

## **Explanatory notes to one-page performance summary of gas distributors**

Date: 20 November 2023

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### **Purpose of this explanatory document**

1. The purpose of these explanatory notes is to provide guidance on the interpretation of our performance summaries of gas distributors' performance.

### **Purpose of the performance summaries**

2. The summaries are designed to promote a better understanding of each company's performance by providing high-level statistics on measures such as profitability, capital and operating expenditure, asset condition, line charge revenue, network reliability and service, on one page.
3. These performance summaries are available as a PDF page for each gas distributor or an Excel workbook. These are located on our [website](#).

### **General information**

4. The information compiled for the performance summaries is derived from publicly available data.<sup>1</sup> Most of the data has either been audited and/or certified by the directors of the businesses. However, we do not guarantee that there are no errors in the data provided. The 2022 performance summaries cover the period ending 30 June 2022 for GasNet and Vector and 30 September 2022 for First Gas and Powerco. Unless otherwise stated, all values within the performance summaries refer to 2022.
5. The data we have highlighted presents a snapshot in time and is not intended to represent a thorough picture of performance. It does suggest some differences between the performance of different companies, such as the health of assets including pipes, district regulator stations and line valves. In cases of apparent poor performance, we will follow up with the companies to better understand their circumstances and we are likely to undertake further detailed analysis in the future.
6. All four individual gas distribution businesses have been aggregated to provide a snapshot of the industry. Generally sums or weighted averages are used. However, for reliability and service measures the simple average of the distributors has been used.
7. When assessing a gas distribution business against the industry average or other businesses it is important to note where there may be differences in the nature of their networks, for example, size or density of the network.
8. The performance summary expresses financial terms in nominal dollars.
  - 8.1 Figures from schedule 11a(iv) (Report on forecast capital expenditure – Asset replacement and renewal) that are only presented in constant prices have been converted to nominal. This has been achieved by comparing the constant and nominal figures presented in schedule 11a(i) (Report on forecast capital expenditure – Expenditure on assets forecast) to attain a modifier.

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<sup>1</sup> The Commission annually publishes an Excel database of information disclosure data provided by gas distributors. The latest database is located on our [website](#).

**Feedback**

9. We welcome feedback on the performance summary or this document for future consideration. Please send feedback to [infrastructure.regulation@comcom.govt.nz](mailto:infrastructure.regulation@comcom.govt.nz) with “Performance summary of GDBs – feedback” as the subject.

**Disclaimer**

10. While all reasonable care and diligence has been used in processing and extracting the data included in this document, we do not guarantee that the data and information represented in this document is error-free. Users should apply reasonable care in the use of or reliance on any material contained in this document or the performance summaries.

**Outline**

11. The following page has an outline of the performance summaries with sections broken down into boxes. Please refer to the hyperlink for further detail on that section.

Drop down to change business

## Industry

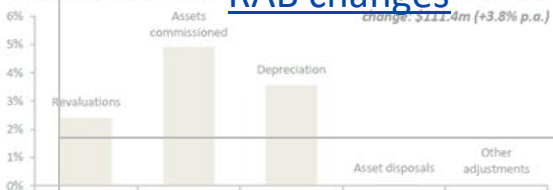
## Summary statistics

	5 year trend	3 year CAGR
Regulatory asset base	\$1,064m	+3.8%
Regulatory profit	\$77.4m	+12.3%
Return on investment	8.27%	+9.5%
Line charge revenue	\$133.6m	+1.5%
Other income	\$1.4m	+61.8%
Consumer connection	\$10.4m	+1.7%
Total gas conveyed	33,977 TJ	-0.5%
Maximum daily load	144.7 TJ	-1.6%
Load factor	79.32%	+0.6%
Capital expenditure	\$61.0m	-0.8%
Operating expenditure	\$43.4m	+4.5%
Capital contributions	\$10.8m	+5.5%
Related party transactions	\$25.0m	+4.0%
System length	18,579km	+1.0%

Summary statistics

## Annualised RAB changes (2019–2021)

Opening RAB: \$952.7million  
 Assets commissioned: \$1,064.1million  
 Depreciation: \$111.4m (+3.8% p.a.)



RAB changes

## Line charge revenues

	Proportion of revenue	Charges per unit
Average daily charge	54.4%	38.8 c/ICP
Delivery (GJ)	45.6%	1.07 \$/GJ
2018	Fixed	
2021	Variable	

Line charge revenues

## Service

	5 year trend
Number of emergencies	261 ↑
Average call response time (hrs)	0.43 ↓
Proportion of emergencies responded to within 1 hour	97.3% ↓
Proportion of emergencies responded to within 3 hours	100.0% ○

Service

## System reliability and integrity

	5 year trend
Planned interruptions on the network	1,184 ↑
Unplanned interruptions on the network	649 ↓
Interruption rate	9.9/100km ↑
Confirmed public-reported gas escapes	40.7/1000km ↓
Total SAIDI (minutes per 1000 customers)	1506 ↑
Total SAIFI (interruptions per 1000 customers)	10.09 ↑

System reliability and integrity

drop-down to change company

Explanatory documentation: [Link](#)

## Capital expenditure

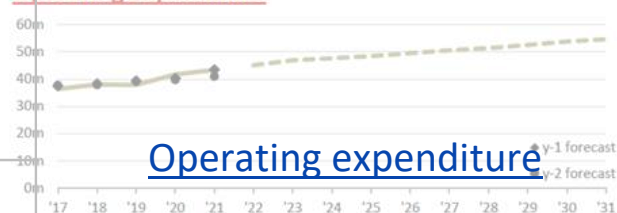


Capital expenditure

3 year ratios
Total capex / asset base
Total capex / system length
Total capex / connections
Total capex / depreciation

Capex by expenditure category	Average (2019–2021)	5 year trend	% of capex
Consumer connection	\$31.77m		52.8%
Asset replacement & renewal	\$8.79m		14.6%
System growth	\$6.15m		10.2%
Non-network assets	\$5.35m		8.9%
Reliability, safety & environment	\$4.58m		7.6%
Asset relocations	\$3.55m		5.9%
Total capital expenditure	\$60.19m		100.0%
Related party transactions	\$14.69m		24.4%

## Operating expenditure



Operating expenditure

3 year ratios
Total opex / asset base
Network opex / system length
Non-network opex / connections
Network opex / GJ

Opex by expenditure category	Average (2019–2021)	5 year trend	% of opex
Business support	\$15.45m		37.7%
System operations & network support	\$9.70m		23.7%
Routine & corrective maintenance	\$7.22m		17.6%
Service interruptions & emergencies	\$5.86m		14.3%
Asset replacement & renewal	\$2.77m		6.8%
Total operating expenditure	\$40.99m		100.0%
Related party transactions	\$6.36m		15.5%

Summary database: [Link](#)

2021



## Company details

PQ Regulated?	-
Year end:	-
:	-
Ownership:	-
Head Office:	New Zealand
Phone number:	-
Website:	-

Company details

## Pipeline assets

Estimated state of the assets	IP Main pipes	Medium Pressure Main pipes	Low Pressure Main pipes	Service pipes
Quantity	720km	11,496km	272km	6,089km
PE/steel/other	0.5%/99.5%	0.5%/99.5%	80.6%/3.8%/15.6%	97.3%/1.7%/1.0%
RAB Value	\$119.8m	\$560.1m	\$22.9m	\$246.5m
Average grade	3.04	3.61	3.61	3.27
Grade 1 / 2	0.0% / 0.0%	Pipelines / 1.2%	0.0% / 9.9%	0.1% / 0.3%
Unknown grade	7.2%	0.8%	0.5%	1.6%
Average age	38 years	25 years	37 years	23 years
Over generic age	0km (0.0%)	0km (0.0%)	0km (0.0%)	0km (0.0%)
Unknown age	0.0%	0.0%	0.1%	0.1%
5yr replacement req (est)	0.0%	0.7%	5.0%	0.2%
5yr planned replacement	0.1%	0.9%	3.7%	1.6%
Forecast repex (ave)	\$63k (-79%)	\$9,000k (+60%)	\$406k (+227%)	\$1,677k (+243%)
Replex series				

Asset condition

Pipelines

## Non-pipeline assets

Estimated state of the assets	District Regulator Stations	Line Valves	Special Crossings	Other Network Assets
Quantity	577	590	590	358
RAB Value	\$18.2m	\$11.2m	\$5.6m	\$51.2m
Average grade	3.16	3.12	3.12	3.16
Grade 1 / 2	0.2% / 1.3%	0.2% / 1.3%	0.2% / 1.3%	0.0% / 17.9%
Unknown grade	0.0%	21.0%	0.2%	1.7%
Average age	26 years	25 years	33 years	18 years
Over generic age	374 (70.3%)	0 (0.0%)	0 (0.0%)	192 (53.6%)
Unknown age	0.0%	1.3%	2.9%	2.0%
5yr replacement req (est)	2.8%	1.3%	0.8%	9.0%
5yr planned replacement	4.0%	0.1%	9.9%	23.2%
Forecast repex (ave)	\$1,652k (+83%)	\$430k (+250%)	\$504k (+6%)	\$766k (+1%)
Replex series				

Asset condition

All other network assets

## Summary statistics

12. For various high-level parameters there are three columns representing:
  - 12.1 the actual value for 2022;
  - 12.2 a small graph showing the 5 year trend (the mini-graphs can be hovered over in Excel to see the actual values for the time series); and
  - 12.3 the three year compound annual growth rate (CAGR).

## Line charge revenues

13. Line charges have been disaggregated into fixed and variable charges based on the data provided in Schedule 8 (Report on billed quantities and line charge revenues) of the information disclosures disclosed by each gas distributor. From this there are two columns:
  - 13.1 the proportion of total revenue sourced from each charging category for the latest year; and
  - 13.2 the average charge per unit based on the applicable quantity:
    - 13.2.1 for fixed charges, the average daily charge per customer; and
    - 13.2.2 for variable charges, the average charge per gigajoule of gas delivered to customers.
14. The bar graph illustrates the proportion of revenue from each charging category for the latest year and three years prior. This is intended to indicate any changes in the charging categories, such as a tariff restructure.
15. Gas distributors can have very different tariff structures, both between distributors and between customer groups. Caution is required when interpreting this section and both types of charges should be looked at in combination rather than in isolation.

## Company details

16. This section provides general information about the gas distributor as at the publication date.

## RAB changes

17. This section summarises the change in the value of each business' assets (known as the regulatory asset base) over the last three years, and the breakdown of that change.<sup>2</sup>

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<sup>2</sup> We note that our methodology for calculating the annualised RAB changes for the industry and for 'Vector + First Gas' will be slightly overstated due to First Gas' 15 month 2017 information disclosure, however, we do not consider this material.

### Capital expenditure

18. The main graph shows historic actual capital expenditure with a solid line and forecast capital expenditure with a dashed line. There are also references to the forecast from the previous two years (where known) so that one can compare previous forecasts with actual capital expenditure.
19. Four ratios are provided. To account for lumpy expenditure the ratios are over the most recent three years. These ratios are:
  - 19.1 total capex over asset base – the percentage of capital expenditure relative to the regulatory asset base;
  - 19.2 total capex over system length – the amount of capital expenditure spent per kilometre of pipeline;
  - 19.3 average capex per connection – the amount of capital expenditure spent per consumer; and
  - 19.4 total capex over depreciation – the ratio of capital expenditure to the depreciation during the period. This is intended to assess whether the distributor is replacing the value lost through depreciation (although the capex will include some expenditure to manage growth in addition to replacement of old degraded assets).
20. Capital expenditure is broken down into the categories contained in information disclosure, and the amount of capital expenditure that is spent through related parties is also shown. The three columns are:
  - 20.1 'Average (2020-2022)' – the average capital expenditure over the last three years;
  - 20.2 '5 year trend' – a small graph showing the 5 year trend (the mini-graphs can be hovered over in Excel to see the actual values for the time series); and
  - 20.3 '% of capex' – the percentage that category makes up of the total capital expenditure.

### Operating expenditure

21. The main graph shows historic actual operating expenditure with a solid line and forecast operating expenditure with a dashed line. There are also references to the forecast from the previous two years (where known) so that one can compare previous forecasts with actual operating expenditure.

22. Four ratios are provided. Consistent with capital expenditure, these ratios are over the most recent three years. These ratios are:
  - 22.1 total opex over asset base – the percentage of operational expenditure relative to the regulatory asset base;
  - 22.2 network opex over system length – the amount of operating expenditure spent on the network per kilometre pipeline;
  - 22.3 non-network opex per connection – the amount of operating expenditure spent on non-network activities per consumer; and
  - 22.4 total opex over GJ – the amount of operating expenditure spent per gigajoule of gas conveyed.
23. Operating expenditure is broken down into the categories contained in information disclosure, and the amount that is spent through related parties is also shown. The three columns are:
  - 23.1 'Average (2020-2022)' – the average operating expenditure over the last three years;
  - 23.2 '5 year trend' – a small graph showing the 5 year trend (the mini-graphs can be hovered over in Excel to see the actual values for the time series); and
  - 23.3 '% of opex' – the percentage that category makes up of the total operating expenditure.

### **Service**

24. This section summarises the service statistics for the network. The arrows show the general direction of that service measure over the last five years.

### **System reliability and integrity**

25. The aim of this section is to summarise the reliability statistics for the network and therefore includes Class B (planned) and Class C (unplanned) interruptions; however SAIDI and SAIFI numbers are based on the total number of interruptions. The arrows show the general direction of that reliability measure over the last five years.
26. The reliability measures used in the performance summaries have not been adjusted for extreme events which can have a significant impact on the gas distributor.



## Asset condition

27. There are two sections on asset condition covering eight asset categories including pipelines, district regulator stations, line valves and special crossings.
28. Other network assets consists of monitoring and control systems and cathodic protection systems.
29. Aside from RAB values, asset condition information is not dynamic for prior disclosure years.
30. For each of these asset categories a dial is used to indicate the condition of these assets. On the dial green is indicatively good, yellow is appears OK, and red is a potential risk. We encourage the user to refer to the distributors' latest asset management plan for further information on the state of its assets.
31. A formulaic approach has been used to determine where each of the asset dials are located and judgement has been applied on how much weighting to give grade 1, grade 2, unknown grade, and old assets<sup>3</sup>. For indicative purposes:
  - 31.1 over 15% of assets being classed as grade 1 will put that asset into the red zone;
  - 31.2 over 60% of assets being grade 2, unknown grade, or over its generic age (with accordance to paragraph 32.1) will put that asset into the red zone; or
  - 31.3 some combination of the above.
32. Also for each of the asset categories there is some summary data relating to quantity, age, grading, and replacement intentions. For further clarification:
  - 32.1 Over generic age – the number of assets that exceed the standard physical asset lives in accordance with Schedule A of the gas distribution services input methodologies, or in the case of cathodic protection systems, 35 years.<sup>4</sup>
  - 32.2 5 year replacement required – our estimation of the proportion of assets requiring replacement over the next five years and is based on the number of grade 1 (100%) and grade 2 (50%) as disclosed by the distributor.
  - 32.3 5 year planned replacement – the percentage that the distributor intends to replace over the next five years. Concerns may be raised if this differs significantly from our estimation above.

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<sup>3</sup> For the 2022 dashboard, the other network assets asset dials are impacted by the high proportion of assets over the generic age. The dials should be considered along with the other detailed information provided by the businesses which indicates the condition of those assets including the average grade of assets and those assets assessed as being Grade 1/2.

<sup>4</sup> *Commerce Act (Gas Distribution Services Input Methodologies) Determination 2012* [2012] NZCC 27, as amended.

- 32.4 Forecast repex – the forecast average annual expenditure on asset replacement and renewal associated with this asset for the next five years, which is disclosed in their asset management plan. And how this compares to their historical spend.
- 32.5 Repex series – a time series of actual and forecast asset replacement and renewal expenditure associated with the asset.
33. Our treatment of asset grades is guided by definitions provided in the information disclosure determination and replicated in Table 1 below. There is scope for gas distribution businesses to apply judgement when assigning a grade to their assets. Consequently, some distributors' assets may appear worse than they are in reality.<sup>5</sup>

**Table 1: Definitions of asset grades**

Grade 1	means end of serviceable life, immediate intervention required
Grade 2	means material deterioration but asset condition still within serviceable life parameters. Intervention likely to be required within 3 years.
Grade 3	means normal deterioration requiring regular monitoring
Grade 4	means good or as new condition
Grade unknown	means condition unknown or not yet assessed

34. For the 2022 year, the standard physical asset life of District Regulator Stations has been changed from 25 years to 35 years. This reflects the standard set in the Schedule A of the gas distribution services input methodologies.<sup>6</sup>
35. We received feedback that the inclusion of both the dial and the average grade for pipeline and non-pipeline assets could be confusing, and as a result we have removed the average grade metric from these summaries.

<sup>5</sup> We caution that asset condition is a somewhat subjective measure and gas distributors may have different interpretations on what each grade means.

<sup>6</sup> *Commerce Act (Gas Distribution Services Input Methodologies) Determination 2012* [2012] NZCC 27, as amended.