 | Bypass                             | GN05                       | 93.7%                |
| 0008000300NGE00 | Bypass                             | GN05                       | 93.8%                |
| 1001294166NGCC4 | Cost Recovery                      | GN05                       | -13.2%               |
| 1001295720NG848 | Interconnection Fee, cost recovery | GN05                       | -30.4%               |
| 1001296139NG852 | Interconnection Fee, cost recovery | GN05                       | -197.2%              |
| 0008000032NGA7E | Measurement only                   | N/A                        | 0                    |
| 0008000047NG26C | Measurement only                   | N/A                        | 0                    |
| 1001298408NGE2A | Bypass                             | GN05                       | N/A                  |
| 1001298461NGF8B | Bypass                             | GN04                       | N/A                  |

\*Note that a negative 'Discount to Standard' indicates that the non-standard tariff is higher than the standard tariff



**Appendix B: Director certification**

We, Mark Adrian Ratcliffe and Fiona Ann Oliver, being directors of First Gas Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

- a) the following attached information of First Gas Limited prepared for the purposes of clause 2.4.1 of the *Gas Distribution Information Disclosure Determination 2012* in all material respects complies with that determination.
- b) The prospective financial or non-financial information included in the attached information has been forecast on a basis consistent with regulatory requirements or recognised industry standards.



Director: Mark Adrian Ratcliffe



Director: Fiona Ann Oliver

29 July 2022

Date

29 July 2022

Date