Regulating water businesses

Response to Draft Report

26 August 2022

Sydney WATER

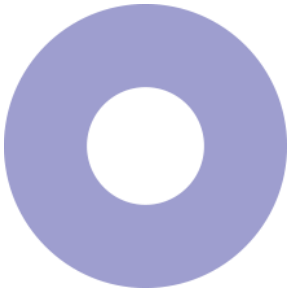
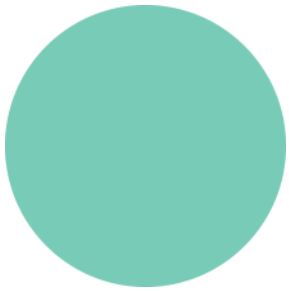



Table of contents

Executive summary

The Independent Pricing and Regulatory Tribunal's (IPART) *Draft Water Regulatory Framework* released in May 2022 represents the most ambitious set of reforms to the NSW water sector since its corporatisation in 1994. We recognise IPART has considered several aspects of input from water providers, and we welcome improvements to the proposed framework, including:

- Setting the determination period at the practical length of five years
- Shortening the price review period to nine months
- Capping the value of ex-post incentive schemes to 1% of annual revenue across the three schemes
- Recognising long-term pricing adjustment mechanisms, including accelerated depreciation, annuities and escrow accounts
- Establishing the Regulators Advisory Panel (RAP) to coordinate regulatory oversight.

We especially welcome a defining feature of the proposed framework: which is placing customer engagement at the centre of business planning. We consider that the long-term interests of customers should be the primary lens through which we plan and deliver our services. The high priority we attach to customer engagement is reflected in our strategic business plans such as our Enterprise Plan and the Long-Term Capital and Operating Plan (LTCOP) (developed jointly with WaterNSW), as well as our imperative to steward our plans through our Customer and Community Reference Group (CCRG), consumer advocacy bodies, and consumer preference research.

However, the framework as it is currently proposed continues to pose significant risks and complexity for our customers with resulting long-term costs. It could be improved by:

- Decoupling pricing proposal grades from alternative price controls and incentive schemes.
- Introducing a mechanism for independent review of IPART's grading of pricing proposals.
- Reducing complexity, such as the detailed line-item expenditure review, to offset the increased administrative burden of the new regulatory framework including by raising the expenditure threshold for review of capex business cases from $10 million to $100 million.
- Deferring the Capex Saving Scheme (CESS) until the 2030-35 period to enable time to improve its design and focus on developing other incentive schemes (Operating Expenditure Savings Scheme and Outcomes Delivery Incentives) which are likely to bring more value to customers.
- Enabling long-term planning with a long-term price path.

Consideration should be given to decoupling pricing proposal grades from alternative price controls and incentives schemes

IPART's proposal to limit the option for alternative price controls such as revenue cap regulation and incentive schemes to utilities with proposals graded Advanced or Leading and excluding those

graded Standard is not in the long-term interests of customers. We are not aware of any regulator that has connected the quality of the pricing proposal to the form of price control which determines the extent to which the company faces uncontrollable volatility in its revenue. By providing utilities with revenue certainty, revenue caps, for example, offer compelling benefits for customers, the community and the environment. Similarly, incentive schemes offer potential benefits which customers value. However, by excluding utilities with Standard proposals, IPART is not only denying customers the opportunity to access these benefits, but also hindering utilities' growth towards the grade of Advanced by withholding the opportunity to learn and develop in an environment with these features.

The proposed ex-ante grading system poses significant risks and should be subject to independent review

The proposed grading system for pricing proposals carries critical risks associated with the way the system is anticipated to operate. The risk is best illustrated by example. A utility may self-assess its pricing proposal as Advanced and, therefore, predicate its business planning on securing alternative price controls, such as revenue caps, along with incentive schemes but IPART may grade it Standard. A grade of Standard would deny the utility access to these features which, in turn, would deny their customers access to benefits such as customer choice pricing and improved customer outcomes. The implications for the utility's budget and its customer services would be so material as to call for the complete revision and resubmission of its pricing proposal and underlying business plan. This is a resource-intensive process likely to take at least several more months. In addition to these procedural considerations are the financial risks. A utility faces a financial risk of 1.75% of annual revenue requirement (ARR) as the difference in financial incentive between receiving a grade of Advanced and one of Standard where it self-assesses as Advanced.

Conversely, if a utility self-assesses its pricing proposal as Standard, meaning it plans to continue operating in the current regulatory environment, but IPART grades the proposal Advanced, the utility will potentially be expected to implement operating expenditure (opex), capital expenditure (capex) and customer outcome delivery incentive schemes (ODIs) – all features which it had not considered in its business plan. We note this power to upgrade proposals is a divergence from Victoria's Performance, Risk, Engagement, Management and Outcomes (PREMO) framework.

A simple solution to the material risks arising from the vastly different regulatory treatments resulting from grading is to extend incentive schemes and alternative forms of price control to all three grades.

Additionally, there is no recourse offered to independently review what essentially amounts to a subjective test if a utility receives a grade from IPART with which it disagrees. IPART proposes to introduce 12 new overarching principles in its proposal assessment rubric which also introduce much more subjectivity. It is entirely plausible that a utility and IPART can reach vastly different but equally legitimate views based on the new principles. An independent review can help to reconcile these positions. The lack of independent review in the proposed framework seems particularly unreasonable when contrasted with other regulators such as the NSW Environment Protection Authority (EPA) which is subject to an appeals mechanism despite applying objective scientific tests with pass or fail outcomes. Added accountability on utilities should be reflected in added accountability on regulators. Consequently, we recommend that the proposed framework should

be balanced by an independent review mechanism. We note Victoria's PREMO framework provides for review of the Essential Services Commission's (ESC) decisions (including proposal grading) by an independent panel. A utility can appeal a decision within 21 days, a panel of review is formed within 7, and a decision reached within 30 days.

Reducing complexity in the review process

The proposed reforms introduce new additional requirements and recognise that some offsetting changes are required. There is scope for offsetting the new additional requirements by taking a more strategic approach to the review so that, for example, detailed expenditure line-item reviews are removed to compensate for the added regulatory burden. Improvements could include raising the expenditure threshold for review of capex business cases from $10 million to $100 million and minimising review for government-approved business cases.

Deferring the Capex Saving Scheme as contrary to our customers' interests because it offers incentives to defer or abandon critical infrastructure investments

We support IPART's ambition to encourage better performance on expenditure and customer outcomes. Therefore, we support the proposal to introduce an EBSS and ODIs. We aim to propose the precise details of these incentive schemes in our next price proposal. Regarding the EBSS, opex categories that should be exempt from the scheme and the percentage sharing that is appropriate will only be evident once utilities have had the opportunity to undertake budgeting for the next review period.

Notwithstanding, any financial incentives introduced as part of IPART's reform package must consider safeguards to ensure the financeability of businesses. Failure to do so could result in penalties that limit a business' ability to invest in meeting compliance requirements, to the detriment of customers. Consequently, the proposal to introduce a CESS to incentivise savings from the capex programme should not proceed in its current form as it is not in the long-term interests of our customers.

A five-year pricing determination such as IPART has proposed requires producing a pricing proposal based on a business plan at least two years from submission. That is, seven years from the end of the regulatory period in question. Consequently, the introduction of a CESS is impractical as it is exceedingly difficult to accurately predict capital project priorities, market conditions and future commercial and residential growth areas for investment seven years into the future.

We have embarked on a record investment program to address the combined challenges of rapid population growth in greenfield areas, ageing infrastructure, growth in demand outpacing supply, climate change and extreme weather events such as droughts, floods and fires. Any of these is a major obstacle to securing Sydney's enduring water supply. Together, they demand nothing less than a fit-for-purpose regulatory framework which enables the investment that water utilities need to meet these formidable challenges. In this context, we consider it contrary to our customers' interests to be offered disincentives to proceeding with our critical infrastructure plans. These outcomes have occurred in other infrastructure sectors with similar schemes. Our investment program, moreover, is unfolding at a time of record infrastructure spend throughout Australia which

is inflating the costs of material and labour. It is not clear how the proposed CESS would distinguish whether our capex spend is inefficient or simply the result of an overheated sector.

We recommend deferring the proposed CESS until the 2030-35 regulatory period to enable time to improve its design. As an alternative, IPART could utilise a shadow CESS incentive for the next regulatory period or allow exclusions of capex categories assessed under the scheme.

In the context of the difficulty in forecasting capex needs for major projects and an ambitious capital program, we would also ask IPART to maintain its thorough ex-post capex review to minimise the risk of potentially stranding assets. The introduction of in-period engagement on capital expenditure would further promote the interests of customers through improved investment certainty for businesses to deliver the needs of customers.

Enabling long-term planning with a long-term price path focussed on customer outcomes

As we believe that the long-term interests of customers should be the primary lens through which we plan and deliver our services, we intend to develop a long-term plan with a long-term price path to meet the challenges we face with minimum volatility for our customers. This will mean aligning our five-year pricing proposal to IPART with our 30-year LTCOP. An integral part of long-term planning will be managing intergenerational equity issues and long-term revenue smoothing. New features IPART is proposing as part of the framework – such as accelerated depreciation and annuities – will help achieve this.

As we develop our long-term plan and engage with customers and stakeholders, we invite IPART to take the opportunity for it to explore how our long-term costs and investment outlook relate to short term revenue and customer bills. Regulating in the long-term interests of customers requires a regulatory process which provides confidence and considers long-term costs and their implications.

An ambitious and challenging reform programme requires appropriate time to implement properly

More generally, we believe that the breadth of proposed reforms is too ambitious in scope and poses significant challenges to implement in one tranche, especially given the limited amount of time until the next determination. IPART is proposing to simultaneously implement both Victoria's PREMO framework and the Australian Energy Regulator (AER)'s incentive schemes framework. The degree of change proposed from the current framework to the new framework is greater than any previous example that we are aware of in Australia. Any business' capacity to absorb and implement change is limited and taking on more change at once than we can implement properly is likely to interfere with business planning.

The framework proposes four new incentive schemes – one for each of the grading of pricing proposals, opex, capex, and customer outcomes delivery – all by the time another new proposal takes effect: the deadline for early engagement with IPART in September 2023. IPART had initially canvassed implementation of these reforms to begin in May 2022 – five months before the final report expected in October 2022. Now, however, implementation is likely to occur many months later. As a result, by the time IPART publishes its final report, we will be fewer than two years away from submitting our next pricing proposal. Many of the new inputs needed, such as customer engagement in business planning; developing customer outcomes; designing customer outcome

incentives; and implementing new financial reporting methodologies, have lead times of at least two years.

For instance, IPART has proposed that the regulatory asset base (RAB) asset categories be consolidated into two categories per service: a RAB for depreciating assets and a RAB for non-depreciating assets. In addition, IPART will no longer calculate remaining asset lives. For depreciating assets, the onus is now on the utility to propose a remaining life for existing assets, and to propose the expected life of capex for each year. It will require some time to undertake a thorough review of our RAB and update internal systems for different asset categories and to assess the suitability of using existing asset lives to calculate regulatory lives.

Consequently, we continue to advocate strongly for a targeted approach to prioritising and implementing those reforms that will be the most beneficial for consumers, whilst allowing utilities adequate time over two determination periods for properly learning, adapting and implementing changes. Specifically, this would involve staggering the implementation of the reforms across two determination periods. The first period could see the introduction of the grading system, new requirements under IPART's Customer and Cost principles, development of customer outcomes/ODIs, EBSS, changes to the expenditure review process, and an early review of the RAB to propose new asset lives. The second period would see the implementation of a CESS, and a more comprehensive RAB review.

Additional clarity on the application of the principles framework

IPART has also identified 12 overarching principles to guide proposals with many multiple principles located within each of these. The intent is that utilities choose a set of these to form their 'focus' principles. To this end, it would be helpful if IPART were to consider providing more granular guidance on the application of the principles and their relative merits during early engagement so that utilities and the regulator develop a clear understanding of the practical interaction between the principles and assessing between the three grades.

Overall, whilst improvements to date are welcome, there remain significant additional steps we should take to simplify the framework and ensure we truly place the customer front and centre whilst also securing Sydney's supply of safe, affordable water into the future. We would welcome opportunities for additional engagement on these issues prior to IPART's final report.

1 Welcome improvements

1.1 We support placing customers at the centre of our regulatory framework

We support the aspiration of placing customers at the centre of our regulatory framework. In our view, regulation should encourage businesses to embed customer engagement at the centre of planning and delivering their services. We discuss this in more detail in Section 2.

Over the past five years, we have increased our capability in engaging with customers to accomplish this. We have focused on better understanding our customers and improving the customer experience. However, we still have much to do to achieve this higher ambition. We are in the process of further deepening our engagement and integrating our customers' values within all levels of our organisation. It will take time for us to embed customer insights and perspectives more fully into our decision-making. We discuss this in more detail in Section 6.

With this in mind, we welcome further engagement on the grading rubric and principles IPART have laid out in their draft report. A mix of principles and high-level guidance that enables businesses to pursue the areas of greatest value to their customers is appropriate.

1.2 IPART's proposals to streamline the review process

We welcome many of IPART's proposals to streamline the review process to reduce the regulatory and administrative burden on utilities (especially Advanced and Leading utilities) and facilitate a more efficient regulatory process for all stakeholders. We are supportive of IPART's proposals to:

- Introduce an 'early engagement' stage, where utilities can engage with IPART one to two years before submitting a pricing proposal on how they are responding to the proposed 3Cs framework (with the stage becoming optional over time for Advanced and Leading utilities)
- Set the determination period at the practical length of five years
- Shorten the price review period to nine months, with a focus on outcomes (in the case of Advanced and Leading utilities)
- Adopt a base-step-trend (BST) approach for opex.

While we are happy to work with IPART on benchmarking for opex and predictive modelling for recurrent capex where it is within our capacity to do so, we have some concerns over the use of both approaches as measures to streamline the review process over the long-term. We discuss this in more detail in Section 7.2.

1.3 IPART's approach to managing changing revenue needs over the short- and long-term

1.3.1 The ability to propose different revenue recovery options allows us to better meet intergenerational equity and fairness outcomes

We welcome IPART's openness to considering different revenue recovery options. These options provide opportunities for us to use long-term plans and price paths to inform short-term prices and revenues. As an infrastructure company with a lumpy capital investment profile which is characteristic of the sector, different revenue recovery options allow businesses to better achieve intergenerational equity and fairness outcomes for their customers.

We also support businesses having the responsibility of proposing their own depreciation rates. We agree that periodically reviewing depreciation rates is an important tool in promoting intergenerational equity. This is because regulatory asset life calculations have historically been relatively formulaic compared with the engineering and economic assessments done for assets post-investment, reflected in our fixed-asset register. The periodic reviews that are required to propose depreciation rates and asset lives will enable a limited form of bill smoothing between periods. A further benefit of this change is that it will help align regulatory and accounting practices in our business. We discuss this in more detail in Section 7.2.4.

1.3.2 Clarity on within-period revenue flexibility options

We support IPART's approach to accounting for uncertain and unforeseeable costs within-period. The guidelines and examples IPART has provided balance the need to achieve efficient cost-service outcomes in the context of environmental and economic uncertainty and the need to incentivise businesses to find efficiencies.

We emphasise the importance of these options given the additional revenue risk that IPART's proposed expenditure incentives have for our business, particularly in the later years of a determination when there is a higher degree of uncertainty.

1.4 Other welcome improvements

1.4.1 IPART's proposed cap on payments across all ex-post incentive schemes

We welcome IPART's proposal to cap payments across all three ex-post incentive schemes to 1% of our revenue requirement. We agree that the cap creates certainty on the revenue risks of the new incentive schemes and provides sufficient flexibility to make decisions relating to price versus service level trade-offs. As businesses mature their customer engagement and confidence in managing the risks, they should have the opportunity to propose different revenue risks against each scheme and the ability to apply for individual caps and collars on outcomes within the ODI scheme.

1.4.2 IPART's recognition of the need for innovation funding

IPART's recognition of the need for innovation funding and the opportunity to propose customer driven innovation on a case-by-case basis to reduce lead times and improve customer outcomes is beneficial. This mechanism will provide us with further opportunities to demonstrate the role innovation plays in delivering better services to our customers and create accountability within the business to develop credible proposals in consultation with customers and industry.

1.4.3 The Regulators Advisory Panel

We support greater alignment and collaboration between regulators and engagement with utilities through a RAP. We see this as an opportunity for IPART to build institutional alignment to deliver policy co-ordination on issues that impact the long-term needs of customers. We request IPART actively engage with us on the design and implementation of the RAP.

We support a focus on alignment between utilities, IPART, NSW EPA, and NSW Health. In our view, utilities play an important role in these discussions as we can provide operational subject matter expertise and insight into implementation of matters discussed by this panel. We do not oppose targeted invitations to relevant stakeholders such as Department of Planning and Environment (DPE), Treasury, our CCRG and regulators in other industries where appropriate. We support the post-implementation review of the RAP and welcome further engagement on its Charter.

2 Engaging and delivering value to our customers

Key messages

- At Sydney Water, we have the 'customer at the heart' of everything we do. As part of that value, we aim to deliver a world-class customer experience and collaborate with our current and future customers, communities, stakeholders and partners to deliver better outcomes.
- For our next pricing proposal submission, our aim is to place customer engagement at the centre and deliver even more value to our customers.
- This will include our largest and most ambitious customer engagement program yet, which will consult customers on a range of areas from outcomes, priorities and expectations to billing and fairness, and preferences as to price structures.
- In parallel, we have also recently established a Customer and Community Reference Group (CCRG), an independently chaired group of customer and community advocates, who will provide input, challenge and support to our business to demonstrate that our decisions, as set out in our strategy, enterprise plan and regulatory submissions, are shaped by and in the best interests of all our customers and the communities in which they live.

2.1 'Customer at the heart' of what we do

At Sydney Water, we have the 'customer at the heart' of everything we do. 'Customer at the heart' is the central value of our corporate strategy[1] and represents our aspiration to transform into a customer-centric business. As part of that value, we aim to deliver a world-class customer experience and collaborate with our current and future customers, communities, stakeholders, and partners to deliver better outcomes.

As noted in our response to IPART's Discussion Paper 2 *Promoting a Customer Focus*,[2] we have increased our capability in engaging with customers over the past five years; focusing on better understanding our customers and improving the customer experience.

However, more needs to be done to focus our business planning and price proposals on our customers. We are in the process of deepening our engagement and integrating our customers'

[1] Our corporate strategy contains further details on our customer centricity, available at www.sydneywater.com.au.
[2] Sydney Water (2021) *Regulating water businesses – Response to Discussion Paper 2 Promoting a customer focus*, p. 5.

values within all levels of our organisation. It will take time for us to embed customer insights and perspectives completely into our decision-making.

2.2 Customer engagement and delivering customer value in our next price proposal

For our next price proposal submission, we are aiming to place customer engagement at the centre and deliver even more value to our customers. This will include **our largest and most ambitious** customer engagement program yet, which will consult customers on a range of areas from outcomes, priorities and expectations to billing and fairness, and preferences as to price structures.

We have recently begun work on engaging for the 2025 Price Review (PR2025). We are informing groups of customers of issues and opportunities, educating on options, and helping to identify preferred solutions. We serve five million customers through two million customer accounts – the challenge is to obtain a representative view of our customers that recognises their diverse views and values. Notwithstanding challenges, we aim to clearly link customer priorities and research, our business planning, and our strategy in our next price review, and ultimately, be held to account for delivering against the outcomes identified as important by our customers.

In parallel, we have also recently established a Customer and Community Reference Group (CCRG), an independently chaired group of customer and community advocates, to replace our previous Community Advisory Council. The purpose of the CCRG will be to work closely with our business to provide input, challenge and support to our business to demonstrate that our decisions, as set out in our strategy, enterprise plan and regulatory submissions, are in the best interests of all our customers and the community and are shaped by them.

We aim to keep IPART informed on key milestones in our engagement projects and extend a standing invitation for IPART and the Secretariat to observe, participate, provide feedback and share in our customer engagement events.

3 Grading of proposals

Key messages

- IPART has proposed a new 3Cs pricing framework, which aims to place customers at the centre of the regulatory process to deliver customer value. We support the framework's focus on delivering customer value, through proposal grading, incentives and ongoing performance monitoring.
- IPART's proposed grading and structure of incentives across the Standard, Advanced and Leading proposals, however, poses a risk to the delivery of customer value and the long-term interests of customers. Specifically, it prevents utilities with proposals graded as Standard from considering their customers' preferences as to the form of price control or incentive schemes. Over time, it further denies these utilities a credible pathway to achieving Advanced and/or Leading proposals, by withholding the opportunity to learn and develop in an environment with these features.
- Taking a tailored and tiered approach to incentives is important to encourage utilities to improve and move through grades over time. This approach, however, should not be contrary to customer preferences or come at the cost of delivering customer value.
- We consider that all utilities should be able to propose different forms of price control, in line with customer preferences, to deliver customer value under the framework. There are many benefits for customers, the community, and the environment, in allowing all utilities to propose different forms of price control, regardless of grade. These benefits include the ability to better manage external risk and provide more certainty to customers over the long-term, the flexibility to pursue pricing options in line with other objectives (eg water conservation), and the flexibility to offer customer choice pricing.
- As a corollary, we also support extending access to ODIs to all utilities, regardless of grading, where the utility can demonstrate that the schemes are supported by its customers and will deliver customer value.

3.1 IPART's proposed structure of incentives under the 3Cs framework poses a risk to customer value and the long-term interests of customers

IPART has proposed a new 3Cs pricing framework, which aims to place customers at the centre of the regulatory process to deliver customer value. We support the 3Cs framework's focus on delivering customer value through proposal grading, incentives and ongoing performance monitoring.

However, we consider that some aspects of the 3Cs framework may pose a risk to customer value and the long-term interests of customers, namely IPART's proposed grading and structure of

incentives for Standard, Advanced and Leading proposals. Specifically, IPART has proposed to allow only utilities with Advanced or Leading proposals to access options for different price controls and incentive schemes and to exclude those with proposals graded as Standard. This structure of incentives effectively prevents any utility with a proposal graded as Standard from considering their customers' preferences as to a form of price control or incentive scheme. Over time, it also entrenches these utilities and hinders them from moving towards achieving an Advanced or Leading proposal, by withholding the opportunity to learn and develop in an environment with these features. This poses a further long-term risk to the delivery of customer value under IPART's proposed 3Cs framework.

We are not aware of any regulator that has connected the quality of a utility's pricing proposal to its ability to propose different forms of price control or incentive schemes. In Victoria, for example, the quality of a utility's pricing proposal only has impacts on the magnitude of the utility's return on equity under the PREMO framework.[3] In the UK, the quality of a utility's pricing proposal has historically impacted whether the proposal is procedurally fast-tracked and the magnitude of the utility's return on equity.[4] The total suite of financial and reputational incentives IPART is proposing to apply to Advanced and Leading proposals, however, are more extensive than any other comparable regulatory framework in Australia.

3.2 All utilities should be allowed to propose different forms of price control to deliver customer value under IPART's 3Cs framework

Forms of price control can range from price cap regulation (as currently applied by IPART) to revenue cap regulation and tariff basket cap regulation. Revenue cap regulation refers to regulators setting maximum revenues that utilities are allowed to recover from customers over the regulatory period. Revenue caps are used widely in the Australian energy market and as the Australian Energy Regulator explains:[5]

> 'Prices are based on estimates of future demand under both revenue cap and price cap approaches. Under the revenue cap approach, average prices are adjusted each year for errors in forecast demand that result in revenue recovery above or below the allowed revenue. Put simply, network businesses under a revenue cap are guaranteed to recover the allowed revenue over the regulatory period.'

[3] Essential Services Commission (2016) *Water Pricing Framework and Approach – Implementing PREMO from 2018*, Victoria, pp. 9-13.
[4] Water Services Regulation Authority (2022) *PR24 and beyond: Creating tomorrow, Together, Appendix 12 – Business plan incentives*, United Kingdom, p. 7.
[5] Senate Standing Committee on Environment and Committees (2015) *The Performance and Management of Electricity Network Companies: Interim Report*, Parliament of Australia, Chapter 3: Chapter 3 – Parliament of Australia (aph.gov.au)

All utilities should be able to propose different forms of price control, in line with their customers' preferences, to be able to deliver customer value under the framework. There are many benefits for customers, the community, and the environment, in allowing all utilities to propose different forms of price control, regardless of grade. We discuss some of these benefits below.

Table 3-1: Different forms of price control across Australian infrastructure industries

Regulator	Sector	Segment	Control mechanism
ESC	Water	Local	Price, Revenue, Hybrid, and Tariff Basket Caps
Essential Services Commission of South Australia (ESCOSA)	Water	State	Revenue cap
Independent Competition and Regulatory Commission (ICRC)	Water	State	Hybrid price and revenue cap
IPART	Water	Local	Hybrid price and revenue cap
Office of the Tasmanian Economic Regulator (OTTER)	Water	State	Price cap
Queensland Competition Authority (QCA)	Water	LGA	Hybrid price and revenue cap
	Port	State	Revenue cap
	Rail	State	Revenue cap
Australian Competition and Consumer Commission (ACCC)	Post	National	Price cap
	Rail	Hunter Valley	Revenue cap
	Rail	Interstate	Revenue cap
	Telecom	National	Price cap
	Telecom	NBN	Revenue cap with price controls
AER	Electricity	Transmission, Distribution	Revenue cap
	Gas	Transmission, Distribution	Price cap

3.2.1 Allowing different forms of price control can help manage external risk and provide certainty for customers over the long-term

One benefit of allowing all utilities to propose different forms of price control is that it provides a more flexible approach for managing external risks to demand and revenue, which can in turn provide greater certainty for customers over the long-term. Under IPART's proposed incentive structure, utilities are subject to price cap regulation as a default, with only those with Advanced or Leading proposals being allowed to seek different forms of price control. The most appropriate form of price control, however, will be dependent on the individual utility and its circumstances, such as its fixed and variable cost structure and customer preferences. Setting price caps as a default necessarily precludes utilities from considering other options and forces them to take on unnecessary additional demand risk and revenue volatility outside of their control. This can, in turn, not only impact the ability of these utilities to respond to other risks, but also reduce their appetite to take on additional risks, even where doing so would be in the long-term interests of customers.

As our industry moves into a future with challenges such as population growth, ageing infrastructure, climate change and extreme weather events, it will become more critical than ever to ensure that utilities are able to respond in a timely and effective manner to these external risks in the long-term interests of customers. With the ability to propose different forms of price control over the regulatory period, the framework would provide increased flexibility to utilities to manage demand and revenue volatility and plan for the long-term, to deliver customers improved services, sustainability, security, and better environmental outcomes.

3.2.2 Allowing different forms of price control can provide flexibility in pricing to achieve community and environment objectives, and facilitate customer choice pricing

Extending the ability to propose different forms of price control for all utilities can provide increased flexibility in pricing to pursue other community and environment objectives. Under IPART's proposed default of price caps, the social and environmental goal of conserving water is in tension with the commercial incentive to generate revenue from water sales. Other forms of price control, such as revenue caps, can better align the incentive to conserve water with commercial outcomes because conserving water or introducing restrictions have no bearing on the overall allowable revenue. In fact, the goal of removing any disincentive for utilities to reduce demand is the primary reason several regulators have adopted revenue cap regulation, including the AER and UK regulators Water Services Regulation Authority (Ofwat) and Office of Gas and Electricity Markets (Ofgem). We are not aware of any regulators which have switched back.[6]

Sydney Water is investigating dynamic pricing approaches to improve water conservation ('water conservation pricing'), which could have very significant customer benefits by reducing the burden of restrictions, reducing the risk of system failure, and deferring or avoiding expensive and environmentally damaging, augmentations. Such benefits may not be obtainable under a default price-cap approach. A price-cap requirement may even inhibit Sydney Water's ability to conduct customer research to investigate the potential effectiveness of conservation pricing.

[6] CEPA (2020) *Economics Regulation of Water Utilities*, Research Report for IPART, June: pp. 7-8.

Allowing other forms of price control also facilitates customer choice pricing. Customer choice pricing refers to the practice of developing and pricing diverse services differently to maximise the benefit various customer segments receive from the customised services they value. For example, a factory may want to purchase the supply and recycling of primary treated wastewater for industrial purposes at a customised price. Delivering this level of superior customer outcome requires support from an overall revenue cap which offers the flexibility to be innovative in pricing. Choice pricing would improve our ability to deliver incentives proposed by IPART. Revenue caps work in tandem with choice pricing to create period pass throughs of efficiency gains like leakage ODIs and ensure consistent leakage management by State Owned Corporations (SOCs). We explored this principle in our response to IPART's Discussion Paper 1.[7]

3.2.3 Allowing different forms of price control can help facilitate more efficient cost recovery

Introducing the ability to propose different forms of price control for all utilities can also help to facilitate more efficient cost recovery. Revenue cap regulation in high fixed cost industries, for example, provides the highest likelihood of efficient cost recovery, placing risk and incentives on companies to seek to improve performance. Our costs are largely fixed and unrelated to water sales and, when coupled with the volatility of demand, this is best managed with a revenue cap as is the norm in other infrastructure industries, such as the AER's regulation of the electricity industry.

As Table 3-1 shows, price caps are preferred by regulated businesses that are asset-light, such as the postal sector, or where a dominant regulatory objective is to promote competition, such as telecommunications. In the water sector, price caps can lead to significant under-or over-recovery as demand for water is largely determined by weather, with reduced demand in periods of lower temperatures and higher rainfall. Forecasting demand beyond a few months is exceedingly difficult and likely to become more so as weather events become more volatile and frequent. Our water sales in 2021-22 are tracking to close 7% below forecast, resulting in $70 million less revenue per year and $350 million over the regulatory period (2020-25).[8] Consequently, revenue caps can provide the revenue stability with which to invest for the impact of extreme weather events (both wet and dry) on water networks.

Both Ofwat and the AER recognised the importance of cost recovery during their transition to revenue caps. Ofwat adopted revenue caps in a 2008 decision based on firstly, avoiding disincentives to promote water efficiency and secondly, removing the scope for the company to outperform or underperform on revenue due to demand.[9] Similarly, in 2016 the AER decided that 'under a revenue cap…a distributor's revenue is fixed by the AER over the regulatory control

[7] Sydney Water Corporation (2021) *Response to Discussion Paper 1*, p. 24.
[8] Sydney Water Corporation (2021) *Response to Discussion Paper 3*, pp. 8-12.
[9] CEPA (2020) *Economics Regulation of Water Utilities*, Research Report for IPART, June: p. 40.

period. Distributors can therefore increase profits by reducing costs. This creates an incentive for distributors to undertake demand side management projects that reduce costs'.[10]

Revenue caps are revenue-neutral and remove any perverse forecasting incentives for utilities to understate forecast demand because they operate symmetrically, and any over-recovery of revenue is returned to customers. Under the existing price cap model, Sydney Water bears a $70million per annum risk in relation to demand variation (based on our 2020-2024 PR). This risk is fixed at the date and duration of determination and cannot be managed until the following determination. This creates undue uncertainty for cost recovery. Given our 3% ARR shortfall for the 2020-2024 determination and increased climate volatility, the risks of achieving efficient cost recovery under a price cap model in the future will increase in dollar value and frequency.

3.2.4 Allowing different forms of price control does not impact bills or affordability

We recognise there may be some concerns with how allowing different forms of price control might impact bills and affordability for customers. We consider that extending different forms of price control to all utilities has a negligible impact on bills and affordability. This is because bills and affordability are primarily determined by base revenue requirements of utilities. Different forms of price control only vary how those base revenue requirements are collected through prices (i.e. the magnitude and timing of price changes both within and in between determination periods).

Specifically, revenue caps do not impact bills or affordability more than IPART's current default of price caps. Over two regulatory periods, net prices change in the same way, and are more reflective of an efficient fixed cost structure. That is, prices decrease when demand for water increases, and vice versa. The only difference is timing. Under revenue cap regulation, prices can change by a smaller amount within a determination period. Under price caps, prices can change by a larger amount at the beginning of the next period. In fact, prices are likely to be more stable across regulatory periods under revenue caps.

Box 1 provides a case study exploring further how revenue caps do not impact bills or affordability any more than IPART's proposed default of price caps.

[10] AER (2016) '2.3.8 Incentives for demand side management', *Preliminary positions on replacement framework and approach (for consultation) for CitiPower, Jemena, Powercorp, SP AusNet, United Energy for the Regulatory control period commencing 1 January 2016*.

3.2.5 Box 1: Revenue caps do not add to volatility more than price caps

Scenario Outline

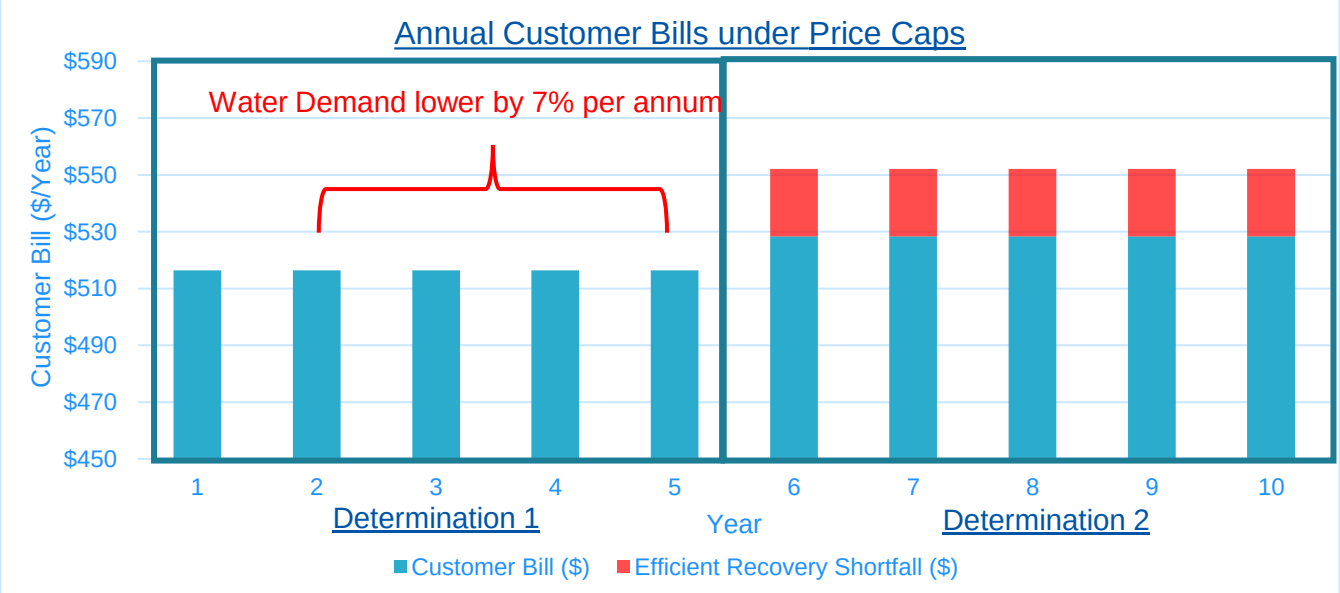
The following scenario demonstrates how revenue caps can deliver more stable bills to customers and more efficient cost recovery to utilities when demand is lower than expected. Under a price cap and demand adjustment model, the business bears the under-recovery within the period and passes through all true-up amounts into customer charges in the next period. In contrast, a revenue cap allows the business to begin passing through true-up amounts within the period, with only the remainder needing to enter prices in the next period. This results in a smaller bill shock in the next period compared to a price cap.

This scenario is based on Sydney Water's current potable demand trajectory which is approximately 7% lower than forecast at the beginning of the determination period. Under these assumptions, a utility can manage the bill impacts with the following price controls:

Price Cap

Under IPART's draft framework, a business with a standard proposal can only be regulated under a price cap. A price cap makes no adjustment to prices in response to lower demand within the determination period. The revenue shortfall from lower demand is partially trued-up in the next period, with a $24 per bill/per year residual demand risk under a price cap.[1] If all efficient costs were recovered, average customer bills would rise in a single step change from $516 a year in Determination 1 to $552 a year in Determination 2.

Due to the residual demand risk, the business fails to recover its efficient revenue requirement. This can introduce risks to service levels and reduce business confidence to commit to improved customer outcome delivery.

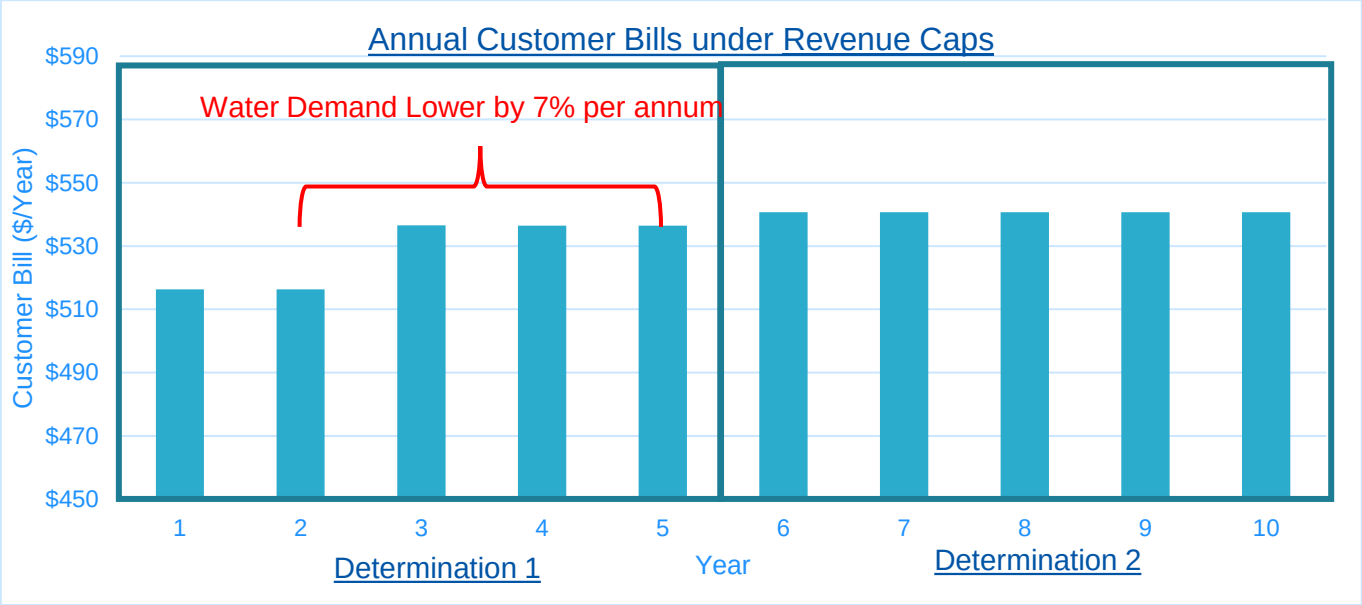


[1] Figures based on an average Sydney Water customer's water bill, assuming a demand volatility adjustment mechanism with 5% deadband.

Revenue cap

Revenue caps change prices within a determination period in response to revenue volatility and can feature a side constraint that limits bill increases within a period.

With revenue caps, a business can begin to recover the revenue shortfall immediately after experiencing lower demand, with any remaining shortfall trued-up in the following determination period. Since lost revenues are partially recovered within-period, the amount trued-up in the next period is smaller than it would be under a price cap, assuming efficient cost recovery in both cases. In this case, customer bills rise relatively smoothly from $516 to $536 within Determination 1, with a smaller increase to $541 in Determination 2. We consider that this is a preferable outcome to the single step change to $552 under a price cap:



3.3 ODIs should also be extended to all utilities

As a corollary, we are also supportive of extending incentive schemes to all utilities, regardless of proposal grade, where it can be demonstrated that the schemes are supported by the utility's customers and will deliver customer value.

As IPART itself notes, it is important that all businesses should have a credible pathway towards achieving an Advanced or Leading proposal over the longer term. Only allowing utilities with Advanced and Leading proposals to access different forms of price control and incentive schemes, even where customer support can be demonstrated, necessarily creates a significant 'jump' between the Standard grade and the Advanced and Leading grades and hinders any utility trying to move towards achieving an Advanced or Leading proposal over time.

4 Expenditure and outcome delivery incentives

Key messages

- Encouraging utilities to seek out greater value for customers is a key theme of our reform agenda. We agree with IPART that developing the right set of ODIs will be crucial to delivering this. We will continue to engage with IPART on our proposed design of these incentives during our price review.
- We will continue to develop the precise details of the EBSS we will propose in our next price submission.
- We oppose IPART's CESS as it appears contrary to our customers' interests. It creates a material disincentive to proceeding with efficient delivery of our capex program if that efficient delivery differs to what was forecast five to seven years prior.
- The CESS should be deferred until the 2030-35 period to enable time to improve its design.
- Experience from other jurisdictions has demonstrated that incentivising efficient delivery of capex without the risk of unintended consequences is a significant challenge. Furthermore, there is significantly complexity in the remainder of IPART's reform package. Delivering this package will require significant effort, and any CESS rewards and penalties made in the subsequent review may not be an appropriate result of changes in behaviour by our business.
- We welcome a global 1% cap across these three incentive schemes. This will minimise the risk to businesses, shareholders and customers from any uncertainties that remain in the first application of these incentive schemes in NSW.

4.1 We welcome IPART's focus on providing balanced incentives for utilities to invest in long-term performance

In general, it is important that businesses have an appropriate incentive to make efficient investments in performance.

Currently, the regulatory framework provides an incentive for businesses to make cost efficiencies. This is because businesses retain any under-spend relative to allowances. Conversely, there is no incentive on businesses to increase costs. Doing so would generate an in-period loss and will not likely affect the subsequent period's allowances since IPART has historically undertaken efficiency reviews based on all relevant information (not just in one particular year). Reversely, the current

framework does not offer incentive for businesses to identify or deliver performance beyond compliance requirements.

We understand that IPART considers there can be improvements made to these incentives, through the introduction of:

- An opex efficiency benefit sharing scheme (EBSS) and capex expenditure sharing scheme (CESS). These schemes are intended to incentivise businesses to implement efficiencies as soon as they are discovered. IPART's version of these schemes are also designed to offer more equal reward from making efficiencies in opex versus efficiencies in capex.
- A service level incentive scheme, similar in design to Ofwat's outcome delivery incentives (ODIs). This is intended to provide an incentive for businesses to prioritise customer engagement and to deliver on the outcomes that customers value.

4.2 We support the introduction of an EBSS that allows utilities to propose elements of the schemes during price reviews

While elements of financial incentive schemes are agreed upon between regulators and businesses in advance of price submissions, other jurisdictions have allowed a degree of flexibility for businesses to design further details themselves. These details are proposed in price submissions and are resolved with regulators over the course of price reviews. This has historically been the case for the Australian gas sector. We are undertaking a similar process and plan to propose the precise details of IPART's EBSS to be applied in 2025-30 in our next price proposal We discuss this in Section 4.4.

4.2.1 We consider that financial incentive schemes should focus on revealing efficient costs in the context of uncertain expenditure requirements

We agree with IPART that incentive frameworks should not reward businesses for delaying the implementation of cost efficiencies. However, this is not a significant concern in the NSW water sector given that there is no evidence that utilities attempt to optimise financial rewards from the incentives under the existing framework.

IPART also note that service incentives without corresponding incentives to reduce costs could risk reputationally sensitive businesses over-investing in performance. As noted, IPART's current framework already provides an incentive to reduce costs. So long as service performance incentives are calibrated appropriately with the financial incentive (current incentives or new incentive schemes) in mind, we consider over-investment by reputationally sensitive businesses is not an issue. We discuss this in more detail in Section 4.5.

In our view, reform to the incentive framework should instead focus on revealing efficient costs more generally in the context of uncertain expenditure requirements. Recent challenges such as the need to respond to drought and flooding, rising inflation and input prices, and changes to the composition of growth servicing requirements illustrate why this is important. To this end, we welcome the changes that IPART have proposed to their cost pass-through framework and

IPART's accounting of these changes in their expenditure incentives. Nevertheless, we request that IPART also consider this primary objective in the design of the incentive schemes themselves.

4.2.2 Adjustments to IPART's EBSS are required to achieve these objectives

How base allowances are set in future regulatory periods will affect whether the EBSS will deliver an equal incentive to make cost efficiencies throughout a period

Our current framework does not provide an incentive for businesses to reveal efficiencies equally across a regulatory period. For example, under the current incentives, a saving of $5 a year in year 3 would result in a utility benefiting $10 until allowances are reset in the next period. However, delaying implementation of this $5 saving until the beginning of the following regulatory period would result in a utility benefiting $22. This is illustrated in Table 4-1.

Table 4-1: Incentive to delay implementation of opex savings under the current framework

Implement saving when it is discovered						
Year	1	2	3	4	5	**Total (NPV)**
Opex allowance	100.0	100.0	100.0	100.0	100.0	
Actual opex	100.0	100.0	100.0	95.0	95.0	
Net Present Value (NPV) underspend (in-period)	0.0	0.0	0.0	5.2	5.0	10.2
Implement saving in next regulatory period						
Year	6	7	8	9	10	**Total (NPV)**
Opex allowance	100.0	100.0	100.0	100.0	100.0	
Actual opex	95.0	95.0	95.0	95.0	95.0	
NPV underspend (in-period)	4.8	4.7	4.5	4.4	4.2	22.6

Note: Discount rate is assumed to be 3.4%

In theory, IPART's EBSS resolves this issue. However, we request IPART outline clear rules on how the model will treat changes in efficient baseline opex in subsequent periods. As explained in our submission to IPART's Discussion Paper 3,[11] a mechanical implementation of IPART's EBSS model may not provide an equal incentive for over- and under-spends made in the final year of a regulatory period. For example, in Table 4-2, an overspend of $5 in year 5 would result in an in-period loss of $5 and a deduction to our revenue requirement of $25.4 in the next period. If opex allowances are reset as they are under the current review process, a utility would be penalised a net of $30.4 from a $5 temporary overspend in the final year of the regulatory period. Clearly a EBSS payment five-fold the initial overspend is not intended by IPART's EBSS.

[11] Sydney Water (2021), *Response to Discussion Paper 3,* pp. 25-27.

Table 4-2: EBSS penalty from an overspend in the final year of a regulatory period

Year	1	2	3	4	5	**Total (NPV)**
Opex allowance	100.0	100.0	100.0	100.0	100.0	
Actual opex	100.0	100.0	100.0	100.0	105.0	
NPV underspend (in-period)	0.0	0.0	0.0	0.0	-5.0	-5.0
NPV EBSS adjustment						-25.4
Year	6	7	8	9	10	
Opex allowance	100.0	100.0	100.0	100.0	100.0	
Actual opex	100.0	100.0	100.0	100.0	100.0	
NPV underspend (in-period)	0.0	0.0	0.0	0.0	0.0	0.0
NPV EBSS adjustment						0.0
					Net gain/loss over both periods	**-30.4**

Note: Discount rate is assumed to be 3.4%

IPART's EBSS model attempts to solve this issue by making the period 2 opex allowance equal to the actual opex in the final year of period 1. In reality, efficient opex is likely to change between periods. We welcome IPART's assurances that the EBSS will accommodate changes to efficient expenditure.[12] However, we request that IPART also consider the following implementation methodology when determining the next period's efficient allowances for the purposes of calculating EBSS rewards or penalties. We consider this approach accounts for potential changes to efficient opex between periods:

1. In period 1, compare actual opex to opex allowance (adjusted for changes to efficient expenditure) and calculate the EBSS reward or penalty per IPART's model.
2. Separately record the under- or over-spend from the final year of period 1.
3. In period 2, determine opex allowances per the updated expenditure review process.
4. Make an 'EBSS opex adjustment' by subtracting the underspend or adding the overspend from the final year of period 1 to opex allowances in all years of period 2. This adjustment should not be considered when comparing actual opex to opex allowances in period 3.

As demonstrated in Table 4-2, failure to account for this will result in a reward or penalty to businesses orders of magnitude greater than the under or over-spend in the final year of a regulatory period. This is the reason why our over-spend in 2019-20 would have been penalised so significantly under the EBSS had it been implemented mechanically in our last Determination.

IPART's EBSS shares the risk of changes in efficient expenditure with customers

We understand that IPART's 20% NPV approach for its EBSS shares cost risks and benefits between businesses and their customers. This is essentially a trade-off between the strength of the incentive for businesses to make cost efficiencies and the protection to businesses and their shareholder from uncertain expenditure requirements ex-ante. For example, under IPART's EBSS, a temporary overspend of $5 in year 3 results in an NPV loss in-period of -$5.3. This overspend is

[12] This will affect the 'opex allowance' line item in period 1 of IPART's EBSS model, not in period 2.

partially offset (shared with customers) in the next period through an EBSS reward of $4.3. The net effect to the utility over both periods from this $5 over-spend is -$1.1. In contrast, the same overspend under the current incentives results in the utility wearing an NPV loss of -$5.3.

Table 4-3: Forecasting risk under the EBSS compared to current framework

Overspend in year 3 under EBSS						
Year	1	2	3	4	5	**Total (NPV)**
Opex allowance	100.0	100.0	100.0	100.0	100.0	
Actual opex	100.0	100.0	105.0	100.0	100.0	
NPV underspend (in-period)	0.0	0.0	-5.3	0.0	0.0	-5.3
NPV EBSS adjustment						4.3
					Net gain/loss over both periods	**-1.1***
Overspend in year 3 under current incentives						
Year	1	2	3	4	5	**Total (NPV)**
Opex allowance	100.0	100.0	100.0	100.0	100.0	
Actual opex	100.0	100.0	105.0	100.0	100.0	
NPV underspend (in-period)	0.0	0.0	-5.3	0.0	0.0	
					Net gain/loss over both periods	**-5.3**

Note: Discount rate is assumed to be 3.4%; * Subject to rounding.

Ofwat has implemented cost sharing of expenditure performance as an additional feature to building blocks to avoid windfall gains and losses from forecasting error.[13] Given the material challenges that regulated utilities face and the implications this has for rapid and significant changes to efficient expenditure, we consider this is a positive outcome for customers and businesses. We aim to propose the precise percentage along with a suite of other details in our 2024 submission.

Other observations

We query whether IPART's EBSS model estimates the Network Service Provider (NSP) underspend line correctly for period 2. For example, in Table 4-4, a temporary overspend of $5 in year 1 of period 2 results in an NPV overspend in-period equal to $4.8. However, IPART's EBSS model records the benefit that the business received in-period as $5 when netting the EBSS payment (total efficiency gain net of total NSP underspend). We note this is the result of the second application of discounting in the total NSP underspend row.

[13] Ofwat has applied a cost sharing mechanism for over- and under-spends in PR19 and is intending to continue to do so in PR24:
Ofwat (2017), *Delivering Water 2020: Our final methodology for the 2019 price review*, Appendix 11: Securing cost efficiency, pp. 3-7;
Ofwat (2022), *PR24 and beyond: Creating tomorrow, Together*, pp. 48-9.

Table 4-4: IPART's EBSS discounting approach for period 2

Year	2029-30	2030-31	2031-32	2032-33	2033-34	Formula
Discount factor	0.97	0.94	0.90	0.87	0.85	a
Opex allowance	100.0	100.0	100.0	100.0	100.0	b
Actual opex	105.0	100.0	100.0	100.0	100.0	c
NPV underspend (in-period)	-4.8	0.0	0.0	0.0	0.0	d=(c-b)*a
Total NSP underspend (NPV)					**-5.0**	=SUM(d)***(1+a)**

Note: Discount rate is assumed to be 3.4%

4.3 We are concerned a CESS will not promote customer interests

We are concerned that delivering the entire suite of changes IPART proposes in its reform package will create a significant incremental burden on our business and IPART during the price review as well as during the next regulatory period. As a result, submitting a business plan that accounts for these financial incentives and responding to them in-period will be challenging. Therefore, any rewards or penalties made to businesses under a CESS may not be a consequence of changes in behaviour. We are uncertain whether these payments would be arbitrary wealth transfers between our customers and shareholder, and we query whether there is any additional customer benefit.

This is of particular concern for the CESS because of the nature of capex. It is conceptually challenging to find an effective mechanism for encouraging efficient capex. Capex poses the following challenges:

- Only a small proportion of capex could be classed as recurrent expenditure
- Capex has long-term effects and the need for capex is challenging for regulators to establish without a very detailed understanding of the assets
- In general, capex is lumpy and forecasting quality (cost and timing) deteriorates as the time horizon increases.

Nevertheless, we make observations on IPART's proposed CESS in Sections 4.3.1 and 4.3.2.

CESS equivalents in the Australian energy sector are being reviewed over concerns of whether they provide customer value

The AER is currently reviewing their incentive schemes, with an emphasis on their efficiency benefit sharing scheme (EBSS) and capital expenditure sharing scheme (CESS).[14] We understand that it is undertaking the review in response to questions by customer and community groups on the size of incentive scheme rewards and whether the schemes provide value for money.[15] While, the AER considers that the EBSS is fit-for-purpose, it identifies the CESS as a key focus for their review.[16] In particular, the AER note that since introducing its CESS, there has been a trend of

[14] AER (2021), *Review of incentive schemes for regulated networks – Discussion paper*, p. 9.
[15] AER (2021), *Incentive schemes for regulated networks* p. 8.
[16] AER (2021), *Incentive schemes for regulated networks* p. 9.

utilities significantly underspending capital allowances and proposing high capital requirements in subsequent reviews.[17,18]

In our view, the focus of this AER review provides a compelling reason to reconsider introducing a CESS. IPART should focus their reform package on implementing incentive schemes with proven success and exercise caution where there is uncertainty around effectiveness and customer value. Therefore, we recommend deferring a CESS until the 2030-35 period to enable time to improve its design. As an alternative, IPART could utilise a shadow CESS incentive for the next regulatory period or allow exclusions of capex categories assessed under the scheme. In the context of the difficulty in forecasting capex needs for major projects and an ambitious capital program, we would also ask IPART to consider maintaining its thorough ex-post capex review to minimise the risk of potentially stranding assets.

4.3.1 We consider the CESS should focus on incentivising efficient delivery of a significant capital programme in the context of uncertain expenditure requirements

In addition to the objectives we discuss for the EBSS in Section 4.2.1, IPART have previously argued that implementing incentive schemes in a piecemeal fashion would create inconsistent incentive rates. That is, IPART considers that an EBSS without a CESS would create an unequal incentive to pursue opex savings over capex savings.[19]

While we acknowledge the role that these incentives play, we reiterate the greater importance of encouraging efficient expenditure in the context of our ambitious capital programme and the rapid and significant changes in environmental, social, and economic conditions that affect our actual capex.

4.3.2 CESS: Does IPART's model achieve these objectives?

Increased risk to businesses and their customers from capex over- and under-spends

IPART's CESS features a similar benefit to its EBSS, in that the CESS equalises the incentive to deliver cost efficiencies across a regulatory period. For instance, under the current incentives, a saving of $5 made in year 5 of the regulatory period will lead to a benefit to the business equal to one year of financing costs ($0.2). However, delaying this saving to year 1 of the following period will lead to a benefit equal to five years of financing costs ($0.9). The business is therefore incentivised to delay making this saving to gain the additional benefit.

[17] Similarly, the AER observe a continuation of this trend through excessively high capex proposals in recent price proposals.
[18] AER (2021), *Incentive schemes for regulated networks* pp. 56-57.
[19] IPART (2021), *Encouraging innovation in the water sector, Discussion paper,* p. 45.

Table 4-5: Benefit of saving capex at end of period under status quo

Implement saving when it is discovered						
Year	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**Total (NPV)**
Capex allowance	100.0	100.0	100.0	100.0	100.0	
Actual capex	100.0	100.0	100.0	100.0	95.0	
Financing cost allowance	3.4	6.8	10.2	13.6	17.0	
Actual financing cost	3.4	6.8	10.2	13.6	16.8	
Benefit to business	0.0	0.0	0.0	0.0	0.2	0.2
Implement saving in next regulatory period						
Year	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**Total (NPV)**
Capex allowance	100.0	100.0	100.0	100.0	100.0	
Actual capex	95.0	100.0	100.0	100.0	100.0	
Financing cost allowance	3.4	6.8	10.2	13.6	17.0	
Actual financing cost	3.2	6.6	10.0	13.4	16.8	
Benefit to business	0.2	0.2	0.2	0.2	0.2	0.9

Note: Discount rate is assumed to be 3.4%

IPART's CESS makes progress in resolving this issue. The benefit of delaying savings is the additional financing costs retained for saving in an earlier year of a regulatory period. The CESS shares this benefit so that only 20% is retained by the business, and therefore the CESS weakens the incentive for this behaviour. In Table 4-5, the business retains an additional $0.7 by delaying savings. Table 4-6 illustrates how this benefit is reduced to $0.2 under the CESS: the business receiving a benefit of $1.2 for saving $5 in year 1 compared to a benefit of $1.0 for the same saving in year 5 (a difference of $0.2).

Table 4-6: Benefit of saving capex at start of period with a CESS

Year	2024-25	2025-26	2026-27	2027-28	2028-29	Total (NPV)
Capex allowance	100.0	100.0	100.0	100.0	100.0	
Actual capex	95.0	100.0	100.0	100.0	100.0	
Underspend	5.0	0.0	0.0	0.0	0.0	
NPV financing benefit	0.2	0.2	0.2	0.2	0.2	
Total efficiency gain	5.2	0.2	0.2	0.2	0.2	5.9
					Business share of efficiency (20%)	1.2
					NPV CESS payment	0.3
					Net gain / loss (financing benefit plus CESS payment)*	**1.2**
Year	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**Total (NPV)**
Capex allowance	100.0	100.0	100.0	100.0	100.0	
Actual capex	100.0	100.0	100.0	100.0	95.0	
Underspend	0.0	0.0	0.0	0.0	5.0	
NPV financing benefit	0.0	0.0	0.0	0.0	0.2	
Total efficiency gain	0.0	0.0	0.0	0.0	5.2	5.2
					Business share of efficiency (20%)	1.0
					NPV CESS payment	0.9
					Net gain / loss (financing benefit plus CESS payment)*	**1.0**

Note: Discount rate is assumed to be 3.4%; * Subject to rounding

However, contrary to the positive cost sharing traits that we observe in IPART's EBSS, the CESS rewards businesses for under-spends and penalises businesses for over-spends more so than they are under the current incentives. That is, there is a stronger incentive to reduce capex and there is greater exposure to forecasting risk. For example, the tables above showed that for a $5 saving in year 1, the business would be rewarded with a benefit of $0.9 if there was no CESS. The CESS would provide an additional reward, leading to a total benefit to the business of $1.2.

We understand that this results from the nature of capex and the low risk that businesses are exposed to under the current framework. However, the example above demonstrates a strengthening of the incentive to under-spend capex allowances under the CESS. Given the practicalities of capex forecasting, we are concerned that this will provide a powerful incentive for businesses to defer efficient investment where it deviates from allowances or provide conservative forecasts in proposals which will be in customer prices irrespective of whether the capex ends up being used by the business.

We query whether this was IPART's intended outcome. In our view, the long-term interests of customers are best served when there is medium-low risk and reward attached to capex investment.

The inclusion of financing costs from under or over-spends as a separate line item in IPART's CESS model appears to double-count efficiencies or inefficiencies

IPART's CESS model records two separate line items as the total efficiency gain:

1. any capex under- or over-spends
2. any in-period financing benefit or loss accrued by the business.

For illustration, in Table 4-7, we assume that a business has a capex allowance of $1000 each year in a regulatory period but overspends by $100 in one of those years. IPART's CESS model shares benefits with customers equal to 80% of the total efficiency gain ($110.5).

Table 4-7: NPV financing benefit in IPART's CESS model

Year	2024-25	2025-26	2026-27	2027-28	2028-29	Total (NPV)
Capex allowance	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	
Actual capex	1,000.0	1,000.0	1,100.0	1.000.0	1,000.0	
Underspend	0.0	0.0	-100.0	0.0	0.0	
NPV financing benefit	0.0	0.0	-3.6	-3.5	-3.4	
Total efficiency gain	0.0	0.0	-103.6	-3.5	-3.4	110.5

Note: Discount rate is assumed to be 3.4%

However, by looking at the benefits that customers receive from a business under-spending $100 of capex, we can understand that this approach may double-count financing benefits. For instance, by under-spending $100 capex, customers no longer pay a 'return on' and 'return of' on the incremental $100 capex each year into perpetuity. The net present value of these cash flows discounted by the WACC is, by definition, the size of the incremental underspend, $100. This 'return of' contained in the $100, is the NPV financing benefit in IPART's CESS model. However, the model records the in-period portion of this as an additional efficiency benefit from underspending allowances.

We consider that the following adjustments to IPART's CESS model is required to achieve their stated policy outcome:

Table 4-8: Proposed adjustments to IPART's CESS model to not double count financing benefit

Year	2024-25	2025-26	2026-27	2027-28	2028-29	Formula
Capex allowance	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	
Actual capex	1,000.0	1,000.0	900.0	1,000.0	1,000.0	
Underspend	0.0	0.0	100.0	0.0	0.0	**a**
Total financing benefit	0.0	0.0	3.4	3.4	3.4	**b**
Discount factor (end of year)	1.1	1.1	1.1	1.0	1.0	**c**
Underspend	0.0	0.0	106.9	0.0	0.0	**d = a * c**
NPV financing benefit	0.0	0.0	3.6	3.5	3.4	**e**
Total efficiency gain	0.0	0.0	106.9	0.0	0.0	**= d ~~+ e~~**

Note: Discount rate is assumed to be 3.4%

Efficient trade-offs between opex and capex are most encouraged by an EBSS without a CESS

We understand that another objective of IPART's expenditure incentives is to create an equal incentive to pursue savings on opex and capex, or in effect, make efficient trade-offs between the two forms of expenditure. Our analysis suggests that businesses in fact have a closer incentive to

invest in either capex or opex when we use IPART's (adjusted) EBSS, but no CESS (after adjustment for the double-counting). Table 4-9 summarises the total benefit to a business resulting from a $5 saving in year 1 in opex compared to a similar saving in capex. Without incentive schemes, it demonstrates that the incentive to save on opex ($5) is much higher than the incentive to save on capex ($0.9). With both incentive schemes, the benefit saving opex is $0.3 and $1.1 for the capex saving. The incentives are closest when the EBSS is implemented without the CESS: $0.3 for the opex saving and a benefit of $0.9 for the capex saving.

Table 4-9: Incentives to find efficiencies with and without incentive schemes

Benefit of Saving $5 in Year 1	Without incentive schemes	With incentive schemes
Opex	5.0	0.3
Capex	0.9	1.1

Note: Discount rate is assumed to be 3.4%

Given this outcome, we consider it is appropriate that IPART implement an EBSS, but delays its CESS until this, amongst our other concerns, can be discussed further.

4.4 Details on certain implementation elements should be considered in price submissions

If IPART continues to pursue these expenditure incentives, we note that there are a range of implementation options that must also be considered. Utilities may plausibly incur overspends due to reasons outside of their control. For example, the Australian Bureau of Statistics (ABS) reports that in the year to June 2022, construction materials experienced price inflation of 17.3%[20] due to demand from the record Australian infrastructure spend as well as bottlenecks in supply chain logistics. In this case, it may be appropriate to provide for cost pass-throughs. It may also be appropriate that certain types of expenditure are exempt from the schemes. These may include investments subject to high risk of forecasting error such as growth servicing. The most appropriate approach regarding these implementation options will vary between utilities and on a case-by-case basis. We request that IPART allow businesses flexibility to propose their preferred approach on these implementation options in their price submissions.

4.5 Financial incentives on outcomes should encourage efficient performance

Encouraging utilities to seek out greater value for customers is a key theme of our reform agenda. Accordingly, we support our regulatory framework having a greater focus on customer

[20] Australian Bureau of Statistics (2022) Producer Price indexes, June 2022

engagement and outcomes. Public reporting of performance against these outcomes, measures and targets are important for businesses to be held accountable to their customers.

We also support introducing financial incentives for performance against them provided these outcomes, measures and targets are credible. Higher or lower revenue based on performance can promote positive behaviours if the change appropriately reflects the targeted change in behaviour. We support a flexible approach that allows us to deliver on the outcomes that customers tell us they want, with the timing for rewards and penalties with which they agree. IPART's proposal to delay payments until the end of the period dilutes the performance incentive[21] in exchange for greater bill stability. We believe IPART should empower customers to make this trade-off.

4.5.1 Not all outcomes are amenable to financial rewards and penalties

We welcome the changes to Principle 3 in IPART's grading rubric, reflecting that not all outcomes need to be tied to outcome delivery payments or penalties. For instance, where the ease of accessing financial assistance or affordability itself is an important outcome for customers it may be contradictory to then reward businesses for good performance as this would affect affordability. Similarly, outcomes which are not well defined by an objective standard or are highly uncertain due to certain environmental factors may not be appropriate.[22] We recognise that other factors will play a significant role, and we do not oppose implementing ODIs where there are manageable levels of uncertainty or control.

Reporting against these outcomes remain a means of incentivising performance by holding businesses publicly accountable to their customers. Like our view on IPART's grading incentives, we consider that reputational impacts from public reporting are equally important as financial incentives. This is especially the case in our context given our public ownership compared to England and Wales, from which the ODI scheme has been derived, and where ownership is private.

4.5.2 We wish to collaborate on the appropriate calibration of outcome delivery incentives

We expect that IPART will provide clear rules on how ODIs should be presented so that we can consider the proper trade-offs to discuss with our customers and in making our business plans. We are keen to collaborate with IPART in developing these rules.

In our view, the following elements are important in developing ODIs. When designed to include the relevant social costs and benefits, tying outcomes performance to small financial rewards and penalties will help focus the attention of utilities to delivering outcomes in the best interests of customers. In our view, the relevant social costs and benefits include customer benefit, typically

[21] If a business wishes to invest to improve performance on an outcome that customers value, the business will only be rewarded (and recover the additional costs of the investment) in the next period. This makes it such that the business' financeability becomes a disincentive to invest for customers' benefit.
[22] These are examples of outcomes that are not financially incentivised in the Ofwat framework. See Ofwat's PR19 final determinations for each utility's 'Outcomes performance commitment appendix', available at https://www.ofwat.gov.uk/regulated-companies/price-review/2019-price-review/final-determinations/.

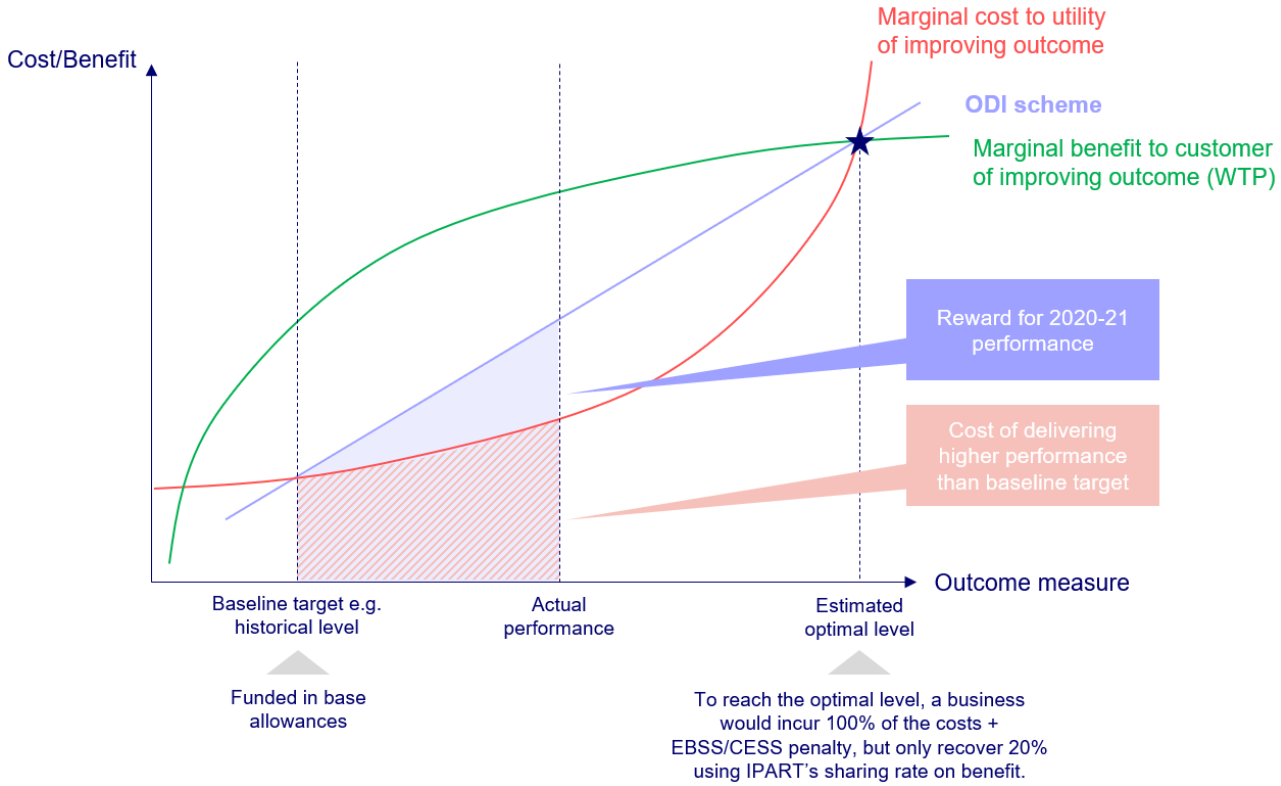
estimated using willingness to pay studies, the marginal or incremental cost of delivery, and any avoided or deferred costs.

To date, IPART have provided only a simple model of ODIs. As there is no reference to these costs and benefits aside from customer benefit, this model may not appropriately incentivise businesses to achieve the socially optimal performance level. For instance, with respect to the shadow price of leakage, IPART identifies the customer benefit of reduced leakage as the long-run marginal cost of water. Certainly, saving water through a reduction in leakage delays the need for supply augmentation that customers would otherwise pay but does not reflect:

- The costs of undertaking the activities necessary to reduce leakage further than is compensated through business' base allowances. Not accounting for these costs will *understate* the efficient level of performance[23].
- The penalty under IPART's proposed EBSS and CESS from the over-spend required to undertake the activities necessary to achieve this lower level of leakage. Not accounting for these penalties and rewards will *overstate* the efficient level of performance.

Accounting for the full social costs and benefits is aligned to economic theory, illustrated in Figure 4-1.

Figure 4-1: ODIs should be calibrated to account for all relevant costs and benefits



[23] Using gross benefits to reflect value of higher performance, rather than net benefits.

Assuming that for a given outcome measure, a baseline level of performance is funded in standard tariffs. This baseline performance may be set according to historical levels or by comparison to industry benchmarks. If the baseline target can be achieved at a lower cost than the ODI scheme specifies (pink shaded area in Figure 4-1), the utility is financially rewarded for their performance (shaded area between pink and purple line in Figure 4-1).

A stretching level is optimal where the marginal cost of providing that higher level is equal to the customer benefit of that outcome (star in Figure 4-1). However, under the proposed scheme, utilities are not incentivised to reach this optimal performance level: to achieve the optimal level, business would have to fund the full incremental costs of meeting this higher performance target, in addition to a penalty from overspending allowances and would only be able to recover 20% of these costs.

We acknowledge that, in practice, a perfectly continuous performance level and ODI is not feasible. This is because investments that businesses can make to improve performance are typically discrete. Nevertheless, we consider that accounting for the benefits *as well as* the costs at these discrete points will create a better incentive for businesses to maximise customer value than just accounting for the customer benefit.

5 Accountability

Key messages

- Accountability is a key principle of regulatory best practice and involves regulators taking responsibility for their decisions and actions.
- Under IPART's proposed 3Cs framework, water businesses are to be accountable for developing their price proposals, engaging with customers and ultimately, delivering the services and outcomes that customers want in an efficient manner, through a range of measures.
- While we support many of these measures and are committed to being accountable to our key stakeholders under IPART's proposed 3Cs framework, we believe that accountability needs to work ***both*** ways, with IPART and water businesses each being held accountable for their decisions and actions.
- IPART is proposing to assess and grade business' proposals, based on how well it meets the 3Cs framework and the 12 guiding principles. Although IPART has set out some objective criteria in its draft detailed assessment tool, any assessment or grading decision made by IPART will necessarily be a subjective one.
- We recommend introducing an independent review process to balance the increased subjectivity and risk posed by IPART's 3Cs framework and ensure there is accountability in IPART's decisions.

5.1 Accountability as a key principle of regulatory best practice

Accountability is a key principle in regulatory theory and practice, which involves regulators taking responsibility for their decisions and actions. It requires regulators to establish clearly defined decision-making processes, provide reasons for decisions, and have an effective review or appeals mechanism.

In our response to IPART's *Position Paper – Regulating Water Businesses* of October 2020, we reviewed a number of regulatory approaches across various sectors in Australia and overseas and found that accountability was consistently identified to be a core pillar of best practice regulation.[24]

As Frontier Economics noted in its report produced for WSAA:[25]

[24] Our literature review included the Organisation for Economic Cooperation and Development's (OECD) 'Best Practice Principles for Regulatory Policy ', the UK Better Regulation Executive's five principles of good regulation, the Council of Australian Government's 'Guide to Best Practice Regulation ', as well as papers by the Water Services Association of Australia (WSAA) and leading academics such as Professor Martin Cave.

[25] Frontier Economics (2014) *Improving economic regulation of urban water: a report prepared for the Water Services Association of Australia*, August, pp. 34-5.

> ‘Accountability is important because it makes regulators responsive to the public, heightens the sense of legitimacy, and reduces regulatory risks as the regulator is in most cases constrained from taking decisions that will undermine the financial viability of the business (Taylor & Ballance, 2000).’

5.2 We recommend introducing an independent review process to ensure accountability in IPART’s decisions made under the proposed 3Cs framework

Accountability is a key feature of IPART’s proposed 3Cs framework. Under the 3Cs framework, water businesses are to be accountable for developing their price proposals, engaging with customers and, ultimately, delivering the services and outcomes that customers want in an efficient manner. Measures such as early engagement, self-assessment and grading, a range of ex-post financial incentive schemes and annual performance reporting on customer outcomes have all been designed to ensure that businesses remain accountable to their customers, the broader public, IPART and Government.

While we are committed to being accountable to our key stakeholders under IPART’s proposed 3Cs framework, we believe that accountability needs to work *both* ways, with the regulator and water businesses each being held to account for their decisions and actions.

Significantly, IPART is proposing to assess and grade business’ proposals, based on how well it meets the 3Cs framework and the 12 guiding principles. As IPART itself observes in its Draft Report:

> *‘Our assessment is not intended to be a simple weighted average of the ‘score’ for each of the 12 principles. Scoring each principle separately would require IPART to make value judgements about whether performance in one category is more or less important than another, when these trade-offs should be driven by customers (…) Our review will highlight the key areas that informed our overall assessment.’*

In fact, we plan to utilise the customer engagement process to navigate the various contending principles and help prioritise our focus principles which will form the basis of our next price submission as this will be demonstrable evidence that our submission and associated business plan are focused where our customers want us to focus.

However, the fact remains that any assessment or grading decision made by IPART under the 3Cs framework is necessarily a subjective one, despite reference to relatively objective criteria in its detailed assessment tool. This decision has significant implications for a water business, from the ex-ante financial and reputational incentives it faces to whether it can propose different forms of price control. Businesses further appear to have no options for recourse where it disagrees with IPART’s grading decision on grounds other than issues of law.

As such, we consider it to be necessary to introduce a review process by an independent third party under the 3Cs framework to ensure there is transparency and accountability behind IPART’s

decisions. This would help balance the increased subjectivity and risk posed by IPART's 3Cs framework and ensure accountability in IPART's decisions. It would further be in line with best practice regulation in many jurisdictions. We note that in Victoria utilities have access to both an independent panel for review of ESC's grading of proposals and merits review for the ESC's decisions. Victoria's PREMO framework provides for review of the ESC's decisions (including proposal grading) by an independent panel. A utility can appeal a decision within 21 days, a panel of review is formed within 7, and a decision reached within 30 days. Similarly, in the UK, utilities can access full merits review for decisions made by Ofwat and Ofgem through the Competition Appeal Tribunal. Most recently, three water utilities successfully used this process in Price Review 2019.

6 Implementation and the quantum of change

Key messages

- IPART has proposed a wide range of reforms as part of its 3Cs framework, which are significant and far-reaching in scope.
- We consider the breadth and complexity of IPART's proposed reforms to be too ambitious to implement properly in one tranche and believe it should be staggered over two determination periods.

6.1 IPART's proposed reforms are significant and far-reaching in scope

IPART has proposed a wide range of reforms as part of its 3Cs framework. These reforms, which are significant and far-reaching in scope, include:

- An 'early engagement' process, where utilities can engage with IPART one to two years before submitting a pricing proposal on how they are responding to the proposed 3Cs framework (with the process becoming optional over time for Advanced and Leading utilities),
- Additional requirements as to customers, costs and credibility, such as the development of a published customer engagement strategy, proposed customer outcomes with performance targets, and a published and approved cost efficiency strategy with a nominated annual 'efficiency factor' across opex and capex,
- A self-assessment exercise, under which utilities will consider how well their price proposal meets IPART's 3Cs framework and 12 guiding principles, and grade themselves as Standard, Advanced or Leading,
- Changes to the expenditure review process, such as:
    - adopting a base-step-trend approach to opex and potentially moving towards greater use of cost benchmarking
    - developing predictive modelling for longer-term capex needs,
- Simplifications to IPART's building block model, such as the review of RAB categories and the proposal of new asset lives and changes to asset disposal and working capital policies, which will initially involve extensive work and resourcing to implement,
- Annual reporting of performance against customer outcomes
- Development of a 'better water regulation handbook' in collaboration with IPART.

For Advanced and Leading utilities, there are still additional reforms also requiring substantial work. These include:

- Options to develop and propose different forms of price control and potentially differentiated pricing for specific customers
- Designing and operationalising three new incentive schemes – one each for opex, capex, and customer outcomes delivery – all before the time the next determination period is to take effect in 2025.

As a whole package, we believe that the breadth and complexity of IPART's proposed reforms are too ambitious in scope and pose significant challenges to implement in one tranche, especially given the limited amount of time until the next determination. Any business' capacity to absorb and implement change is limited and taking on more change at once than we can implement properly is not likely to benefit customers' interests.

IPART had initially canvassed implementation of these reforms to begin in May 2022 – five months before the final report expected in October 2022. Now, however, implementation is likely to occur many months later.

As a result, by the time IPART publishes its final report, we will be less than two years away from submitting our next pricing proposal. Many of the new inputs needed, such as proposing customer outcomes with performance targets; designing customer outcome delivery incentives; changes to the expenditure review process and reviewing RAB categories to propose new asset lives have lead times of at least two years.

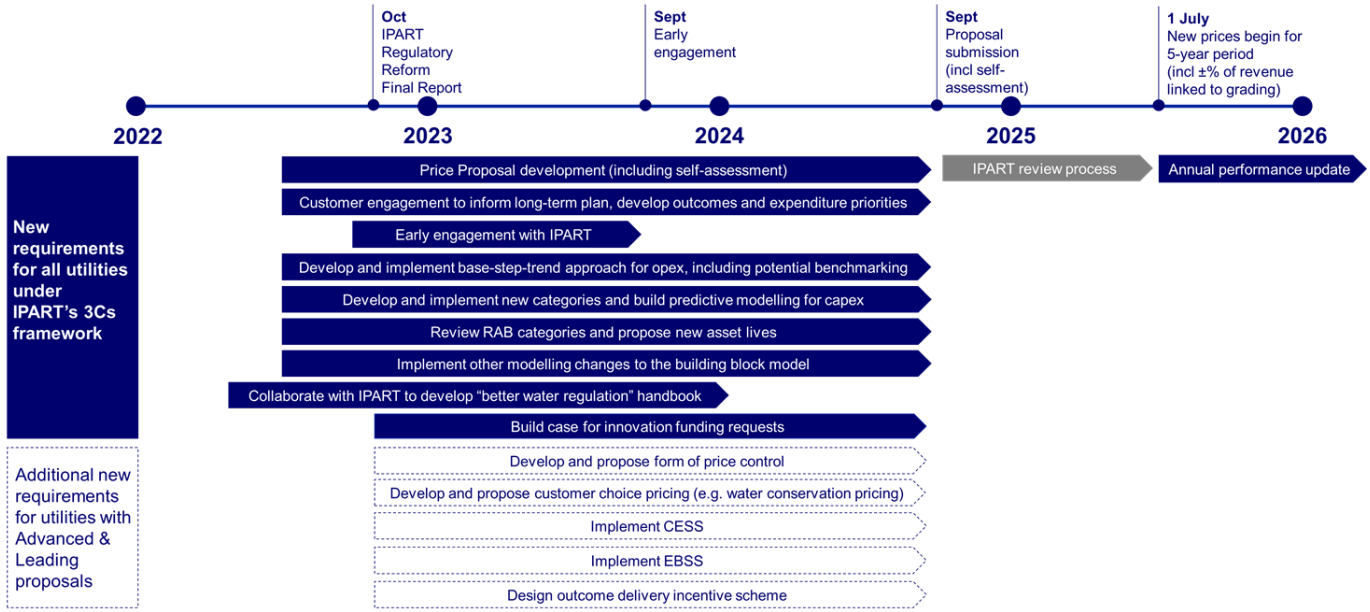
6.2 A targeted approach to implementation phased over two determination periods is required

Consequently, we continue to advocate strongly for a targeted approach to prioritising and implementing those reforms that will be the most beneficial for consumers, whilst allowing utilities adequate time for learning, adapting and implementing changes properly.

Specifically, this would involve staggering the implementation of the reforms across two determination periods.

- The first period could see the introduction of the grading system, customer outcomes, changes to the expenditure review process, outcomes delivery incentives, new determination and review periods, an early review of the RAB to propose new asset lives, and water conservation pricing.
- The second period could see the implementation of a CESS and a more comprehensive review of the RAB and asset lives.

Figure 6-1: IPART has proposed an ambitious and challenging reform programme



7 Other changes and modelling simplifications

Key messages

- In general, we are supportive of the 12 guiding principles under IPART's proposed 3Cs framework. We note that some of the elements in the 12 principles require further clarification and are challenging to implement. We will support IPART in the development of the 'better water regulation handbook' to ensure that there is clear and meaningful guidance and expectations under the 3Cs framework.
- We support elements of IPART's proposed changes to the expenditure review. In principle, we support a transition to base-step-trend but see value in a flexible approach from IPART in the first round of reviews. We request continued engagement with IPART to understand whether the NSW water sector is appropriate to realise the benefits of benchmarking and predictive capex modelling that is observed in other jurisdictions.
- We support elements of IPART's modelling simplifications. Specifically, we support IPART's proposals for reviewing businesses' proposed asset lives. However, we consider that IPART's review of proposed asset lives should be conducted at an appropriate level of scrutiny, especially for the upcoming price reviews. We also request IPART consider a tiered sharing rule for non-regulatory income. A one size fit approach will mean a variety of projects/services are no longer viable and/or customers are not provided a fair proportion of benefits.

7.1 We seek clarification on the application of the 3Cs framework and its 12 guiding principles

We generally support the proposed 3Cs framework and its 12 guiding principles. However, we request some clarification regarding the application of the framework and the expectations IPART has outlined for the 12 principles in its draft detailed assessment tool. Additionally, although we support what the 12 principles are designed to achieve, there will be challenges with implementing some of these changes as discussed in Chapter 6.

In parallel with this submission, we note that IPART is engaging with the industry to develop a 'better water regulation handbook' and to refine its draft detailed assessment tool to provide additional guidance for water businesses' proposals under the 3Cs framework. We look forward to clarifications and discussing our concerns in these workshops and working closely with IPART and other stakeholders to ensure that there is clear and meaningful guidance and expectations under IPART's proposed 3Cs framework.

7.1.1 Application of IPART's proposed 3Cs framework

Under the 3Cs framework, IPART has proposed that it will assess water business' proposals as Leading, Advanced, Standard or Sub-standard, based on how well the business' proposal meets the 12 guiding principles and the 'focus' principles identified by the business consistent with customer preferences. As additional guidance, IPART has set out its expectations for each grade in its draft detailed assessment tool.

It is unclear, however, from IPART's Draft Report how IPART's principles and proposed expectations for each grade will operate and interact with each other. We have concerns with how the 12 principles will interact with each other and which principle IPART would apply, in the event of a conflict between principles. We request further clarification on whether IPART's proposed expectations will operate cumulatively (that is, a utility must first meet all expectations in Standard to progress to an Advanced proposal, and similarly must meet all expectations in Standard and Advanced in order to progress to a Leading proposal). We also seek clarification on how IPART might assess a business against a particular principle, where that business meets a mix of Standard, Advanced and/or Leading criteria in that principle.

Another important consideration is that it will be naturally the case that the relevance and weight of the 12 principles will change over time for a range of reasons, including the maturity of the utility, circumstances in the market, and the perspective of various stakeholders. Hence, the evident benefit of an independent review mechanism for keeping both utility and regulator accountable for their assessment of focus principles, supporting evidence and grading.

As discussed in Section 5.2, any assessment or grading decision made by IPART under the 3Cs framework is necessarily a subjective one, despite reference to relatively objective criteria in its detailed assessment tool. This decision has significant implications for a water business, from the ex-ante financial and reputational incentives it faces to whether it can propose different forms of price control. We welcome clarification and discussion of these issues with IPART in the upcoming 'better water regulation handbook' workshops to help mitigate the risk of subjectivity in IPART's decisions.

7.1.2 Customer principles

As discussed earlier, we are pleased to see that the 3Cs framework puts customers at the centre. It encourages utilities to meaningfully engage with customers to understand their preferences, both in the short and long-term, and use these insights to make key business decisions.

We make some observations on each of the Customer principles below.

Customer centricity

There is substantial expense in conducting customer engagement activities and the expenditure needs to be commensurate with the degree to which the insights gained materially impact customers and the business. We are committed to engage with customers on matters that are of interest to them, using methodologies that will provide meaningful insights and outcomes. However, incorporating customers' preferences into the planning and delivery of services has its

challenges. For instance, customer preferences are not static. Customer preferences and expectations will change with time and will be influenced by external factors. In drought, customers are far more concerned about water security than they are when dams are full. It is challenging to meaningfully reflect these changing views in a timely manner.

Customer engagement

In our experience, customers are interested in outcomes rather than the process needed to achieve those outcomes (i.e., system performance is the outcome whereas asset management is the process). There will be occasions where customers may only wish to be informed or consulted on matters. But on issues where customers interests indicate that co-designing is appropriate, this may require deep engagement with a small representative group such as our CCRG. We will refer to best practice, such as the International Association for Public Participation to ensure our approach is valid and appropriate. However, one of the key challenges undertaking meaningful customer engagement is omission bias. Omission bias refers to the challenge of engaging with customers about matters that are not of interest to them and can provide invalid results.

Customer outcomes

We welcome this principle as driving better outcomes for customers and greater transparency. However, we believe that customer value targets should demonstrate a step change in improved outcomes only when customers believe that a step change is required. Some of the key challenges in achieving this principle include:

- Lost in translation: customer engagement requires translation of our strategies and plans into language that makes sense to customers. It then requires the translation of customer insights back into the strategies and plans. This is not an easy undertaking and needs to be done in a transparent manner.
- Costs at high levels of strategy/planning: the time when customers have the greatest opportunity to shaping a project outcome is also the same time when costs are high level and subject to change as planning progresses. This makes it challenging to meaningfully weigh up costs, benefits and consider key opportunities.

Community

We are seeking clarity from IPART on their differentiation between customer and community. We understand community to mean a subgroup of our customers organised around specific issues of interest or geography. We recognise that specific engagement may be required on key matters that are of greater interest to these groups (i.e., a local waterway project or support for a specific vulnerable group). We also acknowledge that some outcomes are important to customers and communities, so that we need to be mindful of the interests of both in our decision-making.

Environment

This principle focuses on environmental objectives and the appropriate incorporation of climate change projections to continue achieving those objectives in the future. The types of climate-change forecasting models that are appropriate under this principle are those that focus on our

environmental performance (i.e., impact of climate change on sewer overflows or carbon footprint from operations).

We will also need to incorporate climate projections in managing risk to assets and services. This includes inflow forecasting to inform decisions around timing and volume of additional climate independent supply, as well as decisions to build and adapt assets to the changing climate (i.e., changing flood levels, increasing frequency or magnitude of bushfires or wet weather events). These types of climate adaptations appear to be better reflected in principle 8, 'balancing long-term risks'. We suggest that the dot point that sits under principle 8 ('outlines approach to manage long-term risks, including climate change') could be expanded to provide greater clarity of this requirement.

We note that the environmental benefit from an investment can be challenging to measure and may take years of data collection to be able to demonstrate. The time frame required is unlikely to align with IPART pricing and audit periods, which will seek demonstration whether outcomes from these investments have been achieved. Other external factors, including extreme weather, can impact the achievement of the desired outcomes.

Choices of services

We are engaging with customers on their willingness to pay to achieve net zero carbon emissions. Mass market tariff options will be considered. However, there are significant challenges in budgeting for and achieving outcomes with this type of mechanism.

7.1.3 Cost principles

Delivering outcomes and the long-run needs of customers requires us to deliver robust and efficient costs on our programs so that bills are affordable while needs are met. We welcome IPART's inclusion of cost principles to support this objective but have concerns about the implementation and incentives of some of these cost principles.

We provide the following feedback on the four Cost principles.

Robust Costs

We seek clarity on the evidentiary requirements of capex/opex optimisation and recommend codifying the classification of costs by asset class so that utilities can prepare meaningful quantitative evidence that streamlines grading and delivers meaningful insights. We have received feedback that customers tend to be interested in outcomes rather than engagement and are concerned that terminology in the leading requirements such as 'maximises customer value' would be best demonstrated through meeting outcomes rather than costly and time-consuming engagement on issues such as expenditure performance targets. For example, we have found that most customers are concerned with the reliability of supply provided by our capex projects.

Good modelling is central to robust costs, but the current requirements don't reflect our current capex/opex journey. While we agree with base-step trend modelling and aspire for best practice greenfield capex projections, there is a quantum of change for these projects and practical barriers

to implementation. We discussed this and IPART's other changes to streamline the expenditure review process in more detail in Section 7.2.

Balancing risk and long-term performance

We agree that managing risk appetites is important when making investment and asset management decisions. We agree with the principles of prudent investment but seek further clarity surrounding the definitions within this principle relating to risk profiles and exhaustive views on risk management. Phrases such as 'optimising the balance of risk' and 'demonstrates all cost drivers' takes the view that risk management is an optimisation problem rather than a trade-off. We ask IPART to clarify the expectations of utilities to meet these requirements, such as the 'robust costs' principle. There is significant work required to build the modelling capabilities to deliver the outcomes.

Commitment to improve value

We are committed to continuous improvement, and currently implement internal procedures to deliver efficiencies for the purpose of price and expenditure reviews. Under the proposed framework we would publish our cost and efficiency strategy featuring efficiency factors and annual performance reviews that yields step-changes in cost efficiencies.

We seek clarity surrounding:

1. What this efficiency factor would look like and its evidentiary requirements?
2. What a Leading cost efficiency strategy involves?
3. What industry benchmarking would be comparable to Sydney Water's position in the NSW water utility sector?

Equitable and efficient cost recovery

We look forward to further integrating best practice tariff proposals that fairly represent the efficient costs of delivering our essential services. We welcome IPART's inclusion of climate modelling requirements on cost recovery but seek clarity surrounding the customer value of long run marginal cost estimates at a catchment level. In particular, we seek clarity on whether IPART's expectations as to LRMC modelling are for water and/or wastewater and query the usefulness of LRMC estimates at a more granular catchment-level for wastewater.

7.1.4 Credibility principles

In general, we support IPART's proposed Credibility principles and consider the associated expectations for Standard, Advanced and Leading utilities to be reasonable and sensible.

7.2 Changes to the expenditure review process

7.2.1 We support a flexible transition to a base-step-trend approach to assessing proposed opex

IPART has proposed moving to a BST approach for setting opex allowances.[26] BST analysis is an important change in improving the way expenditure reviews are undertaken in our regulatory framework. We recognise that BST provides a means of effectively communicating the drivers of changing cost requirements for regulators and customers and as a result has been adopted by regulators such as the AER and ESC.

While we understand that there are design choices to be made within a general BST approach, we consider that IPART should maintain a simple methodology in the first round of reviews. To date, IPART's guidance on BST provides limited indication over how BST should be applied. For instance, aside from the ESC's high-level cost categories, what depth of analysis is appropriate to underpin that proposal and whether there are types of opex that should be excluded. Given that the NSW water sector is in the process of transitioning to a BST approach, it is important that the design of IPART's mechanism adequately considers the ability of businesses make this transition.

Therefore, IPART's mechanism should allow for discretion for businesses to determine some of these design choices on a case-by-case basis. Doing so will ensure that the BST approach of each business is fit for purpose with respect to the nature of their operations and expenditure. In contrast, a prescriptive approach to BST may be useful in other jurisdictions where there is more homogeneity between the regulated businesses, or where BST is well established.[27] This is less the case in the NSW water sector. As a result, we consider it may be useful for IPART to allow businesses to use the ESC's or other opex categories as appropriate. We look forward to engaging IPART on our proposed approach to BST as part of our price review process.

7.2.2 Benchmarking and predictive models should be used with caution

IPART considers that there is value in streamlining review processes by making greater use of benchmarking and predictive models of long-term capex. As a first step, IPART has proposed to adopt the cost categories applied by the ESC in Victoria and to work with utilities to develop a range of predictive capex modelling tools.[28] These approaches can help measure and compare the financial needs and service performance of different water utilities. This can assist utilities in identifying opportunities for business improvement and efficiency gains. It can also provide regulators and policy makers with data to inform decisions.

---

[26] IPART (2022), *Draft Water Regulatory Framework: Technical Paper*, p. 45.
[27] We consider the adoption of a BST approach represents a significant shift that impacts many aspects of regulated businesses. It is a highly involved process that is likely to require material changes to the systems, processes and culture that we currently have in place. In our view, an inflexible approach to BST may not be suitable during such a transition as there will be a greater risk of error.
[28] IPART (2022), *Draft Framework: Technical Paper*, p. 45.

Benchmarking should not be used as a deterministic tool to make important regulatory decisions

Robust benchmarking requires a thorough dataset from a sufficiently large number of businesses that are relatively comparable. As explained in our response to IPART's Discussion Paper 3,[29] without sufficiently similar comparators, it is not possible to accurately control for the effect of certain characteristics (such as size of networks, climate, geographic location, regulatory requirements, labour costs, etc.) in any benchmarking exercise. This will lead to a high probability that the benchmarking results are inaccurate and/or misleading.

We observe this lack of appropriate comparators for benchmarking in the Australian water sector. There are a small number of heterogeneous water businesses regulated by IPART, limiting the usefulness of benchmarking within NSW. We also caution against IPART's proposal to use cross-jurisdictional benchmarks to overcome this since there is potentially an equally problematic heterogeneity between Australia-wide water utilities. Reiterating what the Australian Productivity Commission has noted on the use of benchmarking in the energy sector:[30]

> … it is equally important to be clear about how to interpret benchmarking results for policy purposes because the misuse of good technical analysis can result in adverse outcomes for consumers and businesses. In particular, comparing the costs between businesses in different jurisdictions without accounting for factors outside the control of the business could provide misleading indicators of managerial efficiency. If used in incentive regulation, this could lead to underinvestment or unwarranted transfers from consumers to the business.

Therefore, while we recognise IPART's proposal is well-intentioned, it is not helpful to rely on benchmarking high-level costs for future streamlining of the review process. We acknowledge there may be potential to benchmark more specific categories of expenditure such as individual business cases. However, this is unlikely to enable IPART to develop the standardised data and benchmarking information that IPART anticipates will enable benchmarking high-level cost categories in future.

We support collaborating with IPART to develop predictive models for replacement capex

Predictive models for replacement capex have been used by the AER to assess electricity distributors' forecast replacement expenditure for future regulatory periods since 2011. This model has undergone consistent refinements since, with detailed guidance describing its updated application in each service provider's price reviews. In the absence of similarly detailed guidance on the type of renewals modelling IPART is considering, we provide some context and general

[29] Sydney Water (2021) *Regulating water businesses, Response to Discussion Paper 3 Encouraging Innovation*, p. 33.
[30] Australian Productivity Commission (2013) Electricity Network Regulatory Frameworks: Productivity Commission Inquiry Report Volume 1, pp. 169-175.

observations for the development of such models in the NSW water sector and highlight the time that will be required to do so.

We support a process which allows for:

- Adequate categorisation of assets within asset classes, to account for the many factors which impact useful lives.[31]
- Adequate consideration of costs, taking account of a sufficient range of factors in the renewing assets' context.[32]
- A reasonable period for model development, testing and review.

We have considered these types of tools in the past and would be happy to discuss our experiences with IPART and the water sector.

We do not see value in developing predictive models for greenfield growth

We are required to service growth. However, doing so is costly and is significantly affected by spatial differences and timing uncertainties. For instance, as discussed in our 2020 Price Review, growth costs are uniquely location specific. The reality of the integrated system we operate requires us to consider the capacity, capability and configuration of (and distance from) the existing system and assets individually for each growth centre. We illustrate a simple example of this in Figure 7-1. This makes modelling costs unique to the specific context of that growth and makes predictive modelling several years in advance particularly challenging.

---

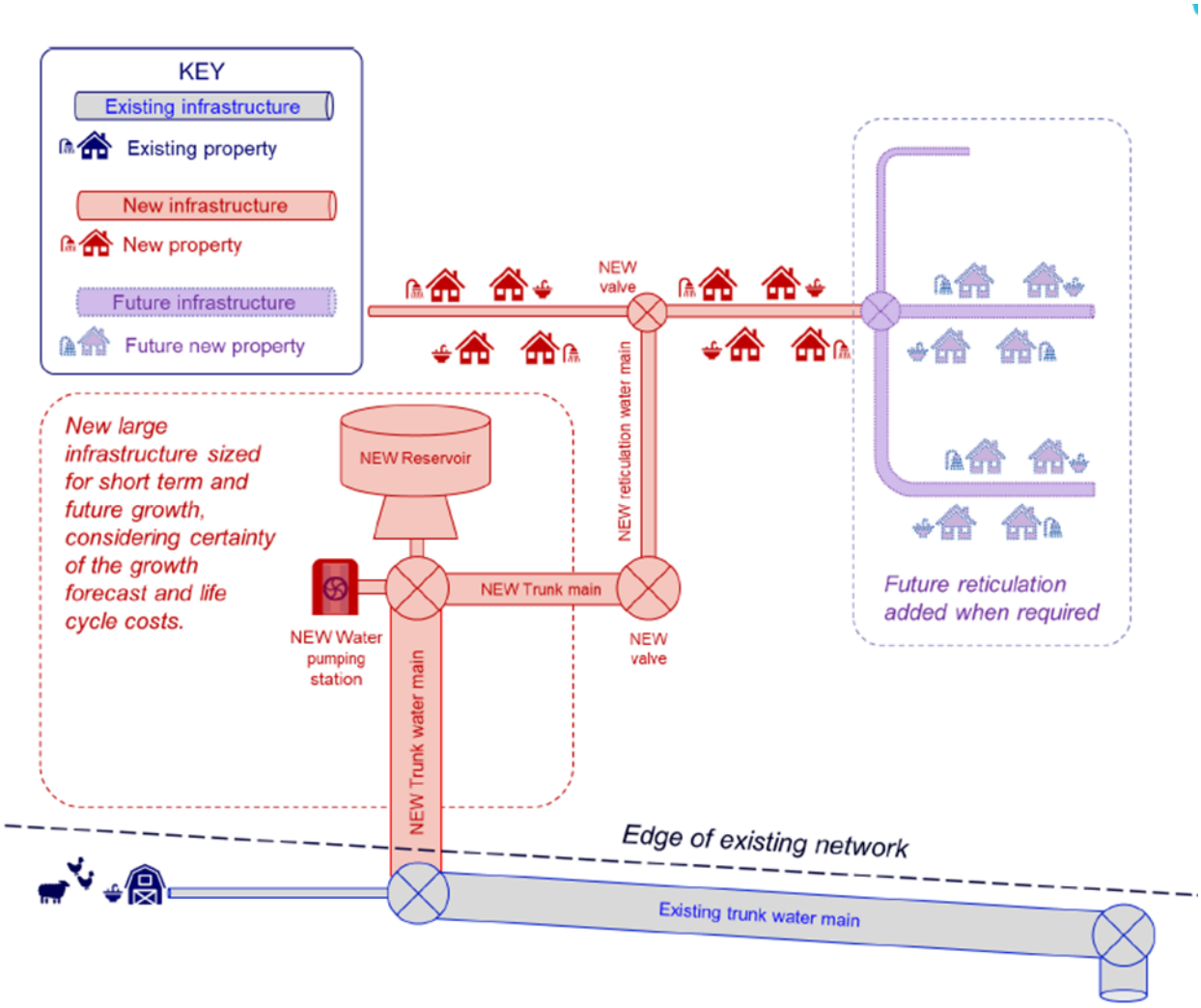
[31] These models tend to be relevant for higher volume, lower unit cost renewals. As such, an obvious application for these models in water and wastewater may be small diameter network pipe assets.

We note however that it is not possible to assume homogeneity for all these assets. Numerous factors contribute to their lifetimes and performance even if they are notionally made of the same material. For instance, the quality of the iron used in such pipes has now been found to have changed over time, so that 'younger' assets are observed to fail before older ones. Furthermore, our asset base comprises an amalgamation of legacy assets from many different original asset owners (disparate local councils), with different budgets, standards, design and installation methods and rigour in recording. Alongside other variables such as ground conditions and how an asset is operated within a system (eg if the asset is part of a more critical process which requires it to not be operated on a 'run to fail' basis), these are all factors which need to be considered in any robust replacement capex modelling.

Acquiring the relevant information on these factors across entire asset classes in our asset base will be a complex undertaking. While we note that such an exercise would take time, we are open to exploring the possibilities in the medium-term.

[32] It is important that the unit cost estimates themselves account for a range of factors. We find that a factor which is often overlooked is where the asset is being renewed. For example, the complexity, time, and therefore, cost of renewing pipe assets is heavily influenced by the existence of other services (eg gas, electricity, telecommunications) in close proximity. Similarly, the impact to major roads can significantly impact costs due to the restrictions put in place by Councils or Roads and Maritime Services. Furthermore, recent changes in construction costs highlight the requirement that any robust predictive capex modelling account for trends in input costs.

Figure 7-1: The exercise of judgment is required in servicing growth



Prior to 2018 land was released incrementally in successive waves from developed areas outwards. This made it easier for a managed expansion of a system and to plan sizing and location of assets for future assets. The current approach can lead to patchwork development. As it would be inefficient to service these one at a time, judgement is required about future growth when putting in place infrastructure for the long term. These decisions cannot be readily built into a model.

Relying on predictive models where there are such significant cost uncertainties comes at a significant risk to customer value and businesses. Even with the existing review process, our experience has been that changes in circumstances and errors in forecasting have resulted in difficult prioritisations between planned renewals and delivery of growth. The protection of ex-post capex review has been important in allowing us to still deliver the necessary services despite capex overruns in-period. We discuss this in more detail in Section 7.2.3.

Therefore, while we support IPART's ambition to develop systems that elicit clearer data and information to assist timely regulatory decisions, we do not consider it is appropriate to do so using predictive models for growth, particularly growth in greenfield areas.

An alternative approach to relying on benchmarking and predictive models is to engage more closely with our governance and internal efficiency processes

A review of a business' systems and processes can yield additional confidence that expenditure proposals are justified. We understand that in Discussion Paper 3, IPART proposed to split out a systems and processes review from the expenditure review. We supported this change as a focus on the former would assist in moving towards a lighter touch form of regulation.

In its Draft Report, IPART proposes to make systems and process reviews a less prominent feature of its framework. IPART intends to conduct a systems and processes review in advance of pricing reviews for Standard businesses, while relying on an 'outcomes focused' review for Advanced and Leading businesses. To the extent that this outcomes-focused review relies on benchmarking and predictive modelling or a review of individual expenditure line items, we query whether there may be greater value reviewing business' systems and processes instead. Understanding whether businesses undertake appropriate decision-making processes to decide whether to spend, and if so, how much to spend, could be more effective at inferring efficient costs than immature benchmarking or predictive capex models, or more efficient than assessing individual expenditure programs.

7.2.3 Historical capex reviews are an important aspect of our regulatory framework

IPART's framework currently allows a re-assessment of historical capex ('ex-post') to determine whether the expenditure was prudent and efficient. This feature minimises the risk that businesses need to invest different levels of capex to what was initially determined. This is important as our operating environment, and therefore the capex required to meet our compliance requirements, can change drastically in short periods of time due to changes in environmental, weather and economic conditions.

This has clear benefits for both customers and businesses. For instance, where projects are deferred or are no longer required, the ex-post review ensures that the capex is not included in the RAB and customers do not pay for it. Conversely, if businesses are required to invest above what was initially determined to meet greater demands on the system, businesses will never recover this incremental capex without ex-post review. This provides a perverse incentive to delay investment until the next determination. The promise of cost recovery for efficient capex on ex-post review avoids this issue.

IPART proposes to only review historic capex by exception. We query the intent given the material benefits of this aspect of the framework. One of IPART's reasons is that it rarely makes significant cuts in ex-post capex reviews since it is difficult to prove that costs were inefficient in retrospect.[33] However, it is even more difficult to prove that costs **will be** efficient ex-ante, yet this is what is

[33] IPART (2022), *Draft Framework: Technical Paper*, p. 47.

used to determine our entire revenue and expenditure allowances. The ex-post review is a mechanism that improves the accuracy of these ex-ante decisions that must be made for determining prices in-period. We consider this is an additional protection for customers and businesses in the context of uncertainty.

Furthermore, we request that IPART consider greater in-period engagement on major changes to capex. This provides greater certainty to businesses, giving them greater confidence that they can invest to meet customer needs. It would also spread the time and effort of ex-post capex reviews over longer periods of time, reducing regulatory burden during price reviews. Our experience is that this would be particularly relevant in the context of servicing growth. As discussed in Section 7.2.2, we have little control over land release by Government. If land release means accelerated growth that utilities have to service, we query whether it is appropriate that the utility should wear the greater financing costs of that early growth or the interim uncertainty that IPART may not allow cost recovery in future periods.

7.2.4 Utilities may require some time to review and build evidence to support proposed asset lives

IPART has proposed that the RAB asset categories be consolidated into two categories per service: a RAB for depreciating assets and a RAB for non-depreciating assets. In addition, IPART will no longer calculate remaining asset lives. For depreciating assets, the onus is now on the business to propose a remaining life for existing assets, and to propose the expected life of capex for each year. The proposed lives will be subject to IPART review.

IPART have also provided two examples of how businesses could determine appropriate asset lives: either by reference to their Fixed Asset Register (FAR) or by maintaining a detailed multiple asset-category RAB (similar to the status quo).

We are open to IPART's proposal, and in particular support the option of maintaining the status quo approach. We will investigate calculating depreciation with reference to our FAR as this approach has potential to provide a more accurate allowance over the longer term. However, implementation of this approach may take some time as the changes raise some implementation questions, for example:

- Which internal categories should a business adopt in calculating the weighted average asset life?
- What level of supporting evidence will be required to justify the asset life?

Moving to the FAR approach will require us to update our internal systems for different asset categories and to assess the suitability of using existing asset lives in our Fixed Asset Register (FAR) to calculate regulatory lives. In addition to that, it may take time to ascertain and collect sufficient evidence to support the proposed asset remaining lives in the FAR.

Therefore, to derive our weighted asset remaining lives, we request the flexibility of having the option of using the current multiple asset-category RAB for the next regulatory period and then transitioning eventually in the following regulatory period to the FAR approach when we are able to properly implement it.

We note that one of the overarching goals of this framework review is to reduce the administrative complexity of price reviews. The stated goal of this change is to reduce modelling complexity. We therefore consider that IPART's review of a business' proposed asset lives should be consistent with this objective and be conducted at an appropriate level of scrutiny, especially for the upcoming price reviews where some of these implementation questions may not be completely addressed. Given that this is a new requirement, it may take some time for businesses to appropriately consider and issues and to build a base of evidence that stands up to potential scrutiny that IPART may apply.

7.3 The 3Cs framework will achieve the objectives of the discretionary expenditure framework

We agree that the requirements under the discretionary expenditure framework are onerous. Aside from a small set of discrete projects, the framework does not genuinely incentivise businesses to explore service outcomes above mandatory levels.

In our view, a broader risk and reward framework, such as IPART's 3Cs framework, replaces the need for the discretionary expenditure framework and its complexities. As we understand it, the objective of the discretionary expenditure framework is to deliver customer preferences above mandatory levels. This objective is integrated into the broader assessments and planning that a business is expected to conduct as part of the development of its entire proposal in a proper risk and reward framework. While we have some concerns with IPART's 3Cs approach, we consider it broadly achieves this outcome.

In removing the discretionary expenditure framework, we request that IPART simply roll the discretionary expenditure RABs into our broader wastewater and stormwater RABs. Since these discretionary expenditure RABs already feed into the NRR and prices of our broader customer base, we do not see any issue with doing so from a customer bill perspective.

7.4 We support a default 42:58 sharing ratio on net proceeds for asset disposals

We support elements of IPART's proposal. Specifically:

- We support sharing on proceeds net of efficient asset selling, Capital Gains Tax (CGT) and rehabilitation costs.
- We are open to a universal 42:58 sharing rule.
- We support the proposed criteria to request an exception to the default rule.
- We support continuing to not adjust the RAB for routine write-offs and write-downs.

We consider this satisfies the need to achieve simplicity, but also provides appropriate incentives for the business to dispose of assets efficiently.

7.4.1 Net proceeds: an adjustment for Capital Gains Tax provides a better incentive for utilities to dispose of assets efficiently

IPART proposes to adopt a sharing ratio on the proceeds from all asset sales net of efficient asset selling, Capital Gains Tax (CGT) and remediation costs. We welcome this change for CGT. Sydney Water already capitalises efficient asset selling and remediation costs. Accounting for CGT as well provides a better incentive for businesses to dispose of assets efficiently and is broadly consistent with our proposal to IPART in their 2017 review of asset disposals.

We also understand this proposal on net proceeds achieves simplicity at a small cost to precision. In theory, efficient asset selling, CGT and remediation costs should be included in our regulated opex allowance. Instead, IPART's proposal for these costs (and our current approach for efficient sales and remediation costs) is that they are compensated through a smaller deduction to the RAB. For businesses, this is essentially providing a capex allowance for these opex line items. This means that businesses would recover these costs over many determination periods, potentially affecting financeability. Given that these costs are generally relatively small, we do not oppose recovering these costs through RAB deductions net of these costs.

We consider IPART's proposal to consider exceptions to this default rule provides adequate flexibility to propose an alternative treatment should the disposal of certain assets create a financeability issue.

7.4.2 Sharing ratio: we support a 42:58 sharing rule, noting that any universal sharing rule will trade efficiency for simplicity

We do not agree that the distinction between pre- and post-Line in the Sand (LIS) assets has an arbitrary impact on incentives.[34] We consider the correct incentive is given by reducing the RAB by the value that disposed assets occupy in the RAB. For post-LIS assets, this is 100% of their historic cost (adjusted for indexation and any regulatory depreciation). For pre-LIS assets:

- That were surplus pre-LIS, this is 0% of their Depreciated Optimised Replacement Cost (DORC) in the financial year 2000; and
- That were not surplus pre-LIS, this is 42% of their DORC in the financial year 2000 (adjusted for indexation and any regulatory depreciation).

This is the rule under the 2018 asset disposals policy. Under IPART's proposed rule utilities could experience windfall gains for disposing post-LIS assets and windfall losses for disposing pre-LIS assets (whether operational at the LIS or not), affecting their incentives to dispose assets efficiently.

Nevertheless, we understand that IPART wishes to reduce the regulatory effort involved with asset disposals. Given this, we support a universal sharing ratio, but request that IPART adopt 42:58 instead of 50:50. A 42:58 ratio achieves the simplicity of a 50:50 sharing rule but is more

[34] IPART (2022) *Draft Water Regulatory Framework: Technical Paper*, p. 66.

consistent with economic principles since it is closer to the value that most of our disposing assets occupy in the RAB. So long as IPART adopts this adjustment to their proposal, we do not oppose:

- Removing the distinction between pre- and post-LIS assets. Nevertheless, we note that this distinction has only a small information requirement on both IPART and Sydney Water.
- Removing the distinction between pre-LIS surplus and non-surplus assets. We note that most of the regulatory effort relating to asset disposals results because of this distinction (having to determine whether there is sufficient evidence on whether disposed land was surplus, ie non-operational, at the LIS point in time).

7.4.3 We support IPART's approach to considering exceptions to the default rule

IPART's willingness to consider exceptions to the default rule where there are reasons for doing so and where there is a material impact on prices provides sufficient flexibility in the case that this default rule significantly affects our incentive to dispose of specific asset(s). We support this approach.

However, we are interested in whether the 1% change to Hunter Water's RAB from the sale of their head-office is intended to be indicative of IPART's proposed threshold materiality to access the exception. In our view, a prescribed percentage threshold will not be appropriate, but we do note that 1% of our RAB might be an excessive threshold if this was IPART's intention. For Sydney Water, such a high threshold would mean that exceptions are only available to assets worth more than around $200 million.

7.5 The current working capital approach remains more appropriate than the pre-2018 approach

IPART has proposed to revert its approach on estimating the number of days for receivables to calculate working capital to the pre-2018 approach. The stated goal of the change is to reduce the complexity of the calculation.

We support retaining the current approach to calculating the number of days for receivables as opposed to reverting to the pre-2018 method for the following reasons:

- Regarding receivables, IPART updated the 2018 approach to account for services being billed in advance and for efficient 'days of delay' between the last day of the billing cycle and the receipt of payment. These factors clearly affect the working capital costs of a business, as they affect the timing of cash flows, and hence should be included in the approach.
- In addition, we consider that taking these factors into account only marginally increases the complexity of the working capital approach. IPART have noted that the change was not well understood and required significant attention in the previous round of reviews. We consider that this is because those reviews were the first time the new working capital policy was implemented. Subsequent reviews should require less incremental effort as the approach has already been applied and embedded in modelling.

7.6 We support a tiered sharing rule for non-regulatory income

We agree that uncertainty relating to how non-regulated income should be shared with regulated customers has led to significant time investment by both IPART and Sydney Water. While we recognise the need to standardise a simple approach, we request that IPART consider a tiered rule rather than the one-size-fits-all model that is implied by IPART's proposed 50:50 sharing ratio for all non-regulatory income.

Our view is that the following sharing rule balances the relevant economic principles:

- Promoting efficient use of assets and innovation
- Appropriately allocating risks, costs and benefits between a utility and its customers such that regulated customers are no worse off
- Providing certainty and stability to a utility and its customers over time
- Is simple, easy to implement and does not require excessive review or administrative effort by IPART or businesses.

We welcome further engagement with IPART to agree on the rule that is appropriate for businesses to pursue opportunities that enable us to deliver IPART's broader 3Cs framework.

Table 7-1: Proposed Progressive Revenue Sharing Rules for non-regulated projects and services

Sharing rate*	Category of non-regulated service	Example
100%	For efficiency projects and services, treated as regulated (where the majority of the benefit is internal savings or project aiming to reduce customer bills) although they contain a component of unregulated income. Assets are transferred to the RAB at the next IPART period.	Co-generation, hydro and solar projects to offset energy use behind the meter. Excess energy is sold back to the grid, generating unregulated income.
50%	For non-regulated projects and services that do not involve material (less than 10% of revenue stream) incremental costs. Incremental costs are ringfenced from the regulated business. A portion of corporate costs are also allocated to the unregulated business.	Property leases, telco rentals
5%	For non-regulated projects and services that incur material (greater than or equal to 10% of revenue stream) incremental costs. Incremental costs are ringfenced from the regulated business. A portion of corporate costs are also allocated to the unregulated business.	Lab services, biobanking, Liverpool and AWRC waste-to-energy
0%	For unregulated projects and services which don't involve shared assets or non-regulated income stream is not expected to exceed 5 years	Sydney Water Developer Direct, Account management for developers
TBD	Exception to the rule for projects involving incremental capex greater than $15m. Sharing to be discussed with IPART as part of price review process.	

* We propose that revenue will be shared based on revenue forecasts for projects. Forecasts will be presented to IPART only for projects that are operating or have approved business cases. We also recommend defining revenue (where possible) as:

- Post-tax
- Net of avoided costs allocated to regulated customers
- Separable into the constituent revenues of a service should an individual project.

7.6.1 Many non-regulated projects currently operating and those in development enable us to deliver IPART's 3Cs framework

IPART's 3Cs framework aims to provide businesses with incentives that align with promoting the long-term interests of customers.[35] For example, in the grading rubric, IPART specifically identifies meeting environmental objectives, including addressing climate change, in a cost-efficient manner across the short- and long-term.[36]

We are finding that non-regulated revenue opportunities are increasingly becoming a more cost-efficient means of simultaneously achieving these stretching environmental objectives and meeting the least cost provision of our regulated services. For instance, non-regulated income from the sale of excess renewable energy we produce and co-digestion by-products are key to achieving any net zero and circular economy objectives our customers and other stakeholders want us to pursue. Rather than relying on full cost recovery from regulated customers, these opportunities are being integrated into business case processes as an efficient means of offsetting regulated costs or co-creating value with regulated customers. We request that IPART consider the impact of their proposed 50:50 sharing ratio on *all* non-regulated opportunities.

7.6.2 A 50:50 revenue sharing rule will make these non-regulated projects unviable

A 50:50 revenue sharing ratio only provides us with an adequate incentive to pursue non-regulated projects which have negligible incremental costs. However, many of these non-regulated opportunities have significant operating and capital investment requirements. Despite being efficient to do so, sharing 50% of our revenue from these services would make them commercially unviable for our business, preventing us from providing them.[37] We provide a list of these projects and assess their commercial viability under different revenue sharing in Table 7-2.

The revenue sharing rule we propose varies depending on the category of non-regulated project. These categories are intended to reflect a sharing ratio that balances businesses having sufficient incentives to pursue efficient opportunities, with allocating risks and benefits appropriately. The categories are also intended to be an exhaustive list that is mutually exclusive for the suite of non-regulated projects that we currently (or in future expect to) provide to the market. This ensures that there is little uncertainty on what sharing rule applies to each type of non-regulated project.

We also propose the following clarifications to appropriately define revenue to achieve the above principles:

- Pre-tax versus post-tax revenue: Using post-tax revenue will ensure that businesses maintain the appropriate incentive to pursue these opportunities. For instance, for a no-incremental cost non-regulated project, sharing 100% of pre-tax revenue would mean businesses pay 100% of income to customers as well as an additional 30% tax.
- Avoided costs: Should businesses have sufficient evidence that a non-regulated project generates avoided costs for their regulated services, allocative efficiency would only be

[35] IPART (2022) *Draft Water Regulatory Framework: Technical Paper*, p. 6.
[36] IPART (2022) *Draft Water Regulatory Framework: Technical Paper*, p. 10.
[37] Sydney Water has a legislative objective to be a successful business: *Sydney Water Act 1994,* s 21(1)(a).

achieved by sharing revenues net of these avoided costs. Doing otherwise would imply cross-subsiding regulated services with non-regulated income.

- Be separable: Should businesses have sufficient evidence that a non-regulated project generates multiple revenue streams which fall within separate categories of the above project definitions, the sharing on these each of these revenue streams should be separable.

Table 7-2: Value to regulated customers and commercial viability of some non-regulated projects

Project type	Examples	Project stage	Customer value proposition	Commercially viable with 50% sharing?	Commercially viable with 5% sharing?	Revenue
Waste to Energy	Liverpool, AWRC	Small scale established. Larger scale projects in pipeline.	Circular economy, net zero carbon Maximise latent digester capacity	No	Yes	$1m with significant growth in pipeline
Co-generation & Hydro	Treatment Plant assets	Established assets	Circular economy, net zero carbon Efficiency project, reducing energy purchased	N/A Regulated project		$3m RECS $8m energy savings
Solar		Rooftop solar established. Ground mounted solar to be established.	Circular economy, net zero carbon Efficiency project, reducing energy purchased	N/A Regulated project		$0.4m RECS $6m energy savings
Lab Services	Councils	Established service offering >20 years	Efficient use of regulated assets Water & wastewater lab analysis	No	Yes	$5m-$8m
Treatment Services	Councils	Established service	O&M services	No	Yes	<$1m

		offering >10 years				
Account Management as a Service	Developers	Newly established service	Choice of services: Medium-Large developers	NA – doesn't use regulated asset		$1m to $3m
Accelerated interim servicing	Developers		Choice of services: Large developers	NA – doesn't use regulated asset		$5m to $10m
Civil contracts	Councils	Established service offering >20 years	Choice of services: Councils	NA – doesn't use regulated asset		$5m to $10m
Wastewater treatment for councils	Gosford Council	Established service offering	Efficient use of regulated assets			$5m to $10m
WaterFix	Strata, Residential, Commercial, Schools	Established service offering > 5 years	Water conservation	NA - doesn't use regulated asset		$1m to $3m
Property Rentals		Established service offering	Efficient use of regulated assets	Yes	Yes	$7m
Telco leases	Various Operations sites	Established service offering	Efficient use of regulated assets	Yes	Yes	>$1m
Biobanking	Picton, Winmalee	Developing service offering	Efficient use of regulated assets	No	Yes	$3m to $5m

8 Our summary responses to IPART's draft decisions

Update IPART's pricing framework to promote customers, costs and credibility

1. **IPART will update our water pricing framework to better promote customer value, cost efficiency and credibility. These elements are referred to as the 3Cs. They are supported by individual principles that:**
   - **water businesses will use to guide pricing proposals that promote the long-term interests of customers**
   - **IPART will use to assess pricing proposals, and as a basis for its decisions, in a pricing review.**

   We broadly support the 3Cs framework and its 12 guiding principles. However, we request that IPART continue collaborating with us to explore how they will be applied in the next round of price determinations and, where appropriate, refine them further.

   We discuss this in more detail in Section 7.1.

2. **IPART will engage with the water businesses to develop a handbook that provides the level and type of guidance required to support water businesses' proposals under the 3Cs framework. It will be updated over time.**

   We welcome IPART's consultation with the industry on developing its water regulation handbook. In particular, we are interested in how IPART's guidelines for each grade will interact with each other: how would a principle be assessed if all IPART's advanced expectations are met, except a single standard expectation?

   We discuss this in more detail in Section 7.1.1.

Engage early with water businesses to support customer outcomes

3. **Water businesses can engage with IPART one to two years before a pricing proposal. 'Early engagement':**
   - **aims to ensure water businesses are supported and accountable for developing their pricing proposals, delivering their plans and engaging with their customers.**
   - **is expected for a water business that previously submitted a Standard proposal, and optional if it previously submitted an Advanced or Leading proposal**

We support the option for early engagement with IPART. Doing so provides the opportunity to understand whether utilities have met expectations in advance of the full price review. However, it is unclear whether early engagement will have an incremental impact on IPART's stated objectives when considered in the context of the other mechanisms that incentivise or require utilities to be accountable for developing a robust pricing submission, delivering against their plans, and engaging with their customers.

We only support early engagement where it is optional. In our view, it should not be mandatory for businesses previously graded as standard. As explained above, the customer benefits from early engagement are not clear. In such cases, the administrative burden of preparing documentation and engaging stakeholders in a process that is incremental to the existing review will not be an effective use of resources where the utility does not observe clear benefits from said engagement either.

Enable water businesses to promote customer value through pricing proposals

4. **Water businesses will demonstrate how well their pricing proposals promote customer value, encourage cost efficiency and whether they can be credibly delivered, by self-assessing whether their pricing proposals meet the 3Cs framework at a Standard, Advanced, or Leading level.**

   We are open to utilities undertaking a self-assessment on whether their pricing proposals meet the 3Cs framework. However, in our view the utility's self-assessment should set the maximum grade that IPART can assess businesses. Doing otherwise may pose a risk to customer value. For instance, if a utility self-assesses themselves as standard and IPART grades them as advanced, IPART's proposed incentive schemes may be expected to apply. These schemes imply risk and reward above what businesses have plans for.

   We discuss this in Section 3.1.

5. **Water businesses will provide information to support self-assessments, including:**
   - **proposed customer outcomes and performance targets, and as applicable, how these are complemented by operating licence conditions and/or incentive schemes**
   - **a nominated efficiency factor, that is substantiated with activities to deliver on this commitment**
   - **supporting evidence that its focus principles are consistent with customer priorities**
   - **Board (or equivalent) endorsement that the pricing proposal best promotes the long-term interests of its customers**

We support providing this information to support self-assessments to IPART. We note some comments on 'nominated efficiency factor', including what this factor might look like and its evidentiary requirements.

These are detailed in Section 7.1.3.

Provide incentives for water businesses to promote customer value and tailor decisions in a pricing review

6. IPART will assess whether we agree with the water business's self-assessment that its proposal meets the 3Cs framework at a Standard, Advanced, or Leading level:

- **IPART will require a water business that submits a sub-standard pricing proposal to resubmit within six months.**

We support IPART re-assessing whether water businesses' proposals meet a Standard, Advanced or Leading level under the 3Cs framework. However, rating businesses above their self-assessment and excluding ODIs and different forms of price control to Advanced and Leading businesses poses significant risks or lost opportunities to customer value.

We explore our concerns in more detail in Section Error! Reference source not found..

7. IPART will provide financial rewards and penalties depending on our assessment of the water business's proposal against the 3Cs framework. We will provide a financial reward – calculated as a percentage of the revenue requirement – where we agree with the water business that its proposal is Advanced or Leading.

While we support IPART grading our proposals, we consider that the financial incentives related to that grading will not change our incentives to deliver a high-quality plan. Other regulators have adopted financial incentives as a means of achieving higher-quality proposals. This makes sense where utilities can credibly be rewarded by:

- comparison against other utilities; or
- assessment against objective criteria.

Clearly, objective criteria may interfere with the flexibility water businesses need to deliver their customer-focused plan. Furthermore, where other jurisdictions have many similar businesses to compare against one another, the NSW water sector is characterised by water businesses of vastly different size, scale, scope and operating environment.

In this context, financial incentives that do not lead to credible rewards and penalties will arbitrarily introduce risk to customer value.

8. IPART's assessment of the water business's proposal against the 3Cs framework will be used to determine our approach to expenditure reviews and to tailor key decisions in a review.

We support IPART using their assessment of the water business' proposal against the 3Cs framework to determine its approach to expenditure reviews.

However, we do not support IPART using this assessment to preclude businesses from alternative forms of price control and flexible pricing options. We understand that IPART are concerned that standard businesses will not have sufficient understanding of their business to adequately implement alternate price control and pricing options. However, under IPART's framework, businesses may be rated standard for reasons relating to any of IPART's other 12 principles.

To preclude utilities from access to these options because of a standard grade relating to these other principles when utilities have agreed on the proposed option with customers and satisfied IPART's evidentiary requirements is not consistent with a customer-focused framework.

We discuss this and the benefits that these alternate forms of price control may have for customers in Section Error! Reference source not found..

Encourage ongoing customer value through financial incentives

9. IPART's assessment of the water business's proposal against the 3Cs framework will determine the financial incentives we provide for ongoing performance. We will use financial and service performance incentive mechanisms for Advanced and Leading proposals. Where the benefits exceed the costs, these proposals will have an incentive regime comprising:

- **an opex benefits savings scheme**
- **a capex savings scheme, and**
- **a customer outcomes delivery incentive scheme for key customer outcomes.**

We do not support the CESS. We discuss this in Section 4.

We consider that service performance incentive schemes should be available for all businesses. We discuss this in more detail in Section 3.3.

10. IPART will implement a shadow price for leakage to encourage efficient reductions in leakage. This will apply for water businesses with Advanced or Leading proposals who serve retail customers.

We support the introduction of a shadow price for leakage. We consider that this shadow price will only encourage efficient reductions in leakage once it accounts for the full social costs and benefits of reducing leakage.

We explore this idea for all outcome and service performance incentives in Section 4.5.

Update common elements of the price review process to promote effective and efficient regulation

11. IPART will set 5-year regulatory periods, and conduct price reviews over nine months, unless another timeframe is agreed in advance.

We welcome IPART's proposal to set 5-year determination periods and shortening the review period to 9-months. We consider this will facilitate a more efficient regulatory process for all stakeholders.

12. IPART will update how we assess proposed opex by:

- **implementing a base-step-trend approach**
- **streamlining information returns to support greater use of benchmarking.**

We support a move towards base-step-trend for assessing proposed opex. We are happy to work with IPART on developing a robust approach to benchmarking opex.

We discuss this briefly in Section 7.1.3

13. IPART will update how we assess proposed capex review by:

- **working with the water businesses to develop predictive models of longer-term capex needs**
- **conducting reviews of historical capex by exception.**

We are happy to work with IPART on developing a robust approach to predictive modelling for certain categories of capex.

14. IPART will require expenditure review consultants (where used) to recommend a range of efficient expenditure.

We support IPART requiring expenditure review consultants to recommend a range of efficient expenditure.

15. IPART will update our regulatory approach around the 3Cs framework:

- **The criteria IPART will apply to test the prudency and efficiency of proposed expenditure will be included in the 3Cs framework and guiding principles, rather than in separate guidelines.**
- **As water businesses will promote the service improvements that their customers want and value by proposing customer outcomes, IPART will not apply a separate discretionary expenditure framework.**
- **Our proposed customer choice pricing model promotes differentiated service offerings and broadens the scope for unregulated pricing agreements.**

We support IPART identifying the criteria it will use to test the prudency and efficiency of proposed expenditure in the 3Cs principles and handbook rather than in separate guidelines. Nevertheless, having access to clear guidelines that are consulted and agreed upon in advance will promote proposals that deliver the best outcomes for our customers.

We support IPART discontinuing the application of a separate discretionary expenditure framework. We agree that a broader risk and reward framework, such as IPART's 3Cs, replaces the need for the discretionary expenditure framework and its greater complexities. We explore this in more detail in Section 7.3.

We welcome the explicit recognition of differentiated service offerings and scope for unregulated pricing agreements in IPART's 3Cs model. However, we note that our delivery of differentiated service offerings is dependent on our customers' interests in these options. We are also unclear on the interaction between unregulated pricing agreements and IPART's non-regulated 50:50 revenue sharing proposal.

16. IPART will simplify the building block models without affecting the quality of outcomes, as outlined in Appendix A of the draft Technical Paper.

We welcome some of IPART's proposed modelling simplifications. We request adjustments to others. We discuss these in more detail in Section 7.

Provide flexibility to address changing revenue needs where it promotes the long-term interest of customers

17. IPART will provide water businesses with mechanisms to manage changing revenue needs over the short and long-term, where these promote better customer outcomes. We will outline principles which we will consider when assessing proposals:

- **to account for uncertain and unforeseen costs within a pricing period with a cost pass-through, ex post-true up, letter of comfort or a partial or a full re-opening of a pricing determination**
- **to smooth revenues between pricing periods with accelerated depreciation, annuities or escrow accounts.**

We support IPART's openness to considering different revenue recovery options and its clarity to accounting for uncertain and unforeseeable costs within-period. We welcome the principles IPART lay out in their assessment of these proposals. We explore this briefly in Section 1.3.

Increase the importance of ongoing performance monitoring

18. Each water business will publish its performance against customer outcomes annually and communicate this information to customers.

We support businesses publishing annually their performance against customer outcomes. Doing so will improve transparency and accountability for water businesses' performance.

19. IPART will publish and maintain an online performance dashboard on water businesses' performance against customer outcome commitments.

We support IPART publishing and maintaining an online performance dashboard on performance against customer outcomes. This improves transparency and accountability of rewards or penalties that utilities receive against performance.

Given that IPART proposes these performance outcomes are reported regularly, we query IPART's draft decision to preclude ODI rewards and penalties only apply ex-post. We consider this trade-off between diluting the incentive to invest efficiently and customer bill stability should be a decision for customers. We discuss this in Section 4.5.

We also note that water utilities in NSW are very different and, consequently, difficult to compare. Sydney Water serves 5 million people, Hunter Water 600,000 people and several smaller utilities the balance. Scale and scope between them vary significantly. Therefore, the performance dashboard should support the general public in understanding these differences and reaching informed views of the relative performance of utilities that account for them.

20. IPART will establish a Regulators Advisory Panel to promote better collaboration between regulators of NSW water businesses.

We support the establishment of a Regulators Advisory Panel. We request IPART actively engage with us on the design and implementation of the RAP. We explore this in Section 1.4.3.

21. IPART will review and update the 3Cs framework every five years. This will include an independent review of the framework, after the first round of reviews under the new framework.

Given the range of challenges that are driving our record investment program in the coming years, we support reviewing the 3Cs framework to ensure it remains fit for purpose for each round of reviews. We welcome IPART's openness to an independent review of the framework post-2025.