

Climate Change Expenditure Review

Urban Utilities submission to discussion paper



UrbanUtilities

Overview

Urban Utilities is responsible for delivering drinking water, recycled water and sewerage services to five local council regions in South-East Queensland. In providing these essential services we play a valued role in enhancing the liveability of our growing communities in Brisbane, Ipswich, Lockyer Valley, Scenic Rim and Somerset.

Our services contribute to:

- Protecting public health by providing access to clean drinking water and sewerage services.
- Enhancing and preserving our natural land and water ecosystems through the collection and safe management of sewage and other wastes.
- Helping to shape the way our cities and regions are planned and developed.

We recognise that what matters most to our communities evolves over time. To meet these needs, we too must continue to adapt and improve both what we do, and how we do it.

Why we are interested in this review

Climate change is but one of a range of challenges we need to consider when making long-term investment decisions to support the liveability of our communities into the future. As a business, we must evolve to ensure our services are resilient to these challenges, and that our investment operation and maintenance decisions ensure our services remain affordable to all customers.

While not formally subject to revenue and price controls, our water and sewerage services provided are declared monopoly business activities (see QCA Reg 2018) and therefore potentially subject to investigations of pricing practices and price monitoring following Ministerial referrals or directions.

It is important that regulatory frameworks also adapt to changes and provide certainty to investment decisions aimed at balancing liveability, sustainability and affordability over the long term.

Sustainability in decision making needs to be incorporated in expenditure assessment

We support the QCA's decision to review how traditional frameworks should adapt to reflect the need for increased resilience in the network to manage future risk, or additional expenditure to demonstrate commitment to broader environmental goals such as climate change mitigation.

The review is timely in the context of sweeping global reforms to ensure greater corporate responsibility in the areas of environment, social impact and governance (ESG). These reforms reflect increasing expectations for organisations to measure and demonstrate their commitment to environmental and social credentials.

Regulators and reporting bodies are recognising the need for improved and standardised disclosure in the areas of sustainability. A business's ESG performance and objectives are increasingly influencing debt and equity funding choices. Finally, there is increasing community awareness and expectation over corporate responsibility which is influential in corporation business strategies and plans.

Sustainability reporting and disclosure is fast maturing but is still in its relative infancy, with climate change reporting and disclosure perhaps the most advanced. There are increasing obligations on businesses to not only demonstrate a commitment to global science-based targets toward emissions, but explain how such commitments will be met through their own investment and expenditure decisions. We expect further standardisation of the reporting of these commitments is likely over time through evolution of financial reporting standards and related company disclosure requirements.

The QCA notes that water regulated entities are assessed against the following prudence and efficiency criteria:

- Is the (capital) expenditure required as a result of a legal obligation, growth, replacement or renewal or alternatively achieves an outcome explicitly endorsed by customers/stakeholders?
- Is the scope of work the best means of achieving the outcomes based on the options available, is the standard consistent with industry best practice and are the costs consistent with prevailing markets?

The potential arises for traditional assessment frameworks to ignore or dismiss proactive climate change mitigation and resilience expenditure that is neither tied to legislative requirements or explicit outcomes, but nevertheless is required by a comparable efficient entity to meet the expectations of the community, customers, industry regulators and capital markets.

In respect of climate change, a benchmark efficient service provider would need to demonstrate adaptability pathways, contingencies and pursuit of some level of mitigation in order to attract/maintain capital investment and meet community, customer and future regulatory reporting expectations.

We would argue expectations apply now to other areas of sustainability – and these expectations are likely to increase in the future. For example, the loss of “natural capital” poses

a similarly high risk to business and there is some momentum in developing a risk management and disclosure framework for nature-related dependencies, impacts, risks and opportunities. ESG obligations will also continue to drive greater accountability and action over a broad range of sustainability measures.

Climate change mitigation, adaptability and response are three interdependent but separate considerations

We agree with the QCA that the mitigation strategies to meet science-based emissions reductions targets strategies should be considered separately to prevention and adaptation strategies and expenditure. Strategies and expenditure in response to events caused by climate change may be included as part of the latter consideration or a third, separate consideration. We agree with the QCA that regulatory frameworks should respond to these considerations separately, rather than attempt to address climate change as a singular issue.

In several instances, it wasn't clear whether the QCA's discussion question was intentionally focussed on either mitigation or adaptation considerations. In most circumstances we have provided a response across both mitigation and adaptation elements.

The QCA may also wish to seek feedback on its preferred definition of climate change.

We have outlined our specific experience in respect of climate change impacts and our response. We support frameworks that can be applied consistently across sectors. However, we expect that adaptation and resilience to climate change will differ across sectors and may need to be reflected in any common framework developed.

The need for global and sector specific considerations

Communities will expect essential services to remain resilient to impacts from climate change. Communities also expect owners of essential services to be playing a key role in addressing the causes of climate change as well as responding to the effects.

Efficient expenditure in adaptation to effects of climate change may minimise the impacts to the essential services the expenditure relates to. However, climate change will inevitably contribute to a much broader set of issues and consequences for our communities. This is why regulatory frameworks need to be responsive to both global and sector specific considerations in mitigation as well as adaptation and resilience measures.

The climate action problem

Question 1: To what extent are the risks of more frequent or severe extreme weather events already impacting the businesses of regulated entities? Please provide evidence where available and appropriate.

It is important that our systems are resilient to changing weather and climate patterns, which are becoming increasingly unpredictable. Severe weather events, such as floods, lightning, storms and bushfire, can damage and interrupt our assets and services. Drought and high temperatures can exacerbate both the availability and quality of drinking water. Rising sea levels and storm surges may impact our operations in low lying and coastal areas. There is consequential pressure on our ecosystem's ability to manage the impacts of a growing population.

The QCA will be aware of a number key weather events in our region in recent times, including:

- 2003 – 2008 Millennium Drought
- 2011 and 2013 Brisbane River flood events
- 2014 Brisbane hailstorm events
- 2017 Logan river flood events
- 2019 – 2020 bushfires
- 2022 flood events

Resilience to drought related events

The Millennium Drought had a profound impact on urban water usage and the water service provider industry in our service area and much of the Australia's east coast.

For Urban Utilities, close to 30% of our commercial customer base was lost as a direct result of severe water restrictions. Industries such as the nursery and garden industry and the pools and spas industry shrunk dramatically and took many years to recover. Some industry participants never returned.

Despite its economic devastation, the Millennium Drought provided a motivation to invest in education, with resources dedicated toward explaining the importance of water for society. The water industry in South-East Queensland invested in a range of activities that built a rapid uplift in "water wise" behaviour from our customer base, a change that has endured for more than a decade. This impact of this education resulted in a deferment in need for new bulk water sources. We are now providing drinking water to 40% more households with the same total volume of water each year.

While the Millennium Drought was said to be the worst drought recorded since European settlement and taken to be a 1:1000-year event, the event that has since been replicated at least in part through 2019 and 2020, less than a decade after the drought lifted.

This rapid uptick in frequency is changing the way our industry plans for water security and will likely result in a shift away from probability-based planning and a redefining of prudent

investment for resilience. Approaches and options need to extend beyond the traditional water cycle toward other methods for ensuring sustainable water supply over the long term. This in turn requires a much more innovative and consultative approach to planning and additional focus on customer education and engagement.

Resilience to flooding and storm events

Flooding has had a substantial impact on our infrastructure over the last decade. There is also significant impact to residents, where homes were either inundated or water and wastewater services were interrupted. Many of our customers were severely impacted by flooding events in 2011-12. Urban Utilities also experienced significant damage to its infrastructure.

The supposed 1:100-year level flood events in 2011-12 were experienced three times in the Spring/Summer of 2021-22 on Australia's east coast from Wide Bay to Northern Rivers with a devastating effect on many who were impacted by similar events only a decade earlier.

Planning and investing in resilience for future scenarios can benefit customers through ensuring essential services are able to continue (or recover quickly) following significant events. Urban Utilities decision to invest in more resilient infrastructure after the 2011-12 floods has proven to be prudent. The 2022 floods had much less impact on infrastructure compared to 10 years earlier. There was also much quicker recover and less impact on service delivery. This is despite around a quarter of sewage pump stations being affected by some level of flooding.

Our ability to withstand significant flooding in some areas and recover quickly in other areas were the dividends from investing in resilience for future flood events a decade ago.

Despite our success, our ability to insure against future flood events continues to be challenging. Events are becoming more frequent with an additional increase in localised events associated with the increased frequency. The increasing frequency, coupled with the impact of tightening insurance markets drives the need for further resilience.

Climate change hazard events are being integrated into asset risk models and asset lifecycle assessments with predicted risk ratings for current, 2050 and 2100 timeframes to allow for adaptive planning pathways.

Question 2: Is there evidence to suggest that regulated entities are facing difficulties in accessing insurance for their assets or accessing insurance at reasonable cost? Is self-insurance thereby becoming a more prudent option for these businesses?

The above events, combined with hardened market conditions through broader national and global impacts of climate change and other factors (geo-political instability, macro-economic

conditions and other severe weather events) will result in significantly reduced and very expensive cover.

This has been our experience in respect of maintaining flood cover for FY23. Urban Utilities investigated the continued availability of flood insurance cover and considered this to still be a prudent and efficient, albeit costly, purchase. However, after the 2021-22 flood events, reinsurance companies withdrew their capacity, forcing Urban Utilities' insurers to dramatically change their position.

Managing risks imposed by withdrawal or reduction in insurance cover should be considered a different concept to "self-insurance" arrangements, which is more focussed toward a decision to take on the insurance function internally rather than transferring it to a third party. The "choice" for self-insurance is usually based on the risk tolerance of the organisation and the total cost of risk to transfer to insurers.

We are aware that Government owned organisations have access to support from Queensland Government Insurance Fund (QGIF) - the self-insurance scheme for all Queensland government agencies and eligible statutory bodies. QGIF has previously advised Urban Utilities that it is not eligible for membership of the fund.

Urban Utilities manages some risk exposures for its linear/underground assets. We minimise the cost of insurance premiums through deductibles across a range of policy lines. We are continually investigating a range of options to reduce the risk exposure from uninsured losses at least cost, whilst managing customer affordability as well as prudential and other regulatory requirements. This includes mechanisms to spread or pass through the cost of responding to natural catastrophe as well as options to self-insure flood risk and deductibles.

In such a tight insurance market, businesses should be incentivised to consider other alternatives where traditional forms are costly, limited or non-existent. Regulatory frameworks should provide the right incentives for businesses to make decisions regarding insurance that is in the long-term interests of customers.

Question 3: Most organisations, including regulated entities, now have detailed climate change strategies and planning documents in place. To what extent are these strategies a response to government policies? To what extent are [climate change strategies] externally driven (e.g. in response to financing requirements or shareholder activism)? Do these external drivers put pressure on businesses to exceed the minimum requirements of government policies?

Most businesses, including regulated entities are developing positions in respect of:

- Climate change mitigation

- Climate change adaptation

The drivers and response to these two issues are interdependent but need to be addressed through a regulatory framework quite differently. Nevertheless, both need to be considered by the regulator when considering expenditure plans in the long-term interest of customers.

Mitigation strategies

While there are currently no mandated targets set through legislation, businesses need to consider the Australian Government's long-term commitments and respond accordingly with mitigation strategies, recognising that over time there will be increasing likelihood of more mandated approaches being applied.

Increasingly, our shareholders, customers and communities are driving our ambitions and strategies to achieve net zero emissions target much earlier than 2050.

In response Urban Utilities is demonstrating leadership on emissions reduction and circular economy principles in managing resources including water, waste, energy and natural capital, to foster the transition to a more circular future.

Urban Utilities has been cognisant of local and state government commitments and aligning our positions to be consistent with these. Efficient businesses are driven to making early decisions on mitigation measures beyond government targets and potential future legislation.

Climate change adaptation strategies

Regulated business must make investment decisions on long term assets – with some assets lasting 80 years or longer before needing to be replaced. Prudent decision-making needs to incorporate future emissions uncertainty to ensure the long-term interest of customers is best served.

Businesses are looking to incorporate emissions uncertainty in investment decisions by examining representative concentration pathways (RCPs) - scenarios which consider the global impact of atmospheric concentrations of greenhouse gases and aerosols (such as sulphate and soot), along with the uncertainty in possible future emissions. RCPs sit alongside Shared Socioeconomic Pathways (SSPs) which include projections of population growth, GDP, and income, and how these factors are impacted by climate change.

Our obligation to customers to ensure the provision of essential services into the future should be a powerful enough driver and should not need a government or regulatory obligation before it is deemed prudent.

The science supporting climate change is now incontrovertible. However, the expected rate of change and resultant impact is subject to a range of variables and uncertainties. Urban Utilities is still considering the adaptive pathway that should be incorporated into its decision making. Absence of a clear indication from the available research on the magnitude and rate of escalation of climate impact, we would support frameworks that accept planning decisions based on a range of plausible scenarios and supported by the latest available data.

Reporting and compliance frameworks continue to signal future compulsory ESG disclosures. Beyond voluntary and mandatory disclosure are expectations by equity and capital markets, communities, customers and prospective staff expect that businesses demonstrate positive contribution on environment, social and governance matters.

Regulatory frameworks should recognise that any comparable entity operating in a competitive market would need to demonstrate positive disclosure in respect of ESG:

- to ensure it remains attractive to capital and equity markets
- to provide some assurance to customers as to its mitigation and adaptation plans and
- to minimise negative impacts from communities and wider stakeholders.

Question 4: Are regulated entities being encouraged or pressured by their customers to take further action on climate change? For example, do customers want regulated entities to reduce their scope 2 emissions by using an increasing proportion of renewable energy in their businesses? How do customers value actions taken by regulated entities that might provide for the customers to claim reduced scope 3 emissions in their supply chains?

As part of our customer engagement, such as our 'Let's Talk Water' research we understand that our customers 'expect us to do the right thing' with regard to the environment, but not at any cost. Our feedback from customers is that they place the highest value on solutions which deliver multiple benefits (like using our waste biogas to generate power and reduce electricity costs).

Our expectation however is that customer and community views are changing rapidly in the space so the need for regular ongoing conversations with customers and what they expect from regulators and regulated businesses is important.

Greenhouse gas emission reporting, carbon foot-printing, and 'Net Zero' commitments are rapidly becoming key elements of sustainability reporting from organisations to their customers and shareholders. Interest is growing with our commercial customers for more partnership opportunities, given these customers have their own corporate reputation motivators and are becoming more interested in supply chain impacts on their own disclosure and reporting. These

expectations will likely intensify as disclosure obligations become more standardised, and particularly if they require better understanding of scope 3 emissions.

Effectiveness of regulatory frameworks

Question 5: Do the QCA's existing regulatory frameworks create appropriate incentives for regulated entities to efficiently manage risks associated with climate change? If not how might the frameworks be improved in this regard?

The QCA's existing frameworks drive decision-making in favour of the least-cost option which gives little room for longer-term resilience measures in investment planning. Examples provided earlier, such as long-term investment in behaviour change to mitigate the impact of drought, struggled under the current frameworks in the absence of certainty of longer-term success.

Existing frameworks do not cope well with uncertainty, because they focus on maintaining existing service levels, demonstration of compliance or meeting customer expectations. Regulatory assessment needs to consider how it will incorporate probabilities of different climate change futures in the assessment of capital expenditure, noting the lowest cost option to invest now may have greater risk of reinvestment in the future.

At a high level, it is important that incentive frameworks recognise that benchmark efficient firms would be making positive decisions around climate change mitigation and resilience to meet the expectations of the community, the customer, industry regulators and capital markets.

This includes some recognition that a benchmark efficient entity would need to demonstrate adaptability pathways, contingencies and pursuit of some level of mitigation in order to attract and maintain capital investment and meet community, customer and future regulatory reporting expectations.

Frameworks need to consider both the investment and operational impacts of climate change. This includes operational responsive cost and engagement costs which in many ways can lead to positive long-term benefits for customers.

Question 6: Are existing mechanisms in the QCA's regulatory frameworks for dealing with newly arising expenditure requirements (e.g. pass-through mechanisms, review events and draft amending access undertaking (DAAU) processes) sufficient to deal with climate change related expenditure? If not, how might these mechanisms need to be amended?

The likelihood and cost of events driven by climate change will continue to be quite uncertain and unpredictable. This creates some tension with traditional ex-ante incentive frameworks which are aimed at providing strong incentives for regulated businesses to manage expenditure below revealed costs or forecast allowances. Under such frameworks additional expenditure

driven by externalities during a period is assumed to be absorbed by the business (as part of its business-as-usual budget constraints). Some frameworks allow mechanisms to adjust allowances mid-period (for example pass-through), but these are only available in limited circumstances, and usually involve some threshold for materiality and approval.

Insurance arrangements possibly mitigate against the uncertainty of future expenditure and assist in managing costs within a period. With increasing impacts from climate change and tightening insurance markets, alternative arrangements may need to be considered. Options may include greater flexibility in self-insurance arrangements or more flexibility to smooth costs associated with the impact of climate change investment over longer periods.

Regulatory frameworks should provide businesses with confidence that mechanisms are available to recover efficient incremental costs, while providing customers confidence that any impact to customers from an event can be smoothed to the extent possible. It should be noted that some self-insurance solutions may result in a mismatch of revenue being recovered and costs being incurred which may impact its working capital and financing structures and arrangements.

Question 7: The QCA's standard approach to assessing the prudence and efficiency of capital expenditure claims by regulated entities involves applying frameworks that assess scope, standard and cost. Are these existing frameworks suitable for assessing climate change related expenditures? Do [these expenditure frameworks] provide the right incentives for entities to appropriately have regard for climate change considerations – and alternative ways of achieving the desired objectives – when undertaking expenditure? If not, how should they be enhanced? For example, in considering the prudence of capital expenditure, is there a trade-off between efficiency and least cost, and robustness and resilience? If so, how can these trade-offs be managed?

It is not clear how traditional regulatory frameworks for assessing expenditure properly take into account a regulated business's response to plausible climate change scenarios when considering investment in long term infrastructure.

The QCA's current assessment for prudent and efficient water expenditure appears to focus on outcomes by reference to legal or regulatory obligations, or external endorsement. Under this framework, QCA's general approach is to develop its own alternative estimate of an appropriate capital expenditure allowance based on its review of sample projects (usually with the assistance of a consultant). Where its own expenditure forecast differs to the expenditure provided by the regulated business, further investigation is undertaken which may lead to a substituted expenditure forecast or allowance being made.

The subjectivity of the alternative assessment, particularly with regard to lowest cost options against mandated requirements puts at risk proposed investment based on more adaptive planning approaches. This is especially the case where expenditure forecasts do not have the benefit of clear criteria or explicit endorsement of approach. Instead, they may involve some assessment of least regrets investment based on the most up to date information.

Urban Utilities is working to overcome the technical challenges of how to most effectively and efficiently embark on a capital works program that increases the resilience to manage increased risk, at lowest cost. Such decisions need to be underpinned by a defensible, risk-informed decision approach that identifies risk-resilience and cost-resilience trade-offs.

For example, initial analysis has revealed that the consequence of flood risk can be mitigated or managed through targeted investment in Sewage Treatment Plants (STPs), priority pumping station and key water assets. Similarly, bushfire can be managed through summer preparedness programs such as vegetation clearance and housekeeping.

In relation to operating expenditure, step changes in expenditure may be considered if they relate to binding statutory or regulatory obligations, are reasonably required to achieve an outcome explicitly endorsed by customers or changes in community expectations and are sufficiently material.

In our view, regulatory frameworks need to positively incentivise consideration of long-term impacts of climate change, while also maintaining the current approach to ensuring least cost investment from a range of plausible alternatives. This may require a more intentional assessment using a mindset of least regrets, noting there is a wide range of potential climate change outcomes that investments need to be considered under.

Question 8: Are processes in the regulatory frameworks that are designed to provide regulated entities with a degree of certainty to make investment decisions (e.g. provisions that allow for preapproval of the scope of projects or customer vote mechanisms) sufficiently flexible to enable climate change related investments to proceed where appropriate?

Not all regulatory frameworks apply the same processes. Some processes may be more suited to a small number of larger customers and may not work as well with larger customer numbers. Nevertheless, we would welcome further investigation by the QCA on how more flexible arrangements in some frameworks can be applied more broadly to all frameworks.

The QCA's discussion paper correctly points out that businesses need to prepare for and/or respond to more frequent or more severe climate change related significant weather events and also meet expectations of relevant third parties. Decisions regarding investment in adaptation and mitigation are made in an environment of uncertainty with both the science on

climate change impact, reporting expectations, and policy frameworks moving and evolving rapidly. Businesses need to respond based on the information available to them at the time and, when faced with a range of uncertainties will need to make decisions based on least regrets and often without the benefit of hindsight.

However, regulatory frameworks have the opportunity to review investment ex post, in some cases with the benefit of hindsight. Ex-post optimisation is therefore a risk to any investment with an uncertain and changing framework. The QCA may wish to consider how to incentivise investment in adaptive capacity where the combination of uncertainty and risk of under-recovery (through optimisation) may drive more conservative response to climate change risks.

Corporate and regulatory insights

Question 9: How should differences between regulated entities' willingness to supply and customers' willingness to pay for adaptation and/or mitigation expenditure be reconciled? What if the willingness to pay differs among customers or groups of customers? In considering these matters, how should potential externalities be assessed? This includes positive externalities that may accrue to the broader community from increased mitigation activities.

Issues around reconciling efficient expenditure to customer willingness to pay is not specific to climate change mitigation or adaptation issues. There is a growing acceptance in regulatory frameworks that engagement with customers requires a far broader process aimed toward the best overall outcome for customers based on the risks and priorities involved. This involves more iterative engagement processes which consider customer preferences, education and understanding, trade-off considerations and outcome expectations – as well as willingness to pay considerations.

It is important that expenditure plans and forecasts proposed and approved reflect customer preferences and trade-offs. Customers should be involved in decision making on future investment and be included in scenarios tested and assumptions that should be considered. This relates to decisions regarding both mitigation and adaptation strategies (noting that they are two separate but interdependent considerations).

However, these issues are complex and technical. Customers should not be forced into a position that requires them to make a technical assessment on issues of prudence and efficiency.

Navigating an efficient level of expenditure under uncertain pathways based solely on the customer's willingness to pay may not result in the best long-term outcome. Rather considerations of this nature should be a balanced decision-making process that considers

customer preference as well as other aspects of prudence and efficiency which take into account long term interest of consumers.

Community externalities are more qualitative but can be informed by engagement. However, this will be a growing consideration in the context of new reporting and disclosure frameworks and an area which will require consideration in future regulatory frameworks

Question 10: How do organisations justify climate change related expenditures to their boards and other internal stakeholders? To what extent can these processes inform the QCA's assessment of this type of expenditure?

As we noted earlier there is a growing focus on how organisations align environmental, social and governance outcomes with its own corporate planning and reporting processes to meet current and future expectations of customers, community, regulatory authorities and markets.

Businesses are evolving their strategic thinking rapidly in response to these different expectations – which themselves are still maturing. We expect over time there will be greater standardisation of expectations which may provide an opportunity for leverage through regulatory frameworks.

In the meantime, businesses need to be responsive to changing research on the pace of climate change and its impact as it is occurring – particularly in the case of adaptation where investment decisions need to be considered through a broader risk lens with a fair degree of uncertainty are to future impact and timing from climate change.

Question 11: How do organisations consider different types of mitigation expenditures? How do they decide between alternative options (e.g. direct mitigation versus purchase of offsets) and justify those decisions? What lessons can be learned for the QCA's regulatory processes?

In this maturing phase of development, our view is that regulatory frameworks need to be open and flexible to different approaches while more standardised approaches are developed. There may also be an opportunity for the QCA to incentivise innovation in terms of best practice strategies for mitigation.

While we are aware of industry approaches being developed to highlight best practice there will be differences between organisations and sectors based on their current environment and circumstance. Nevertheless, we expect most organisations are in the process of establishing frameworks to record and track their carbon footprint and using this to establish an overarching roadmap to drive corporate and business strategies.

One common method to developing strategy and assessing options for implementation adopts a multi-pronged strategy based on the following priorities which can be integrated into the broader roadmap:

- Avoid – strategies to avoid energy use and emissions through smart design of new and renewed assets
- Minimise – strategies aimed at minimising energy and emissions through efficiency and optimisation
- Substitute – strategies aimed at substituting emissions intensive energy processes and assets with zero emissions sources
- Sequester – strategies aimed at sequestering carbon from the atmosphere
- Offset – strategies aimed at offsetting residual emissions.

Using this or other models, businesses are developing broad strategies with an accompanying roadmap which can be referenced when developing strategic business cases and project business cases for decision making. We expect that decisions against alternatives will usually be established according to economic criteria.

A key consideration will be the internal value placed on not meeting net zero targets or progress or the inherent risk of no mitigation strategy. This will be challenging while there is no agreed approach for quantifying the risk of not accelerating to net zero that could be used for economic analysis.

Question 12: What lessons can be learned from the insurance industry's assessment of climate change related risks? How should the QCA approach the assessment of actuarial information provided to it as part of future expenditure claims? Does the QCA's approach to assessing self-insurance claims provide a model for assessing proposed climate change related spending? What might the criteria be for a climate change related application? What types of supporting material should an entity provide?

Experts in underwriting natural catastrophe risks have informed us of unprecedented increases in catastrophe and class action claims. This has driven worldwide insurance market correction, prompting insurers to impose higher premiums and stricter underwriting guidelines. The consequential tightening of insurance markets is resulting in inadequately-priced insurance products. Natural catastrophe insurance is fast becoming cost prohibitive, restrictive or simply not available at all.

Demographic shifts, increasing global interdependencies and climate change all play a role in weather-related insurance losses. We understand such losses have increased 15-fold over the last few decades, implying high risk and volatility for the insurance industry.

Mitigating against this will require more sophisticated catastrophe modelling and total cost of risk modelling. We expect actuarial models will change to keep up with increasing volatility and will be key to model evolving frequency and severity trends in coming years.

In dealing with this issue, other regulators have accepted the fact that the regulated entity is in the best position to act prudently in the management of risks, and should be entitled to recover the efficient costs of managing these risks. In other words, where businesses can demonstrate that there has been an appropriate consideration of trade-offs between the costs of mitigating risk through annual commercial/self-insurance premiums and the consequence of passing through costs through events which aren't insured, then the appropriate allowance for expenditure and pass through should be provided.

This could be evidenced through appropriate governance, documentation and assurance frameworks. To ensure certainty, the QCA should be clear on what information is required to demonstrate prudence in its decisions regarding insurance and pass-through arrangements.

Question 13: Do stakeholders have experiences with other regulatory work or frameworks, in Australia or overseas, that the QCA ought to have regard to in undertaking this climate change project? If so, what lessons could be learned from such experiences?

We recognise that international reporting and regulatory frameworks are in a maturing stage of development and expect approaches to converge over time. We note that the UK water regulator, Ofwat, has legislative obligations to report on progress toward adaptation to climate change in the water sector and how, as a regulator it is managing associated climate change risks.

These obligations are driving Ofwat toward intentional approaches aimed at enabling and building climate change adaptation and resilience in the water sector. Ofwat only recently released its third climate change adaptation report which provides the following regulatory approach and strategic commitment:

- creating a framework that incentivises and encourages the sector to safeguard the services customers and society value by adapting to climate change in innovative, efficient and sustainable ways.
- ensuring the framework sends the right signals for service providers to plan and invest for adaptation over the long-term.
- targeting intervention using the best information available and working with others to improve our own understanding about climate risks and opportunities.
- monitoring and measuring outcomes in the sector to ensure companies deliver in line with the intentions of our regulatory action.

- ensuring companies listen to, and are engaging with, customers.

Ofwat is committed to regulatory outcomes which deliver against these commitments, recognising that ultimately it is the responsibility of the companies they regulate to respond to the appropriate incentives in adaptation and resilience.

In April 2022 Ofwat released its guidance on long-term delivery strategies aimed at ensuring that short term decisions are likely to maximise long term value for customers, communities and the environment. These arrangements require companies to set 5-year business plans in the context of a 25-year long-term delivery strategy in order to more properly assess how it is sequencing activities to achieve objectives at best value over the long term.

Businesses are required to demonstrate their no and low regret investments as well as alternative adaptive pathways which may be triggered based on different scenarios. This long term adaptive pathway approach provides a greater understanding of trade-offs between ambition, cost and price under a range of scenarios.