Firstgas

Asset Management Plan Update

Transmission Network

30 SEPTEMBER 2024

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I OREA TE TUATARA KA PUTA KI WAHO

– Ta Hirini Moko Mead

Translation:

The Tuatara comes out before it is too late.
A problem is solved by continuing to find solutions.

Message from our Chief Executive

Tēnā koutou katoa and welcome to First Gas Limited's (Firstgas) Gas Transmission Asset Management Plan Update 2024.

Ultimately, we all want a low carbon energy future that's affordable, reliable and meets the diverse needs of all New Zealanders. Firstgas remains focused on investing in and maintaining a safe, reliable and resilient transmission network for our customers; whilst actively pursuing growth across the network and investigating and developing future opportunities, which is reflected in the work that has been achieved over the last 12 months.

A key premise for the AMP is that existing reliability, safety and supply quality levels will be maintained and improved. There has been strong performance from the transmission network for the last two years on meeting its key indicators ensuring safe and reliable supply of gas.

We believe that having more customers, with more diverse needs, makes our business more resilient now and in the future, and ultimately leads to more competitive prices for all customers accessing and using our networks.

We have continued to focus on the reliability of the transmission system and maintaining compliance to increase the resilience, security of supply and reduce the emissions of the network. This has been achieved this year with such projects as the completion of the Mokau Compressor Station Re-wheel and upgrade, commencing the Kaitoke Compressor Station Upgrade and the SCADA system upgrade. Looking forward, we need to continue to improve the operational excellence of our core businesses.

At the heart of our business are our people. We lead a safety-first culture, and we work as one dedicated team. We are excited about the future. We have a clear strategy, and a host of opportunities in front of us to make sure New Zealanders are delivered natural gas safely and reliably, right now, while we plan for the future.

I hope you find the 2024 AMP Update for our gas transmission business both interesting and informative. We look forward to working with you in the coming year and welcome your feedback.

Ngā mihi nui

Paul Goodeve
Chief Executive

Executive Summary

Introducing the 2024 Asset Management Plan Update

This is the Firstgas Gas Transmission Asset Management Plan Update (AMP Update) for 2024. This AMP Update focuses on the material changes from the 2023 AMP that influence our planned expenditure and the operation of our gas transmission business.

This document is part of our ongoing engagement with our customers and provides a way for our customers to evaluate the value being delivered by our expenditure. For a complete understanding of the basis for our asset management decisions, we recommend that this AMP Update is read in conjunction with our 2023 AMP summary document and appendices which are available on our website **here**.

Background to the 2024 AMP Update

Firstgas owns and operates New Zealand's gas transmission system. Firstgas owns and operates 2,519 kilometres of gas transmission pipelines. These pipelines are essential to transporting large volumes of natural gas from production stations in the Taranaki region to distribution networks and large customers across the North Island.

Clarus

Firstgas is part of the wider Clarus Group.[1] Clarus is one of New Zealand's largest energy groups with businesses that touch many aspects of the energy supply chain including Rockgas, Firstgas, Firstlight Network, First Renewables and Flexgas.

Firstgas also owns and operates more than 4,900 kilometres of gas distribution pipelines that service approximately 67,800 consumers across the North Island. Our gas distribution business is also regulated under Part 4 of the Commerce Act 1986 and the 2024 AMP Update for our gas distribution business is available on our Firstgas website.[2]

Our gas transmission business is focused on transporting gas across the North Island to meet the diverse needs of our customers. This includes industrial use, power generation, commercial applications or residential use for space heating, water heating and cooking. We are focused on ensuring gas is a competitive fuel choice for our customers, while operating within the regulated price quality framework set by the Commerce Commission.

Our approach is driven by our vision and mission:

Purpose

Deliver good energy for a brighter Aotearoa.

Mission

Deliver safe, reliable and cleaner energy today and in the future, doing right by our environment, people and communities.

1 Further details are available at the website **clarus.co.nz**
2 Information on our distribution business is available **here**.

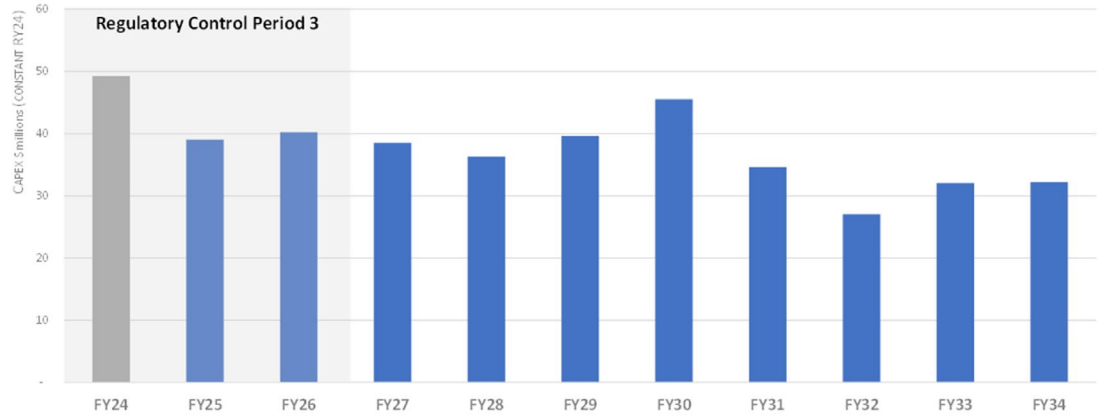
Forecast Expenditure Summary

The 2024 AMP Update sets out a summary of planned investments in our gas transmission network during the planning period to develop the transmission network, renew assets and undertake maintenance to provide a safe, reliable, and valued service to customers. Planned expenditure over the 10-year planning period is based on analysis of customer needs, future demand, system and asset information.

Capital Expenditure (Capex) Forecast

Forecast Capex over the planning period is set out below.

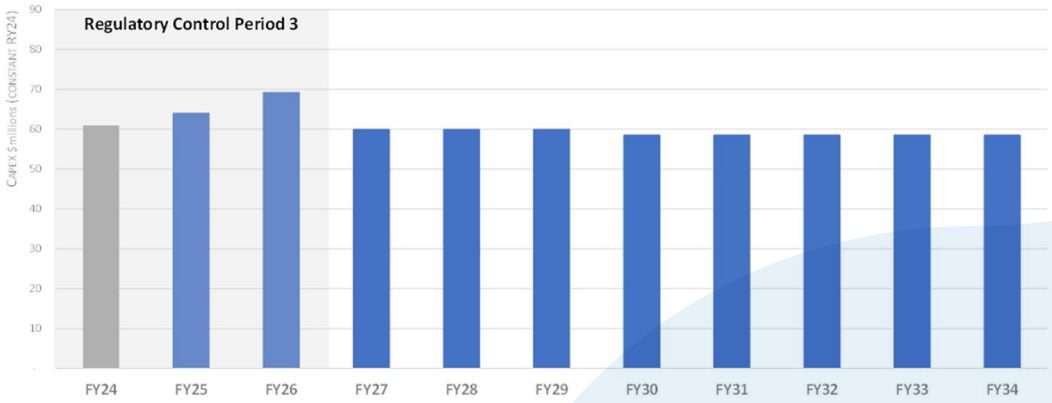
Total forecast Capex for the planning period (constant FY24)



Operating Expenditure (Opex) Forecast

Forecast Opex over the planning period is set out below.

Total forecast Opex for the planning period (constant FY24)



These forecasts reflect our current view of required Opex and Capex over the next ten years. While priorities may change over this time, we consider it important that we clearly outline our plans for the transmission network, while maintaining flexibility to adapt and respond to circumstances as the year progresses. Further details on our expenditure plans are set in the remainder of this document.

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1. Introduction

This is the Firstgas Gas Transmission Asset Management Plan Update for 2024. This section outlines the purpose, scope and structure of the 2024 AMP and provides an overview of the overall business.

As the sole provider of gas transmission services, Firstgas is regulated under Part 4 of the Commerce Act 1986 and subject to both price-quality path and information disclosure regulation. Publishing an AMP is a regulatory requirement. It is a key document supporting engagement with customers and stakeholders. Information on Firstgas' gas distribution business (GDB) can be found in a separate AMP Update.[3]

3 Information on our distribution business is available **here**.

1.1 Purpose of the Gas Transmission Business (GTB) AMP Update

This AMP Update focuses on the material changes from the 2023 AMP that influence our planned expenditure and the operation of our gas transmission business. We also see this AMP Update as an important planning tool for our operating expenditure (Opex) and capital expenditure (Capex) over the next ten years. While priorities may change over this time, we consider that it essential that we clearly outline our plans for the transmission network, while maintaining flexibility to adapt and respond to circumstances as the year progresses.

In addition, this document is one part of our ongoing engagement with our customers, and it provides an important way for our customers to evaluate the value being delivered by our expenditure.

1.2 Alignment with Regulatory Requirements

Our AMP Update aligns with regulatory requirements, as it:

1. Relates to the gas transmission services supplied by Firstgas.
2. Identifies material changes to the network development plans disclosed in the last AMP.
3. Identifies any material changes to the lifecycle asset management (maintenance and renewal) plans disclosed in the last AMP.
4. Provides reasons for any material changes to the previous disclosures in the report on forecast capital expenditure set out in Schedule 11a and report on forecast operational expenditure set out in Schedule 11b.
5. An assessment of transmission capacity as set out in clause 8 of Attachment A.
6. Identify any material changes related to the legislative requirements as set out in clause 3.6 of Attachment A.
7. Identifies any changes to the asset management practice of Firstgas that would affect a Schedule 13 Report on asset management maturity.
8. Contains the information set out in the schedules described in clause 2.6.6 (Schedules 11a, 11b, 12a, and 12b).

For a complete understanding of the basis for our asset management decisions over the planning period, we recommend that this AMP Update is read in conjunction with our 2023 AMP summary document and appendices which are available on our website **here**.

1.3 Period covered by the AMP Update

The AMP Update covers the ten-year period from 1 October 2024 through to 30 September 2034 (planning period). This aligns with our 1 October to 30 September financial and pricing year. The expenditure forecasts presented in this AMP Update are expressed in constant 2024 prices (unless otherwise stated).

The 2024 Firstgas GTB AMP Update was approved by our Board of Directors on 16 August 2024.

1.4 Scope of the 2024 AMP Update

The 2024 AMP Update sets out a summary of planned investments in our gas transmission network during the planning period to develop the transmission network, renew assets and undertake maintenance to provide a safe, reliable, and valued service to customers.

Expenditure forecasts and planned projects over the 10-year planning period are based on analysis of customer, system and asset information, and reflect a relatively high degree of accuracy (to the extent reasonably possible). These Capex and Opex forecasts are important inputs to the Firstgas Annual Business Plan.

This AMP Update complies with the requirements for an Asset Management Plan Update, as specified in the Commerce Commission's Information Disclosure requirements.[4] Appendix C includes a reference table, setting out compliance with these Information Disclosure requirements.

4 As specified in section 2.6.2 of the Gas Transmission Information Disclosure Amendments Determination (No.1) 2017, published 14 June 2017, Commerce Commission.

1.5 Structure of the AMP Update

The structure of the AMP Update is aligned with the AMP Summary document published in 2023. It focusses on providing a high-level overview of the material changes from the 2023 AMP.

Table 1.1: AMP Update Structure

CHAPTER	DESCRIPTION
Executive Summary	Summarises the key points of the AMP Update
1. Introduction	This chapter
2. Overview of Firstgas	Provides an overview of our gas transmission business
3. Year in Review	A summary of key activities and investments during FY23
4. Expenditure Forecasts	Provides a summary of our forecast expenditure over the next ten years
APPENDICES	**DESCRIPTION**
A. Glossary	Sets out key terms and abbreviations
B. Information Disclosure Schedules	AMP disclosure schedules required by Commerce Commission
C. Disclosure Requirements	Sets out how the AMP Update addresses relevant Information Disclosure requirements
D. Director's Certificate	A copy of the AMP's director certification

To get a more complete overview of our asset management approach, this AMP Update should be read in conjunction with the following 2023 AMP appendices.

Table 1.2: 2023 AMP Appendices that support this AMP Update

APPENDICES	DESCRIPTION
C. Network Overview	Provides an overview of our gas transmission network
D. Asset Fleets	Explains our approach to managing our asset fleets
F. System Development	Explains our approach to developing our transmission network
H. Asset Management Approach	Overview of our approach to asset management
I. Capacity Determination	Sets out forecast transmission capacity
L. Significant Projects	Summarises our main planned projects

2. Overview of Firstgas

This section introduces the Firstgas business and provides an overview of how the organisation is structured. It also provides key information on the gas transmission network, our approach to asset management and our approach to stakeholder engagement.

2.1 Corporate Structure

Firstgas owns and operates 2,519 kilometres of gas transmission pipelines. These pipelines are essential to supplying natural gas to industrial, commercial and residential customers throughout the North Island.

Clarus

Firstgas is part of the wider Clarus Group.[5] Clarus is one of New Zealand's largest energy groups with businesses that touch many aspects of the energy supply chain including Rockgas, Firstgas, Firstlight Network, First Renewables and Flexgas.

Firstgas also owns and operates more than 4,900 kilometres of gas distribution pipelines that service approximately 67,800 consumers across the North Island.

Our gas distribution business is also regulated under Part 4 of the Commerce Act 1986 and the 2024 AMP Update for our gas distribution business is available on our Firstgas website.[6] Firstgas believes that common ownership is delivering distinct advantages for gas industry participants and consumers, including:

- a strong commercial interest in maximising the competitiveness of gas.
- scale and new capabilities to capitalise on opportunities across the gas transmission system and gas distribution network.
- ability to operate the gas transmission system and the gas distribution network and manage assets in ways that better serve the interests of all customers.

Firstgas remains focused on actively promoting the use of gas and ensuring work signalled in the AMP maximises the value obtained from the gas networks.

2.1.1 Firstgas Board

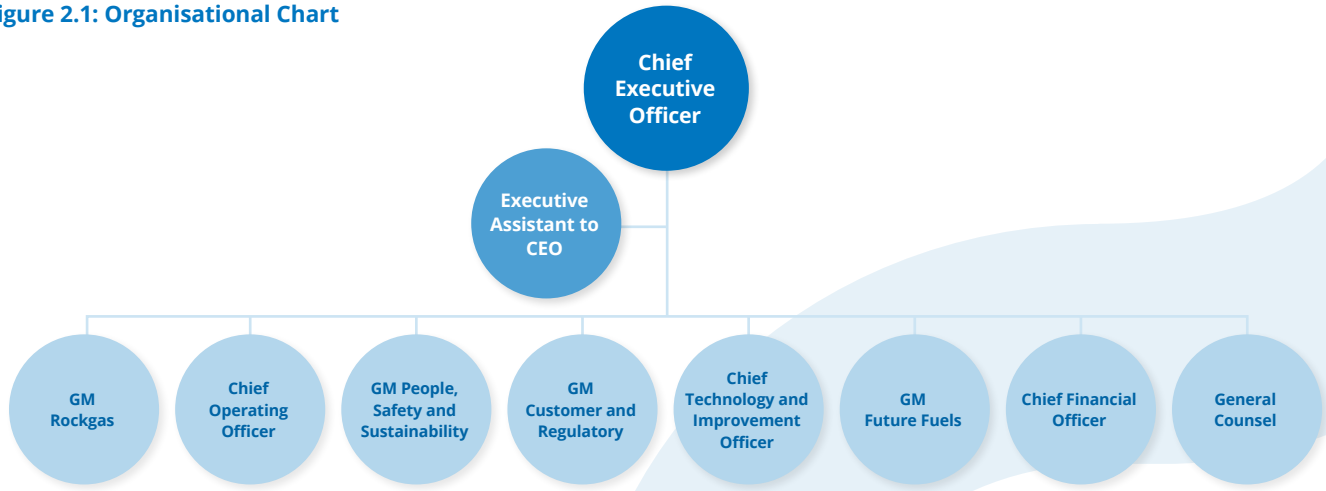
Firstgas is governed by a Board of Directors, chaired by Mark Ratcliffe. The Board has a mixture of professional infrastructure experience from both sides of the Tasman. Biographies for the individual Board members are available on the website **firstgas.co.nz**

2.1.2 Organisation Structure

Firstgas employs approximately 304 staff[7] with most staff based in our corporate headquarters in Bell Block, New Plymouth, with teams also located in Wellington, Tauranga, Palmerston North, Hamilton, and Auckland. Our Executive team is headed by our Chief Executive Paul Goodeve, with nine direct reports.[8]

Our organisational structure is illustrated in Figure 2.1 below.

Figure 2.1: Organisational Chart

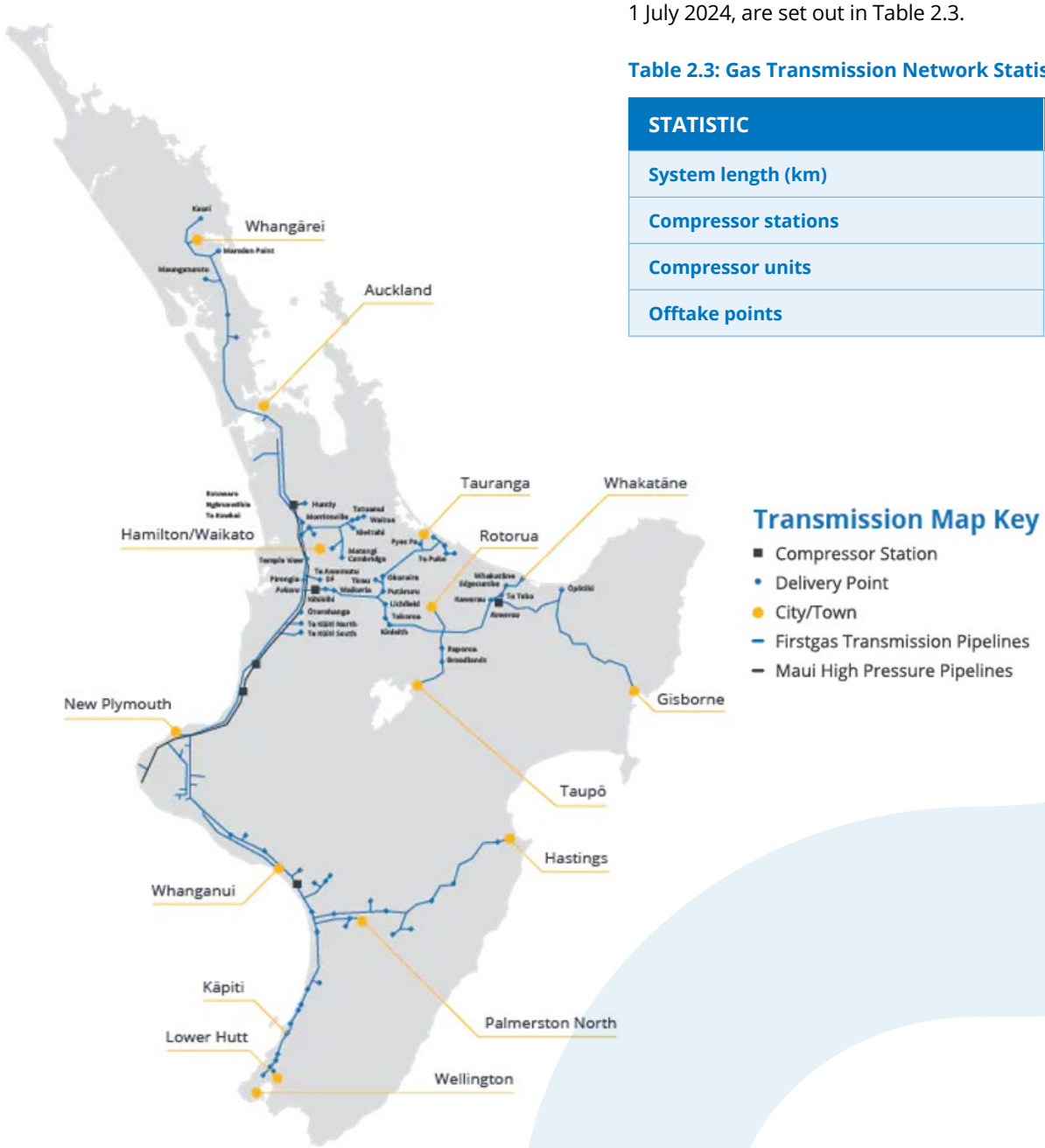


5 Further details are available at the website **clarus.co.nz**
6 More information on our gas distribution business is available **here**.
7 Excludes employees directly employed by Rockgas but incorporates a number of business support staff that provide support across the Clarus Group.
8 Biographies of our Executive Team are available on our website **clarus.co.nz/about-us/people**

2.2 Our Gas Transmission Network

Firstgas owns and operates the gas transmission system consisting of underground pipelines, compressor facilities and above ground stations in the North Island of New Zealand. The transmission system incorporates both the Maui and non-Maui[9] transmission pipelines, as set out in Figure 2.2 below.

Figure 2.2: High Pressure Gas Transmission Pipelines



The transmission system is 2,519 kilometres in length, with approximately 146 kilometres installed in urban areas and the remainder in rural areas. The nominal internal diameter of the pipelines range from 50mm to 850mm, with the majority installed below ground. The pipelines connect 246 stations that contain a range of equipment designed to receive, transmit and deliver gas safely and efficiently to customers.

Key statistics for the gas transmission network, as of 1 July 2024, are set out in Table 2.3.

Table 2.3: Gas Transmission Network Statistics

STATISTIC	VALUE
System length (km)	2,519
Compressor stations	9
Compressor units	20
Offtake points	123

9 The gas transmission system purchased from Vector Limited in April 2016.

2.3 Asset Management Strategy

At Firstgas, we put significant effort into ensuring we safely, reliably and cost-effectively supply gas to our customers. Our business' focus on gas directly influences our approach to asset management through our strong desire to ensure we provide reliable and cost-effective services to customers. We will also investigate opportunities with renewable gases where economic. We believe that having more customers, with more diverse needs, makes our business more resilient in the near term and ultimately leads to more competitive prices for all customers accessing and using our networks.

The Firstgas approach to asset management is guided by a suite of asset management documents and practices that ensure performance objectives and the expectations of stakeholders are met. The approach incorporates:

- **Asset Management Framework:** ensures alignment between corporate objectives and day-to-day asset management activities. It covers the strategic plan, that guides the subsequent development of the asset management system, asset management policy, objectives and ultimately, our AMP documents.
- **Asset Management System:** we link corporate objectives and stakeholder needs to specific asset management approaches through the asset management system. It aligns with the requirements of ISO55001, the international standard for asset management, and seeks to reflect best practice.
- **Performance Measures:** set out the overall asset management performance objectives and key performance indicators (KPIs) that Firstgas regularly monitor to ensure a safe and reliable gas transmission system is provided. Where appropriate, the targets have been developed to align with the definitions developed by the Commerce Commission for information disclosure.

Our AMP documentation captures the key elements of the above in a summarised form and explains the asset management strategy and approach to both internal and external stakeholders.

2.3.1 Objectives for our Gas Transmission Network

Throughout this AMP Update, we describe how we will achieve the following important objectives for our gas transmission network:

- **Safety commitment:** The safety of our customers, staff, service providers and the general public is paramount.
- **Engaged stakeholders:** Consult with stakeholders, particularly on planned investments, and inform stakeholders about the intentions to managing the gas transmission system. This requires Firstgas to provide clear descriptions of all assets, key strategies and objectives.
- **Performance accountability:** Provide visibility to stakeholders on performance and information on the performance of the system.
- **Investment planning:** Provide visibility of forecasted system investment programmes and upcoming medium-term construction works, with a clear rationale as to why planned investments are the best way to meet service requirements.
- **Informed staff and contractors:** Provide guidance and clarity on the asset management approach to our employees and service providers that ensures a common understanding and adequate resourcing.
- **Regulatory compliance:** Ensure Information Disclosure obligations[10] set by the Commerce Commission are met.

10 Gas Transmission Information Disclosure Determination 2012 (consolidated April 2018), available **here**.

2.4 Stakeholder Engagement

Firstgas recognises the importance of regular engagement with major gas users, customers and the communities who rely on the consistent and safe delivery of large volumes of gas to maintain their on-going productivity and business. A focus on maintaining regular dialogue with stakeholders provides important feedback, to improve the transmission services across the system.

Our focus is to engage with our stakeholders on a range of topics, including:

- Distributed regular updates to stakeholders, providing them with information and updates on significant transmission topics.
- Continued participation in meetings of the Major Gas Users Group (MGUG) to share detailed operational plans and gather feedback. These meetings also served as a platform to discuss common areas of interest and address issues facing the gas sector, such as the ERP and the development of a Gas Transition Plan.
- Maintaining regular meetings with gas producers to address relevant matters and explore opportunities for enhancing gas quality and compliance with specifications.
- Continued engagement with EmsTradepoint, the wholesale gas market operator, by actively participating in their operations working group. This involvement helps gain a better understanding of how gas trading impacts the competitiveness of the New Zealand gas market.
- Actively participating in monthly meetings with the Critical Contingency Operator (CCO) to discuss pertinent issues and ensure preparedness for potential critical contingency events.
- Providing input as the Transmission System Owner (TSO) during the CCO's annual training sessions, which were attended by shippers, large consumers, retailers, producers, and gas distribution companies.

The Firstgas Land and Planning team's stakeholder management is focused on building and sustaining relationships, and where appropriate, partnerships with landowners, iwi, councils, developers, contractors, and other interested parties, for the protection of the transmission pipeline and the community.

In the operation of any large organisation with numerous stakeholders and diverse interests, situations will inevitably arise where not all interests can be accommodated, or where conflicting interests exist. For example, different customers may place greater or lesser emphasis on price or quality.

From our perspective, situations of conflicting interests are best managed by:

- Clearly identifying and analysing stakeholder conflicts (existing or potential).
- Having a clear set of fundamental principles that help to guide a resolution. We are legally bound to make decisions that are consistent with operating codes (which include obligations relating to confidentiality) and we need to comply with the Gas Act 1992 and other relevant legislation.
- Seeking solutions that are consistent with the principles found in the codes and in relevant legislation or regulation.
- Communicating effectively with stakeholders so that all parties know where they stand.

In all instances of conflicting interests, we will strive to engage with stakeholders in a transparent manner to explain our decisions.

3. Year in Review

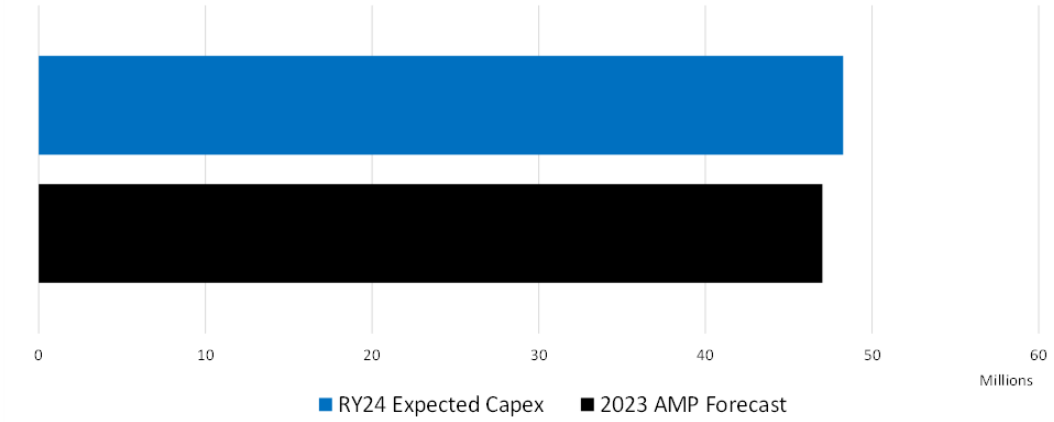
This section provides an overview of Firstgas' major projects and initiatives over the past year ending 30 September 2024. It sets out how our FY24 expenditure compared with the equivalent forecast expenditure included in our 2023 AMP Update.

3.1 Capital Expenditure Summary

Firstgas remains focused on building and maintaining a safe and resilient gas distribution network for customers, whilst actively pursuing growth across the networks. This focus is reflected in the work programme that was undertaken over the last 12 months.

Expected FY24 Capex is forecast to be higher than the forecast set out in our 2023 AMP. The marginally higher expenditure is attributed to reprioritisation and change to several small projects. These included upgrading battery chargers, installing new pig launchers (allowing for pipeline inspection) and additional spend on renewal of our SCADA system. These increased investments were offset by lower expenditure on non-network Capex, initially intended for upgrading office facilities.

Figure 3.1: Expected Capex in FY24 versus forecast Capex in 2023 AMP



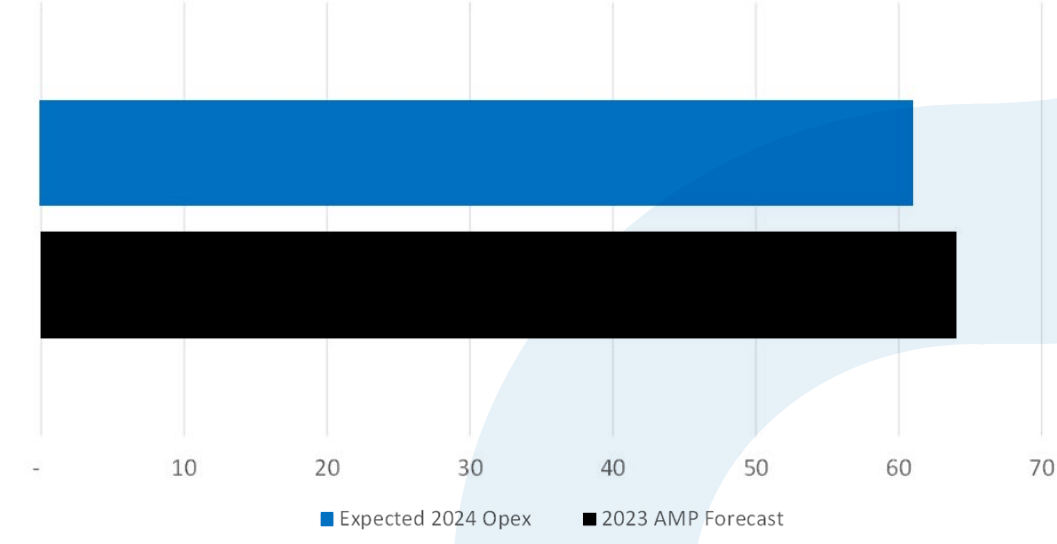
3.2 Operating Expenditure Summary

Firstgas remains focused on building and maintaining a safe and resilient gas transmission network for customers, whilst actively pursuing growth across the networks. This focus is reflected in the work programme that was undertaken over the last 12 months.

Opex in RY24 is expected to be lower than our 2023 AMP forecast due to a range of factors. These included the following:

- A material reduction in compressor fuel Opex. This has achieved further optimisation of compressor usage and favourable gas pricing during RY24.
- Some savings across system operations, network support activities and land management.
- Reduced service interruption incident and emergency (SIE) expenditure due to fewer incidents on the network.

Figure 3.2: Expected Opex in FY24 versus forecast Opex in our 2023 AMP



3.3 Significant Activities Undertaken in FY24

This section sets out a summary of the significant activities and capital works completed during FY24. It should be noted that some activities undertaken in FY24 may carry over into the coming FY25 year.

3.3.1 Stress Corrosion Cracking (SCC)

As part of the ongoing management of our pipelines, Firstgas assess pipelines for risk of stress corrosion cracking (SCC). Previously this had not been observed on Firstgas pipelines and the risk was considered low. In 2022 and 2023, as part of the investigation of a pipeline failure on a transmission pipeline in the King Country and as part of the follow up to an in-line pipeline inspection, SCC was identified in three locations. This has led to a reassessment of this risk based on the Canadian guideline[11] widely considered best practice for managing stress corrosion cracking in pipelines. Models have been developed to predict higher risk locations and an extensive excavation program is underway to understand the extent of this issue.

BOX 3.1: Need for increased remediation expenditure

As a result of an independent assessment, we have identified some issues which, if left unaddressed, could represent significant risks for our transmission network.

This was unforeseen at the time of the current DPP reset, hence there are no Capex and Opex allowances to remediate the issues and manage/ mitigate these risks. We are doing further analysis to understand total remediation costs.

3.3.2 Excavation Surveillance Program

As our pipelines age, more excavations are required to allow sufficient access to undertake required pipeline integrity maintenance. Historically we have completed approximately 35 excavations (on average) per year, but the increasing risk due to ageing pipelines requires increasing excavation volumes. We have completed 80 excavations in FY24 and aim to complete 120 excavations per year over the next 5 years to ensure pipeline integrity maintenance is up to date. After this time, it is expected we will then need to average around 70 to 80 excavations per year. As we progress though the program, we will refine these timings and volumes to ensure the risks are effectively managed.

11 CEPA Recommended Practices for Managing Near-neutral pH Stress Corrosion Cracking 3rd Edition.

3.3.3 Kaitoke Compressor Station Upgrade

The upgrade started in FY24 to install two smaller (50% duty) machines at the Kaitoke Compressor Station south of Whanganui. Upon commissioning, these new compressors will replace an existing unit and operate in parallel with an older existing unit. This setup will ensure adequate line pack in the southern system (Wellington and Hawkes Bay), meeting critical contingency management requirements. The upgrade at this station will improve reliability, avoid significant CAPEX requirements of the older machines, reduce OPEX costs and reduce carbon emissions. This upgrade also enables further optimisation of the wider compressor network.

Work on this project will continue in FY25, with commissioning dates scheduled for the middle of the year.

3.3.4 Mokau Compressor Re-wheeling

A project to reconfigure the Mokau compressors was completed in FY24, this project is central to the compression and optimisation strategy Firstgas has developed. With an increased outlet pressure and an optimised operating envelope for the compressor, Mokau will be the primary compressor station on the network for the 400 and 500 pipelines north of Taranaki and enable Rotowaro and Pokuru compressor stations to potentially be shut off for periods of the year, while being able to handle swings in operational imbalances that occur throughout each day.

This will enable the compressors to operate in the most efficient areas of the performance curve, reducing fuel costs and emissions, whilst being able to meet relevant operational needs.

3.3.5 SCADA System Replacement

As the existing control system has now reached the end of its life, a project to replace the existing SCADA system commenced with an expected project completion scheduled in FY25.

The scope of works includes the supply and install of hardware and software, cybersecurity hardware, software and licenses to upgrade this system.

3.4 Performance of the Transmission Network

A key premise for the AMP is that existing reliability, safety and supply quality levels will be maintained and improved. Targets are set to help drive performance improvements and measure progress in delivering reliable, safe and high-quality service.[12] There has been strong performance from the transmission network for the last two years on meeting its key indicators ensuring safe and reliable supply of gas.

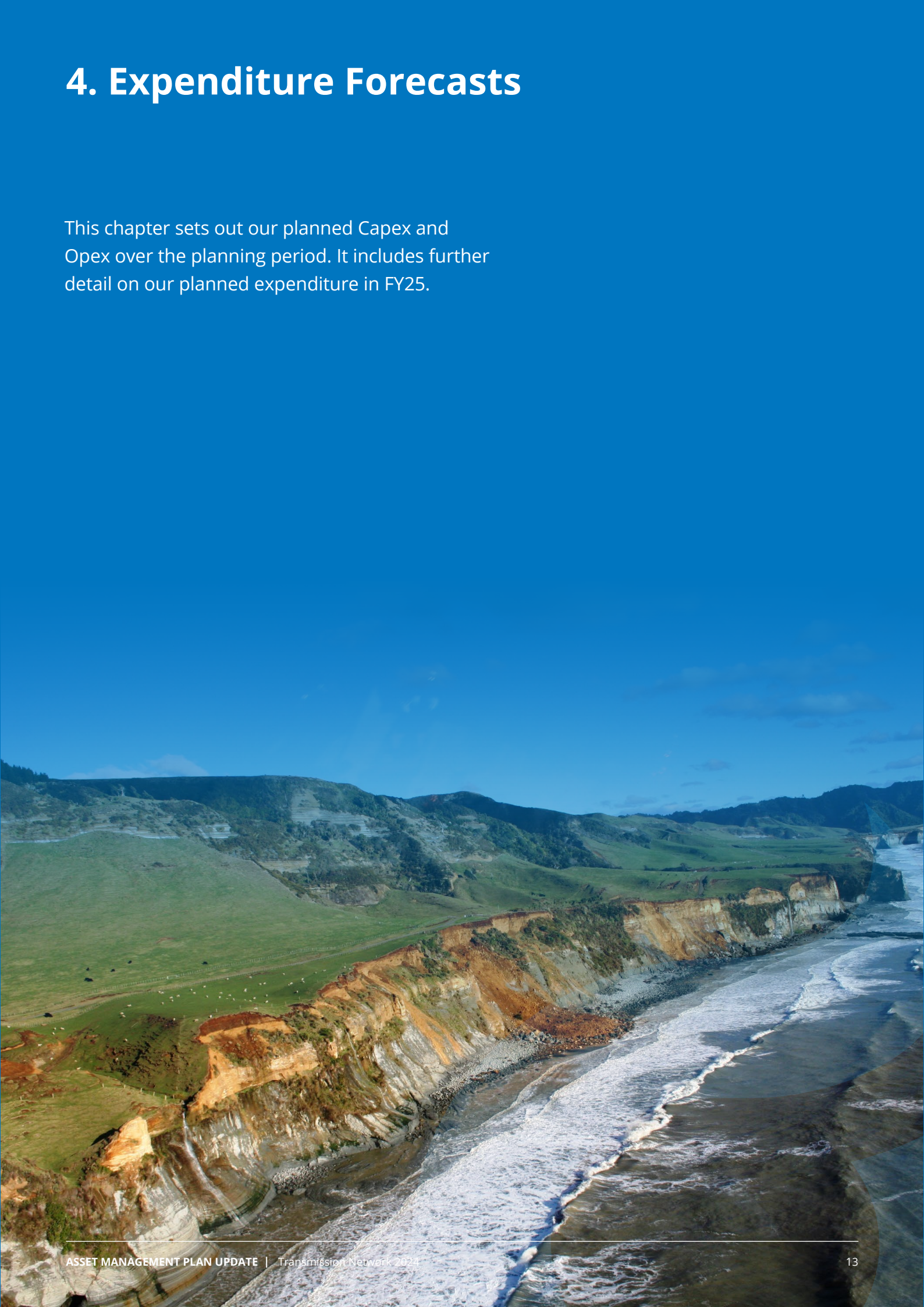
Table 3.1: Gas Transmission Network Performance[13]

KEY PERFORMANCE INDICATOR	FY23	TARGET	PERFORMANCE
Response time to emergencies	100%	100%	Target met
Major interruptions	0	0	Target met

12 These performance measures are explained in Appendix H of the 2023 GDB AMP.
13 These measures are included as part of the DPP quality measures.

4. Expenditure Forecasts

This chapter sets out our planned Capex and Opex over the planning period. It includes further detail on our planned expenditure in FY25.



4.1 Introduction

Short-term cost increases have been observed over the past two years, with sector inflation greatly exceeding CPI. This has led to significant cost escalation throughout the supply chain for planned maintenance and capital expenditure. Several factors have contributed to these increases, including supply and demand imbalances, production downturns, fuel price increases, container shortages and port congestion.

As the likelihood increases of future capital investment not being fully recovered, increasing consideration is being given to the risk of asset stranding on gas networks. Work has commenced to better understand the exposure of the business to this risk and identify further changes that may be required to ensure that the CAPEX required, to ensure the continued availability of the network, is able to be invested in a manner acceptable to investors.

Work to date has focused on scenario definition and option analysis, with more detailed strategy to be developed in FY25. Until this analysis has been progressed, we have maintained our strategy on required investment levels in this AMP. Initial findings indicate that a significant change to the investment profile may not be immediately necessary and many of the current investments need to be made to ensure the network continues to be operationally effective and efficient. This will be reassessed as part of the more detailed work to be carried out in RY25.

4.1.1 Managing Ageing Assets

Ageing assets require investment to maintain them at an appropriate level for expected safety and service levels. As assets age, there is increasing risk of asset failure. To mitigate this risk increased levels of investment, primarily Capex, is typically required.

While technology and operational approaches can help manage risk and monitor issues to some extent, there will come a point where asset replacement becomes the most cost effective and technically appropriate solution. In the case of assets like pipelines, wholesale replacement is usually not feasible and instead affected sections are replaced.

4.2 Capex Forecast

The forecast Capex over the planning period is set out in Figure 4.1.

Key drivers associated with the Capex profile:

- Asset Replacement and renewal profiles are driven by the need to address key assets including;
  - Compressor replacement and optimisation.
  - Replacing obsolete flow computers and odorant injection units.
  - Water bath heater refurbishment, and safety improvements.
- Site communication upgrades to mitigate the removal of 2/3G and fixed-line telecommunications services.
- Construction of a new office and control room building in New Plymouth between FY27 and FY32.
- Urban encroachment protection or replacement of pipelines in developing urban areas.

The overall downward trend reflects the completion of the following programs:

- Reconfiguring pipelines and stations to enable pigging.
- Peak heater replacement and refurbishment becoming routine.
- Non-network expenditure decreases following completion of an office building replacement in FY30.
- FY33 and FY34 plan for lifecycle replacement of new SCADA system.

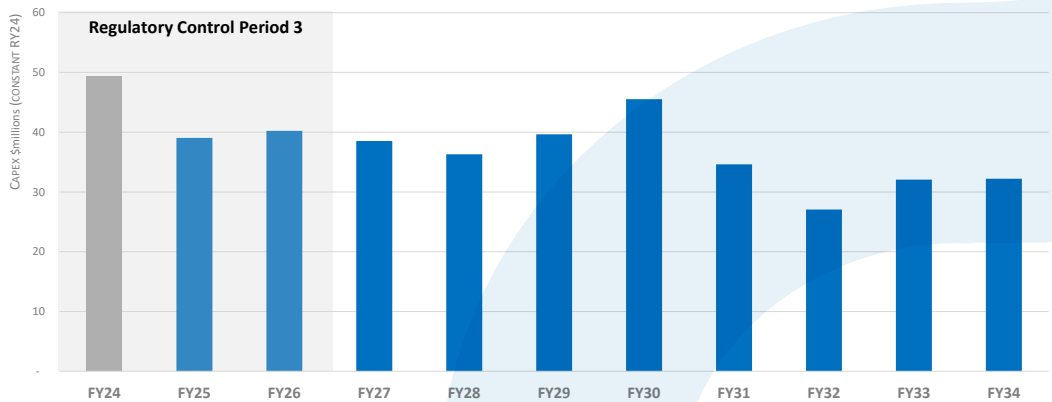
4.2.1 Material changes to our Capex forecasts and related strategies

There is an increase of Capex forecast for the FY25 to FY30, this is attributed to:

- Replacement programs for the obsolete flow computers and odorant injection plant have been added from FY26.
- Compressor optimisation and replacement strategy allocated over the next 10 years.
- Programs for the refurbishment and replacement of heaters have been refined to smooth the volume of work required across the 10-year timeline, this has brought forward work into FY25 to FY28 to avoid a large peak of work in FY31 to FY33.
- Kaitoke Compressor upgrade has been reforecast and rescheduled. This required additional expenditure in FY25.
- SCADA Master replacement terminal has been reforecast and rescheduled. This required additional expenditure in FY25. The replacement and associated upgrades will be predominately completed in FY25. This was originally forecast over three years.
- An allowance for a possible new customer connection forecast in FY26.

In addition to the above, urban encroachment is having an impact on our expenditure planning. There are currently enquiries to relocate our pipelines throughout South Auckland and we are expecting this to have an increase in Capex forecasts but require further information from developers.

Figure 4.1: Total forecast Capex for the planning period (constant FY24)



4.2.2 Key Capital Investments during FY25

The following table sets out key capital investments during FY25.

Table 4.1: Key capital investments during FY25

PLANNED INVESTEMENT	FY25 CAPEX
Kaitoke compressor station upgrade	$9.2 million
SCADA system replacement, disaster recovery and SCADA room relocation	$4.2 million
Site communication upgrades	$2.0 million
Shallow pipeline remediation	$1.5 million
Pipeline inline inspection program	$3.47 million
KiwiRail realignment	$2.4 million

4.3 Opex Forecast

The forecast Opex over the planning period is set out in Figure 4.2.

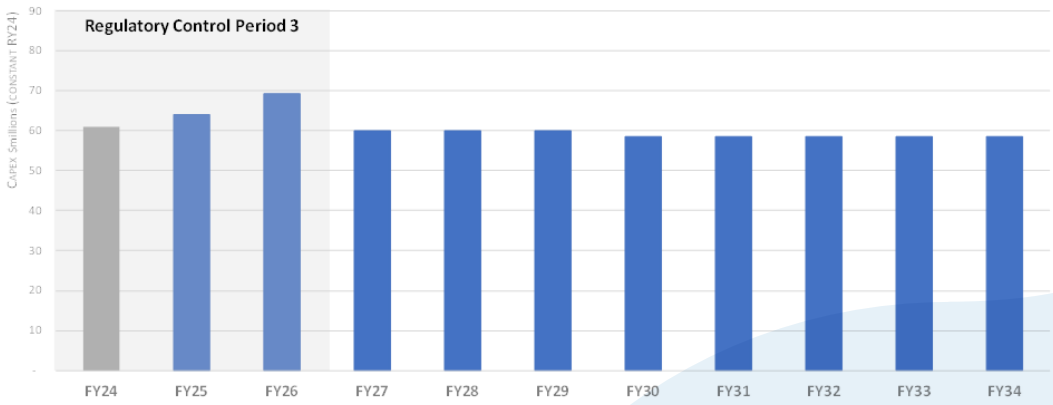
Our forecast Opex over the majority of the AMP period is broadly aligned with expenditure in FY24. Forecast expenditure from FY25 onwards includes an uplift in RCI Opex to undertake excavation works to support our surveillance program (discussed in Section 3.3.2) and SCC mitigation (discussed in Section 3.3.1). Offsetting this increase from FY27 onwards is the removal of compressor fuel Opex when this will become a pass-through.

4.3.1 Material changes to our Opex forecasts and related strategies

Setting aside the change to the treatment of compressor fuel, our overall level of forecast Opex and related strategies are broadly consistent with AMP 23. Within the overall expenditure amounts there are variances in individual categories, including:

- Forecast service interruptions and emergencies (SIE) expenditure has been increased above our AMP 23 forecasts based on levels of expenditure in both FY23 and FY24.
- We have increased routine and corrective maintenance and inspections (RCI) Opex to undertake increased volumes of excavation works to support our surveillance program and managing stress corrosion cracking in our pipelines.

Figure 4.2: Total forecast Opex for the planning period (constant FY24)



Appendices

Appendix A. Glossary

TERM	DEFINITION
AMMAT	Asset Management Maturity Assessment Tool. Results of the AMMAT are published in a full AMP. Any material changes to the asset management maturity rating results between AMPs are published in the AMP update.
AMP	Asset Management Plan
Asset grades	**Grade 1:** means end of service life, immediate intervention required **Grade 2:** means material deterioration but asset condition still within serviceable life parameters. Intervention likely to be required within three 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
BAU	Business as usual
Capex	Capital expenditure – the expenditure used to create new or upgrade physical assets in the network and non-network assets
CCC	Climate Change Commission
COO	Chief Operating Officer
CPP	Customised Price-quality Path
CPU	Central Processing Unit
Data accuracy	**Grade 1:** means that good quality data is not available for any of the assets in the category and estimates are likely to contain significant error **Grade 2:** means that good quality data is available for some assets but not for others and the data provided includes estimates of uncounted assets within the category **Grade 3:** means that data is available for all assets but includes a level of estimation where there is understood to be some poor quality data for some of the assets within the category **Grade 4:** means that good quality data is available for all so the assets in the category
DP	Delivery Point
DPP	Default Price – Quality Path
DRS	District Regulating Station
EDB	Electricity Distribution Business
FEED	Front End Engineering Design
FSA	Formal Safety Assessment-risk management process in distribution networks.
FSP	Field Service Provider
FY2024	Financial year ending 30 September 2024
GDB	Gas Distribution Business
GIC	Gas Industry Company – New Zealand's gas industry co-regulatory body
GIS	Geographical Information System
GM	General Manager
GMS	Gas Measurement System – commonly referred to as a gas meter
GTAC	Gas transmission access code – the proposed single code for the transmission system, replacing the Maui Pipeline Operating Code and the Vector Transmission Code.
GTB	Gas Transmission Business

TERM	DEFINITION
HDD	Horizontal directional drilling
HSE	Health and Safety in Employment
ICP	Installation Control Point
IS	Information Systems
HSEQ	Health, Safety, Environment and Quality
IMs	Input Methodologies – documents set by the Commerce Commission which promote certainty for suppliers and consumers in relation to the rules, requirements, and processes applying to the regulation under Part 4 of the Commerce Act 1986. Input Methodologies – documents set by the Commerce Commission which promote certainty for suppliers and consumers in relation to the rules, requirements, and processes applying to the regulation under Part 4 of the Commerce Act 1986.
IT	Information Technology
KGTP	Kapuni Gas Treatment Plant
KPI	Key performance indicators
NZTA	New Zealand Transport Agency
MLV	Main line valve
OATIS	Open Access Transmission Information System
Opex	Operational expenditure – the ongoing costs directly associated with running the Gas Transmission System. This includes costs both directly related to the network (e.g. routine and corrective maintenance, service interruptions/incidents, land management) and non-network related expenditure (e.g. network and business support)
PIG	Pipeline inspection gauge tool
Pigging	A method of internally inspecting, cleaning or gauging a high-pressure pipeline, normally while in service to obtain information on pipeline condition
PJ	Petajoule (unit of energy) = 1015 Joules = 1,000 TJ
RAB	Regulated Asset Base
RTE	Response Time to Emergencies
SCADA	Supervisory control and data acquisition
TJ	Terajoule (unit of energy) = 1012 Joules
UAV	Unmanned aerial vehicle

A full glossary is also included in Appendix A – Glossary of the supporting appendices for this Asset Management Plan.

Appendix B. Disclosure Schedules

This appendix includes the following Information Disclosure schedules:

- **Schedule 11a:** report on forecast Capital Expenditure.
- **Schedule 11b:** report on forecast Operational Expenditure.
- **Schedule 12a:** report on asset condition.
- **Schedule 12b:** report on forecast demand.
- **Schedule 14a:** commentary on differences between forecast Capex (schedule 11a) and Opex (schedule 11b) in nominal and constant prices.

Schedule 11a: report on forecast Capital Expenditure

											Company Name	Firstgas
											AMP Planning Period	1 October 2024 – 30 September 2034

SCHEDULE 11a: REPORT ON FORECAST CAPITAL EXPENDITURE

This schedule requires a breakdown of forecast expenditure on assets for the current disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms. Also required is a forecast of the value of commissioned assets (i.e., the value of RAB additions)

GTBs must provide explanatory comment on the difference between constant price and nominal dollar forecasts of expenditure on assets in Schedule 14a (Mandatory Explanatory Notes).

This information is not part of audited disclosure information.

sch ref			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
		for year ended	30 Sep 24	30 Sep 25	30 Sep 26	30 Sep 27	30 Sep 28	30 Sep 29	30 Sep 30	30 Sep 31	30 Sep 32	30 Sep 33	30 Sep 34
	11a(i): Expenditure on Assets Forecast		$000 (nominal dollars)										
	Consumer connection		-	359	1,100	374	381	389	397	405	413	421	430
	System growth		29	513	262	267	272	278	283	289	295	301	307
	Asset replacement and renewal		46,115	32,347	30,010	31,592	30,955	33,213	39,122	27,992	25,278	31,559	32,313
	Asset relocations		477	2,793	2,095	2,137	2,180	2,223	2,268	2,313	2,359	2,407	2,455
	Reliability, safety and environment:												
	Quality of supply		9	-	-	-	-	-	-	-	-	-	-
	Legislative and regulatory		-	-	-	-	-	-	-	-	-	-	-
	Other Reliability, Safety and Environment		404	718	733	748	763	1,278	510	520	531	541	552
	Total reliability, safety and environment		413	718	733	748	763	1,278	510	520	531	541	552
	Expenditure on network assets		47,034	36,730	34,200	35,118	34,551	37,382	42,580	31,519	28,876	35,229	36,057
	Expenditure on non-network assets		2,251	3,338	7,936	6,054	5,011	6,702	9,038	8,526	3,053	3,364	3,481
	Expenditure on assets		49,284	40,068	42,136	41,172	39,562	44,083	51,618	40,045	31,929	38,593	39,538
	plus Cost of financing		1,084	881	927	906	870	970	1,136	881	702	849	870
	less Value of capital contributions		429	2,514	1,886	1,923	1,962	2,001	2,041	2,082	2,123	2,166	2,209
	plus Value of vested assets												
	Capital expenditure forecast		49,939	38,436	41,177	40,155	38,471	43,052	50,713	38,844	30,508	37,276	38,198
	Assets commissioned		39,951	30,749	32,942	32,124	30,777	34,442	40,570	31,075	24,407	29,821	30,559
			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
		for year ended	30 Sep 24	30 Sep 25	30 Sep 26	30 Sep 27	30 Sep 28	30 Sep 29	30 Sep 30	30 Sep 31	30 Sep 32	30 Sep 33	30 Sep 34
			$000 (in constant prices)										
	Consumer connection		-	350	1,050	350	350	350	350	350	350	350	350
	System growth		29	500	250	250	250	250	250	250	250	250	250
	Asset replacement and renewal		46,115	31,520	28,649	29,568	28,403	29,878	34,503	24,203	21,428	26,228	26,328
	Asset relocations		477	2,722	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
	Reliability, safety and environment:												
	Quality of supply		9	-	-	-	-	-	-	-	-	-	-
	Legislative and regulatory		-	-	-	-	-	-	-	-	-	-	-
	Other Reliability, Safety and Environment		404	700	700	700	700	1,150	450	450	450	450	450
	Total reliability, safety and environment		413	700	700	700	700	1,150	450	450	450	450	450
	Expenditure on network assets		47,034	35,791	32,649	32,868	31,703	33,628	37,553	27,253	24,478	29,278	29,378
	Expenditure on non-network assets		2,251	3,253	7,576	5,666	4,598	6,029	7,971	7,372	2,588	2,795	2,836
	Expenditure on assets		49,284	39,044	40,224	38,534	36,301	39,657	45,524	34,625	27,066	32,073	32,214
	Subcomponents of expenditure on assets (where known)												
	Research and development												

Schedule 11a: report on forecast Capital Expenditure

	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
for year ended	30 Sep 24	30 Sep 25	30 Sep 26	30 Sep 27	30 Sep 28	30 Sep 29	30 Sep 30	30 Sep 31	30 Sep 32	30 Sep 33	30 Sep 34
Difference between nominal and constant price forecasts	$000										
Consumer connection	-	9	50	24	31	39	47	55	63	71	80
System growth	-	13	12	17	22	28	33	39	45	51	57
Asset replacement and renewal	-	827	1,361	2,024	2,552	3,335	4,619	3,789	3,850	5,331	5,985
Asset relocations	-	71	95	137	180	223	268	313	359	407	455
Reliability, safety and environment:											
Quality of supply	-	-	-	-	-	-	-	-	-	-	-
Legislative and regulatory	-	-	-	-	-	-	-	-	-	-	-
Other Reliability, Safety and Environment	-	18	33	48	63	128	60	70	81	91	102
Total reliability, safety and environment	-	18	33	48	63	128	60	70	81	91	102
Expenditure on network assets	-	939	1,551	2,250	2,848	3,754	5,027	4,266	4,398	5,951	6,679
Expenditure on non-network assets	-	85	360	388	413	673	1,067	1,154	465	568	645
Expenditure on assets	-	1,024	1,911	2,638	3,261	4,427	6,094	5,420	4,863	6,519	7,323

11a(ii): Consumer Connection

for year ended	Current Year CY 30 Sep 24	CY+1 30 Sep 25	CY+2 30 Sep 26	CY+3 30 Sep 27	CY+4 30 Sep 28	CY+5 30 Sep 29
*Consumer types defined by GTB**	$000 (in constant prices)					
General	-	350	1,050	350	350	350
** include additional rows if needed*						
Consumer connection expenditure	-	350	1,050	350	350	350
less Capital contributions funding consumer connection						
Consumer connection less capital contributions	-	350	1,050	350	350	350

11a(iii): System Growth

Pipes	29	500	250	250	250	250
Compressor stations						
Other stations						
SCADA and communications						
Special crossings						
System growth expenditure	29	500	250	250	250	250
less Capital contributions funding system growth						
System growth less capital contributions	29	500	250	250	250	250

Schedule 11a: report on forecast Capital Expenditure

	for year ended	Current Year CY 30 Sep 24	CY+1 30 Sep 25	CY+2 30 Sep 26	CY+3 30 Sep 27	CY+4 30 Sep 28	CY+5 30 Sep 29
11a(iv): Asset Replacement and Renewal							
		$000 (in constant prices)					
	Pipes	14,629	10,517	13,361	10,500	13,200	16,900
	Compressor stations	19,845	10,869	7,450	11,100	7,650	6,750
	Other stations	4,700	2,259	2,765	2,805	2,250	2,250
	SCADA and communications	4,983	5,841	2,700	700	700	700
	Special crossings	47	150	-	-	-	-
	Components of stations (where known)						
	Main-line valves	1,911	76	-	1,000	1,000	1,000
	Heating system	-	1,022	975	1,125	975	900
	Odorisation plants	-	120	360	1,000	1,000	-
	Coalescers	-	120	120	120	120	120
	Metering system	-	375	570	858	1,158	1,008
	Cathodic protection	-	171	198	210	200	100
	Chromatographs	-	-	150	150	150	150
	Asset replacement and renewal expenditure	46,115	31,520	28,649	29,568	28,403	29,878
less	Capital contributions funding asset replacement and renewal						
	Asset replacement and renewal less capital contributions	46,115	31,520	28,649	29,568	28,403	29,878
11a(v): Asset Relocations							
	Project or programme*						
	** include additional rows if needed*						
	All other projects or programmes - asset relocations	477	2,722	2,000	2,000	2,000	2,000
	Asset relocations expenditure	477	2,722	2,000	2,000	2,000	2,000
less	Capital contributions funding asset relocations	429	2,449	1,800	1,800	1,800	1,800
	Asset Relocations less capital contributions	48	272	200	200	200	200
11a(vi): Quality of Supply							
	Project or programme*						
	** include additional rows if needed*						
	All other projects or programmes - quality of supply	9					
	Quality of supply expenditure	9	-	-	-	-	-
less	Capital contributions funding quality of supply						
	Quality of supply less capital contributions	9	-	-	-	-	-

Schedule 11a: report on forecast Capital Expenditure

11a(vii): Legislative and Regulatory

Project or programme*						
*include additional rows if needed						
All other projects or programmes - legislative and regulatory						
Legislative and regulatory expenditure	-	-	-	-	-	-
less Capital contributions funding legislative and regulatory						
Legislative and regulatory less capital contributions	-	-	-	-	-	-

	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
for year ended	30 Sep 24	30 Sep 25	30 Sep 26	30 Sep 27	30 Sep 28	30 Sep 29

11a(viii): Other Reliability, Safety and Environm

Project or programme*	$000 (in constant prices)					
*include additional rows if needed						
All other projects or programmes - other reliability, safety and environment	404	700	700	700	700	1,150
Other reliability, safety and environment total	404	700	700	700	700	1,150
less Capital contributions funding other reliability, safety and environment						
Other reliability, safety and environment less capital contributions	404	700	700	700	700	1,150

11a(ix): Non-Network Assets

Routine expenditure

Project or programme*	$000 (in constant prices)					
ICT	1,688	530	698	698	698	698
Buildings and Facilities	-	1,479	5,370	3,427	2,325	3,720
Plant and equipment	562	400	400	400	400	400
Motor Vehicle Procurement	-	844	1,108	1,142	1,176	1,211
*include additional rows if needed						
All other projects or programmes - routine expenditure						
Routine expenditure	2,251	3,253	7,576	5,666	4,598	6,029

Atypical expenditure

Project or programme*						
*include additional rows if needed						
All other projects or programmes - atypical expenditure						
Atypical expenditure	-	-	-	-	-	-
Expenditure on non-network assets	2,251	3,253	7,576	5,666	4,598	6,029

Schedule 11b: report on forecast Operational Expenditure

												Company Name: Firstgas
												AMP Planning Period: 1 October 2024 – 30 September 2034
	SCHEDULE 11b: REPORT ON FORECAST OPERATIONAL EXPENDITURE											
	This schedule requires a breakdown of forecast operational expenditure for the disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms.											
	GTBs must provide explanatory comment on the difference between constant price and nominal dollar operational expenditure forecasts in Schedule 14a (Mandatory Explanatory Notes).											
	This information is not part of audited disclosure information.											
sch ref												
7												
8			*Current Year CY*	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*	*CY+6*	*CY+7*	*CY+8*	*CY+9*	*CY+10*
9		for year ended	30 Sep 24	30 Sep 25	30 Sep 26	30 Sep 27	30 Sep 28	30 Sep 29	30 Sep 30	30 Sep 31	30 Sep 32	30 Sep 33	30 Sep 34
10	**Operational Expenditure Forecast**		$000 (in nominal dollars)										
11	Service interruptions, incidents and emergencies		1,160	1,342	1,370	1,398	1,426	1,454	1,483	1,513	1,543	1,574	1,605
12	Routine and corrective maintenance and inspection		17,279	19,831	21,814	22,250	22,695	23,149	21,911	22,349	22,796	23,252	23,717
13	Asset replacement and renewal		-	-	-	-	-	-	-	-	-	-	-
14	Compressor fuel		3,533	5,696	9,687	-	-	-	-	-	-	-	-
15	Land management and associated activity		1,725	1,531	1,562	1,594	1,625	1,658	1,691	1,725	1,759	1,795	1,830
16	**Network opex**		23,698	28,400	34,433	25,241	25,746	26,261	25,085	25,587	26,099	26,621	27,153
17	System operations		2,483	3,585	3,660	3,733	3,808	3,884	3,962	4,041	4,122	4,204	4,288
18	Network support		5,573	7,296	7,448	7,597	7,749	7,904	8,062	8,223	8,387	8,555	8,726
19	Business support		29,170	26,428	26,976	27,516	28,066	28,627	29,200	29,784	30,380	30,987	31,607
20	**Non-network opex**		37,226	37,310	38,084	38,845	39,622	40,415	41,223	42,048	42,889	43,746	44,621
21	**Operational expenditure**		60,924	65,709	72,517	64,087	65,368	66,676	66,309	67,635	68,987	70,367	71,775
22			*Current Year CY*	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*	*CY+6*	*CY+7*	*CY+8*	*CY+9*	*CY+10*
23		for year ended	30 Sep 24	30 Sep 25	30 Sep 26	30 Sep 27	30 Sep 28	30 Sep 29	30 Sep 30	30 Sep 31	30 Sep 32	30 Sep 33	30 Sep 34
24			$000 (in constant prices)										
25	Service interruptions, incidents and emergencies		1,160	1,308	1,308	1,308	1,308	1,308	1,308	1,308	1,308	1,308	1,308
26	Routine and corrective maintenance and inspection		17,279	19,324	20,824	20,824	20,824	20,824	19,324	19,324	19,324	19,324	19,324
27	Asset replacement and renewal		-	-	-	-	-	-	-	-	-	-	-
28	Compressor fuel		3,533	5,550	9,248	-	-	-	-	-	-	-	-
29	Land management and associated activity		1,725	1,491	1,491	1,491	1,491	1,491	1,491	1,491	1,491	1,491	1,491
30	**Network opex**		23,698	27,674	32,871	23,624	23,624	23,624	22,124	22,124	22,124	22,124	22,124
31	System operations		2,483	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494
32	Network support		5,573	7,110	7,110	7,110	7,110	7,110	7,110	7,110	7,110	7,110	7,110
33	Business support		29,170	25,753	25,753	25,753	25,753	25,753	25,753	25,753	25,753	25,753	25,753
34	**Non-network opex**		37,226	36,356	36,356	36,356	36,356	36,356	36,356	36,356	36,356	36,356	36,356
35	**Operational expenditure**		60,924	64,030	69,228	59,980	59,980	59,980	58,480	58,480	58,480	58,480	58,480

Schedule 11b: report on forecast Operational Expenditure

36	**Subcomponents of operational expenditure (where known)**											
37	Research and Development											
38	Insurance											
39		*Current Year CY*	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*	*CY+6*	*CY+7*	*CY+8*	*CY+9*	*CY+10*
40	for year ended	**30 Sep 24**	**30 Sep 25**	**30 Sep 26**	**30 Sep 27**	**30 Sep 28**	**30 Sep 29**	**30 Sep 30**	**30 Sep 31**	**30 Sep 32**	**30 Sep 33**	**30 Sep 34**
41	**Difference between nominal and real forecasts**	$000										
42	Service interruptions, incidents and emergencies	-	34	62	90	118	146	175	205	235	266	297
43	Routine and corrective maintenance and inspection	-	507	989	1,426	1,871	2,325	2,587	3,025	3,472	3,928	4,393
44	Asset replacement and renewal	-	-	-	-	-	-	-	-	-	-	-
45	Compressor fuel	-	146	439	-	-	-	-	-	-	-	-
46	Land management and associated activity	-	39	71	102	134	166	200	233	268	303	339
47	**Network opex**	-	726	1,562	1,617	2,122	2,637	2,962	3,463	3,975	4,497	5,029
48	System operations	-	92	166	239	314	390	468	547	628	710	794
49	Network support	-	186	338	487	639	794	952	1,113	1,277	1,445	1,616
50	Business support	-	675	1,224	1,763	2,313	2,875	3,447	4,031	4,627	5,235	5,854
51	**Non-network opex**	-	953	1,727	2,489	3,266	4,058	4,867	5,691	6,532	7,390	8,265
52	**Operational expenditure**	-	1,679	3,289	4,107	5,388	6,696	7,828	9,155	10,507	11,887	13,294

Schedule 12a: report on asset condition

Company Name	**Firstgas**
AMP Planning Period	**1 October 2024 – 30 September 2034**

SCHEDULE 12a: REPORT ON ASSET CONDITION

This schedule requires a breakdown of asset condition by asset class as at the start of the forecast year. The data accuracy assessment relates to the percentage values disclosed in the asset condition columns. Also required is a forecast of the percentage of units to be replaced in the next 5 years. All information should be consistent with the information provided in the AMP and the expenditure on assets forecast in Schedule 11a.

sch ref

				Asset condition at start of planning period (percentage of units by grade)						
8	Asset category	Asset class	Units	Grade 1	Grade 2	Grade 3	Grade 4	Grade unknown	Data accuracy (1–4)	% of asset forecast to be replaced in next 5 years
9	Pipes	Protected steel pipes	km	-	0.88%	37.58%	60.93%	0.61%	3	-
10	Pipes	Special crossings	km	-	-	43.24%	56.76%		3	-
11	Stations	Compressor stations	No.	-	88.89%	11.11%	-	-	3	-
12	Stations	Offtake point	No.	2.44%	18.70%	78.05%	0.81%	-	3	-
13	Stations	Scraper stations	No.	-	-	100.00%	-	-	3	-
14	Stations	Intake points	No.	-	22.22%	77.78%	-	-	3	-
15	Stations	Metering stations	No.	-	-	100.00%	-	-	3	-
16	Compressors	Compressors—turbine driven	No.	50.00%	25.00%	25.00%	-	-	3	-
17	Compressors	Compressors—electric motor driven	No.	-	-	100.00%	-	-	3	-
18	Compressors	Compressors—reciprocating engine driven	No.	71.42%	14.29%	14.29%	-	-	3	-
19	Main-line valves	Main line valves manually operated	No.	-	2.67%	97.33%	-	-	3	1%
20	Main-line valves	Main line valves remotely operated	No.	-	-	100.00%	-	-	3	-
21	Heating systems	Gas-fired heaters	No.	0.94%	0.94%	88.68%	7.55%	1.89%	3	-
22	Heating systems	Electric heaters	No.	-	-	100.00%	-	-	3	-
23	Odorisation plants	Odorisation plants	No.	-	-	100.00%	-	-	3	30%
24	Coalescers	Coalescers	No.	-	-	100.00%	-	-	3	-
25	Metering systems	Meters—ultrasonic	No.	80.00%	-	20.00%	-	-	3	-
26	Metering systems	Meters—rotary	No.	25.00%	-	73.44%	1.56%	-	3	-
27	Metering systems	Meters turbine	No.	13.25%	1.20%	72.30%	13.25%	-	3	-
28	Metering systems	Meters—mass flow	No.	50.00%	-	50.00%	-	-	3	-
29	SCADA and communications	Remote terminal units (RTU)	No.	40.21%	33.70%	21.74%	3.26%	1.09%	3	55%
30	SCADA and communications	Communications terminals	No.	33.33%	-	33.33%	-	33.34%	3	100%
31	Cathodic protection	Rectifier units	No.	50.00%	-	50.00%	-	-	3	-
32	Chromatographs	Chromatographs	No.	75.00%	-	16.67%	-	8.33%	3	8%

Schedule 12b: report on forecast utilisation

Company Name	**Firstgas**
AMP Planning Period	**1 October 2024 – 30 September 2034**

SCHEDULE 12b: REPORT ON FORECAST DEMAND

This Schedule requires a forecast of new connections (by consumer type) and gas delivered for the current disclosure year and a 5 year planning period. The forecasts should be

sch ref

12b(i): Connections

	Current Year CY	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*
Consumer types defined by GTB						
** include additional rows if needed*						
Connections total	-	-	-	-	-	-

12b(ii): Gas conveyed

	Current Year CY	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*
Total gas entering the system at injection points	122,157,794	102,575,990	100,524,955	98,552,854	96,656,649	94,833,419
Total gas delivered to consumers	121,743,775	102,112,640	100,061,605	98,089,504	96,193,299	94,370,069
Total gas used in compressor stations	465,832	560,398	560,398	560,398	560,398	560,398
Total gas used in heating systems	99,702	-	-	-	-	-
Total unaccounted for gas	(200,062)	(97,048)	(97,048)	(97,048)	(97,048)	(97,048)
Total gas conveyed	122,309,308	102,673,038	100,622,003	98,649,902	96,753,697	94,930,468

Schedule 14a: Mandatory Explanatory Notes on Forecast Information

(In this Schedule, clause references are to the Gas Transmission Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018.)

1. This Schedule requires GTBs to provide explanatory notes to reports prepared in accordance with clause 2.6.6.
2. This Schedule is mandatory—GTBs must provide the explanatory comment specified below, in accordance with clause 2.7.2. This information is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.

Commentary on difference between nominal and constant price capital expenditure forecasts (Schedule 11a)

3. In the box below, comment on the difference between nominal and constant price capital expenditure for the current disclosure year and 10-year planning period, as disclosed in Schedule 11a.

BOX 1: Commentary on difference between nominal and constant price capital expenditure forecasts.

The difference between constant and nominal price Capex in Schedule 11a is based on Statistics New Zealand CPI forecast through to RY27, after which it reflects a forecast CPI of 2%.

Commentary on difference between nominal and constant price operational expenditure forecasts (Schedule 11b)

4. In the box below, comment on the difference between nominal and constant price operational expenditure for the current disclosure year and 10-year planning period, as disclosed in Schedule 11b.

BOX 2: Commentary on difference between nominal and constant price operational expenditure forecasts.

Our approach for operational expenditure is equivalent to the approach for capital expenditure, described above.

Appendix C. Disclosure Requirements

The table below explains how this AMP Update complies with the disclosure requirements for an AMP Update, as set out in the Gas Transmission Information Disclosure Determination 2012 (ID Determination).

Table C.1: Disclosure requirements checklist

REGULATORY REQUIREMENTS		AMP REFERENCE
2.6	**ASSET MANAGEMENT PLANS AND FORECAST INFORMATION**	
2.6.1	Subject to clauses 2.6.3 and 2.13, before the start of each disclosure year commencing with the disclosure year 2014, every GDB must – 1. Complete an AMP that: a) relates to the gas transmission services supplied by the GTB; b) meets the purposes of AMP disclosure set out in clause 2.6.2; c) has been prepared in accordance with Attachment A to this determination; Gas Transmission Information Disclosure Determination 2012 – (consolidated in 2018); d) contains the information set out in the schedules described in clause 2.6.6; e) contains the Report on Asset Management Maturity as described in Schedule 13; 2. Complete the Report on Asset Management Maturity in accordance with the requirements specified in Schedule 13; 3. Publicly disclose the AMP.	Firstgas is publishing an AMP Update. It's most recent, previous disclosure was its 2023 AMP.
2.6.2	The purposes of AMP disclosure referred to in subclause 2.6.1(1)(b) are that the AMP: 1. Must provide sufficient information for interested persons to assess whether – a) assets are being managed for the long term; b) the required level of performance is being delivered; c) costs are efficient and performance efficiencies are being achieved; 2. Must be capable of being understood by interested persons with a reasonable understanding of the management of infrastructure assets; 3. Should provide a sound basis for the ongoing assessment of asset-related risks, particularly high impact asset-related risks.	• We have structured the AMP Update with links to supporting information in the previous AMP with details on these aspects; • We have provided a glossary in Appendix A to assist interested persons' understanding.
2.6.3	Subject to clause 2.6.4, a GTB may elect to complete and publicly disclose an AMP update, as described in clause 2.6.5, before the start of a disclosure year, instead of an AMP, as described in clause 2.6.1(1), unless the start of that disclosure year is – 1. Between 6 (inclusive) and 18 months after the start of the DPP regulatory period; or 2. Between 18 (inclusive) and 30 months before the start of the next DPP regulatory period.	Firstgas was granted an exemption from the requirement to disclose a full Asset Management Plan in RY24.[14]

14 Gas Transmission ID Exemption – First Gas Limited – Asset Management Plans during DPP3, dated 31 March 2023.

REGULATORY REQUIREMENTS		AMP REFERENCE
2.6.4	A GTB must not complete and publicly disclose an AMP update instead of an AMP if it has not previously publicly disclosed an AMP under clause 2.6.1.	Our most recent, previous disclosure was the 2023 AMP Update.
2.6.5	For the purpose of clause 2.6.3, the AMP update must – 1. Relate to the gas transmission services supplied by the GTB; 2. Identify any material changes to the network development plans disclosed in the last AMP under clause 12 of Attachment A or in the last AMP update disclosed under this clause 2.6.5; 3. Identify any material changes to the lifecycle asset management (maintenance and renewal) plans disclosed in the last AMP pursuant to clause 13 of Attachment A or in the last AMP update disclosed under this clause; 4. Provide the reasons for any material changes to the previous disclosures in the Report on Forecast Capital Expenditure set out in Schedule 11a and Report on Forecast Operational Expenditure set out in Schedule 11b; 5. Provide an assessment of transmission capacity as set out in clause 8 of Attachment A. 6. Identify any material changes related to the legislative requirements as set out in clause 3.6 of Attachment A. 7. Identify any changes to the asset management practices of the GTB that would affect a Schedule 13 Report on Asset Management Maturity disclosure; and 8. Contain the information set out in the schedules described in clause 2.6.6.	1. Confirmed in Chapter 1. 2. These are discussed in Chapter 4. 3. These are discussed in Chapter 4. 4. These are provided in Chapters 3 and 4. 5. There has been no material changes to the Transmission Capacity determination as included in Appendix I of the 2023 AMP. 6. There have been no material changes to the legislative requirements directly affecting management of the assets. 7. There have been no material changes that would affect our Schedule 13 Report on Asset Management Maturity disclosure. 8. See 2.6.6 below.
2.6.6	Subject to clause 2.13.2, before the start of each disclosure year, each GTB must complete and publicly disclose each of the following reports by inserting all information relating to the gas transmission services supplied by the GTB for the disclosure years provided for in the following reports: 1. The Report on Forecast Capital Expenditure in Schedule 11a; 2. The Report on Forecast Operational Expenditure in Schedule 11b; 3. The Report on Asset Condition in Schedule 12a; 4. The Report on Forecast Utilisation in Schedule 12b;	This information is included in Appendix B.
2.7	**EXPLANATORY NOTES TO DISCLOSED INFORMATION**	
2.7.2	Before the start of each disclosure year, every GTB must complete and publicly disclose the Mandatory Explanatory Notes on Forecast Information in Schedule 14a by inserting all relevant information relating to information disclosed in accordance with clause 2.6.6.	This is included in Appendix B.
2.9	**CERTIFICATES**	
2.9.1	Where a GTB is required to publicly disclose any information under clauses 2.6.1, 2.6.3, 2.6.6 and 2.7.2, the GTB must at that time publicly disclose a certificate in the form set out in Schedule 17 in respect of that information, duly signed by 2 directors of the GTB.	A copy of the certificate is included in Appendix D.

Appendix D. Director's Certificate

Certification for Year-beginning Disclosures

Clause 2.9.1

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

a) The following attached information of Firstgas Limited prepared for the purposes of clauses 2.6.1, 2.6.3, 2.6.6 and 2.7.2 of the Gas Transmission 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 measured on a basis consistent with regulatory requirements or recognised industry standards.

c) The forecasts in Schedules 11a, 11b, 12a, and 12b are based on objective and reasonable assumptions which both align with Firstgas' corporate vision and strategy and are documented in retained records.

Director: Mark Adrian Ratcliffe	Director: Fiona Ann Oliver
16 August 2024	16 August 2024
Date	Date