

Victoria's water sector: The PREMO model for economic regulation

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Glossary

Term	Definition
2018 price review	The regulatory process to determine the prices to be charged by water business for the regulatory period commencing 1 July 2018. Typically, the regulatory period is five years.
Commission’s Customer Service Code(s)	Refers to the Essential Services Commission’s Customer Service Code Urban Water Businesses, August 2018; the Rural Water Customer Service Code, August 2018; or the Trade Waste Customer Service Code Victorian Urban Water Businesses, September 2014 as appropriate.
Framework and Approach	The Essential Services Commission’s <i>Water Pricing Framework and Approach</i> published in October 2016.
PREMO or PREMO approach	An approach to setting regulated prices and services or water business that has new and conventional elements: <ul style="list-style-type: none"> • The key new element is a financial incentive related to the level of ambition shown by a water business in the delivery of services and outcomes that matter most to customers, and to the delivery of these as efficiently as possible. • Conventional elements of PREMO are: <ul style="list-style-type: none"> – the retention of the building blocks approach which provides reasonable certainty and protections that prudent and efficient costs are able to be recovered; and – an expenditure review undertaken by the regulator to determine whether a water business’s proposed expenditure forecasts are consistent with the requirements of the regulatory framework - but undertaken in a more targeted manner than in previous reviews.
Water business, or water businesses	These terms refer to the 16 water businesses that were subject to the PREMO approach to set their prices for the 2018 price review. Each is a regulated metropolitan water corporation, Regional Urban Water Authority or Rural Water Authority, as defined in the <i>Water Industry Act 1994 (Vic)</i> . See Appendix A for a list of businesses included and excluded. We note that 17 businesses entered the process, but Western Water was removed during the process.
Water corporations	Refers to all Victorian public entities responsible for the supply of water and sewerage services, established under the <i>Water Act 1989 (Vic)</i> .
Water services	Includes distribution of water and sewerage services; retailing of water and sewerage services (meter reading, billing and customer service); trade waste services to commercial and industrial customers; harvesting bulk water; treating and delivering water for human use; bulk treatment and disposing of sewage; managing dams and weirs, operating irrigation districts, and licensing groundwater users and river diverters.

Abbreviations

Term	Definition
ACCC	Australian Competition and Consumer Commission
AER	Australian Energy Regulator
CALC	Consumer Action Law Centre
Commission, or ESC	Victorian Essential Service Commission
PREMO	P erformance, R isk, E ngagement, M anagement and O utcomes
RAB	Regulated asset base
WACC	Weighted Average Cost of Capital
WIRO	Water Industry Regulatory Order, made under section 4D of the <i>Water Industry Act 1994 (Vic)</i>
WPn	Water regulatory period where n is between 1 and 4. The 2018 price review decisions apply for the fourth regulatory period, which is WP4.
WSAA	Water Services Association of Australia

Executive summary

In April 2015, the Victorian Essential Services Commission (the Commission) embarked on an ambitious project to make step change improvements in economic regulation of the Victorian water sector. It did so with a keen sense of problem areas and an open mind to possible options.

Over an 18 month period, the Commission worked closely with stakeholders to develop and implement a regulatory model known as PREMO - an acronym for **P**erformance, **R**isk, **E**ngagement, **M**anagement and **O**utcomes. The Commission's flexibility to implement changes was enabled by government amendments to the governing regulatory instrument (the Water Industry Regulatory Order - WIRO) made in 2014.

The first application of PREMO occurred as part of the Commission's 2018 price review, and applied to 16 government-owned Victorian water businesses.¹

In late 2018, the Commission engaged farrierswier to conduct an independent post implementation review. This report provides a public record of the development and implementation of PREMO, and an early assessment of how well PREMO delivered on its intended outcomes.

Development and implementation of PREMO

In 2013, three water price reviews had been conducted by the Commission under the previous economic regulatory framework. Faced with an emerging perception of shortcomings with the framework, the Victorian Government engaged Professor Graeme Samuel to conduct an independent review in 2014² in which the Commission participated, advocating for greater flexibility. Three key themes emerged which influenced subsequent changes implemented by the Government, and the Commission's thinking that led to PREMO development in late 2016.³ The themes were:

- Government needed a more 'active' approach to managing the performance of its water businesses.
- The WIRO as then in force unnecessarily limited regulatory flexibility.
- There was an opportunity for a more flexible assessment approach by the Commission.

In line with the emerging themes, the Victorian Government amended the WIRO in 2014, which in turn gave the Commission the flexibility to undertake a far-reaching review of economic regulation for the water sector in 2015 and 2016. The Commission's review process allowed extensive participation by customers and water businesses, and drew on the expertise of world leading regulatory authorities.

The Commission developed its new pricing approach with four high level objectives:

- to pivot the businesses' attention squarely towards their customers
- to provide greater autonomy for water businesses, in consultation with customers, to decide on the services to be delivered and the prices to be paid and the risk to assume on behalf of customers
- to provide new incentives for water businesses to demonstrate ambition in the delivery of services and outcomes that matter most to customers, and to deliver these as efficiently as possible, and

¹ Appendix A lists names and characteristics of Victorian water businesses that were included and excluded from PREMO application in the 2018 price review.

² Professor Graeme Samuel, *Economic regulation, governance and efficiency in the Victorian water sector, Preliminary advice from the Independent Reviewer*, May 2014

³ A number of recommendations made by the Samuel Review were not adopted and are not discussed further in this report.

- to avoid focusing on matters that make little difference to the outcomes experienced by customers by choosing simplicity whenever possible.

Under the PREMO approach, water businesses' revenue requirements are still derived using the building block method, as under the previous pricing approach. The key changes under the new approach are:

- a stronger emphasis on the role of customer engagement to inform and influence water businesses' price submissions
- a set of outcomes focused on what each water business will deliver to its customers effectively replaces the previous core service standards encapsulated in the Commission's Customer Service Code
- a water business's return on regulated equity linked to the tangible outcomes it delivers to customers:
 - The return on equity varies according to the level of ambition shown in a price submission.
 - A price submission can be rated as 'leading', 'advanced', 'standard' or 'basic', and is assessed against the five PREMO elements of Performance, Risk, Engagement, Management and Outcomes.
- water businesses incentivised to submit price submissions that reflect their 'best offers'
- a more flexible assessment approach tailoring the scope of the Commission's assessment to the quality of a price submission, with potential 'fast-tracking' of high-quality submissions through the assessment process to an early draft and final decision
- a requirement for water business boards to attest to the quality and accuracy of the information included in price submissions, and the submissions' compliance with the Commission's guidance.

The Commission accepted the PREMO ratings proposed by 14 of the 16 water businesses assessed. The ratings ranged from one 'leading' (the highest rating) to one 'basic' (the lowest rating). Two businesses were not rated. Four water businesses had their price submissions fast-tracked by the Commission.

Our review approach and assessment

Our review approach is evidence-based, and considers multiple sources of evidence. We undertook a desktop review of documents; an online survey of water businesses; interviews with a selected sample of water businesses, customer and government representatives; and analysed data provided by the Commission. Our review has a number of limitations which we have sought to address where possible. These include the review timing (only six months after the relevant PREMO regulatory decisions); the fact that not all PREMO elements were implemented for the 2018 price review;⁴ and the potential for bias in survey and interview results.

There is strong evidence that the design of PREMO contributed significantly to the overall objective of economic regulation of water businesses, being to promote the best long-term outcomes for Victorian water customers.

Other key findings of our assessment are:

- There is clear evidence that the PREMO approach provided incentives for the water businesses to have greater ambition. There was significant divergence in business ambition and strategies - some water businesses did 'break from the pack' as intended by the Commission.

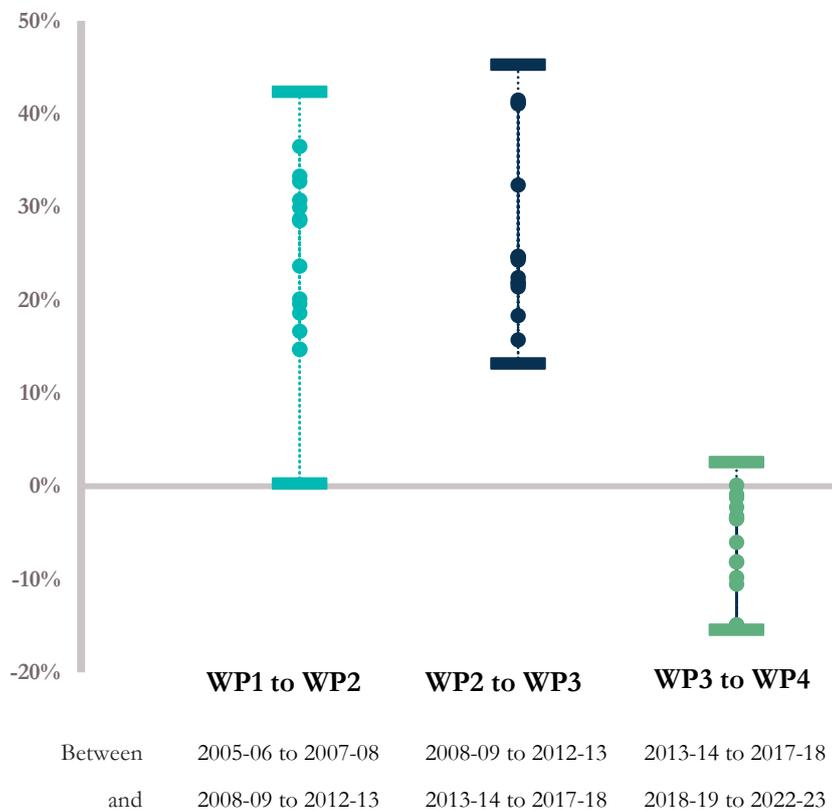
⁴ For example, the Commission's Water pricing framework and approach final paper stated at page 7: 'The 'P' element of PREMO is a backward looking consideration of performance against specified outcomes during the period, and will not be assessed at the 2018 water price review, but will come into effect for a business's second price review under the new PREMO incentive framework.'

- There is clear evidence that PREMO was successful in giving stronger emphasis to customer engagement for most water businesses.
- There is some evidence supporting the proposition that PREMO provides greater autonomy to water businesses, and that this can produce better outcomes, but a mixed picture on whether the benefits of autonomy were achieved across all water businesses.
- There is mixed evidence on the extent to which the objective of greater focus and simplicity in the price review process was achieved.

Key impacts on customers under the PREMO approach for the 2018 price review were:

- There was a significant shift towards price reductions compared to significant price increases in previous regulatory periods, and a narrower concentration of price outcomes (See figure E1).

Figure E1 Regulatory period-on-period changes in prices (controlling for changes in WACC and desalination costs)



- The water businesses committed to a diverse range of improvements in service outcomes, with the majority considering that PREMO resulted in modest improvement in service outcomes for their customers compared to the past.
- Thirteen water businesses proposed operating expenditure efficiency improvements of up to 2.6% per annum.

Most adjustments made by the Commission to the water businesses' proposals were driven by traditional aspects of the Commission's building block review practice, namely the technical review of expenditure forecasts for operating and capital expenditure based on expenditure review assessments. The largest adjustments and biggest impacts on customer bills were directed to businesses rated as 'standard', 'basic' or 'not rated'.

Our assessment of the impact of the PREMO approach on the water businesses' approach to planning and developing their 2018 price submissions is as follows:

- There is reasonably clear evidence that the design of the PREMO incentive mechanism encouraged the businesses to put forward their best offers.
- There are diverse views in the sector about the real incentives that drive water businesses. Reputational incentives are considered the most important.
- There is reasonably clear evidence supporting the value of the board attestation requirement.
- There are mixed views on the impact of the PREMO approach on water businesses' effort and resourcing requirements.

The Commission demonstrated a more flexible approach to making its determinations than in the past, for example, approving one business's proposal for an 8-year regulatory period. The change in regulatory cost burden resulting from applying the PREMO approach does not appear significant.

Lessons and observations

The Commission's review of its water pricing approach led to significant changes. In our view, the Commission took a broad and genuinely open-minded and transparent approach to exploring alternative approaches to the economic regulation of water prices. It had a mindset that was willing to be creative and take some measured risks. Its approach engendered a relatively high level of trust between most water businesses and the Commission. The time allowed by the Commission for its review (18 months) was sufficient to enable the required work to occur. Feedback from some stakeholders emphasised the importance of the leadership provided by commissioners throughout the review, and the depth of the water industry expertise of the Commission staff.

The Commission's review found that traditional incentive-based economic regulation had not been effective in promoting good business performance in the Victorian water sector. It considered such performance was important to customers long-term interests. The Commission developed and tested a new economic regulatory approach to address this gap.

It is a significant innovation in economic regulatory practice to view good business performance as a direct concern of the regulator, rather than something assumed to be indirectly affected by the financial incentives provided by a traditional economic regulatory model. Our positive assessment of PREMO outcomes suggests that it is feasible and beneficial to design an economic regulatory framework that focuses on directly assessing and incentivising good business performance as a direct concern of the regulator, where traditional incentive-based economic regulation is not considered effective.

The PREMO approach is also an interesting case study on developing an alternative approach to designing institutional arrangements to drive improved performance of government businesses.

Notwithstanding its statutory obligations in relation to making its water pricing decisions, the social and political legitimacy of the Commission's decisions is also very important. In the 2018 price review, the water businesses operated for the most part in an environment that supported lower prices. In future water price reviews, challenges may emerge which require the Commission to increase prices. The deeper customer engagement enabled by PREMO could help stakeholders to accept the social and political legitimacy of any Commission decision to increase prices, if the increase were necessary to meet the statutory objectives. But clearly, customer engagement in a cost increasing environment would be more challenging for water businesses and the Commission.

1. Introduction

1.1 PURPOSE OF THIS REPORT

In Victoria, a diverse range of water services are provided by 19 state-owned businesses. The Essential Services Commission (the Commission, or ESC) is Victoria's independent economic regulator which regulates various water, energy, transport and other services. In the water sector, the Commission conducts periodic price reviews for all regulated businesses. It also monitors the performance of each business and conducts reviews and inquiries that promote the long-term interests of water consumers.

In 2018, the Commission applied a new approach called PREMO to regulate the prices charged by 16 Victorian water businesses. PREMO stands for **P**erformance, **R**isk, **E**ngagement, **M**anagement and **O**utcomes. The PREMO approach has both new and conventional elements.

- The key new element is a financial incentive related to the level of ambition shown by a water business in the delivery of services and outcomes that matter most to customers, and to deliver these as efficiently as possible.
- Conventional elements of PREMO are:
 - the retention of the building block approach which provides reasonable certainty and protections that prudent and efficient costs are able to be recovered; and
 - an expenditure review undertaken by the Commission to determine whether a water business's proposed expenditure forecasts are consistent with the requirements of the regulatory framework - but undertaken in a more targeted manner than in previous reviews.

The Commission requested farrierswier to prepare this independent report to:

- create a public record of the development and implementation of PREMO, and
- undertake an early assessment of how well PREMO delivered on its intended outcomes.

1.2 REPORT STRUCTURE

This report is in three parts:

1. **Part 1** | Sections 2 to 5 describe the Victorian water industry, the background to the development of the PREMO approach, and how it differs from past economic regulation; the PREMO framework and approach for the 2018 price review; and how PREMO was implemented for the 2018 regulatory period.
2. **Part 2** | Sections 6 and 7 set out our review approach and our assessment on the effectiveness of PREMO in achieving its desired outcomes, the impact on customers, and the effect it had on water businesses' planning and development of their price submissions.
3. **Part 3** | Sections 8 and 9 set out our observations about lessons learned from the first review, that may assist in PREMO's future application; and broader lessons about the design of institutional arrangements and incentives to drive economic value for government owned regulated industries.

The body of the report focuses on findings and outcomes, with only high-level summaries of supporting information and data. It is targeted at readers with some knowledge of the Victorian water sector, its governance and economic regulation and the PREMO approach. Additional detailed information can be found in the Appendices.

Part 1 - Development and implementation of PREMO

2. Background

This section briefly describes the Victorian water sector and the 16 businesses to which the PREMO approach was applied in 2018; the water industry institutional arrangements; and the history of economic regulation of the water sector in Victoria.

2.1 THE VICTORIAN WATER BUSINESSES

Table 1 describes the Victorian water businesses, and identifies which were subject to PREMO for the 2018 price review. Appendix A.1 explains why three businesses were not subject to PREMO. Figures 1 and 2 set out the urban and rural water business boundaries respectively.⁵

The water businesses are diverse in terms of the services that they provide; the size of their customer base; the size of the geographic area that they cover; their roles in the water sector ‘value chain’; and the nature of water and waste water assets that they own. This diversity creates some challenges for applying economic regulation. Appendix A.2 includes a profile of the water businesses that summarises some key features that are helpful for understanding practical issues that affect the application of economic regulation.

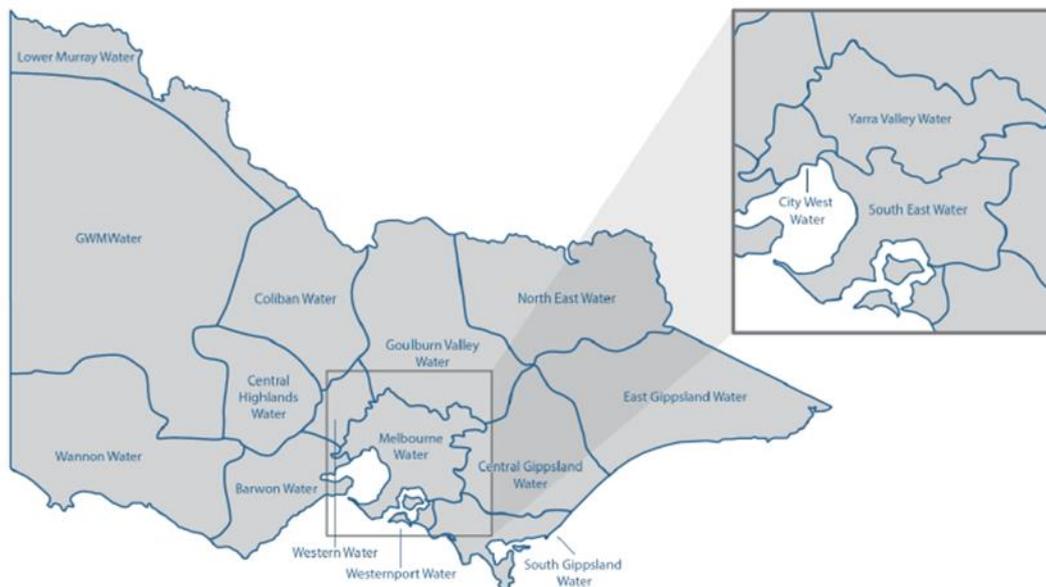
Table 1 Victorian water corporations - application of PREMO for 2018 price review

Category	Description of businesses	Subject to PREMO	Not subject to PREMO
Metropolitan Melbourne water corporations	Three metropolitan Melbourne retail water businesses - Yarra Valley Water, City West Water, South East Water <i>Profile - Retail focused water businesses that are supplied with bulk water and sewerage services by Melbourne Water</i>	✓	
	Melbourne Water – Supplies bulk water, sewerage and recycled water services to metropolitan retail water companies and others <i>Profile - Bulk service provider in Melbourne metropolitan area. Also manages rivers, creeks and major drainage systems in Melbourne, Port Phillip and Westernport regions</i>		✓

⁵ The boundaries for Grampians Wimmera-Mallee (GWM) Water and Lower Murray Water are shown in both Figures 1 and 2.

Category	Description of businesses	Subject to PREMO	Not subject to PREMO
Regional urban water corporations	Thirteen regional urban water businesses of which: <ul style="list-style-type: none"> eleven supply regional cities and towns, and two⁶ provide both urban and rural water services <i>Profile – Retail function, bulk water and waste water</i>	Twelve regional urban water businesses	Western Water Rural service provided by Lower Murray Water
Rural water corporations	Two rural water businesses <i>Profile - Managing dams and weirs, operation of irrigation districts, licensing groundwater users and river diverters</i>	Southern Rural Water	Goulburn-Murray Water
Total	19	16 ⁷	3

Figure 2: Urban water business boundaries

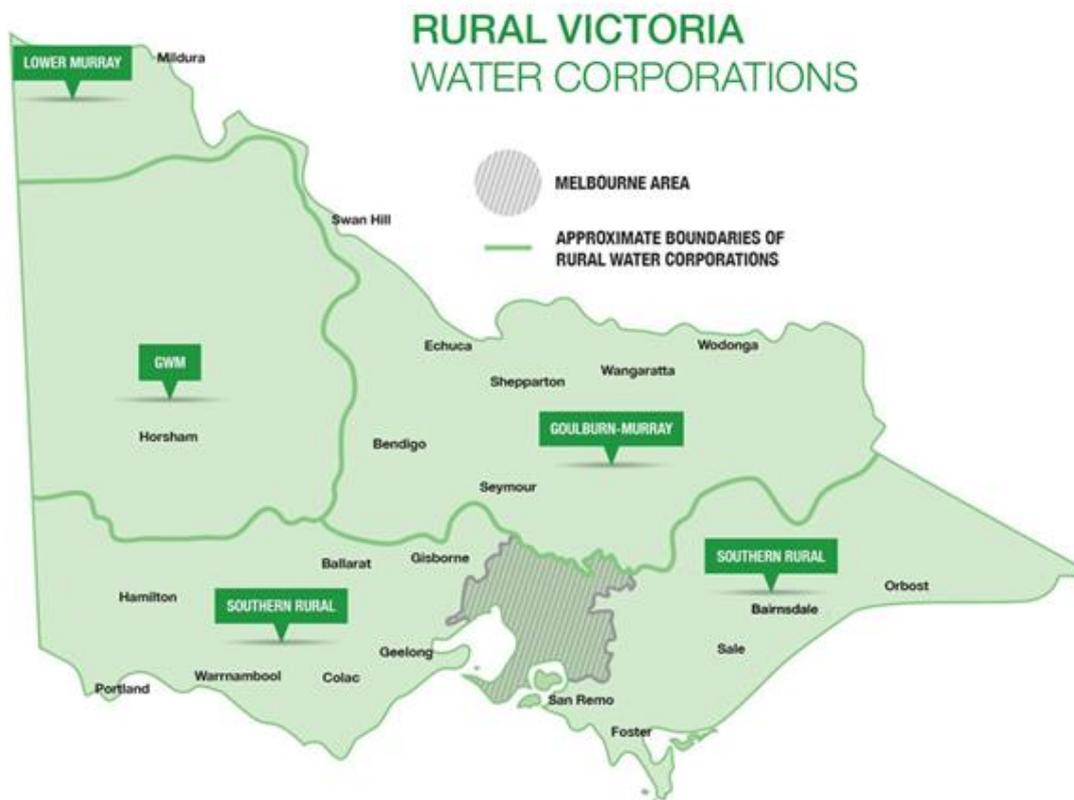


Source: Essential Services Commission Water performance report 2017-18, Performance of Victorian urban water and sewerage businesses, 10 December 2018

⁶ GWM Water and Lower Murray Water.

⁷ Unless the context suggests otherwise, these 16 entities are referred to as ‘water businesses’ in this report.

Figure 3 Rural water business boundaries



Source: Vic Water <https://vicwater.org.au/victorian-water-sector/regional-victoria>

2.2 INSTITUTIONAL ARRANGEMENTS FOR VICTORIAN WATER SECTOR

Key features of the institutional arrangements for the Victorian water sector are set out in Box 1.⁸

Associated roles and responsibilities under the economic regulatory framework are governed by:

- the *Essential Services Commission Act 2001 (Vic)* (the ESC Act), which sets out the overall objectives of the Commission, and specific powers relating to price regulation and price determinations
- the *Water Industry Act 1994 (Vic)* (the WI Act), which sets out the regulatory powers and objectives of the Commission with regard to regulation of the Victorian water industry, and
- the Water Industry Regulatory Order (WIRO) made under section 4D(1) of the WI Act, which sets out specific details for economic regulation of the water industry.

The Commission sets water prices independently from government and must promote objectives set out in the ESC Act, the WI Act and the WIRO.

The key objective of the Commission pursuant to the ESC Act is to promote the long-term interests of Victorian consumers.⁹ Other objectives pursuant to the WI Act are to ensure that the costs of regulation do not exceed the benefits; to ensure that regulation has regard to differences between the operating

⁸ Additional details are set out in Victorian Department of Environment Land Water & Planning, *Governing the Victorian water industry*, undated, available at https://www2.delwp.vic.gov.au/_data/assets/pdf_file/0023/78026/Water-governance-guide-D7.pdf.

⁹ Section 8, *Essential Services Commission Act 2001 (Vic)* (ESC Act)

environments of regulated entities; and to ensure that regulatory decision making has regard to the health, safety, environmental sustainability (including water conservation) and social obligations of regulated entities.¹⁰

The WIRO provides that in seeking to achieve these objectives, the Commission must have regard to and place particular emphasis on the promotion of efficient use of prescribed services by customers; the promotion of efficiency and the financial viability of regulated entities; and providing incentives for regulated entities to pursue efficiency improvements.¹¹

The Commission interpreted these objectives as requiring it to identify the pricing approach that will ‘produce the best outcomes for Victorian customers, namely, services delivered at the lowest price while meeting all quality and reliability standards.’¹²

In practice, the Commission is aware that its decisions must be seen as legitimate by stakeholders and government and therefore ensure that appropriate engagement and communication with stakeholders is undertaken by itself and the regulated businesses.

¹⁰ Section 4C, *Water Industry Act 1994 (Vic)*

¹¹ Clause 8, Water Industry Regulatory Order, 2014 (WIRO)

¹² Essential Services Commission, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October 2016, p.1

Box 1 – Institutional arrangements for 2018 price review

The primary legislation governing the Victorian water corporations is the *Water Act 1989 (Vic)* (the Water Act) and the *Water Industry Act 1994 (Vic)* (the WI Act).

- The Water Act deals with allocation and management of the state’s water resources, and establishes the functions, rights and obligations of the state’s water businesses.
- The WI Act provides the framework for the economic regulation of the water industry.

Ministerial roles

The **Minister for Water** has the key ownership role. The legislation provides for the Minister for Water to issue a Statement of Obligations specifying details of how water corporations should perform a range of functions including governance, community service obligations, and customer and community consultation.¹³

Regulated water businesses are stand-alone businesses with independent boards of directors appointed by the Minister for Water, who is responsible to Parliament for the businesses’ overall performance.

In addition, the Treasurer (advised by the Department of Treasury and Finance) has oversight of the financial operation of the water corporations, including by reviewing corporate plans and business cases alongside the Minister for Water. In 2018, the **Minister for Finance**¹⁴ was responsible for setting financial reporting guidelines, including financial reporting directions and standing directions. The Minister for Finance was also responsible for the Essential Services Commission Act 2001 and for the activities of the Commission.

Other institutional arrangements

The Department of Health regulates drinking water standards, and the Environment Protection Authority regulates discharges to the environment.

Other important players in the water sector include local government, government agencies, private sector developers and community groups.

2.3 HISTORY OF ECONOMIC REGULATION OF THE VICTORIAN WATER INDUSTRY

In 2003, the Commission commenced developing its approach for regulating Victorian water business prices, before formally becoming the water industry economic regulator on 1 January 2004.

The Commission made its first price determinations for Victoria’s urban and regional urban water corporations in 2005, and for Victoria’s rural water corporations in 2006.

The economic regulation methodology effectively mandated by the original Water Industry Regulatory Order (WIRO) was the well-known incentive-based regulation approach, which uses the building block method to set a price path over a multi-year regulatory period (typically five years). This approach required water businesses to submit to the Commission their proposed requirements for each different component in the building block approach, as well as their preferred price path (comprising a P0 adjustment and X-factor). The Commission assessed these proposals against the objectives and principles

¹³ See section 41 *Water Industry Act 1994 (Vic)*. Under s41(2), the Minister responsible for this Act may issue a statement of obligations after consultation with the Treasurer and the Commission. Current statements of obligations are accessible at <https://www.water.vic.gov.au/water-industry-and-customers/water-corporations>.

¹⁴ This Ministry existed until Machinery of Government changes were made by General Order on 29 November 2018.

in the relevant legislative instruments. Appendix B provides more detail on the economic regulatory framework.

Three specific aspects of this framework are important for understanding the subsequent development of PREMO.

Incentive-based approach assumed to be effective | The incentive-based approach - with prices set in advance for (say) five years - is based on an assumption that there should be an incentive for water business boards and managers to improve cost efficiency, and that boards and managers will respond to this incentive. Under an incentive-based regulation approach, if the business out-performs the cost benchmarks used to set the building block revenues and X-factor (while maintaining service standards), it can 'keep' some or all of the efficiency gains and (subject to any decision by the shareholder) use these for other purposes (for example to pay a higher dividend, retain within the business or spend on discretionary projects).

Expenditure review to test prudence and efficiency | The Commission's primary assessment tool was an expenditure review which assessed whether the capital and operating expenditure cost forecasts proposed by the water businesses were prudent and efficient. The expenditure review also reviewed key factors underpinning operating and capital expenditure forecasts such as demand forecasts, service standards, asset condition and regulatory obligations.

One size fits all | In administering this approach, the Commission adopted a 'one size fits all approach' that subjected each water business to broadly similar types of information requests and expenditure review assessments, regardless of how well they were performing.

3. Developing a new water pricing framework

3.1 THE NEED FOR CHANGE

By 2013, the Commission had conducted water price reviews over three regulatory periods, and there was an emerging perception that economic regulation was not working as intended. In February 2014, the Victorian Government appointed Professor Graeme Samuel to independently review the economic regulation, governance and efficient operation of the Victorian water sector (the Samuel Review). In parallel, the Commission had been rethinking aspects of its regulatory approach.

This section discusses three key themes that emerged in 2014 that proved influential in subsequent changes implemented by the Government, and in the Commission's thinking that led to PREMO's development in late 2016.¹⁵ The themes were:

- Government needed a more 'active' approach to managing the performance of its water businesses.
- The WIRO as then in force unnecessarily limited regulatory flexibility.
- There was an opportunity for a more flexible assessment approach by the Commission.

¹⁵ A number of recommendations made by the Samuel Review were not adopted and are not discussed further in this report.

More active approach to managing water business performance | The importance of promoting improved water business performance was highlighted by the Commission¹⁶ and the Samuel Review¹⁷. The Samuel Review proposed a more active shareholder role... ‘that would go beyond a compliance focus and monitoring of performance in terms of the outcomes that are important to government. This should focus on ‘driving’ increased efficiency, for example through focusing on improving the challenge to water business strategic planning, and enhancing businesses’ culture and capability.’ This need was supported by other stakeholders such as the Water Services Association of Australia (WSAA).¹⁸ The government did not adopt the specific actions¹⁹ recommended by the Samuel Review to improve business performance by water businesses, but this theme was taken up by the Commission through the design of PREMO, in particular the focus on improving the challenge to water business strategic planning and strengthening the assessment of performance.

WIRO limited regulatory flexibility | The Commission and the Samuel Review identified that the WIRO as then in force unnecessarily limited regulatory flexibility. The Commission stated that the ‘WIRO locks in procedures and principles to which the Commission must have regard in our price reviews..... it limits the Commission’s flexibility to pursue alternatives to the building block approach.’²⁰ The Samuel Review found that the economic regulatory framework had become complex, inflexible and burdensome.

Later in 2014, the Victorian Government amended the WIRO to make it less prescriptive. Changes included ceasing to mandate use of the building blocks methodology.

More flexible assessment approach | The Commission indicated interest in exploring a graded approach to pre-assessing businesses’ pricing proposals against key criteria. Pricing proposals with a grading that indicated a negative assessment against the criteria would undergo a more comprehensive expenditure review and pricing determination, while businesses that had positive assessment would qualify for a lighter-handed review.²¹ This idea was subsequently incorporated in the PREMO approach.

3.2 DEVELOPMENT OF THE NEW WATER PRICING FRAMEWORK

The Government’s WIRO amendments gave the Commission wider discretion to decide on the manner, approach and methodology for economic regulation. Together, the perception that economic regulation was not working as intended and the wider discretions provided by the WIRO triggered a broad ranging 18-month review of the Commission’s pricing approach for the Victorian water sector in preparation for the 2018 price review.²² The Commission commented that the review:

...presents the most significant opportunity to improve the way water prices are determined since the establishment of the Commission’s water pricing function in 2004.

¹⁶ ‘Efficiency gains are likely to be maximised when... the shareholder (via the Board) provides strong incentives for business management to outperform the regulatory benchmarks used to approve prices.’ Essential Services Commission, *Information Paper for the Independent Review of the Economic Regulatory Framework, Submission No. 1*, April 2004

¹⁷ Professor Graeme Samuel, *Economic regulation, governance and efficiency in the Victorian water sector, Preliminary advice from the Independent Reviewer*, May 2014

¹⁸ WSAA supported the thrust of the Reviewer’s proposals to reinvigorate the role of the shareholder through the establishment of a water sector performance unit. WSAA, *Submission in response to Preliminary Advice of the Independent Reviewers*, June 2014

¹⁹ Notably, the Samuel Review recommended establishment of a water sector performance unit within government.

²⁰ Essential Services Commission, *Information Paper for the Independent Review of the Economic Regulatory Framework, Submission No 1*, April 2004

²¹ Essential Services Commission, *Information Paper for the Independent Review of the Economic Regulatory Framework, Submission No 1*, April 2004

²² Essential Services Commission, *Review of Water Pricing Approach, Consultation Paper*, April 2015

*Our consultative review process will allow extensive participation by customers and water businesses, and we will also draw on the expertise of world leading experts and their experience of international regulatory frameworks.*²³

Appendix B.2B.2 sets out the scope and milestones for the water pricing framework review, and details of the various review reports and papers. The Commission's investigations and consultation phase concluded in a two-day conference held November 2016. The conference and subsequent consultation highlighted stakeholders' interest in the following key themes:

- opportunities to improve how water businesses engage with customers when deciding services and prices to propose in price submissions
- simpler regulatory processes
- incentives for businesses to deliver outcomes that reflect customer preferences.

Also, water businesses generally viewed the building block method as critical to helping them remain financially viable and able to deliver quality services.

4. PREMO framework and approach for 2018 price review

This section describes the PREMO framework and approach,²⁴ resulting from the Commission's review with further background and additional details set out in Appendices D, E, F and G.²⁵

4.1 THE CASE FOR CHANGE

In its framework and approach paper, the Commission stated the objective of the review was to:

... identify the pricing approach that will produce the best outcomes for Victorian customers, namely, services delivered at the lowest price while meeting all quality and reliability standards.

Our approach to pricing will involve establishing strong incentives for the water businesses to operate efficiently and innovatively, while providing for their long-term viability.

*Alternatively stated, our approach to pricing seeks to uphold the long term viability of Victorian water businesses that operate efficiently and invest prudently. Victorian customers should expect no less.*²⁶

The Commission's review identified the following problems with the previous approach to economic regulation of water businesses that a revised pricing approach needed to address:

Customer engagement insufficient | Customer engagement generally had been undertaken by water businesses and the regulator as an afterthought, with little opportunity for customers to influence a water business's service or price proposals before their submission to the Commission.

²³ *Ibid.*

²⁴ Essential Services Commission, *Framework and Approach paper- Implementing PREMO from 2018*, October 2016

²⁵ Appendix C sets out details of the main changes in the PREMO pricing framework. C.1 describes key changes to the pricing framework, including the best offer mechanism (C.1.4); and C.2 sets out details for the establishing the return on equity under PREMO. Appendix D sets out details of the 2018 price review process.

²⁶ Essential Services Commission, *Review of Water Pricing Approach, Consultation Paper*, April 2015

Businesses' weak response to incentives in early water plan periods | Water businesses generally had not responded strongly to incentives to deliver services as efficiently as possible. The Commission observed that (contrary to assumptions underpinning incentive-based regulation) many businesses do not endeavour to outperform the expenditure benchmarks established in price reviews in the pursuit of profits or discretionary funds.

Average performances, little ambition to improve service performance | Water businesses' performance tended to cluster around an average. There appeared to be little incentive for one or more businesses to 'break from the pack' and outdo their peers. There was little ambition within the sector to drive a step change in service performance.

Customer accountability for service commitments not incentivised | Businesses had limited incentives to be accountable to customers for delivering on their service commitments. While service standards and performance reporting have been central features of the pricing approach, there were no material consequences for water businesses that did not achieve the standards to which they committed.

4.2 THE OBJECTIVES OF THE PREMO APPROACH

The new pricing approach had four high level objectives.

Customers | The new pricing approach would pivot the businesses' attention squarely towards their customers. The water businesses would be required to express their price submissions in terms that reflect the outcomes they will be delivering to their customers.

Autonomy | In consultation with customers, water businesses would decide on the services to be delivered and the prices to be paid. Boards would determine the risk their businesses assume on behalf of their customers. Having committed to those decisions, each board would be responsible for self-assessing the level of ambition of its pricing proposals. The level of ambition determined the return on equity allowed for in the business's proposed prices.

Performance | The pricing approach would provide new incentives for ambition in the delivery of services and outcomes that matter most to customers, and to deliver these as efficiently as possible.

Simplicity | The pricing approach would attempt to avoid focusing on matters that make little difference to the outcomes experienced by customers. The Commission sought to achieve this by choosing simplicity whenever it could.

4.3 MAIN CHANGES TO THE PRICING APPROACH AS A RESULT OF PREMO

The main features and changes to the pricing approach adopted for the 2018 price review are outlined below.

Customer engagement | The PREMO pricing framework and approach placed a stronger emphasis on the role of customer engagement to inform and influence the price submissions of water businesses. Appendix C.1 sets out details of the Commission's guidance to the water businesses on undertaking customer engagement.

Outcomes | A set of outcomes focused on what each water business would deliver to its customers to replace the previous core 'service standards' encapsulated in the Commission's Customer Service Code.

Calculating the revenue requirement | The water business's revenue requirement would continue to be derived using the building block approach calculated over a multi-year period - see Appendix B.

Rate of return decision | The Commission made a binding determination on the rate of return. For the previous regulatory periods, the Commission first made a draft decision on the rate of return, and then considered rate of return submissions on its draft decision before making a final decision.

Return on equity | The PREMO approach links a water business's return on regulated equity to the tangible outcomes it delivers to customers. This was achieved by allowing the return on equity to vary according to the level of ambition shown in a price submission. Ambition is assessed against each of the five PREMO elements: **P**erformance, **R**isk, **E**ngagement, **M**anagement and **O**utcomes. Further details are set out in Appendix C.2.

Performance reporting | A key change under the new framework was that water businesses would be accountable to their customers for delivering the outcomes set out in their price submissions. This direct accountability to customers was intended to strengthen the business-customer relationship (rather than reporting to the Commission, as in the past). Each water business was required to report annually to its customers on its performance against the specified outputs for each outcome, with an overall assessment of whether it has delivered on expectations for each outcome. It was required to explain any performance shortfalls and how the business intends to address the shortfall in the coming year(s). The business's reporting was to be readily available to its customers and the Commission, including on its website.

Best offers only | The new pricing approach encouraged water businesses to submit price submissions that reflect their 'best offers' by providing incentives for businesses to assess their price submissions accurately and honestly. The framework required water businesses to submit their 'best offers' and not to be lured into making ambit or inflated claims. Further details are set out in C.1.5.

Flexible assessment approach | The Commission introduced a new flexible assessment approach which would:

- tailor the scope of the Commission's assessment to the quality of each price submission, which may include resubmission when businesses provide insufficient information
- 'fast-track' high quality price submissions through the assessment process to an early draft and final decision
- provide financial and reputational incentives linked to the ambition of a price submission through its overall PREMO rating.

The opportunity for a price submission to be fast-tracked through the assessment process was not directly linked to its PREMO rating. Instead, it was linked to the quality and clarity of the submission, its proposals, and the supporting information – which in turn enabled the Commission to complete its verification and assessment in a short timeframe. The Commission did not provide a check-list set of criteria for a business to qualify for fast-tracking.

Price review process | The price review process was changed to reflect the new approach. Details are set out in Appendix D.

4.4 OTHER ASPECTS OF THE PRICING APPROACH FOR THE 2018 PRICE REVIEW

Much of the existing regulatory framework did not change | As noted, the revenue requirement and prices for the water businesses would continue to be calculated by way of the building block methodology. Appendix C.3 details other aspects of the pricing approach that remain unchanged.

Expenditure review | This review was undertaken by the Commission to determine whether each water business's proposed expenditure forecast was consistent with the requirements of the regulatory framework. The expenditure review (undertaken for the Commission by Deloitte Access Economics) was broadly similar to the reviews undertaken by the Commission in previous periods, and is similar to the expenditure reviews undertaken by other economic regulators in Australia. The main difference was that, consistent with the flexible assessment approach described above, the review was undertaken in a more targeted manner. The Commission and its consultants focused much less attention on the price submissions they considered were very clear and of high quality.

Reduced contingencies for capital expenditure forecasting risk | The Commission considered that its past approach to capital expenditure forecasting risk encouraged water businesses to include excessive contingency allowances in capital project cost estimates, and to include capital expenditure allowances for speculative or un-scoped projects. PREMO guidance explicitly reinforced the role of the end of period 'true-up' for actual prudent and efficient expenditure, to protect customers from prices including excessive capital expenditure allowances. We consider that this approach is not necessarily an integral component of PREMO (this equivalent provision existed in the past, albeit with less focus in Commission guidance), and have therefore assessed it separately.

Board attestation | The Commission required each water business's board to attest to the quality and accuracy of the information included in its price submission, and that the price submission complies with the Commission's guidance in all material respects. This requirement was linked to the intention to provide greater autonomy to the water businesses. We consider that the attestation requirement (and the detailed form of it) is not necessarily an integral component of PREMO,²⁷ and have therefore assessed it separately.

5. PREMO implementation for 2018 price review

5.1 HOW PREMO WAS IMPLEMENTED

The development work outlined in the previous section culminated in the publication in October 2016 of the Commission's framework and approach paper.²⁸ That paper set out the pricing framework and approach for the 2018 price review, including the processes the Commission intended to follow.

It was followed in November 2016 by a guidance paper²⁹ setting out the Commission's detailed approach to the price review and information requirements for price submissions. Attachment 5 of the guidance paper details the PREMO rating process, and sets out a PREMO assessment tool which provides a set of guiding questions for rating price submissions, together with examples to demonstrate what might constitute 'leading', 'advanced', 'standard' or 'basic' ambition for the PREMO elements. The Commission also published other related guidance documents.³⁰

The Commission held workshops and meetings to assist water businesses to understand what was required of them. The Commission also met with the boards of the water businesses.

²⁷ The PREMO attestation requirement followed the Australian energy network precedent.

²⁸ Essential Services Commission, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October 2016

²⁹ Essential Services Commission, *2018 Water Price Review, Guidance Paper*, November 2016

³⁰ KPMG, *A practical application of the PREMO Framework*, September 2016; KPMG, *PREMO Assessment Tool* September 2016

Box 2 sets out the process and timeline for the water businesses to prepare their price submissions, and the Commission’s consultation and decision-making process.

Box 2 - 2018 Water price review process and timeline

29 September 2017	Price submissions lodged
10 November 2017	Customer submissions closed
28 March 2018	Draft decisions released
9 May 2018	Feedback closed
19 June 2018	Final decisions
1 July 2018	Implementation

The performance component of PREMO was not implemented as part of the 2018 price review, which the Commission foreshadowed in its framework and approach final paper.³¹ It stated:

The ‘P’ element of PREMO is a backward looking consideration of performance against specified outcomes during the period, and will not be assessed at the 2018 water price review, but will come into effect for a business’s second price review under the new PREMO incentive framework.

A framework for assessing performance will be developed ahead of the next price review.

5.2 CUSTOMER ENGAGEMENT

Water businesses all provided varying levels of support for customer engagement on the development of their price submission. Examples in Appendix F describe how some businesses undertook customer engagement. In addition, the Victorian Government provided funding to the Consumer Action Law Centre (CALC) to participate in the consultation on the price submissions on behalf of consumers across the state.

5.3 COMMISSION DECISIONS ON PREMO-RELATED ASPECTS OF 2018 WATER PRICE REVIEW

Table 5.1 provides an overview of the Commission’s final decisions on PREMO ratings for each of the 16 water businesses that had prices set through the PREMO approach and Western Water that was removed from the PREMO review. Further details on prices and expenditure allowances are set out in the next section.

³¹ Essential Services Commission, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October 2016, p.7

Table 5.1: Commission’s final decisions on PREMO ratings

Leading	Advanced	Standard	Basic	Not Rated
Goulburn Valley Water	Barwon Water Central Highlands Water City West Water Coliban Water GWM Water North East Water South East Water Southern Rural Water Yarra Valley Water	East Gippsland Water Gippsland Water Lower Murray Water (urban) Westernport Water	Wannon Water	South Gippsland Water Western Water ³²

PREMO ratings proposed by two water businesses were not accepted by the Commission:

- **Wannon Water – Commission approved a rating of ‘basic’ compared with a proposal for ‘standard’** | The Commission’s final decision reduced the PREMO rating proposed and reduced operating and capital expenditure allowances. This mainly reflected its review of Wannon Water’s ratings for the Management and Risk elements of PREMO; both of which it rated as ‘Basic’, compared to the ‘Standard’ proposed by Wannon Water. The Commission indicated it would accept an application from Wannon Water for it to consider a further review of its PREMO rating during the 2018-23 regulatory period.
- **South Gippsland – not rated** | The Commission determined that South Gippsland Water’s price submission did not meet the standards required by its guidance. South Gippsland Water originally proposed an average price increase of around 20 to 25% over the five years from 1 July 2018. The Commission’s draft decision approved a 10% increase over the 2 years. South Gippsland Water’s revised proposal proposed inflation only for two years. The final decision approved this shorter two-year regulatory period with annual price changes limited to changes in inflation. The Commission has since reviewed how it will regulate the prices that South Gippsland Water will charge from 1 July 2020, over a three-year regulatory period and published its guidance for this.³³

Four price submission were fast-tracked by the Commission:

- South East Water
- Yarra Valley Water
- East Gippsland Water
- Westernport Water.

Box 3 sets out sets out how ‘fast-tracking’ was managed through the regulatory decision-making process.

³² The Commission did not assess Western Water under PREMO. Before lodging its price submission, Western Water notified of its intention to target a short-term pricing outcome, rather than the overall value for money outcome expected under PREMO.

³³ Essential Services Commission, *South Gippsland Water’s 2020 water price review, Guidance paper*, December 2018

Box 3 How fast-tracking was managed through the regulatory decision-making process

- The Commission released an early draft decision (in December 2017, rather than the scheduled time of March 2018) to provide an opportunity for it to test its preliminary views with stakeholders before making a final decision around June 2018.
- The Commission explained the rationale for releasing the early decision.

South East Water example

- In the case of South East Water, for example, the Commission stated that the price submission:
 - ‘provided clear and comprehensive information supporting its proposals and ... also provided evidence that its engagement captured the main priorities and concerns of customers and [had] taken this feedback into account. This enabled us to quickly assess South East Water’s price submission against the legal framework that governs our role.’³⁴
- The Commission’s draft decision was to accept South East Water’s proposal. Though indicating that it would seek further information to inform its final decision, it considered the additional information did not involve matters that materially impact customer prices or outcomes.
- The Commission then considered submissions on its draft decision and held a public meeting with stakeholders.
- In the Commission’s final decision:³⁵
 - where a particular aspect of a final decision was unchanged from a draft decision, it did not detail the supporting reasons, and
 - where it reached a different decision to that proposed in the draft decision, or where new information required its consideration, it set out its reasons in full in the final decision, and therefore
 - the final decision had to be read in conjunction with the draft decision.

³⁴ Essential Services Commission, *South East Water draft decision, 2018 Water Price Review*, 7 December 2017

³⁵ See for example the Final Decision for South East Water (Essential Services Commission, *South East Water final decision, 2018 Water Price Review*, 29 May 2018).

Part 2 Our review approach and assessment

6. Review approach

Our research task was to undertake an early assessment of how well PREMO delivered on its intended outcomes. The PREMO objectives and desired outcomes arise from relevant regulatory instruments, guidance materials and documented public statements by the Commission as described in section 2.2 above. Our methodology combined qualitative and quantitative methods, and interpreted these in light of broader economic regulatory theory and practice, and our own experience. This section sets out our research approach and discusses potential limitations of the approach and how we sought to mitigate them.

6.1 RESEARCH APPROACH

Our research approach recognises that assessing ‘how well PREMO delivered’ cannot be determined with certainty, but requires interpretation and judgment. Therefore, we sought as far as possible, to take an evidence-based approach - considering multiple sources of evidence - and separating the presentation of this evidence from our own judgments about what the evidence is telling us.

We considered four main areas of evidence in this work:

1. **Desktop review** | We undertook a desktop review of relevant reports, especially water business submissions and Commission determinations as part of the 2018 price review. We also reviewed relevant regulatory instruments, guidance materials and documented public statements by the Commission.
2. **Online survey** | We designed and administered an online survey to ascertain views on a range of questions. All 16 water businesses participated in this survey, though not all answered all of the questions. Some of the questions focused on the design of PREMO and the outcomes, and are reported below. Other questions went to detailed implementation aspects and are not reported here.
3. **Interviews** | We interviewed a representative sample of water businesses, as well as customer and government representatives. In consultation with the Commission, we selected a range of water businesses that provided a broad spectrum in terms of size, location, and regulatory outcomes achieved in the 2018 price review. We primarily interviewed senior water business managers directly involved in the 2018 price review and also some board directors.
4. **Data and analysis** | We worked with Commission staff to identify useful data and analysis to be undertaken. Commission staff prepared this material, which we reviewed and interpreted. We have not independently checked the robustness of this data.

6.2 LIMITATIONS OF OUR REVIEW APPROACH

This section discusses actual and potential limitations of our research approach.

Early assessment | This review took place only six months after the relevant PREMO regulatory decisions, which apply for five years from 1 July 2018.³⁶ The information collected necessarily focuses on the process to arrive at those decisions in 2018, and on early experience and data in giving effect to them. Under PREMO, water businesses must articulate the outcomes they commit to deliver in the next five years, and are accountable to customers for achieving those outcomes. The success of the Outcomes component of PREMO cannot be fully evaluated until further into the current regulatory period. Further evidence on the success of PREMO will emerge over the next few years especially in relation to the Outcomes component.

Not all PREMO elements were implemented for the 2018 price review | The Performance component of PREMO was not assessed in the 2018 price review and the Commission will develop its approach for this ahead of the next price review.

The Commission is currently finalising the Outcome measures and targets for each business. It has developed a process for reporting progress against these outcomes, but is yet to decide how it will measure and assess a business's outcome performance in future.

The Outcomes and Performance components will be important in gaining a full understanding of the effect of the PREMO approach.

Recognising and addressing potential bias in survey and interview results | Qualitative research techniques have their limitations. One research challenge is the potential risk of bias in survey and interview results towards excessively positive or negative statements about PREMO and/or the Commission. The following are the potential areas of bias we identified and how we considered them.

- 1. Bias due to desire for a good relationship with the regulator** | A potential source of bias was the water businesses' desire to maintain a good relationship with the regulator, discouraging candour and criticism. To address this potential source of bias:
 - Before the review commenced, the Commission chair contacted all water businesses encouraging their involvement in the review, inviting honest and candid feedback, and establishing arrangements for confidentiality.³⁷
 - Individual survey and interview responses were kept confidential, with only consolidated data shared by us with the Commission.
 - Comments made were not attributed to individual people or businesses, unless with their prior consent. Commission officers did not participate in any interviews.

We did receive candid and robust feedback from many water businesses. We also observed that water businesses generally appeared to have an open and constructive relationship with the Commission, and felt able to discuss their views without adversely affecting their relationship.

- 2. Bias due to aspects of PREMO that water businesses could be expected to support** | There are aspects of PREMO which water businesses might be expected to support regardless of their merit in promoting the long-term interest of consumers. These include, for example, the intention of PREMO to provide businesses with greater autonomy, and/or the opportunity for less intensive review by the regulator. To address this potential source of bias:

³⁶ Or eight years, in the case of North East Water.

³⁷ In practice, few businesses expressed concern with confidentiality, with most indicating that they had already expressed their views directly to the Commission.

- We interviewed stakeholders representing customer and government interests.
- We assessed objective data on matters such as costs, prices, and efficiency outcomes.

There remains the possibility that feedback we received on aspects that water businesses supported was biased to some degree. However, our overall judgment on the balance of all the evidence is that any bias that does exist, does not undermine our assessment conclusions.

3. Bias related to the outcome experienced by a water business | A water business that had a positive experience through PREMO could (understandably) be more favourably disposed towards PREMO and/or the Commission; and conversely a water business having a less positive experience could have less positive views. To address this potential source of bias:

- We analysed the survey results and did detect evidence for such a bias.
- We are reasonably confident that the potential for bias has been mitigated by considering the overall balance of evidence.

Price data are not final prices and may be subject to future adjustment | Prices for the 2018 regulatory period do not include contingencies for capital expenditure forecasting risk to the same extent that they have in the past, whereas previous periods did include such contingencies in forecast capital expenditure. The Commission has noted provision for an end of period true-up of actual prudent and efficient expenditure in its PREMO guidance. This could mean that prices may be adjusted upwards in future.

No review of compliance | We have not undertaken any review of the new reporting obligations established by the Commission, or of the water businesses' compliance with them.

No technical review of engagement approaches | We have not undertaken a technical review of the robustness of customer engagement and research methods or the veracity of findings drawn from the engagement. We do however note the measures employed by a number of businesses to stress test their engagement approaches and findings (e.g. advisory panels) and use of expert research providers and sample recruiters – Appendix F explores these further.

No review of capitalisation decisions | Capital expenditure and operating expenditure affect customer prices differently. Forecast operating expenditure is funded dollar-for-dollar (i.e. 100%) in allowed revenues and prices. Capital expenditure only receives financing costs over the life of the long-lived assets, meaning the prices within the regulatory period may only reflect a small fraction of the expenditure in that period (i.e. <10%). We acknowledge that this downward pricing pressure achievable through capitalisation relative to expensing, together with the Commission's emphasis on allowing for an end of period true-up of actual prudent and efficient capital expenditure, may potentially create a bias in water businesses' incentives to favour capital expenditure over operating expenditure. This could increase the RAB over time in a manner counter to customers' long-term interests. We have not analysed the scope of activities in the capital and operating expenditure forecasts relative to prior regulatory period to test for this.

7. Our assessment

7.1 PREMO HAS BEEN SUCCESSFUL IN PROMOTING ITS INTENDED OUTCOMES

The desired outcomes described in section 4.2 above were:

- price review objectives to:
 - promote the best outcomes for Victorian customers
 - incentivise water businesses to provide the services and outcomes that matter most to their customers
 - adopt a pricing approach with strong incentives for water businesses to operate efficiently and innovatively, while providing for their long-term viability, and
- four high level objectives of the new approach being:
 - **Making customers central** | pivoting the businesses’ attention towards their customers’ concerns, priorities and preferences, and couching their price submission in terms of customer outcomes to be delivered
 - **Business autonomy** | allowing each water business to consult with its customers to decide services to be delivered and prices to be paid; and allowing each board to determine risks assumed on behalf of their customers, and self-assess the level of ambition of its pricing proposal, that in turn determines the return on equity reflected in the business’s proposed prices
 - **Incentivising performance** | providing new incentives for ambition in the delivery of services and outcomes that matter most to customers, and to deliver these as efficiently as possible
 - **Focus and simplicity** | encouraging both the water businesses and the regulator to focus on matters that were material to the outcomes experienced by customers, in part by choosing simplicity where possible.

Based on surveys, interviews and independent research conducted between December 2018 and February 2019, this section sets out our findings on the extent to which PREMO achieved its intended outcomes for the 2018 price review.

7.1.1 PREMO design and implementation clearly helped promote best outcomes for Victorian customers

We found strong evidence that the design of PREMO contributed significantly to the overall objective of economic regulation of water businesses, being to promote the best long-term outcomes for Victorian water customers.

Evidence for this finding:

- Nearly all water businesses surveyed agreed or strongly agreed with the survey question³⁸ on this topic. Interview comments (see Box 4 below) provide useful supporting insights on the overall impact of PREMO on the water businesses.

³⁸ Survey question: ‘Traditionally, economic regulation of water businesses seeks the best outcomes for Victorian customers, namely, services delivered at the lowest price while meeting all quality and reliability standards. PREMO sought to build on this by incentivising businesses to better understand, and reflect customer views in their proposals,

- Interviews with customer and government department representatives indicated they were all positive about PREMO overall, and did not identify any major concerns.
- There were price reductions for consumers - compared to price increases (in the control of the water businesses) in the previous two regulatory periods - and a narrower concentration of price outcomes (see section 7.2.1 below).
- There was a diverse range of improvements in service outcomes committed to by the water businesses (see section 7.2.2 below).
- There were operating expenditure efficiency gains proposed, and in some cases, these were large (see section 7.2.3 below).
- Responses to other survey questions on the various PREMO components (discussed below) were also generally positive.
- Even those interviewees whose businesses did not achieve their desired regulatory outcomes or conveyed concerns about some implementation details, still expressed positive views about PREMO's goals.

Box 4 Water business interview comments on PREMO

- PREMO is a big step forward particularly for how water businesses engage with their customers.
- We give the ESC credit for modernising economic regulation. PREMO aligns much better with how our business thinks.
- It took us a while to understand how PREMO fitted together – it is not immediately obvious. It has a number of levers and counter-levers that seem to lead to the right, natural outcome. It is very sophisticated in how it does this.
- We liked flexibility in the customer engagement approach - it encouraged lateral thinking.
- Strengths of PREMO include:
 - It challenged us to think about business differently with customers at centre, to take on extra risk on behalf of customers.
 - It encouraged us to take a leap of faith finding efficiencies in Years 4 and 5.
 - We liked the flexibility – for example one business has an eight year regulatory period.
 - We cooperated really well with the ESC after the submission, working collaboratively to achieve a good result.

Limitations to this finding were discussed in section 6.2 above, including that:

- the Outcomes component can only be fully evaluated further into the regulatory period
- the Performance component was not implemented for the 2018 price review.

Notably, one water business managing director was very positive overall about the PREMO approach, but noted that 'the jury was out' (in their view) on a key element, being the Performance component of PREMO which has yet to be developed and assessed by the Commission.

to improve customer value. Do you think that the design of PREMO in principle (and ignoring how it was implemented) helps promote this objective?

Results: Strongly agree 3; agree 12; and neither agree nor disagree 1.

7.1.2 PREMO approach clearly provided incentives for greater ambition

We found clear evidence that the PREMO approach provided incentives for the water businesses to have greater ambition.

Evaluating and measuring ambition is somewhat subjective. Nonetheless there is clear evidence that the design of PREMO did, on average and for the majority of businesses, significantly contribute to promoting greater ambition in planning and delivery of services.

Evidence for this finding is:

- 15 of the 16 water businesses agreed with the survey question³⁹ on this topic, and none disagreed.
- Several interviewees highlighted the importance and value of PREMO in focusing the attention of their organisation on the need for greater ambition in business strategy.
- A review of the water price submissions and interviews shows that many water businesses did seriously examine their existing practices and made significant changes as a result.
- A number of businesses made changes to significantly improve outcomes for their customers (see section 7.2.2 below).
- One business (Goulburn Valley Water) was rated by the Commission as ‘leading’ and nine businesses were rated as ‘advanced’. Feedback suggested that a number of the businesses were conservative in determining their rating and could have rated themselves more highly.
- Interviews with customer representatives also commented positively on the level of ambition that some (though not all) of the businesses showed in regard to their customer engagement work.

There is clear evidence that some water businesses did ‘break from the pack’ – as intended by the Commission. That is, there was significant divergence in business ambition and strategies.

Evidence for this finding is:

- There was a spread of outcomes across each PREMO rating category, ranging from one business rated as ‘leading’ (Goulburn Valley Water) through to one business rated as ‘basic’ (Wannon Water).
- Survey results and interviews highlighted a wide divergence between businesses in terms of focus and priorities. Some focused on developing a high-quality submission that was easy for the Commission to fast-track; others prioritised developing the most ambitious proposal that they could.
- PREMO facilitated the Commission adopting a more tailored, fit-for-purpose response to deal with water businesses facing significant challenges, such as those faced by South Gippsland Water and Western Water. This point is discussed further in section 7.4.2 below.

7.1.3 PREMO succeeded in giving stronger emphasis to customer engagement

This section sets out findings on the effect of the PREMO approach on customer engagement. Appendix F provides selected examples of how leading and advanced businesses approached their customer engagement, and further detail on some of the methods used.

There is clear evidence that PREMO was successful in giving stronger emphasis to customer engagement for most water businesses.

³⁹ Survey question: ‘One objective of PREMO was to provide new incentives for water businesses to have greater ambition in the delivery of services and outcomes that matter most to their customers. Do you think that the design of PREMO in principle (and ignoring how it was implemented) provides incentives for water businesses to have greater ambition to improve the delivery of services and outcomes that matter most to customers?’

Evidence for this finding is:

- Within the Commission’s expectations and guidance, water businesses pursued a wide variety of engagement approaches, with many investing significant resources to do so.
- Many water businesses reported that they had run the most in-depth customer engagement program ever for their business, although others considered that the Commission’s guidance reinforced a customer-centric cultural transformation that was already underway within their business.
- We reviewed the water businesses’ price submissions, which included details of customer engagement activities undertaken, to confirm the significant effort made by many water businesses. Those efforts are discussed further in Appendix F.
- PREMO’s focus on engagement was broadly welcomed by the water businesses. The survey indicates unanimous support for stronger emphasis on customer engagement, which was seen as a positive change.⁴⁰ All respondents believed PREMO has driven a noticeable increase in ambition to deliver better customer outcomes and value.
- Specific benefits identified by the survey included:
 - Increased customer engagement gave the water businesses a better understanding of the outcomes that were important to their customers (75% of respondents).
 - PREMO focused attention on better defining the outcomes water businesses would deliver to their customers (68% of respondents).
- Survey and interview responses provided consistently positive comments on how increased customer engagement was experienced by the water businesses. Examples in Box 5 provide insights on the impact and learnings about customer engagement under PREMO.
- The Consumer Action Law Centre (CALC) characterised the customer engagement focus of PREMO as ‘a major success’, and observed a step change in water businesses’ understanding of customers. However, CALC also noted a wide variation in how different businesses responded, with those at one end of a spectrum making a huge effort with positive results, while some other businesses made little real change.
- For some water businesses, the exercise provided a revelation that customer engagement needs to be more business as usual, though several observed that some forms of the PREMO engagement would be too costly to run for business as usual engagement purposes.

Box 5 – Impact and learnings about customer engagement under PREMO

- Water business comments on the benefits of deeper customer engagement include:
 - *The engineering trade-offs we have made in the past may not have been the right ones from a customer perspective.*
 - *There was great benefit in our planners, who are engineers, having to explain choices and trade-offs to consumers directly. It changes their perspective on risk and cost.*
 - *There was deeper and more extensive connection to customers. Still need to work on ‘we know best’ attitude within certain areas of the business.*

⁴⁰ Survey question: ‘Consider the following statement and set out your response: PREMO gives stronger emphasis on customer engagement by the business, and less engagement by the Commission. This has been a positive change compared to prior price review periods.’

Results: Agree 8; strongly agree 8.

- *In the previous determination we held deliberative forums - adopting [approach X]. This time around was a whole new level of engagement. Adding [approach Y] to validate the optimum price/service trade off made the engagement much more insightful and robust.*
- *We enjoy being more connected to customers, we will look to continue this.*
- *The breadth of subject matters on which we approached customers was vastly improved.*
- *We conducted water cafes in all the towns in our service area in order to understand what our customers value and think about our service.*
- There was improved understanding of the value of information to customers:
 - A positive outcome observed by non-water business stakeholders was that water businesses gained a different sense of how customers view and value reliability— e.g. there was less focus on reliability in the sense of mandatory times to fix problems, but instead on what information customers receive, and when, if there are supply reliability problems.
 - Commitments in pricing submissions to implement better communications and notifications to customers (e.g. about outages and bills) were seen as a positive outcome from engagement.
- Whether the customer focus was a catalyst for change, or reinforcing of it, differed across the businesses:
 - Several businesses reported a pre-existing shift towards prioritising greater engagement with customers. PREMO helped reinforce a trend already begun, rather than being a catalyst for change.
 - *‘Our Board had demanded we achieve customer centricity before PREMO, and we’re pleased that various customer benchmarks have proven we’re on the right path.’*
- There were learnings about the potential pitfalls arising from the way research questions were framed, for example:
 - *‘Initial result showed limited support for hardship support. But when the engagement consultant repeated the work with focus groups to ask, ‘if you lost your job...’ then this resulted in a different answer.’*
- Only one business considered that PREMO had no effect:
 - *‘Our engagement didn’t improve because of PREMO, rather we were on a continuous improvement journey regarding engagement anyway.’*
- There may be further benefits in future that have not yet been fully realised:
 - Many businesses did not use all the customer generated ideas they gained because they ran out of time.
 - Many recognised the need to make engagement part of their business as usual.

There is mixed evidence regarding how water businesses took account of the long-term interests of consumers when framing their engagement.

The Commission has a statutory objective to promote the long-term interests of consumers of the services it regulates.⁴¹ It is important that service providers give due attention to the long-term interest of consumers for services provided by long lived infrastructure assets. It is often possible for a service provider to achieve short-term price benefits for today's consumers, but not optimise efficiency over the longer term, or ensure resilience to future risks.

One area where the long-term interest of consumers is reflected in the Commission's framework and approach paper is where the water businesses are required to take into account a planning horizon that extends beyond the pricing period, typically a 10-year outlook as a minimum.⁴²

Proper framing of consumer engagement in respect of consumers' long-term interests could significantly affect the validity of reported outcomes. For example, if current customers were asked about preferred prices and service levels and *not* asked at the same time to think about the implications for future customers, then their responses may differ from those given if explicitly asked to think about, and provided with information on, the interests of future generations of customers.

Interviews highlighted mixed practices as to whether water businesses explicitly took account of the long-term interests of consumers when framing their customer engagement. At least two businesses we interviewed had not thought about this when framing their engagement, although they understood the point. In contrast, another water business had explicitly considered this aspect, and told us that their customers gave clear feedback - they did not want to see service outcomes decline to gain a short-term price benefit that was unsustainable in the long-term. A regional water business told us that their engagement revealed that their customers were very attuned to longer term issues affecting prices charged for future consumers, such as population growth and climate change.

We do not identify any evidence of a problematic lack of appropriate 'framing' of customer engagement in respect of promoting the 'long-term interests of consumers'. We were encouraged that where customers were engaged on this point, they were concerned with the interests of future generations of consumers.

There was diverse terminology adopted by different businesses to describe their engagement.

Within the range of engagement methods adopted, we observed a diversity in the terminology used by different businesses to describe their engagement. This was especially apparent on the forms of engagement, and occurred notwithstanding the guidance provided by the Commission, which incorporated the recognised International Association for Public Participation (IAP2) public participation spectrum in its engagement tool.⁴³

7.1.4 Progress made in enhancing water business autonomy

There is some evidence supporting the proposition that PREMO provides greater autonomy to water businesses, and that this can produce better outcomes.

Evidence for this includes:

- There was a high level of agreement by the water businesses with the survey question⁴⁴ on this topic.

⁴¹ Section 8(1) *Essential Service Commission Act 2001 (Vic)*

⁴² Essential Services Commission, *Water pricing framework and approach*, Oct 2016, p.24

⁴³ This engagement tool is shown in Appendix C at section C.1.1, Figure 11 Commission customer engagement diagram tool.

⁴⁴ Survey question: 'In principle (putting aside how this was implemented in practice) do you agree that PREMO should create greater autonomy for your water business?'

- However, comments from CALC and some water businesses (summarised in Box 6) revealed a more mixed picture.

Box 6 - Interview comments on whether PREMO promoted greater autonomy

- Positive comments
 - *Service measures/outcomes agreed with customers are much more valuable than those driven by the regulator.*
 - *PREMO should result in a deal or promise between the utility and its customers. Provided that deal is honoured and transparent, the utility should be left to get on and deliver the promise and report back to its customers, while adding further value where it can.*
 - *The opportunity to provide clear evidence of customer support for initiatives was positive.*
 - *Greater autonomy for our business allows us to empower our customers more.*
 - *It clearly puts the responsibility back to the organisation with less involvement of the regulator. I think that is a good thing.*
- Mixed comments
 - *There was a wide variation in how businesses responded. At one extreme, some put in a huge effort and at the other extreme, there were businesses who did not make much change. (CALC)*
 - *In principle, the PREMO design does provide greater autonomy, however in my opinion this wasn't evident in the way the 2018 review was implemented.*

There is a mixed picture on whether the benefits of autonomy were achieved across all water businesses.

Though there is clear evidence that, on average, there were benefits from greater autonomy, there is a mixed picture on whether the benefits of autonomy were achieved across all water businesses. We understand that this aligns with the Commission's expectation that the PREMO approach would help reveal this and enable regulatory attention to focus on those that are not demonstrating the customer benefits of autonomy in managing their business.

Some water businesses undertook extensive and genuine customer engagement, made changes to service outcomes and service measures as a result of this engagement, and considered they were driven by incentives through the Engagement and Outcomes aspects of PREMO.

At the other end of the spectrum, there were some water businesses that undertook much more limited customer engagement, and conveyed that their businesses were not driven by the PREMO incentives.

7.1.5 Mixed evidence on improved focus and simplicity in price review process

There is mixed evidence on the extent to which the objective of greater focus and simplicity in the price review process was achieved.

Results: Agree 10; strongly agree 4; neither agree nor disagree 1.

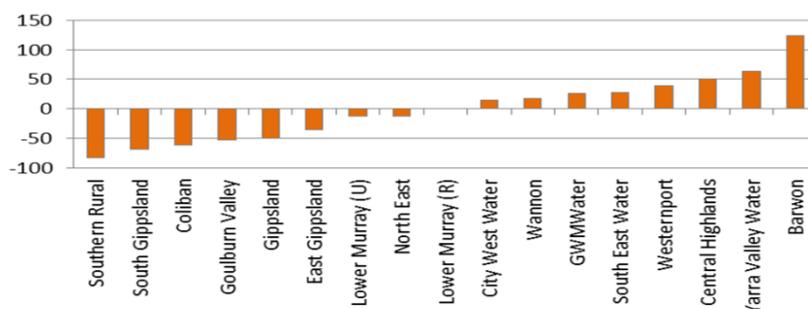
In implementing PREMO, the Commission sought better focus – both by water businesses and the Commission itself - on matters that were material to the outcomes experienced by customers. In part, this focus encouraged simplicity where possible. Specifically, the Commission:

- encouraged water businesses to prepare short submissions
- stated that much of the detail could be incorporated by populating the financial model
- stated that businesses need not submit supporting detail, but should have that detail available for review by the Commission if requested.

Evidence for whether this objective was achieved is:

- The length of water business price submissions was on average the same as in 2003 but there was wide variation in submission length.⁴⁵
- Changes in submission length compared to 2003 are shown in Figure 4.

Figure 4 Changes in submission length (pages in 2019 less pages in 2013)



Source: Essential Services Commission staff presentation, 2018

- Only half of the survey responses agreed that PREMO had brought about greater simplicity⁴⁶. However, it is possible that responses focussed on processes and procedural simplicity (such as the time and effort required to prepare the submission), rather than the customer outcome focus perspective.
- Interview comments highlighted challenges for water businesses understanding what was expected. Comments included:
 - ‘It was hard to reconcile the expectation of a short submission, with the level of detail set out in the guidance.’
 - ‘It is difficult to translate 200 pages of guideline into a short submission.’

7.2 IMPACT OF THE PREMO APPROACH ON CUSTOMERS FOR THE 2018 PRICE REVIEW

This section reviews the price submissions and Commission decisions, to provide insights into the impact of PREMO on outcomes that are important to customers. Those outcomes include the direction of

⁴⁵ The average submission length in 2018 was 76 pages compared to 77 pages in 2013. Source: Essential Services Commission.

⁴⁶ Survey question: ‘One of the objectives of PREMO was to promote greater simplicity in the price review process. Recognising that this was the first time that PREMO has been implemented, do you think that in principle the design of PREMO promotes greater simplicity in the price review process?’

Results: Strongly agree 1; agree 7; neither agree nor disagree 5; disagree 2; strongly disagree 1.

prices; whether the service outcomes are in line with customer expectations; and the forecast changes in productivity targets and cost forecasts that impact on setting of prices.

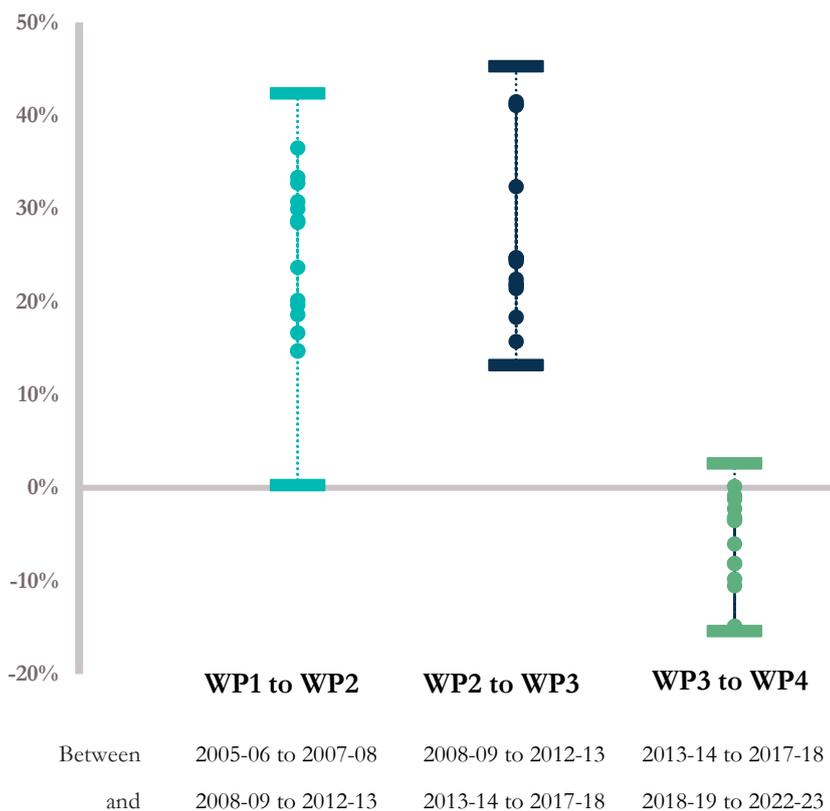
The analysis relies upon quantitative analysis performed by Commission staff. Appendix A provides an overview of how PREMO affected the water businesses’ proposed expenditure forecasts compared to prior regulatory periods.

7.2.1 The direction of prices

There was a significant shift towards price reductions compared to previous regulatory periods, which saw significant price increases, and a narrower concentration of price outcomes.

Figure 5 shows the pricing outcomes across the four water regulatory periods to date. It measures the change in average revenue per customer between regulatory periods after controlling for the revenue effects of significant changes in costs that are outside the control of the water business (the Weighted Average Cost of Capital (WACC) and desalination costs). This gives a proxy pricing measure for factors affecting prices that are within water businesses’ control.

Figure 5: Regulatory period-on-period changes in prices (controlling for changes in WACC and desalination costs)



Source: Essential Services Commission analysis, 2018

We note that the prices for WP4 do not include contingencies for capital expenditure forecasting risk to the extent they have done in the past. The Commission has provided for what its guidance termed an end of period ‘true-up’ of actual prudent and efficient expenditure. It is unclear to us whether water businesses have interpreted this guidance as a planned true-up adjustment with financing cost true-up or just the traditional RAB roll forward. It is clear the businesses have explicitly left identified capital projects

and programs out of their forecasts stating reliance on this next period true-up. This may mean that prices could be adjusted upwards in future.

7.2.2 Service outcomes committed to by the water businesses

The water businesses committed to a diverse range of improvements in service outcomes.

Evidence for this finding is the range of commitments for improved service outcomes that included:⁴⁷

- upgrading water and sewerage networks to address population growth and climate change
- providing regional water consumers with better tasting and more reliable drinking water
- improving the timeliness and quality of communication with customers
- increasing the ways customers can communicate with, and receive information from, the business, and
- extending support for vulnerable customers.

This finding was also supported by feedback from CALC.

To our knowledge, no detailed analysis or comparison of changes in service outcome commitments has yet been undertaken by the Commission or other bodies (such as VicWater), though interviewees suggested such analysis would be useful.

The majority of water businesses considered that PREMO resulted in modest improvement in service outcomes for their customers compared to the past.

Evidence for this finding is provided by the response to the survey question on this topic.⁴⁸

7.2.3 Operating expenditure efficiency improvements

Thirteen water businesses proposed operating expenditure efficiency improvements of up to 2.6% per annum.

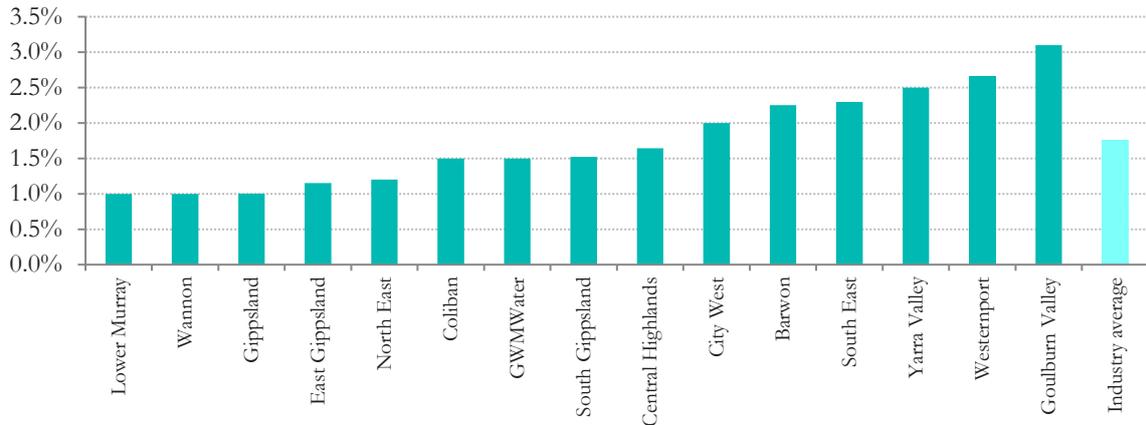
This aspect is complex and nuanced. Care must be taken to focus on the outcomes achieved for customers. The steps followed to determine the operating expenditure efficiency outcomes are described below.

The Commission's guidance expected water businesses to propose productivity savings in their operating expenditure forecasts. As a first step in this process, all water businesses proposed percentage rates of productivity savings in their operating expenditure forecasting methods, which were approved in the final decision as shown in Figure 6.

⁴⁷ Source : ESC website

⁴⁸ Survey question: "To what extent did PREMO result in better service outcomes for your customers compared to the past?" Responses: It made a major difference 2; it made a modest difference 10; it made little or no difference 2.

Figure 6: Comparison of Victorian water businesses operating expenditure efficiency hurdle (% p.a.)



Source: Essential Services Commission analysis, 2018

The next step involved assessing the efficiency outcomes after accounting for other cost increases (i.e. if you inflate costs then take some off, the net outcome borne by customers can still be higher costs). In addition to proposing productivity ‘stretch’ adjustments to their operating expenditure forecasts, most businesses also forecast cost increases relative to their current actual costs (or ‘baselines’). While the Commission’s guidance and template reporting made these clearer for assessment purposes, these cost increases still affected the actual level of productivity improvement experienced by customers in the approved prices.

The net effects on operating expenditure forecasts as assessed by the Commission’s expenditure review consultant is shown in Figure 7. The final column shows that in every business (except Lower Murray – urban) the actual operating expenditure savings per customer were lower than the proposed productivity adjustments.

Figure 7: Comparison of Victorian water businesses' change in controllable operating expenditure

Water business	Efficiency target	Growth rate (% per annum)	Forecast variations to baseline	Reduction in controllable opex per connection
	(avg. % per annum)		(total RP4 \$m)	(avg. % per annum)
Westernport	2.7%	1.9%	0.00	2.6%
Yarra Valley	2.5%	1.7%	8.61	2.2%
South East	2.3%	2.3%	9.58	1.8%
Goulburn Valley	3.1%	1.3%	10.12	1.5%
Barwon	2.3%	1.6%	22.67	1.3%
Lower Murray – urban	1.0%	1.1%	0.26	1.2%
City West	2.0%	2.6%	20.66	1.1%
Coliban	1.5%	1.7%	8.55	1.0%
North East	1.2%	1.2%	6.24	0.9%
East Gippsland	1.2%	1.3%	1.91	0.9%
GWMWater – urban	1.5%	0.5%	8.73	0.8%
Central Highlands	1.6%	1.6%	12.71	0.6%
South Gippsland	1.5%	1.5%	7.03	0.0%
Gippsland	1.0%	1.2%	16.78	-0.2%
Wannon	1.0%	0.8%	25.41	-1.8%

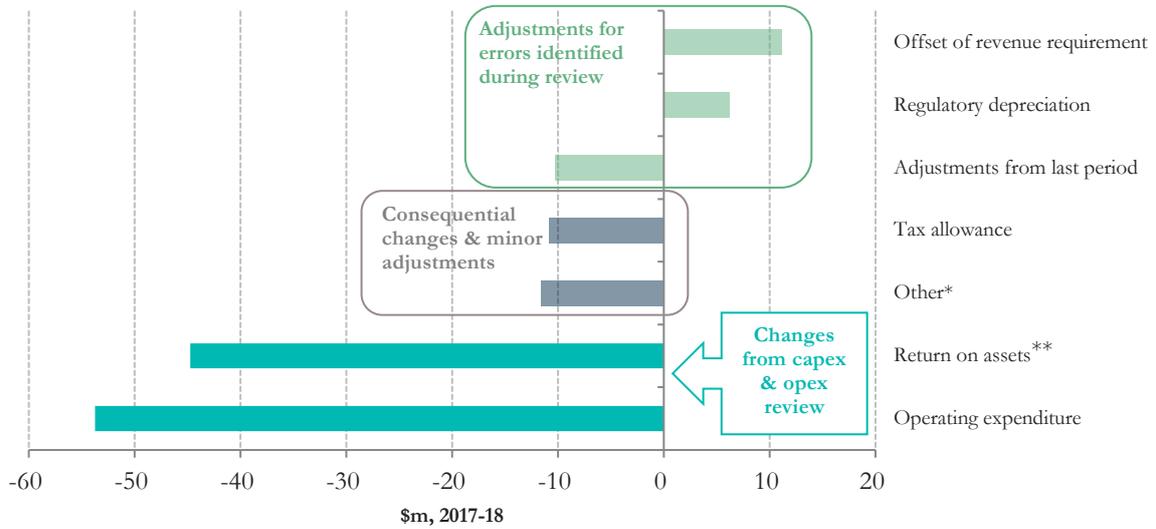
Source: Deloitte Access Economics, City West Water – expenditure review for 2018 water price review | Report for the Essential Services Commission – FINAL REPORT, February 2018, Figure 3.1

7.2.4 Nature of Commission adjustments to water business proposals

The majority of adjustments to the water business proposals were driven by the traditional aspect of the Commission's building block review practice, namely technical reviews of the expenditure forecasts for operating and capital expenditure based on expenditure review assessments.

Figure 8 shows the Commission's revenue requirement adjustments relative to water businesses' proposals.

Figure 8: Commission adjustments in final decision revenue requirements (\$m, 2017-18)



Source: Essential Services Commission analysis, 2018

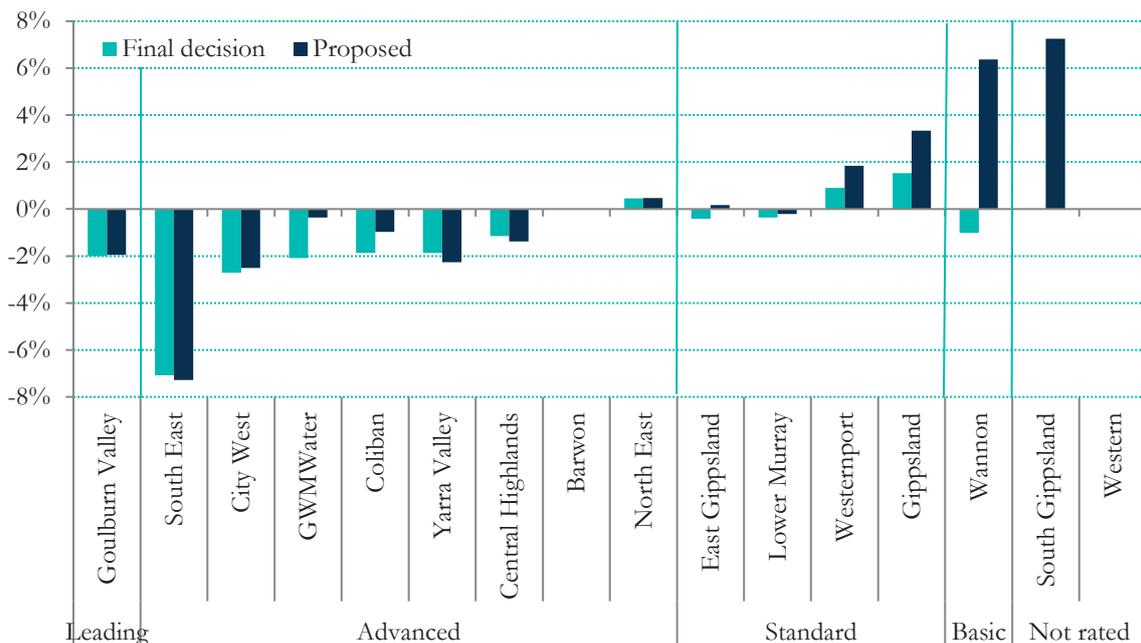
Notes: *Other includes adjustments such as ‘foregone revenue’ for NEW, SGW, and WW, and ‘additional required efficiencies’ for GVW.

** Determination of the rate of return for the 2018 review was not through a ‘propose respond’ approach, and was therefore not a driver of regulator adjustments. Until recently the rate of return in economic regulatory regimes and decisions has been determined through a ‘propose respond’ approach and typically this is the largest single adjustment.

The largest adjustments and biggest impacts on customer bills were directed to businesses rated as ‘standard’, ‘basic’ or not rated.

The size of the adjustments made by the Commission increased for those businesses with lower PREMO ratings.

Figure 9: Indicative changes in prices from 2017-18 to 2018-19 - Final decision vs. proposed



7.3 WATER BUSINESS PLANNING AND PRICE SUBMISSIONS

This section describes the impact of the PREMO approach and other aspects of the 2018 price review process on the water businesses' approach to planning and developing their price submissions.

7.3.1 PREMO encouraged water businesses to propose their best offers

There is reasonably clear evidence that the design of the PREMO incentive mechanism encouraged the businesses to put forward their best offer.

The new pricing approach aimed to encourage water businesses to submit price submissions that reflected their 'best offers' by incentivising them to assess their price submissions accurately and honestly. Each business was required to self-assess the level of ambition of its price submission, with the self-assessment set out in the submission. The Commission then conducted its own, independent assessment. A water business achieved the highest return on equity allowance, when the Commission and the business assessments aligned.

Evidence that the incentive mechanism was successful in encouraging businesses to put forward their best offer is as follows:

- Most businesses agreed with a survey question on whether a best offer mechanism is, in principle, a good idea.⁴⁹
- Eleven of 14 survey responses agreed or strongly agreed with a survey question on whether the specific mechanism adopted had encouraged them to put forward their best offer, and none disagreed.⁵⁰

We note, however, instances where the Commission used its consultant's expenditure reviews to reduce forecast operating and capital expenditure allowances from those submitted by some water businesses. It is unclear whether this reduction indicates that:

- the affected businesses had included a degree of ambit claim in their expenditure forecasts
- the affected businesses lacked good planning and expenditure forecasting capability, and/or
- simply, that there were legitimate differences in judgments between the respective business and consultant assessments.

Finally, we note anecdotal comments that the best offer mechanism had encouraged some water businesses to be overly conservative in their assessment.

7.3.2 The impact of PREMO on businesses' strategic priorities and structures

The increased emphasis on customer engagement had a significant effect on the strategic priorities and business processes of most of the water business and in a few cases led to changes in organisational structure.

The water businesses reported in the online survey that due to the stronger emphasis on customer engagement:

⁴⁹ Survey question: 'Consider this statement and provide your response: Noting that the best offer mechanism could be implemented in different ways, in principle, it is a good idea.'

Results: Strongly agree 4; agree 10; neither agree or disagree 1.

⁵⁰ Survey question: 'Consider this statement and provide your response: The best offer mechanism was effective in encouraging us to provide a realistic self-assessment of our price submission.'

Results : Strongly agree 4; agree 7; neither agree nor disagree 3.

- 10 businesses changed their business processes
- Three businesses changed their organisational structure.

7.3.3 The impact of the PREMO incentive mechanism

There were diverse views in the sector about the real incentives that drive water businesses. While reputational incentives were widely considered the most important, views diverged widely regarding the role of financial incentives.

The Commission's 2016 review found that Victorian water businesses generally had not responded strongly to incentives to deliver services as efficiently as possible. The Commission observed that many businesses did not try to outperform the expenditure benchmarks established in price reviews in pursuit of profits or discretionary funds. PREMO introduced new financial, reputational and procedural incentives to better align the interests of water businesses and the customers they serve. The main changes were:

- linking the return on equity to the Commission's determination of PREMO rating, which created a direct financial incentive and, indirectly, was expected to provide a reputational incentive
- the best offer mechanism, giving an incentive not to overstate the level of ambition (achieved through the design of the return on equity matrix).

Survey responses indicated:

- Reputational incentives were considered the most important for water businesses, with wide agreement across the sector.
- Procedural incentives (e.g. fast tracking or the extent of scrutiny in expenditure review) were seen as being the second most important.
- Financial incentives were considered the least important on average, with very wide variation in their perceived importance.

We recognise that this order may, in part, reflect the fact that the water businesses are government owned.

7.3.4 Board attestation requirement positively affected the review process

There was reasonably clear evidence supporting the value of the attestation requirement.

The attestation requirement appeared to be broadly accepted by a majority of water businesses and was seen as adding value. We note:

- Of survey responses provided by management, 62% supported the attestation requirement in principle as part of the PREMO design:
 - The main reason given for this support was that attestation promotes greater buy-in between the board and management to the price submission development process.
 - Other reasons were that attestation helps ensure the board's role is clear, and assists the board in reviewing the price submission.
- 43% of responses said that the attestation requirement resulted in significant changes in internal processes and practices.

However, a significant minority (25%) of responses considered that attestation had little or no effect on the robustness of the price submission.

One interviewee considered that the attestation requirement was too legalistic, and this approach resulted in unnecessary additional costs. It suggested instead that the attestation requirement should be principle-based, more in line with corporate governance guidance.

7.3.5 Mixed evidence of PREMO impact on water businesses' resource requirements

There were mixed views on the impact of the PREMO approach on water businesses' effort and resourcing requirements.

The evidence for this finding is:

- No water businesses reported that the effort was less than what was required for previous water price reviews.
- 43% said the effort was the same as in the past; 43% said the effort was somewhat more; and 14% said it was much more.

The main reason given for the additional effort was the work required to undertake more intensive customer engagement. Other factors mentioned were:

- more modelling by engineers to provide options
- significantly more time and effort to undertake financial modelling, and document preparation
- additional consultant resources to assist in gaining attestation confidence.

We sought comments on whether the additional resources were commensurate with the benefits. This had a relatively low response rate (50%) but the comments were largely in the affirmative.

In interviews, a number of water businesses recognised that enhanced customer engagement should in future be seen as a 'business as usual' activity, rather than related to economic regulation. If deeper customer engagement is now viewed as 'the new normal', then it is arguably incorrect to ascribe all the additional effort to PREMO. Rather, much of it should be ascribed to the new way of doing business.

In general, water businesses said they learned much about how best to undertake customer engagement. Some approaches used will not be repeated, and others may be undertaken more efficiently in future. Businesses now have a higher base level of understanding. These factors suggest that some increased resources devoted by water businesses to customer engagement for the 2018 price review were a 'one off' response to PREMO's introduction.

7.3.6 Effect of PREMO on industry collaboration

An issue raised unprompted in several interviews was that PREMO had reduced incentives for industry collaboration, seen as a positive feature of water businesses' approach to economic regulation in the past. For example, one business commented that businesses wanting to create an 'edge' through the rating of their submission did not want to share good ideas with others.

We note that reduced industry collaboration is consistent with the Commission's desire to see less 'bunching' in strategies. In our view, this seems unlikely to be a significant problem in the medium term, since over time, good ideas and improved practices are likely to spread through the industry. Several interviewees agreed with this view.

7.4 CHANGES IN REGULATORY PRACTICES AND PROCESSES

7.4.1 Increased regulatory flexibility

The Commission demonstrated a more flexible approach to making its determinations than in past water price reviews.

Examples of where the Commission exhibited increased flexibility include:

- **Approval of North East Water's proposed 8 year regulatory period** | The standard regulatory period for water businesses is 5 years. North East Water's proposal for an 8 year regulatory period was approved by the Commission reflecting amongst other things, a recognition of the diversity of the water businesses in Victoria; and that North East Water's financial position enabled it to absorb risks associated with lower demand or higher costs than forecast during an 8 year period.
- **Western Water taken out of PREMO review** | As noted in section 2.1 the Commission did not assess Western Water under the PREMO approach, which enabled the business to focus on planning for growth.

7.4.2 Regulatory cost burden of applying the new regulatory regime

The change in regulatory cost burden resulting from applying the PREMO approach does not appear significant.

We did not undertake a detailed assessment of the regulatory burden associated with the 2018 water price review or assess the effect of PREMO compared with other aspects of the Commission's framework and approach.

The Commission reported modest savings (\$1.13 million or about 20%) in its costs compared to the previous regulatory period. In part, this reduction was due to the less intensive expenditure review required for some water businesses.

As discussed in section 7.3.5, water businesses reported additional costs, some of which arguably could be seen as new business as usual arising from an increased focus on customer engagement.

Some businesses reported increased costs arising from the new attestation requirement. However, as outlined in section 4.4, the need for attestation and its detailed form, were not a fundamental part of the PREMO approach. It is a separate requirement, and any costs and benefits should be assessed on their own terms.

Part 3 - Lessons and observations

8. Lessons and observations

This section outlines some key lessons regarding economic regulation which can be drawn from our review of the PREMO approach.

These are farrierswier's own views.

8.1 THE COMMISSION'S REVIEW APPROACH

The Commission's approach to undertaking the review that led to PREMO provides a number of interesting lessons for economic regulation practitioners.

By 2015, economic regulation of the Victorian water industry had evolved to a relatively mature regime. Work on economic regulation had started in 2003, and three price reviews had been undertaken by the Commission. The framework and approach were very similar to those adopted for economic regulation in other regulated industries, especially energy networks. In such circumstances, a significant degree of inertia might have been expected, with a review focused on more incremental changes.

Given this context, why did the Commission's review process lead to such a significant change? Our views are as outlined below.

Firstly, the Commission took a broad and genuinely open-minded and transparent approach to exploring alternative approaches to the economic regulation of water prices. The Commission avoided any bias towards making early decisions prior to undertaking its work and early consultation.

The initial consultation paper (released in April 2015) canvassed a wide range of economic regulation approaches. Particularly interesting was the Commission's 'ideas generation' work. The Commission engaged six independent regulatory experts to provide their views on alternative regulatory approaches. Importantly, the Commission did not seek to limit the consultants' discretion in the ideas they wished to put forward. It also actively sought ideas from water businesses and other stakeholders. This input was influential in the decision to prioritise improved consumer engagement.

Secondly, in our opinion, the Commission had a mindset that was willing to be creative and take some risks. It was open to exploring options that went well beyond conventional thinking about economic regulation.

A third lesson is probably well understood by economic regulation practitioners, but was also important. In our view, the Commission was effective in managing a logical and stepwise approach to developing the revised economic regulatory framework, and was successful in bringing stakeholders along with its thinking. This approach engendered a relatively high level of trust between most water businesses and the Commission. It was also important that the time allowed for the review (18 months) was sufficient to enable the required work to occur.

Finally, feedback from some stakeholders emphasised the importance of the leadership provided by the Commissioners throughout the review, and the depth of the water industry expertise of the Commission staff.

8.2 DESIGNING INSTITUTIONAL ARRANGEMENTS AND INCENTIVES TO DRIVE ECONOMIC VALUE

The PREMO approach is of significant interest for theory and practice concerning the design of institutional arrangements and incentives for government owned businesses. There are important lessons and observations arising from:

- the priority given by the Commission to promoting good business performance where traditional incentive regulation was considered ineffective
- the consideration of alternative institutional arrangements that aim to promote improved performance for government businesses.

8.2.1 Using economic regulation to promote good business performance

The Commission's review of its water pricing approach found that traditional incentive-based economic regulation had not been effective in promoting good business performance in the Victorian water sector. The Commission developed and tested a new economic regulatory approach to address this gap. It is a significant innovation in economic regulatory practice to view good business performance as a direct concern of the regulator, rather than something assumed to be indirectly affected by the financial incentives provided by a traditional economic regulatory model.

In traditional economic regulation, the regulator makes determinations on cost benchmarks and designs incentives based on reasonably well understood and measurable inputs (such as costs) and outcomes (prices, service standards, etc.). It is also increasingly common for regulators to 'add-on' other features and incentives to promote other desired outcomes.⁵¹ Having determined an estimate of efficient costs and established a set of incentives, the regulator has left it to the regulated business to decide how it performs as a business. It is assumed that if the financial incentives are right, they will drive good business performance.

In contrast, 'good business performance' is complex and dynamic, harder to define, and involves more judgment. It draws on concepts that are more akin to those used by boards and shareholders in defining the expectations for management and then monitoring their performance. In addition, 'advanced' or 'leading' business performance cannot be defined by the regulator in advance. As one interviewee said, 'It is clearly impossible for the regulator to define how an ambitious water business can achieve leading business performance – only water business managers can do this.'

Our positive assessment of PREMO suggests that it is feasible and beneficial to design an economic regulatory framework that focuses on directly assessing and incentivising good business performance as a direct concern of the regulator, where traditional incentive-based economic regulation is not considered to be effective.

As far as we are aware, the Commission is the only economic regulator in Australia to have explicitly concluded that traditional incentive regulation was not effective in promoting good business performance, and to identify the importance of directly focusing on improving business performance. Recently, regulators have focused more on aspects of how regulated businesses are managed and perform. For example, Paula Conboy, the Chair of the Australian Energy Regulator (AER), recently noted the need for regulated energy businesses to engage more with their customers and noted that, 'boards need to be seen as playing a greater role in delivering consumer value'. However, the AER considers that its incentive-

⁵¹ For example, demand management incentives or innovation allowances which are common in UK economic regulation.

based regulatory framework continues to be effective in encouraging businesses to move towards efficient costs.⁵²

8.2.2 Alternative institutional arrangements to promote improved performance for government-owned businesses

The PREMO approach is also an interesting case study on developing an alternative approach to the design of institutional arrangements to drive improved performance of government businesses.

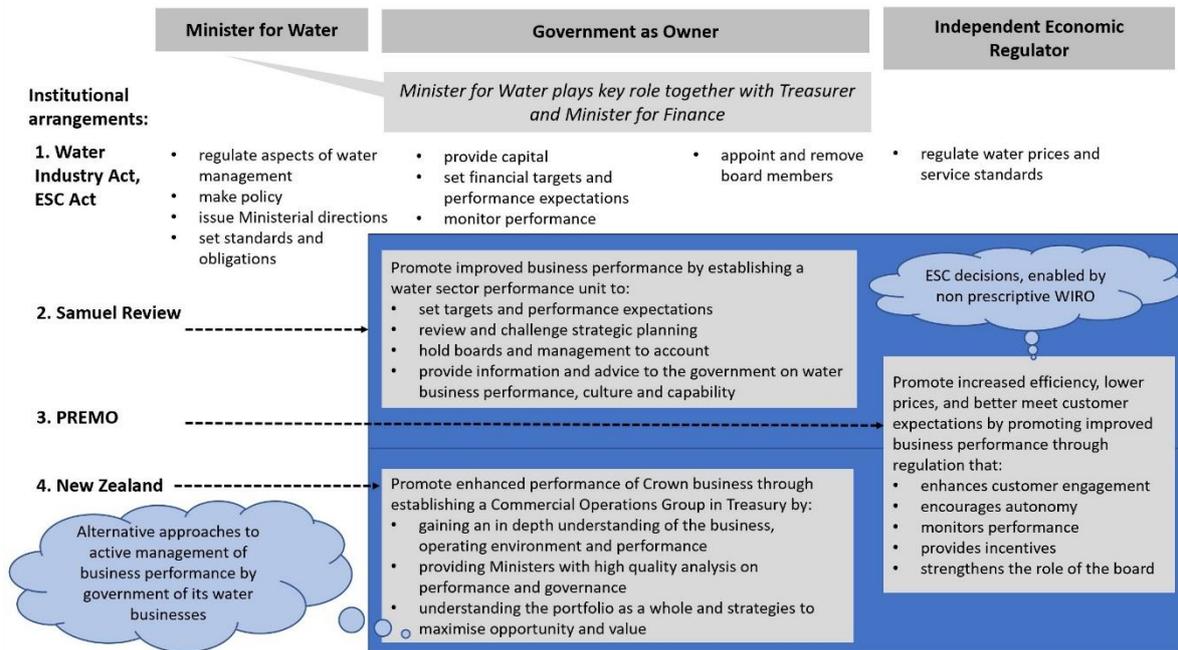
Governments in Australasia appear to vary in the extent to which they actively drive business performance of their government-owned businesses. In New Zealand, for example, the Commercial Operations Group within Treasury has been established as a centre of commercial expertise and experience to ‘provide high quality commercial advice within the public sector, policy advice on state ownership matters and ensures Ministers are supported, well informed, active shareholders’ (emphasis added).⁵³ As discussed in section 3.1 above, the Samuel Review advocated a more active approach by government as owner to promoting improved water business performance, and similar to New Zealand, proposed establishing a unit within government for this purpose.

Figure 10 illustrates alternative approaches to the design of institutional approaches to promote more active government management of the performance of its water businesses. It shows the current institutional arrangements (under the Water Industry Act and the Essential Services Commission Act); the Samuel Review proposal; the PREMO approach; and New Zealand’s performance monitoring arrangements for Crown owned businesses.

⁵² Paula Conboy, AER Chair, *Energy Networks Australia Regulation Seminar 2018 Regulatory innovation and collaboration in a dynamic environment: what has been achieved and where to from here*, 25 July 2018

⁵³ The Commercial Operations group in New Zealand Treasury helps shareholding Ministers protect the value of the commercial portfolio by: maintaining active relationships with entities and their boards by providing a link between the business world and the Crown as the shareholder; gaining an in depth understanding of the business, operating environment and performance of each of the entities; providing Ministers with high quality analysis on performance and governance to inform their decision making; seeking out and recommending the appointment of high quality, fit-for-purpose directors to Crown company boards; and understanding the portfolio as a whole and strategies to maximise opportunity and value. Source: <https://treasury.govt.nz/information-and-services/commercial-portfolio-and-advice/commercial-portfolio/about-commercial-operations-group>.

Figure 10 Alternative institutional arrangements for government management of business performance by its water businesses



8.3 FUTURE PRICE REVIEWS AND LEGITIMACY OF REGULATORY DECISIONS

Notwithstanding its statutory obligations in relation to making its water pricing decisions, the social and political legitimacy of the Commission’s decisions is also very important.⁵⁴

In an environment where efficient unit costs are declining (due to increased efficiency and/or increasing demand over which to recover costs, and/or where the cost of capital is stable or falling) and where quality and reliability standards are stable, the Commission should, in general, be able to approve lower prices. But in a more challenging environment, such as where efficient costs are rising or quality or reliability standards are increasing, then the Commission may be required to approve higher prices. Such conditions would make it more challenging for the Commission to achieve acceptance of the legitimacy of its decisions by consumers and the government.

In the 2018 price review, the water businesses operated for the most part in an environment that supported lower prices. For example, operating expenditure efficiencies were being achieved by the water businesses, there were no significant external shocks in relation to reliability or quality standards, and the cost of capital was stable.

In future water price reviews, challenges may emerge which require the Commission to increase prices.

The deeper customer engagement enabled by PREMO could help the stakeholders to accept the social and political legitimacy of any Commission decision to increase prices, if the increase is necessary to meet

⁵⁴ This importance is reflected in the Commission’s statutory objectives in relation to the regulated water industry, which include and objective to ensure that regulatory decision making has regard to the health, safety, environmental sustainability (including water conservation) and social obligations of regulated entities. See section 4C(c) of the *Water Industry Act 1994 (Vic)*.

the statutory objectives or to respond to drought and water scarcity. Clearly, customer engagement in an environment of rising costs would be much more challenging for water businesses and the Commission, than the lower prices context for the 2018 price review.

Appendix A PREMO application to Victorian water businesses

A.1 BUSINESSES NOT SUBJECT TO PREMO FOR 2018 PRICE REVIEW

Three Victorian water businesses were *not* subject to PREMO for the 2018 price review. The businesses and rationale for their exclusion were as follows:

Western Water | This is a regional urban water business adjacent to Melbourne. The Commission did not assess Western Water under PREMO because it is experiencing unprecedented growth levels, requiring substantive strategic changes. Prior to lodging its price submission, Western Water notified the Commission of its intention to target a short-term pricing outcome, rather than the overall value for money outcome expected under PREMO. This approach was adopted to provide Western Water with time to undertake a review to inform longer-term prices. The Commission is currently reviewing how it will regulate Western Water’s prices from 1 July 2020.

Melbourne Water | Melbourne Water Corporation provides bulk water and sewerage services to water corporations in the Melbourne metropolitan area and manages rivers, creeks and major drainage systems in the Melbourne, Port Phillip and Westernport regions. It supplies recycled water through retailers for irrigation and other purposes, and manages the taking of surface water from rivers, creeks and some dams. Melbourne Water was not subject to PREMO. Its price review was undertaken earlier and implemented in 2016.

Goulbourn Murray Water | This rural water business is subject to a substantially different regulatory framework from that applicable to other Victorian water businesses. Goulbourn Murray Water’s prices are regulated under two regulatory frameworks: infrastructure-related services are regulated under the Commonwealth Government’s Water Charge (Infrastructure) Rules⁵⁵ which cover approximately 95% of total regulated costs; and groundwater and some miscellaneous services are not infrastructure related, and are regulated under the WIRO.

A.2 BUSINESSES SUBJECT TO PREMO FOR 2018 PRICE REVIEW

A profile of the 16 water businesses that were subject to PREMO for the 2018 price review is set out in the Figure A.1 below.

Figure A.1: Businesses that were subject to PREMO in 2018 water price review

Water business	Business and customer profile	Features relevant to understanding the application of PREMO
Melbourne urban water businesses		
City West Water	<ul style="list-style-type: none"> Services Distribution of water and sewage services; meter reading, billing and customer service; some sewage collection 	<ul style="list-style-type: none"> Melbourne urban water businesses are large with significant budgets

⁵⁵ That is, the *Water Charge (Infrastructure) Rules 2010* made under section 92 of the *Water Act 2007 (CT)*.

Water business	Business and customer profile	Features relevant to understanding the application of PREMO
South East Water	<p>and treatment, billing for drainage services, trade waste services to commercial and industrial customers</p> <ul style="list-style-type: none"> Supplied with bulk water and sewage treatment services by Melbourne Water 	<ul style="list-style-type: none"> They supply water and waste water services to large numbers of residential, commercial and industrial customers
Yarra Valley Water	<ul style="list-style-type: none"> Customers: residential, commercial and industrial customers Service 74% of the 2.7 million customers in Victoria 	<ul style="list-style-type: none"> Yarra Valley Water has 802, 130 customers South East has 762,245 customers City West Water has 459,044 customers
Regional urban water business		
Barwon Water	<ul style="list-style-type: none"> Services Harvesting bulk water; treating and delivering water for human use; treating and disposing of sewage; meter reading, billing and customer service; trade waste services for a relatively small number of industrial customers 	<ul style="list-style-type: none"> Range in size between very small to medium sized businesses, with budgets proportionate to their size
Central Highlands Water		
Coliban Water		<ul style="list-style-type: none"> Supply small to medium size customer bases comprising residential, commercial and industrial customers
East Gippsland Water	<ul style="list-style-type: none"> Services do not include irrigation and domestic and stock water services - rural water businesses provide these services 	
Gippsland Water		<ul style="list-style-type: none"> Businesses range in size between
Goulburn Valley Water	<ul style="list-style-type: none"> Each business is responsible for serving a number of supply areas (regional cities or towns), often across a number of catchments. This often requires a business to use a number of discrete water supply systems 	<ul style="list-style-type: none"> 158,109 customers (Barwon Water) down to
GWM Water		<ul style="list-style-type: none"> 16,529 customers (Westernport Water)
Lower Murray Water (urban) ⁵⁶		<ul style="list-style-type: none"> Differing opportunities and challenges to understand customer needs
North East Water		
South Gippsland Water	<ul style="list-style-type: none"> Customers: residential, commercial and industrial customers 	
Wannon Water	<ul style="list-style-type: none"> The regional water businesses serve 26% of the 2.7 million customers in Victoria 	
Westernport Water		

⁵⁶ Lower Murray Water's prices are regulated under two different regulatory frameworks. Urban water prices are regulated by the Commission under the WIRO. Under the Murray-Darling Basin Agreement, the Commonwealth is responsible for the regulation of the prices charged by LMW for its rural water infrastructure services. The ACCC is responsible under the Water Charge (Infrastructure) Rules for approving or determining the regulated charges of water entities in the Murray-Darling Basin. The ESC is currently accredited by the ACCC to regulate Lower Murray Water's rural charges for ten years from 17 February 2012.

Water business	Business and customer profile	Features relevant to understanding the application of PREMO
Rural water business		
Southern Rural Water	<ul style="list-style-type: none"> • Services Operates irrigation districts at Maffra, Bacchus Marsh and Werribee; manages seven major dams; licences groundwater users and river diverters across the southern half of Victoria • Customers agricultural producers, electricity generators, country towns and cities, and rural and urban businesses. Over 10,000 customers • Revenue \$28 million per year and assets valued at around \$1.23 billion • Agricultural customers have been allocated water reliability risk through tradeable water entitlement regime 	<ul style="list-style-type: none"> • A relatively small business that deals with a range of generally more sophisticated customers

Appendix B Evolution of economic regulation of water businesses

This Appendix provides an overview of the economic regulatory framework for the Victorian water businesses over the period from 2005 to 2015,⁵⁷ and outlines the subsequent water pricing framework review scope and milestones.

B.1 ECONOMIC REGULATION OF WATER BUSINESSES – 2005 TO 2015

The overarching objective of economic regulation of essential services industries is to promote effective competition where feasible and to implement appropriate economic regulation where necessary. Water services are considered to be subject to the problem of ‘natural monopoly’ – it is typically efficient to have a single water supply and waste water treatment network.⁵⁸

Until 2015, the WIRO effectively mandated the use of the building block approach to determining revenue requirements and setting prices, which is widely used in Australia for economic regulation. This aims to ensure that over the regulatory period, allowed revenues will fully compensate the business for its anticipated efficient costs.

In summary, the building block approach involves:

- establishing an initial Regulated Asset Base (RAB) value at the commencement of price regulation
- rolling forward the RAB each year to include any forecast capital expenditure, depreciation and disposals of capital assets for each regulatory period
- at the end of the regulatory period, updating the rolled-forward RAB to reflect actual prudent and efficient capital expenditure and disposals and depreciation incurred throughout the period
- determining a return on capital (the weighted average cost of capital or WACC)
- allowing for the return of capital (regulatory depreciation) to recover the capital that has been invested in assets (over the useful lives of those assets)
- allowing operating expenditure forecasts, to recover non-capital costs
- reflecting tax obligations, and
- developing demand forecasts for each year of the regulatory period.

The total revenue requirement for the business is determined by adding each building block and prices are determined by dividing the total revenue requirement by the forecast demand.

Price paths are smoothed to ensure a smooth rate of change in prices.

From 2005 to 2015, the Commission assessed the efficiency of proposed operating and capital expenditure using a variety of assessment tools and techniques, including partial or total benchmarks,

⁵⁷ Appendix A of the Commission’s April 2015 consultation paper, *Review of Water Pricing Approach*, sets out further details of the approach used in the 2013 price review.

⁵⁸ While there were investigations during this period into the potential for expanding the scope of competition in urban water and water services, these were not pursued. See: Victorian Competition and Efficiency Commission, *Water Ways: Inquiry into Reform of the Metropolitan Retail Water Sector, A draft report for further consultation and input*, December 2007.

productivity improvement hurdles, unit rates for material inputs (e.g. labour and material construction costs, energy price indices), and engineering and risk assessments.

If a business managed to out-perform the cost benchmarks used to set the building blocks and X-factor (while maintaining service standards), it kept some or all of the efficiency gains for the remainder of the pricing period. If the business had cost over-runs, then it absorbed the increases in costs.

B.2 SCOPE AND MILESTONES IN REVIEWING THE WATER PRICING FRAMEWORK

B.2.1 The scope of the Commission’s framework review

The first and most significant step in the review was to identify the most appropriate pricing approach to deliver the best outcomes and value for money to Victorian customers.

Once the pricing approach had been decided (by May 2016), the review turned to a range of other matters, including:

- how the Commission would assess pricing submissions and make a price determination, including information requirements
- the length of the regulatory period
- preparation of guidance for the 2018 price review enshrining the outcomes from the 2015-16 review.

Excluded from the review were new customer contributions; large scale supply of recycled water industrial trade waste management; and infrastructure services covered under the ACCC’s Water Charge (Infrastructure) Rules.

B.2.2 Key milestones in the review process

Date	Milestone	Documents
April 2015	Initial consultation paper outlining the review process	<i>Review of Water Pricing Approach, Consultation Paper, April 2015</i>
June 2015	Release of papers prepared by regulatory experts to assist in the idea generation process	<p><i>Generating ideas on the pricing approach for Victoria’s water sector - Summary of papers prepared for the Essential Services Commission, July 2015: This paper summarises the following consultant reports:</i></p> <ul style="list-style-type: none"> • <i>Streamlining the pricing approach, Synergies Economic Consulting</i> • <i>Pricing by function in the supply chain, Sapere Research Group</i> • <i>Application of UK RIIO Framework to Victoria’s water industry, KPMG</i> • <i>Approaches for establishing the revenue requirement, Frontier Economics (UK)</i> • <i>Ideas on the cost of capital and tax for water businesses, Bruce Mountain, Paul Szuster and Professor Stephen Littlechild.</i>

Date	Milestone	Documents
		<i>Customer engagement methodologies in water price setting: experience in England and Wales and Scotland, and possible application to Victoria</i> , Stephen Littlechild, Bruce Mountain, July 2015
November 2015		Presentations to the water pricing conference and post conference submissions can be found at:
December – March 2015	Following the conference, the Commission surveyed attendees and called for further submissions of stakeholder views	https://www.esc.vic.gov.au/water/water-inquiries-studies-and-reviews/water-pricing-framework-premo-review-2016#tabs-container2 A summary of the Conference proceedings can be found in Box 1.1 of <i>A new model for pricing services in Victoria's water sector, Position Paper</i> , May 2016
May 2016	Release of position paper proposing the Commission's pricing approach at a high level based on the cumulative consultation undertaken	<i>A new model for pricing services in Victoria's water sector, Position Paper</i> , May 2016
August 2016	Submissions on the Review of Water Pricing Approach position paper	Submissions can be found at: https://www.esc.vic.gov.au/water/water-inquiries-studies-and-reviews/water-pricing-framework-premo-review-2016#tabs-container2
September 2016	Release of a commissioned KPMG paper, and a workshop with the water businesses, to explore how the proposed PREMO framework could apply in practice	<i>A practical application of the PREMO Framework</i> , KPMG September 2016
October 2016	Release of a staff consultation paper on the proposed PREMO assessment and rating criteria	<i>Water Pricing Framework and Approach: Implementing PREMO from 2018</i> , October 2016

Appendix C Main changes in PREMO pricing framework

This Appendix describes the main changes to economic regulation, effected through the PREMO pricing framework. It covers key areas that changed in C.1, the approach to establishing the return on equity in C.2, and the aspects that did not change in C.3.

C.1 KEY CHANGES TO THE PRICING FRAMEWORK

C.1.1 Commission expectations for customer engagement

The pricing framework and approach places a stronger emphasis on the role of customer engagement to inform and influence the price submissions of water businesses. The Commission explained that, under PREMO:

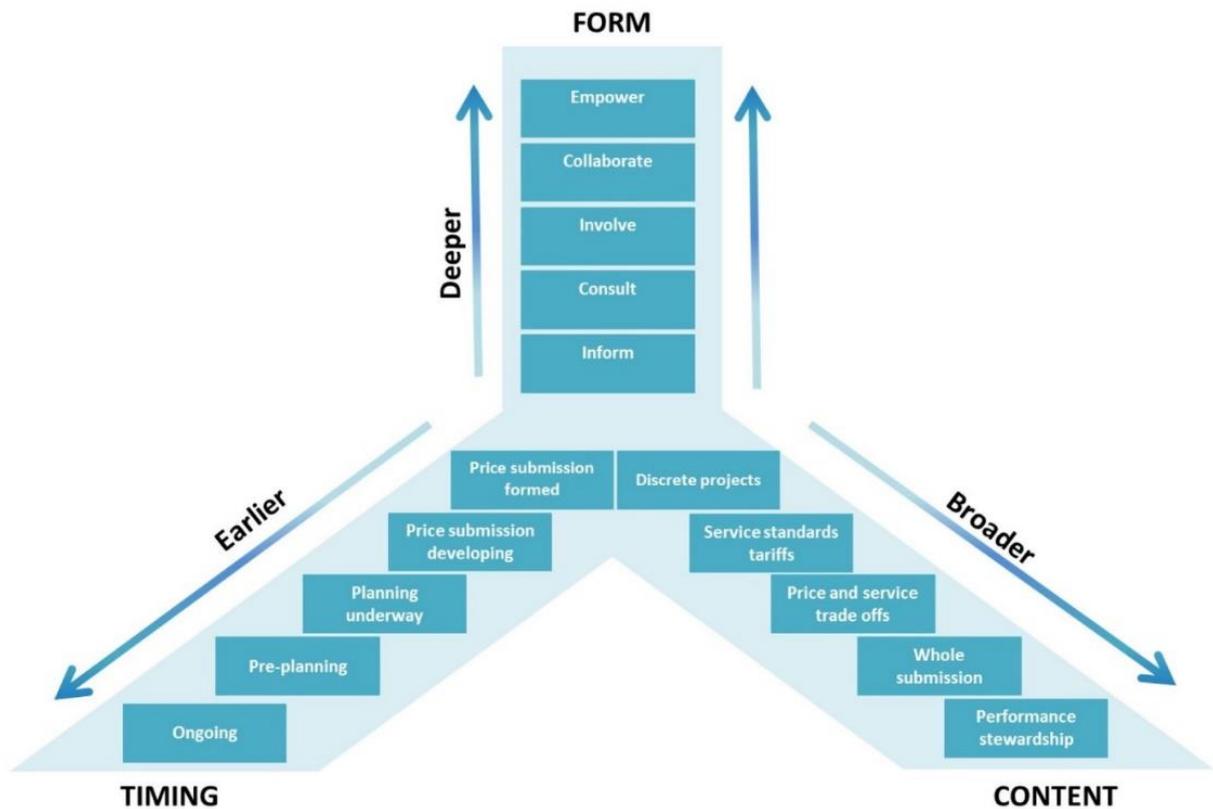
‘Businesses will need to identify their customers’ concerns, interests and priorities so that their submissions can be expressed in terms of the outcomes valued by their customers.’⁵⁹

Clearly demonstrating these desired outcomes and how they were reflected in pricing submissions was a critical element of determining the level of ambition in water businesses’ proposals under the PREMO incentive mechanism.

The Commission made clear that it expected a greater depth in the form of engagement, earlier timing and greater breadth of engagement content. It published an engagement tool to assist in this task. However, the Commission did not prescribe the forms of or topics for engagement, leaving businesses to determine these based on their own circumstances.

⁵⁹ Essential Services Commission, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, Oct 2016, p. ii

Figure 11 Commission customer engagement diagram tool



Source: Essential Services Commission, Framework and approach, Figure 3.1, 2016.

Five principles form the basis of the Commission’s assessment of a water business’s customer engagement:

- The form of customer engagement undertaken by a water business should be tailored to suit the content on which it is seeking to engage, and to the circumstances facing the water business and its customers.
- A water business must provide customers with appropriate instruction and information, given the purpose, form and the content of the customer engagement.
- A water business’s customer engagement should give priority to matters that have a significant influence on the services provided and prices charged by the business.
- A water business should start customer engagement early in its planning. The engagement should be ongoing, to keep testing proposals with customers.
- A water business should demonstrate in its price submission how it has taken into account the views of its customers.

The Commission expected:

- the business to explain why it chose the various engagement activities, what it learnt and how it used the information gained from its engagement program to develop its submission
- the price submission to clearly describe how the business has taken into account the customer views and values revealed through the engagement processes, and how these have informed the customer outcomes proposed

- significant changes in costs to be clearly linked to the proposed customer outcomes, demonstrating how the changes will provide improved customer value.

The Commission did not intend for water businesses to simply adopt whatever their customers wanted. Businesses remained responsible for their decisions reflected in their price submissions, for matters included or excluded from their engagement findings, and for justifications for these decisions.

C.1.2 Commission expectations for defining Outcomes

Under the PREMO approach, a set of outcomes focused on what a water business will deliver to its customers effectively replaced the previous core service standards encapsulated in the Commission's Customer Service Code. The Commission called for a price submission to clearly present:

- a set of customer outcomes that reflect the value customers will receive during the pricing period, demonstrating how each has been derived and how it relates to the business's customer engagement processes
- the measurable outputs and deliverables and associated targets that will demonstrate the achievement of each outcome
- the actions or programs that the business will undertake to meet the agreed targets
- the costs and cost savings associated with each of these, and
- how these costs are reflected in tariff structures and prices charged to customers.

The Commission expected:

- the new framework would shift how a water business prepared its price submission to focus on customer outcomes that it proposed to deliver
- rather than exhaustive discussion around the inputs into a price submission, a business should describe what its customers will receive for the prices charged, and how this relates to the customers' expectations as revealed through the engagement process
- rather than relying on a series of specific engineering metrics with little meaning to customers to describe performance, a business should also report its performance against the proposed customer outcomes, to clearly demonstrate whether it has delivered the customer value it promised for the prices charged
- a set of outcomes focused on what the water business will deliver to its customers would effectively replace the previous core service standards encapsulated in the Commission's Customer Service Code.

C.1.3 Calculating the revenue requirement

Under the PREMO approach, a water business's revenue requirement continues to be derived using the building block method. The revenue requirement reflects the forecast revenue required to recover the efficient cost of delivering on its policy and regulatory obligations, and validated service outcomes. The main change relates to the calculation of the return reflected in maximum prices.

Under PREMO, the return on regulated equity will vary according to the level of ambition shown in a price submission. Ambition is assessed against five elements: **P**erformance, **R**isk, **E**ngagement, **M**anagement and **O**utcomes (PREMO). Under the new pricing framework and approach, a benchmark cost of debt is calculated based on a 10-year trailing average.

C.1.4 Efficiency incentives

Expenditure forecasts are used to establish benchmark efficient cost assumptions for the purposes of establishing maximum prices. Businesses may strive to outperform these cost benchmarks to increase profits or discretionary funds. These may be returned to the shareholder in the form of a dividend, used to pay down debt, or reduce prices, for example.

The new pricing approach includes new efficiency incentives.

- Via PREMO, the rate of return a water business can earn is linked to the level of ambition of its pricing proposal. The framework will reward businesses that:
 - focus on delivering outcomes sought by their customers
 - appropriately allocate risk to the party best able to manage it
 - deliver services as efficiently as possible.

Pricing for the period is determined using the forecast expenditure, but the RAB is updated at the end of the period to reflect the actual prudent and efficient net capital expenditure incurred during the period.

- This true-up of actual prudent and efficient expenditure effectively protects the businesses and customers from significant changes in capital expenditure. As such, businesses do not need to include high contingency allowances in capital project cost estimates, nor allow capital for speculative or un-scoped projects.

C.1.5 Best offer mechanism

The PREMO approach encourages water businesses to submit price submissions that reflect their ‘best offers’ by providing incentives for business to assess their price submissions accurately and honestly. The framework requires water businesses to submit their ‘best offers’ and not to be lured into making ambit or inflated claims.

This is achieved by requiring the businesses to self-assess the level of ambition of their price submissions, with these self-assessments provided in the businesses’ price submissions. The Commission then conducts its own independent assessment.

The best outcomes for a water business in terms of the return on equity are achieved when the Commission and the business align in their respective assessments.

Water businesses were incentivised not to overstate their level of ambition. If the Commission found that a water business had overstated its ambition, then the return on equity was lower than had the water business accurately assessed itself.

C.1.6 Performance reporting

The WIRO provides an explicit function for the Commission to monitor, audit and report publicly on the performance of the regulated water industry.

The Commission continues to monitor and report publicly on the performance of the Victorian water industry, through the annual regulatory audit and comparative performance report.

The key change under the new framework is that water businesses are accountable to their customers for delivering the outcomes set out in their price submissions. A business must report annually to its customers on its performance against the specified outputs for each outcome, with an overall assessment of whether it has delivered on expectations for each outcome. This reporting should also include

appropriate explanation for any performance shortfalls and how the business intends addressing this shortfall in the coming year(s). The business's reporting should be readily available to its customers and the Commission, including on its website. This direct accountability to customers strengthens the business-customer relationship.

C.1.7 Key steps in applying the new pricing approach

The following are the key steps in applying the PREMO approach.⁶⁰

1. Water business engages with its customers and community to inform the outcomes to be delivered in a pricing period.
2. Water business develops its estimate of prudent and efficient expenditure to deliver the outcomes identified at the first step, and obligations imposed by government and technical regulators. The price submission should demonstrate alignment of expenditure with the outcomes to be delivered. Priorities and options are tested with customers throughout the price submission development process. The business also develops its proposed prices and tariff structures.
3. The Commission's assessment of price submissions influences the returns allowed in prices for each water business. The return on equity established at the start of a pricing period may vary for each business, depending on the ambition of its price submission. Ambition is assessed against five elements: **P**erformance, **R**isk, **E**ngagement, **M**anagement and **O**utcomes (PREMO). In its price submission to the Commission, a water business will self-rate the ambition of its submission based on the PREMO elements. After receiving the price submission, the Commission will also rate it against the PREMO elements. The PREMO assessment process informs the return on equity to be reflected in revenue and prices (the fourth step). Water businesses continue to recover a benchmark cost of debt, but estimated using a 'trailing average' approach rather than the previous 'on-the-day' approach.
4. A flexible price review process is influenced by the quality of price submissions. Businesses putting forward high quality price submissions may benefit from a streamlined price review.
5. There is an ongoing review of the outcomes delivered by water businesses. As well as performance reporting, a business's revenue and prices may be adjusted within a regulatory period to reflect performance against outcome commitments.

C.2 ESTABLISHING THE RETURN ON EQUITY UNDER PREMO

C.2.1 Ambition

An increasing rate of return creates an incentive for businesses to be as ambitious as possible. There are two aspects to this incentive. The ambition of a plan is assessed against the five elements of PREMO; and then these individual ratings are combined to develop an overall rating of a price submission by a water business and the Commission into one of four categories:

- basic
- standard
- advanced, or
- leading.

⁶⁰ Essential Services Commission, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October 2016

C.2.2 PREMO elements

The PREMO elements are as follows:

- **Performance** - Have the performance outcomes to which the business committed in its price submission been met or exceeded?
- **Risk** - Has the business sought to allocate risk to the party best positioned to manage that risk?
- **Engagement** - How effective was the business's customer engagement?
- **Management** - Is there a strong focus on efficiency? Are controllable costs increasing, staying the same, or decreasing?
- **Outcomes** - Do proposed service outcomes represent an improvement, the status quo, or a withdrawal of service standards?

C.2.3 Price submission ratings

A 'basic' submission reflects stagnating or declining performance for customers in terms of service outcomes, operating efficiencies or both. In light of these poor outcomes, the return on equity for 'basic' price submissions will be set at a level commensurate with the Commission's estimate of the benchmark real cost of debt. This ensures that relevant water businesses can, at the least, recover interest costs associated with funding capital investment. This rate should remain fairly constant over time and close to the long-run average cost of debt.

The return on equity allowed for a 'standard' price submission would be slightly higher. A 'standard' price submission will reflect a good value proposition for customers, albeit it would generally reflect proposals representing a continuation of current outcomes and targets for cost efficiency, for example. Therefore, the allowed return on equity would be largely unchanged from the one expected under the previous framework.

More ambitious submissions — that is, either 'advanced' or 'leading' price submissions — would receive a higher allowance for the return on equity. 'Advanced' and 'leading' price submissions will demonstrate better value for customers than the commitments given in a 'standard' price submission. Generally, the business will commit to improved outcomes for customers in terms of services, prices, or both. 'Leading' price submissions will demonstrate that a water business's proposal places it as a sector leader on key aspects of performance.

C.3 ASPECTS OF REGULATORY FRAMEWORK THAT DID NOT CHANGE

Much of the existing regulatory framework processes and practices did not change including the following:⁶¹

- the revenue requirement and prices for the water businesses continue to be calculated by way of the building blocks methodology
- water businesses continue to develop their estimate of prudent and efficient expenditure to deliver defined outcomes and obligations imposed by government and technical regulators using similar processes as they have in the past
- demand forecasting
- developing operating expenditure forecasts

⁶¹ Source: Essential Services Commission *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October 2016, Appendix A

- regulatory depreciation
- calculating tax cost allowances
- guaranteed service level schemes
- defining the form of price control
- calculating tariffs
- determining developer charges (connection capital contributions)
- dealing with uncertainty (other than capital cost contingency treatment)
- financial viability test
- length of the regulatory period (generally five years).

Appendix D The price review process

D.1 THREE-STAGE REVIEW PROCESS

The Commission assessed the price submissions using a three-stage review process:

- Stage 1 - Price submission evaluation to verify the quality and strength of the submission and the proposed outcomes, and to establish what further verification work was required
- Stage 2 - Further verification work, which may range from simple requests for further information through to a full review of cost forecasts by an expert consultant
- Stage 3 - Public consultation on the Commission's draft decision, leading to its final decision and a price determination for each business.

To facilitate a quick and simple stage 1 assessment and the possibility of fast-tracking, a price submission had to clearly convey its key messages and data to the Commission. The guidance issued by the Commission informed businesses on what to include in their price submissions, consistent with this rapid assessment.

D.2 RESPONDING TO A DRAFT DECISION

The draft decision provided a means for water businesses and other interested parties to contest the Commission's reasoning or draft decisions, prior to a final decision and price determination.

Consistent with the intended incentive for the business to put forward its best offer, where the Commission proposed a lower PREMO rating than that proposed by the business, the business could seek to clarify and justify its original rating by providing additional evidence in support of that rating, or by seeking to demonstrate that the Commission's draft decision was in error.

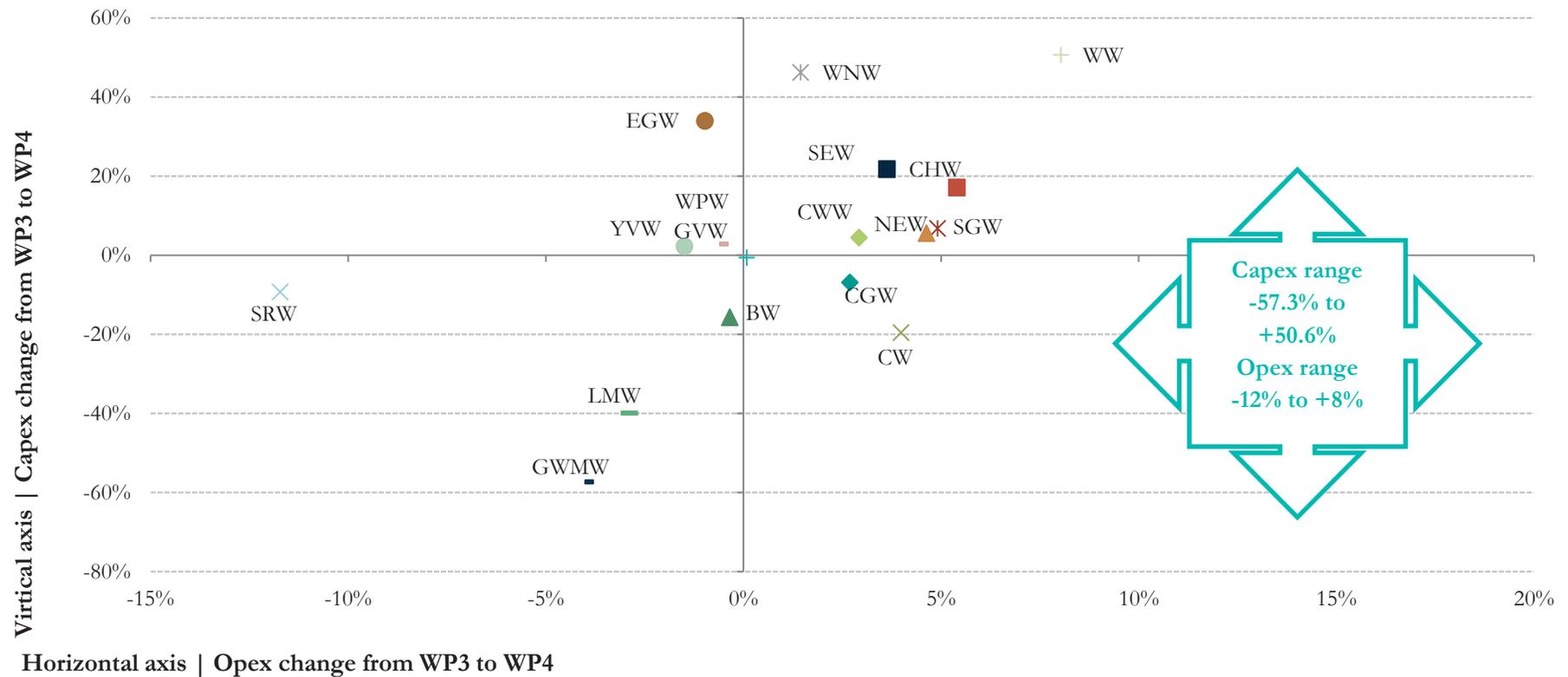
However, the water business could not seek to improve its rating with an alternate proposal, nor seek to revise its submission with a lower rating to match the Commission's rating assessment.

The draft decision also provided, that where the Commission reduced the PREMO rating, the business would have an opportunity to propose specific criteria such that, if these were met, that it could apply to have its original PREMO rating restored during the regulatory period.

Appendix E Expenditure forecasts under PREMO

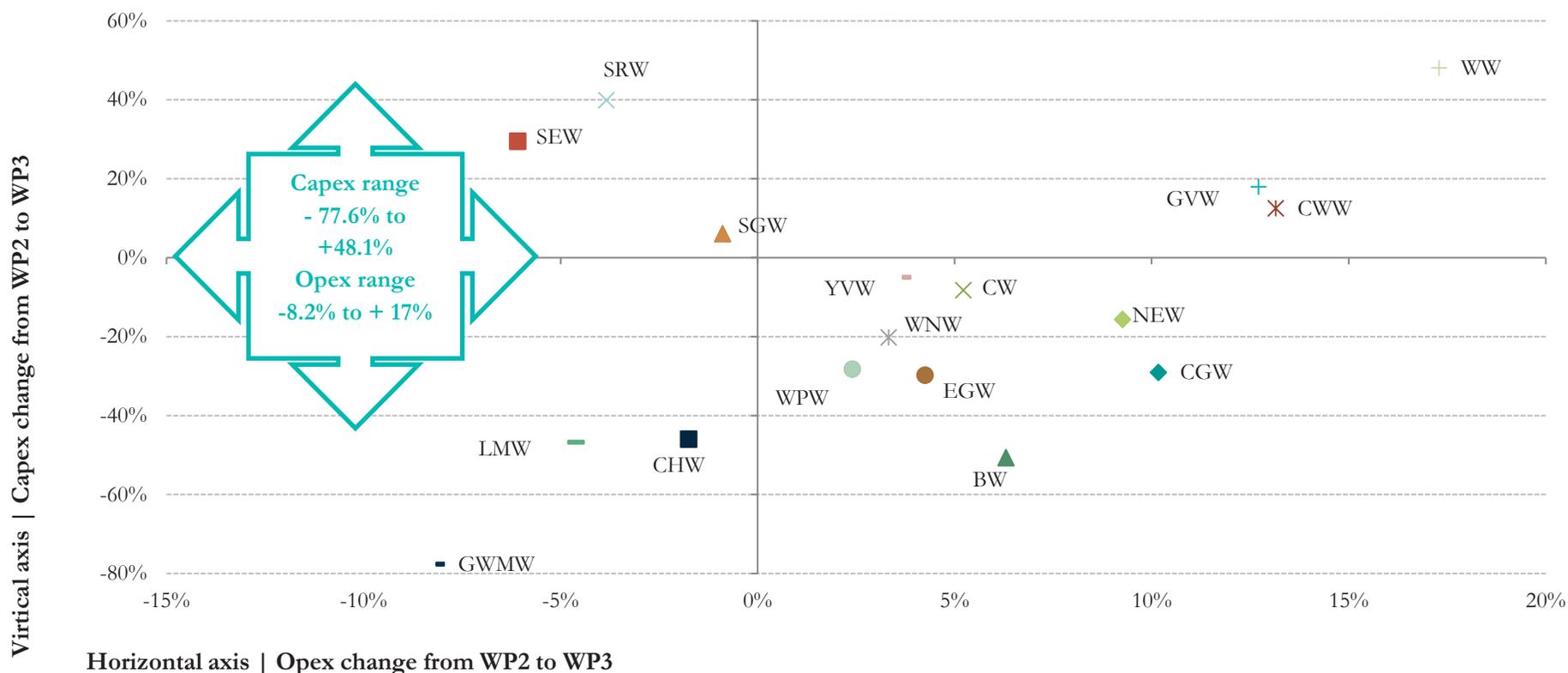
For the fourth regulatory period, we observe from Figure E.1 that the variation in capital expenditure period-on-period movements across the water businesses was much greater than the variation for operating expenditure, although comparison with Figure E.2 shows that the fourth period capital expenditure variation across water businesses was equally as broad as it was in the third period.

Figure E.1 - Period-on-period changes in operating and capital expenditure for fourth regulatory period



Source: Essential Services Commission analysis, 2018

Figure E.2: Period-on-period changes in operating and capital expenditure for third regulatory period



Source: Essential Services Commission analysis, 2018

The following factors may have contributed to this ongoing capital expenditure diversity with less diversity in operating expenditure outcomes for WP4.

- *Clear operating expenditure expectations* | The Commission’s framework and approach (Oct 2016) and 2018 Water Price Review guidance paper (Nov 2016) both set out clear Commission expectations that directed operating expenditure forecasting using a revealed cost approach with productivity stretch. For example, the guidance paper stated:

‘The Commission considers that a prudent and efficient operating expenditure forecast has the following characteristics:

- *baseline year expenditure is reflective of efficient operating costs and is used as a basis to forecast expenditure*
- *forecast operating expenditure incorporates expectations for a reasonable rate of improvement in cost efficiency⁶²*
- *expenditure requirements above the baseline year (adjusted for growth and efficiency improvements) are fully explained and justified⁶³*
- *Non-recurrent nature of some capital expenditure categories* | In general, capital expenditure of regulated utilities is lumpier in nature over time than the more-recurrent nature of operating expenditure.
- *Lower pricing outcomes to support easier engagement context* | The downward pricing pressure achievable through capitalisation relative to expensing, together with the Commission's new approach of allowing for an end of period true-up of actual prudent and efficient capital expenditure, may have created a bias in water businesses' incentives to favour capital expenditure over operating expenditure.

⁶² We note that in the third regulatory period, the Commission had also set a 1% annual operating expenditure productivity improvement.

⁶³ Essential Services Commission, *2018 Water Price Review Guidance Paper*, November 2016, p.31

Appendix F Examples of customer engagement approaches and techniques

This Appendix uses the Commission’s engagement tool to present observations about the form, content and timing of customer engagement by looking at:

- the engagement approach of the water business assessed as ‘leading’ - Goulburn Valley Water (GVW)
- a sample of customer engagement approaches and techniques adopted by businesses that were assessed as ‘advanced’ including:
 - citizens’ jury
 - conjoint modelling
 - deliberative forum
 - advisory panel.

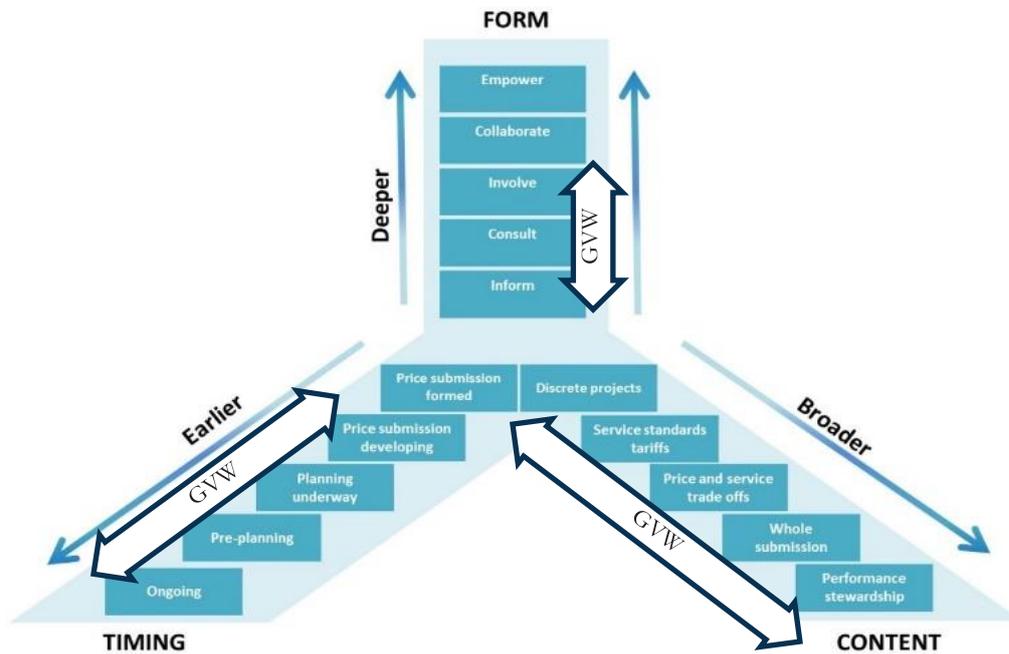
This information is provided to give a sense of the approaches and techniques used by leading and advanced water businesses. In describing these approaches and techniques, we are not advocating their use.

F.1 GOULBURN VALLEY WATER’S ENGAGEMENT

GVW pursued a broad range of engagement methods which spanned the *inform, consult and involve* forms of engagements from the Commission’s engagement tool, as assessed using the IAP2 public participation spectrum.

The range of engagement methods included community forums, pop-up water cafes at community events, online and paper surveys, and a deliberative forum. The deliberative forum (as labelled in the Commission’s draft decision) was termed a ‘mini-public’ event in GVW’s price submission. This forum had a professionally-recruited representative customer sample brought together for five hours to test the findings from the rest of the engagement and GVW’s proposed responses. (Section F.4 below describes deliberative forums in more detail).

Figure 12: GWV engagement summary view



The engagement program design as well as its application was also informed by business as usual customer engagement, research and complaints data (e.g. annual customer service evaluation research survey, annual connections customer survey, major customer surveys and meetings, and review of customer data in the customer relationship management system and from ombudsman complaints).

In this sense, while the timing of the program (September 2016 and May 2017) was within one year of the September 2017 water plan submission date, it incorporated elements of prior customer engagement.

The engagement content covered topics such as prices, on-line services, water quality in non-potable towns, the balance of fixed and variable charges, hydration stations, water efficiency and emissions reduction.

GVW stated that:

We wanted to identify areas where customers could have a real say in the decisions of GVW. We deliberately did not engage in questions relating to regulatory obligations, such as how much customers value safe drinking water.⁶⁴

The topics covered in the engagement program differed across the 54 towns and the range of customer groups (including the public, plumbers, builders, land developers, and major customers) and appears to have spanned the full range of content items in the Commission’s engagement tool.

The resulting outcomes presented in GVW’s pricing submission were organised into four outcome areas:

- the best prices for customers
- a renewed focus on water quality and supply
- modern and thoughtful customer service
- meaningful environmental and recreational outcomes.

Importantly, the outcomes adopted a clear and intuitive format that showed: the outcome commitment, background, engagement findings, outputs and deliverables, activities and process, inputs and

⁶⁴ GVW, *Pricing submission*, September 2017, p.6

accountability. This format made the link between engagement feedback, business decisions and commitments easy to follow. Figure 13 shows an example of an outcome commitment.

Figure 13: Sample GVW outcome commitment

A RENEWED FOCUS ON WATER QUALITY AND SUPPLY			
2A) IMPROVED WATER PRESSURE FOR IDENTIFIED COMMUNITIES – THROUGH TARGETED INVESTIGATIONS AND RESPONSES			
BACKGROUND: GVW has 37 discrete water treatment and supply systems, which can lead to variable, albeit compliant, pressure outcomes for different communities.			
ENGAGEMENT FINDING	OUTPUTS AND DELIVERABLES	ACTIVITIES AND PROCESSES	INPUTS
<p>In response to a survey question of "how GVW can offer greater value for customers" 3.2% of customers identified water pressure as an issue, being the fourth most mentioned issue. In addition, over the four years to 30 June 2017, 588 customer complaints regarding water pressure were received.</p> <p>Although it is believed that our water pressure does meet minimum standards, this feedback indicates that it is not meeting the expectations of some customers. Most concern with pressure seems to be in smaller towns such as Barmah, Picola and Stanhope.</p>	<p>Development and implementation of a program by 30 June 2019 to address localised water pressure issues in identified towns.</p> <p>Completion of a review of water pressure standards and development of a new GVW standard in consultation with customers by 30 June 2019.</p> <p>Completion of water pressure improvements for a pilot town (Picola is currently proposed) by 30 June 2020.</p> <p>Prioritised water pressure improvements for at least two towns per year, if needed, from 2020/21 until all identified towns with issues are improved.</p>	<p>Further targeted customer engagement to fully understand the extent of towns that have water pressure issues.</p> <p>Development of a small town water pressure improvement program.</p> <p>Undertake a review of water pressure standards.</p> <p>Implementation of water pressure improvement projects.</p>	<p>Whilst water pressure improvements will be undertaken during the Price Period, the precise responses and their costs are not known at this stage, and accordingly have not been built into this Price Submission. However, this does not diminish the commitment.</p> <p>Rather GVW will include such capital costs into the opening RAB for the subsequent price period.</p>
ACCOUNTABILITY: The identified towns will be addressed in priority order. It is proposed that surveying of water pressure satisfaction will be undertaken for each subject town immediately before and after any works. Where results do not meet Customer Charter requirements a GSL credit of \$25 p.a. will be made to affected customers until such time as the pressure meets the standard.			

Source: GVW, Pricing submission, September 2017, p.14..

F.2 CITIZENS' JURY

Yarra Valley Water (YVW) established a citizens' jury which is an example of an *empower* form of engagement using the Commission's engagement tool (the highest form under the IAP spectrum). This section summarises key aspects of this approach:⁶⁵

- **Recruitment and administration** | YVW used two independent service providers to manage the citizens' jury process. They were tasked with designing a process with sufficient rigour as to withstand sceptical scrutiny, and which could not be visibly influenced by a politician, an interest group, or financial interest. One service provider was responsible for overseeing the activities within the jury sessions and the second managed the processes that fed in and out of the jury process. 30,000 participant invitations were sent to randomly selected customers, of which about 35 customers were selected through an independent process to ensure they were representative of the community.
- **What they were asked** | The overarching question for the citizens' jury was:

'We need to find a balance between price and service which is fair for everyone. How should we do this?'

The citizens' jury was asked to challenge the business's inputs and make recommendations for how it could best meet this challenge. The jury considered the insights from the business's customer research and engagement, heard from speakers chosen by its stakeholders and themselves, read submissions made by the public, and deliberated over the content.

The jury were asked to make decisions that 'were fair for everyone'. They brought to the jury their own circumstances and were asked to consider others and their differing circumstances.

⁶⁵ Source documents: *Yarra Valley Water Price Submission*, 2017, section 1.6; Appendix 1 - Citizens' jury recommendations; Appendix 2 - Response to citizens' jury recommendations; Appendix 3 - Citizens' jury debrief report; Appendix 4 - Yarra Valley Water citizens' jury collated feedback.

They were asked to consider what issues might be addressed to create the definition of fairness for the representative demographics.

- **What information they were provided** | The jury was provided with an information pack which focused on four outcome areas and set out objectives the business sought their views on. The board, executive team and subject matter experts provided information to the citizens' jury by attending sessions and enabling the jurors to access information in an informal and direct way. In addition, Board members participated in a question and answer session, which allowed the jurors to test their ideas. In preparation for the jury, stakeholders were consulted on matters they wanted put before the jury. They nominated and elected by popular vote the speakers who would present to the jury. The jury also selected speakers to present on areas where they had identified gaps or suspected bias in the information provided. All stakeholders and customers were encouraged to provide submissions to the jury for consideration. During the process, jury members requested additional information to aid their deliberations. All requests were responded to with sufficient time for the jurors to consider the information before their next sitting. All customer research and insights were made available to the jurors, who deliberated for five-and-a-half days, over four months (about 40 hours in total). This allowed sufficient time for the jury to fully consider the remit, seek additional information and consult with their peers and communities.
- **Outcomes** | The jury made ten recommendations that were incorporated into YVW's price submission.

F.3 CONJOINT MODELLING

YVW also undertook a conjoint modelling study that aimed to robustly inform its understanding of what outcomes its customers valued. Conjoint choice modelling is a trade-off technique that replicates a purchase situation, comparing packages of services and their associated price. It is claimed to accurately reflect the cognitive thinking of buyers as they evaluate purchases for value. The technique has been applied in a broad range of products and services, from telecommunications and industrial products to healthcare, electricity and banking services.

It is used extensively in competitive pricing environments to analyse trade-offs; understand how customers make purchase decisions; and predict behaviour; as well as to determine how people value different features that make up a service offering.

YVW presented a representative sample of customers with a series of hypothetical, yet realistic scenarios which included existing service levels. A series of reiterative tests asked customers to identify which of two options they preferred or would choose – thereby forcing them to 'trade off' the strengths and weakness of each offering. The process elicits data that is then modelled using econometric methods to determine the variable(s) driving customer preference.

The analysis showed that pricing mechanisms are the biggest contributors to customer choice. It also showed there are increased service offerings that provide greater value compared to a reduction in price. At the same time the analysis confirmed that increasing core infrastructure service levels would not improve customers' perception of value.

YVW commented that the Conjoint Modelling results aligned with the outcomes of the Citizen Jury and that this therefore gave it a high level of comfort in its proposed service commitments.

F.4 DELIBERATIVE FORUM

Various businesses (Coliban Water, North East Water, and Barwon Water) established deliberative forums (also called customer challenge panels). GVW's 'mini public' is also a form of deliberative forum.

Such forums are identified as *involve* under the IAP2 public participation spectrum, and thus respond to the Commission's guidance for deeper forms of engagement.

An independently facilitated deliberative forum with a representative customer sample is established. The exact functions vary, but it will typically explore issues, provide feedback on the price submission, and review and provide feedback on the findings from a range of other engagement activities.

The forum is generally presented with a consolidated view of previous customer engagement work. This group is recruited and selected by an independent consultant using a random, stratified sampling methodology to ensure its integrity as a representative group. The forum is informed about information such as legal and regulatory framework, the process to date, background briefing papers and presentations from both internal and external subject matter experts. Independent facilitators are used to ensure the integrity of the deliberative process and the voting procedures.

In the case of North East Water, the participants deliberated on the full suite of topics detailed in this price submission for six days. Information captured from the forum was used to draft a suite of customer proposals. Following board consideration, the proposals were reflected back to participants through another similar round of engagements.

F.5 ADVISORY PANEL

GWM Water, South East Water, and East Gippsland Water used advisory panels as part of their customer engagement work. Depending on the content considered and extent of influence on water business decision making, these forums would be deemed as *involve* or *collaborate* on the IAP2 spectrum.

An independent advisory panel (also called customer engagement council) is established at the outset of the business's customer engagement work and provides advice on the design of the work plan, and feedback on the engagement work as it proceeds and when the business responds to engagement findings.

They served an important role in helping the businesses improve the quality of their engagement, and gave independent rigour to the process of distilling engagement findings into options, actions and outcome commitments for the water businesses to either further engage on, or to include in their pricing submissions.