

Discussion Paper: A Sustainable Development Goals Framework for driving sustainability outcomes for urban water utilities

Prepared for WSAA by Monash Sustainable
Development Institute

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About WSAA

The Water Services Association of Australia (WSAA) is the peak industry body representing the urban water industry. Our members provide water and wastewater services to over 24 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Acknowledgement

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Background and purpose

In the last few years, WSAA and its members have sought to establish how current operations and activities of the urban water industry fit within the SDGs. This work has included better understanding the SDGs and associated targets and compiling examples from utilities.

In August 2017, WSAA launched *Global Goals for Local Communities: Urban water advancing the UN Sustainable Development Goals*. The paper encouraged collaboration between water utilities, governments, regulators and the community while focusing on a sustainable future for both people and planet. It included a commitment from the water industry to the SDGs as well as 13 case studies from water utilities around Australia on their work to advance the Goals. The commitment articulates the intent of the industry to support and promote the SDGs in partnership with other utilities, customers and stakeholders and has since been signed onto by 25 WSAA utility members.

In August 2018, WSAA launched the *Sustainable Development Goals Progress Report: Global goals for local communities*. Supported by nine case studies, the Progress Report demonstrates the progress by the industry to support and promote the SDGs in partnership with other utilities, customers and stakeholders, and shows the industry's contribution to achieving national and global SDG commitment.

The next step in this work is to make an impact and to this end WSAA established a Working Group and engaged Monash Sustainable Development Institute to write this Discussion Paper. The Discussion Paper seeks to provide utilities with support through the provision of tools and a framework to measure the impact of utilities going forward. The framework identifies priority targets and indicators for water utilities to measure their impact on the SDGs now, and utility of the future targets and indicators for water utilities to consider their future impact. MSDI and the WSAA Working Group also identified a long list of targets that can guide strategic planning and management approaches in ways that support "priority" and "utility of future" indicator outcomes.

WSAA will now use the framework, including the priority targets and indicators to inform our response to the 2021 Bureau of Meteorology's review of the Urban Water National Performance Report NWI indicators. The WSAA Working Group and broader membership will be involved in further definition of the targets and indicators. In the future WSAA will consider at opportunities to measure and report on the Australian and New Zealand water industry's impact on the SDGs.

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1. Introduction

Water utilities have long been powerful drivers of global, national and local innovation for economic development, environmental enhancement and societal wellbeing. Accordingly, they have a significant role in progressing sustainable development and can benefit from engaging with the United Nations Sustainable Development Goals. (SDGs).

The SDGs officially came into force in September 2015, and seek to build on the former progresses of the Millennium Development Goals. Endorsed by all 193 United Nations Member States, the 2030 Agenda and its SDGs focus global efforts and attention on 17 pressing issues, acting as a definitive list of environmental, social and governance perspective for ensuring a sustainable future. Australian and New Zealand urban water utilities already play a central role in providing solutions to many of these challenges, and stand to benefit through new business and collaborative opportunities that flow from their commitments to the SDGs.

2. Strategic planning for sustainability outcomes – the central role of the SDGs

The SDGs provide an all-encompassing framework to ensure the scope of a utility's work in areas of sustainability is comprehensive, in ways that:

- i) Ensure that all perspectives that relate to sustainability are considered, in addition to what a utility might traditionally regard as a business as usual approach. In this way, it might be useful for identifying organisational strategic blind spots.
- ii) Provide a new or clearer definition of outcomes being sought, and therefore the potential to identify innovative options for achieving those outcomes.
- iii) May identify other stakeholders who are also addressing this outcome and therefore the potential for collaboration with other partners to co-develop and possibly co-fund new initiatives.
- iv) Provides a common and unifying language for sustainability that enriches the capabilities of water sectors to extend their practices beyond siloed approaches through cross –sector engagement.
- v) Support Australia and New Zealand's National obligation to progress the UNSDG agenda, as well as supporting utilities signatory to UN global compact for sustainable business. This framework supports the progress of organisations through an approach that is suited to the context of Australian and New Zealand water utilities.
- vi) Develops utility's reputation as an organisation that is serious about delivering sustainability outcomes, with the subsequent benefits of:
 - being an employer of choice for people seeking to work in an organisation committed sustainable
 - being able to attract partnership opportunities with organisations that are also committed to innovation in these areas
- vii) Provides the utility with perspectives on opportunities for moving to being a "utility of the future".

3. A SDG framework for urban water utilities

A key challenge in harnessing the transformative potential of the SDGs lies in the translation of high-level “global” targets and indicators to deliver meaningful outcomes for on-ground impact.

WSAA’s SDG Working Group (comprising representatives from Australian and New Zealand water utilities), has worked in collaboration with Monash Sustainable Development Institute (MSDI) to establish an SDG framework for urban water utilities that:

- a) Demonstrates the value to their business of engaging with the broad range of SDGs and targets – through identifying strategic planning and management considerations that will guide them to deliver greater value to their customers, and the community and environment more generally
- b) Provides water utilities with a deeper understanding of the contributions they make to the SDGs at present and in the future.
- c) Identifies new measures and targets linked to SDGs that water utilities can commit to reporting on at various levels.

3.1 Sustainability Outcomes

The first component of the SDG Framework is a set of Sustainability Outcomes for utilities (developed by the WSAA Working Group and MSDI). The Sustainability Outcomes are in three categories:

- A. Internal organisational environment;**
- B. Operational environment – enabling factors; and**
- C. Operational environment – delivery focus.**

Figure 1 displays the Sustainability Outcomes and their connection with the SDGs.

Under each category there are a number of outcomes.

A. Internal organisational environmental

1. Workplace inclusion and diversity: Availability and Access
2. Education, training and capacity building
3. Occupational health and safety
4. Job creation and decent work
5. Diversification and innovation

B. Operational environment - enabling factors

Inclusion and empowerment

6. Empowering vulnerable customers
7. Support and strengthen the participation of local communities in water and sanitation planning and management
8. Strengthen efforts to safeguard cultural and natural heritage

Sustainable development

9. Uptake and implementation of sustainable development

C. **Operational environment - delivery focus**

Essential service provision

10. (a & b) Universal access to safe and affordable drinking water
11. 11 Universal access to adequate and equitable sanitation
12. Improved water quality by reducing pollution, minimising dumping, reducing hazardous waste and increasing safe re-use
13. Substantially increase water use efficiency across all sectors to address water scarcity
14. Implementing IWM at all levels, across entire water cycle

Climate change and disaster management

15. Integrated and inclusive climate planning and management
16. Climate resilient utility and services

Ecological health and liveability

17. Liveable and healthy places
18. Restore, protect and enhance water related ecosystems

Resource efficiency and recovery towards regenerative planning

19. Increase energy efficiency
20. Increase renewable energy production and emissions reduction
21. Sustainable consumption and production
22. Waste recycling and circular economy

3.2 Water utility sustainability outcomes and links to SDG targets

The SDG utility Sustainability Outcomes provide a framework for urban water utilities to identify how their processes and practices potentially relate to multiple SDG targets. These are presented in Appendix 2.

For each of the Sustainable Outcomes, a set of indicators have been developed that allows water utilities to measure and report on their performance and consequently their contribution to the SDG agenda both in terms of their current service priorities and as a utility of the future.

This framework serves as a blueprint for urban water utilities to broaden the way they can view sustainability and the way they can potentially deliver wider value to their customers, the broader community and the environment. By establishing a set of ambitious organisational and operational service delivery indicators that are linked directly to a number of SDG targets (or conversely, are driven by a commitment to achieve SDG targets) a common dialogue can be established across the Australian and New Zealand water sector for driving SDG related outcomes in water service delivery.

The ambitious set of current “priority” and future focused “Utility of the Future” indicators that have been developed, offer a transformative agenda for optimising, or expanding on, current organisational processes and practices – to maximise sustainable development impact.

The process followed to develop this framework (see Appendix 1) has been one of adapting UN global targets and indicators to the local water utility context. In so doing it is hoped that an enabling environment will be established within WSAA and individual water utilities to consider the achievement of Sustainability Outcomes in a more integrated and non-siloed manner.

3.3 A long list of SDG Targets

The WSAA Working Group undertook a comprehensive review of the responsibilities and activities of water utilities (both current and for “utilities of the future”) and developed a “long list” of SDG targets that relate to these responsibilities and activities. The list is presented in Appendix 3 and includes both “organisational” indicators – that highlight the contributions utilities make as business entities; and “impact” oriented indicators – that highlight the contributions made associated to practice and operational outputs. This list reflects the suite of current and strategic SDG contributions - ranging from business as usual through to best practice - as articulated through the expertise of Australian and New Zealand utilities.

The SDG long list targets and indicators can be used either independently or together with the outcomes framework. Independently, it provides an exploratory tool for considering new fields of SDG contribution, and testing or measuring the impacts of current or new processes and practices on specific goals. Together, with the SDG reporting framework, the list can guide strategic planning and management approaches in ways that support “priority” and “utility of future” indicator outcomes. In doing so an SDG led approach can be taken to utility planning and practice to deliver greater benefits throughout organisations, to customers, communities and environment.

4. Enhancing sustainability thinking, strategic planning and reporting for achieving sustainability outcomes

As the UN Global Compact (2018) suggest, effective corporate reporting is key to building trust and aligning investment through transparency and accountability. In addition to informing external stakeholders, investors and communities, sustainability reporting is a powerful stimulus for internal conversation and decision-making with regard to contributing to the SDGs at all levels of a water utilities business.

In the SDG Framework for water utilities (Appendix 2) the set of sustainability outcomes provide an overview on how common utility processes and practices can contribute to specific SDG targets. These have been determined through the SDG long list (Appendix 3) and are provided alongside each of the associated priority and utility of the future indicators (from 4 to 12 SDG targets per outcome).

The SDG targets that are aligned to each of the priority and utility of the future indicators possess a range of common metrics for quantifying utility contributions (as defined through the utility long list). While these can serve as metrics for sustainability reporting, they are also indicative of the different ways utilities can optimise service delivery outcomes in strategy and practice. By using these service related indicators, utilities can engage in more meaningful SDG-led reporting, planning and strategising.

Notably, through encompassing both “priority” and “utility of the future indicators” utilities can both broaden and deepen their sustainability planning and reporting by considering a wider sub-set of SDG targets that are relevant to their sustainability outcomes. This will depend however on the particular practices and processes utilities choose to adopt. For example, utilities with little capacity to contribute to the health of marine ecosystems may not choose to report on targets 14.1 and 14.2.

The below examples demonstrate the opportunities associated to current priority (or Priority indicator) sustainability outcomes. As summarised in Appendix 2, Sustainability Outcomes have been identified across three key areas

- a. Those that relate to a water utility’s internal or organisational environment
- b. Those that relate to the enabling factors of a utility’s operational environment; and
- c. Those that relate to the core delivery focus of a utility’s operational environment.

Example: Internal Organisational Sustainability Outcomes

Outcome 1: Workplace inclusion and diversity.

Value proposition: Water utilities make substantial contributions to the SDGs as organisations that ensure all staff have the same opportunities, and are supported to access and take up these opportunities.

Priority indicator: Maturity and implementation progress of utility diversity and inclusion strategy. This indicator is designed to supports utilities to consider the maturity of their internal processes for ensuring inclusion and diversity and the extent of progress they have made in implementing these plans.

The SDG Targets that are relevant to this Sustainability Outcome for 'current priority' reporting are:

- SDG Target 5.1: End all forms of discrimination against all women and girls everywhere
- SDG Target 8.5: (Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for equal work)
- SDG Target 10.2: Empower and promote the social, economic and political inclusion of all , irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
- SDG Target 10.3: Ensure equal opportunity and reduce inequality of outcomes
- SDG Target 10.4: Adopt policies... and progressively achieve greater equality
- SDG Target 11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage.
- SDG Target 16b: Promote and enforce non-discriminatory laws and policies for sustainable development

These represent the full range of targets that can be considered if a water utility is to be sure its strategic and business planning are maximising the achievement their Sustainability Outcomes. Equally these targets provide a lens through which utilities can consider and report on sustainability principles in 'internal' workplace inclusion and diversity programs.

The relevant SDG targets that have been identified for this Sustainability Outcome would prompt a utility when developing inclusion and diversity initiatives to consider a wider range of factors and perspectives that while are relevant to utility processes and practices (as outlined in Appendix 3- SDG Long List) may be less considered or under-recognised in the planning and management practices of the past. Including:

- Ensure access to education for sustainable development and sustainable lifestyles,
- Cultural and natural heritage protection as a form of ensuring inclusive work culture
- gender equality at all levels
- youth equality and inclusion
- ensuring equal opportunity.
- Empowerment processes for social, economic and political inclusion.
- systemic change for inclusion and diversity (including through processes of policy development and power relations)
- promotion of a culture of peace and non-violence,
- Strengthening resilience and adaptive capacity to climate-related hazards and natural disasters

Example: Operational Environment – Enabling factors for Sustainability Outcomes

Outcome 7: Supporting and strengthening the participation of local communities in water and sanitation planning and management.

Value proposition: Utilities make substantial contributions to the SDGs through processes of community education and engagement, capacity building and participation in planning and management practices.

Priority indicator: Extent (degree of engagement) and reach (across jurisdiction) of community engagement and consultative programs and processes (by program, demographics, region, % population in management jurisdiction) and maturity of engagement programs.

This encourages utilities to consider the extent and quality of community engagement and participation throughout their service region.

The SDG Targets that are relevant to this Sustainability Outcome for 'current priority' reporting include:

- SDG Target 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
- SDG Target 3.2: end preventable deaths of newborns and children under 5 years of age
- SDG Target 4.7: ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
- SDG Target 6.1 achieve universal and equitable access to safe and affordable drinking water for all
- SDG Target 6.2: achieve access to adequate and equitable sanitation and hygiene for all
- SDG Target 6.4: substantially increase water-use efficiency across all sectors
- SDG Target 11.3: enhance inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
- SDG Target 12.8: ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
- SDG Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- SDG Target 14.1: prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
- SDG Target 14.2: sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
- SDG Target 16.6: Develop effective, accountable and transparent institutions at all levels
- SDG Target 16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels
- SDG Target 16.10: Ensure public access to information and protect
- fundamental freedoms, in accordance with national
- legislation and international agreements
- SDG Target 16.B: Promote and enforce non-discriminatory laws and policies for sustainable development
- SDG Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

The relevant SDG targets that have been identified for this Sustainability Outcome would prompt a utility when developing engagement programs to consider a wider range of factors and perspectives that while are relevant to utility processes and practices (as outlined in Appendix 3- SDG Long List) may be less considered or under-recognised in the planning and management practices of the past. Including:

- education for sustainable development and sustainable lifestyles
- human rights
- gender equality
- promotion of a culture of peace and non-violence,
- global citizenship (or community-based ownership of projects)
- appreciation of cultural diversity and of culture's contribution to sustainable development
- integrated and sustainable human settlement planning
- awareness for sustainable development and lifestyles in harmony with nature
- strengthening resilience and adaptive capacity to climate-related hazards and natural disasters.

Example: Operational Environment – Delivery Focus for Sustainability outcomes

Outcome 14: Implement integrated Water Management at all levels

Value proposition: Water utilities make substantial contributions to the SDGs through multi-stakeholder and integrated processes for water planning and management.

Priority indicator: Maturity and coverage of Integrated Water Management.

This indicator supports utilities to deliver best practice integrated water management outcomes pursuant to the WSAA IWM guidelines for urban water utilities framework.

The SDG Targets that are relevant to this Sustainability Outcome for 'current priority' reporting are:

- SDG Target 1.5: build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
- SDG Target 6.4: substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
- SDG Target 6.5: implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- SDG Target 6b: Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management
- SDG Target 11.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- SDG Target 11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage
- SDG Target 11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations
- SDG Target 11a: Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning
- SDG Target 13.2: Integrate climate change measures into national policies, strategies and planning
- SDG Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- SDG Target 14.1: prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
- SDG Target 14.2: sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
- SDG Target 16.6: Develop effective, accountable and transparent institutions at all levels
- SDG Target 16.10: Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
- SDG Target 16a: Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels
- SDG Target 17.4: attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate,
- SDG Target 17.7: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

The relevant SDG targets that have been identified for this Sustainability Outcome (see Appendix 2) would prompt water utilities when developing integrated Water management initiatives to consider a wider range of factors that mightn't normally be considered, including:

- the resilience of the poor and those in vulnerable situations to climate-related extreme events
- substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater
- implement transboundary cooperation as appropriate
- establish and operate policies and procedures for participation of local communities
- improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- integrate climate change measures into national policies, strategies and planning
- prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
- sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
- develop effective, accountable and transparent institutions at all levels
- ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
- strengthen relevant national institutions, for building capacity at all levels
- attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate
- encourage and promote effective public, public private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

Implementing integrated water management at all levels (Sustainability Outcome 14) involves, by definition, integration of all water systems and across all services that underpin resilience and liveability. That is, integration and collaboration with other sectors, including local government, land use planning and energy. The SDG Targets identified Sustainability Outcome 14 provide a comprehensive list of factors, from which responsible stakeholders can be identified who need to be involved with water utilities in IWM strategies.

5. A Transformative Agenda for a Utility of the Future

The WSAA Next Gen Urban Water paper (2017) highlights the important role water utilities currently play in ensuring the liveability, resilience, health and prosperity of urban areas for communities and environment. However, emerging mega-trends and the increasing demands of population and climate related pressures present the need for utilities to transition beyond existing 'business as usual' service delivery models to broaden the ways they deliver value to cities and regions (WSAA 2017).

It is suggested that a systemic shift is required to support urban utilities to transition to 'utilities of the future', which would involve transformations of their interrelated operational, enabling and authorising environments.

This transformative agenda would guide the current "value focus", "authorising focus" and "capacity focus" of the water sector (the dark blue circles in Figure 1) towards a strategic context that supports the aspirations for the "utility of the future" (the pale blue circles in Figure 1).

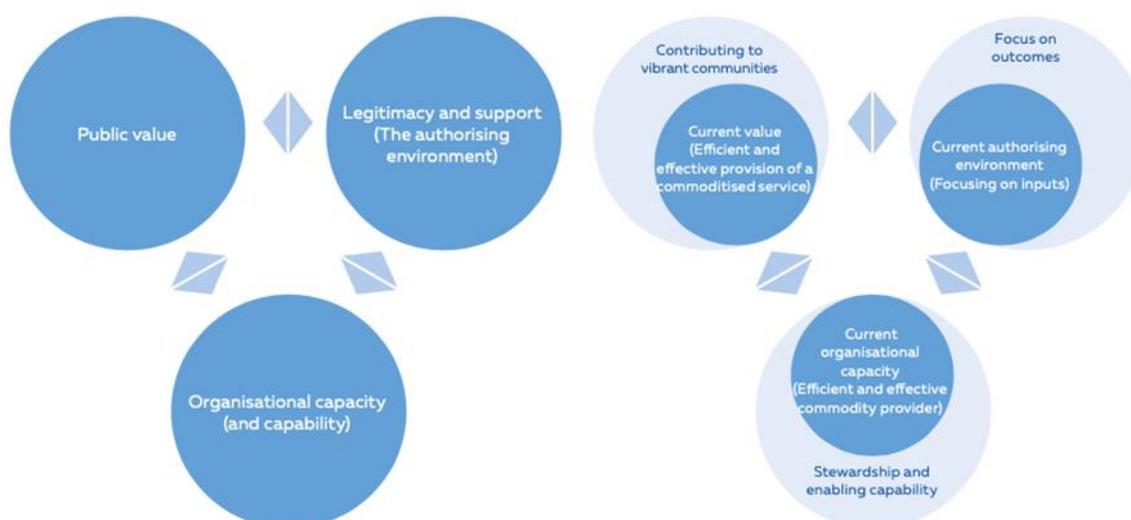


Figure 1: Left: Moore (1995)'s Strategic triangle for sustainable change, and Right: The aspirations of the water industry for facilitating change.

The WSAA SDG Framework for water utilities supports the development aspirations of urban water utilities articulated here. The Priority indicators and related SDG targets are those that relate to delivering Sustainability Outcomes for utilities operating at "best-practice" in the current environment. The Indicators for Utility of the Future and related SDG Targets are those that would drive the three transition areas outlined in Figure 1. In the following section we outline how the SDG Framework offers a blueprint for guiding these transformations by offering:

- i) *A value focus that would transition from "efficient and effective provision of a commoditised service" to "Contributing to vibrant communities through creating shared value"*

The WSAA Next Gen Urban Water paper highlights the requirement for urban utilities to shift to an economic model predicated on achieving shared value across organisations, the community and environment. At the heart of this model is the requirement for value to "be defined by the recipient, not the provider" highlighting the inherent need for utilities to pursue greater community, stakeholder and cross-sector collaboration and coordination.

This presents a substantial shift from the servicing models of the past, which are based on organisational objectives of efficient and effective service provision, as determined through regulatory compliance. But importantly, it is a transition urban water utilities are uniquely positioned to lead within the broader urban sustainability context. By example, Porter and Kramer (2011) describe three core pillars for creating 'shared value' which many Australian and New Zealand urban water utilities have opportunistically begun delivering value within. These include:

1. reconceiving product markets- e.g. Water utilities pursuing renewable energy generation and circular economy outcomes
2. redefining productivity in value chain- e.g. Water utility programs for supporting vulnerable communities
3. enabling local cluster development- e.g. Water utilities facilitating and participating in integrated water management and integrated climate resilience and adaptive planning.

The WSAA SDG framework provides a coordinating agenda to guide further progress in shared value delivery, by broadening the scope of perceived opportunity and priorities, and supporting the collective capacity of urban water utilities to drive transformative change for broader community value.

The set of common key performance indicators in this framework underpin the suit of urban water utility processes and practices that collectively drive shared value outcomes (consistent with Porter and Kramer (2011)'s 3 pillars described above). Through the articulation of current "Priority" indicators alongside aspirational "Utility of the Future" indicators, a transformative agenda has been established to guide utilities from current 'commodity focused' servicing capabilities and outcomes, to a future servicing context premised on the notion of community-led shared value.

Sustainability Outcome 19. Increase Energy Efficiency

Utilising this outcome once more as an example, we see a range of relating SDG Targets associated to both the Priority and Future Focused indicator. Upon reviewing the indicator established for each Target in the long list, a range of potential scenarios for contributing to this indicator can be observed, which include:

- the optimisation of energy efficiency outcomes in domestic and industrial water energy efficiency initiatives (relating to SDG Target 6.4)
- enhanced resource efficiencies in utility ecological and material footprint (relating to SDG Target 12.2)
- embedding of Net Zero Outcomes in utility policy and strategy.
- cross sector collaboration in infrastructure planning and investment (relating to SDG target 13.3)
- supporting community participation in infrastructure and water efficiency planning and management (relating to SDG Target 11b and 6b)

The long list supports utilities to consider blind spots and identify synergies in service delivery outcomes for optimising shared value.

The SDG long list (appendix 3) articulating the existing suit of SDG related utility practices and processes, further supports this process by providing an exploratory tool for utilities to consider potential innovations or augmentations to servicing outcomes and their associated 'shared value' impacts.

ii) An authorising focus that would transition from “regulatory compliance through a focus on inputs” to “Building legitimacy and support for value through a focus on outcomes.”

The SDG framework supports an “outcomes based focus” to service delivery, through a series of current and future focused indicators designed to support utilities to progress shared value based outcomes through holistic processes of collaboration.

Implicit in many of the service delivery indicators developed is the recognition for regulatory and policy reform processes in order to establishing the appropriate authorising environment to support utilities to broaden their role. However, as WSAA (2017 pg. 25) rightfully note:

“water businesses should not broaden their role in isolation. The mandate needs to come from changes in policy. And this change will not come unless the community and customers see value in this broader role”

A collaborative approach to urban planning is required in this sense, where stakeholders and communities work together to deliver community value. The SDGs provide a rich enabling tool in this respect, setting an agenda for a sustainable future to which many utilities, governments, communities and stakeholders alike are already committed. It thus serves as a tool to support a unifying vision for future transformation amongst the urban water sector, with other sectors and the community for urban sustainability more broadly. An SDG-led approach in this sense, serves to foster and strengthen the legitimacy and support needed throughout regions for servicing arrangement that drive shared value.

Through the localising agenda of the WSAA SDG framework - where SDG Targets are scaled to the utility context through a series of key performance indicators that drive localised SDG outcomes-, utilities are encouraged to develop enriched processes of community, multi-stakeholder and cross-sector collaboration in water planning and practice. Through these outcomes, processes for community and customer centred participation in servicing arrangement are supported, which not only drive greater “shared value” in servicing outcomes, but further support a momentum towards a community value perception which WSAA (2017) describe as a key requirement for policy and regulatory reform.

Sustainable Outcome 17. Liveable and Healthy Places

This outcome provides a notable example in which the Utility of the Future Indicator encourages utilities to transition from a ‘regulatory compliance’ based agenda– which conceives of community value outcomes as ‘co-benefits’ (see Priority Indicator)- to a community-led approach to service delivery, in which shared value outcomes for liveability are co-designed with the community and thus, responsive to their contextual needs, aspirations and experiences.

Notably, measuring the embeddedness of these outcomes in strategic and policy process, encourages utilities to critically consider the extent to which these processes have effectively supported a ‘perceived value’ for their community, and thus influencing a transition of the authorising environment to support a shared value agenda.

iii) A focus on organisational capacity and capability that would transition from “Efficient and effective commodity provider” to “Building stewardship and enabling capability”

As Table 1 suggests, the systemic shift of urban water utilities from traditional “commodity provider” servicing arrangements to those with emphasis on “shared value” and community – led outcomes, will require an evolution of corporate goals, skill-sets, processes, communications and metrics. As WSAA (2017) suggest, this will be a cultural transition as much as a strategic one, lead at all levels of the organisation to drive transformative change.

From organisational value	To shared value
An exclusive focus on optimising the drinking water and sewerage element of the water cycle (narrow focus)	Looking for optimal outcomes across the whole of the water cycle and urban communities more broadly (systems thinking)
Need for prescriptive direction and clear attribution	Outcomes focused and capable of making sense of complexity
Offering products and building assets	Offering services and enabling outcomes
Working within an organisation's capability and jurisdiction to deliver services	Using the broader community knowledge, goodwill and assets to deliver shared value
Technical skill set	A diverse range of skills with a particular focus on social skills
Solving problems	Creating an enabling environment to involve community in the solution
Growing the asset base proportionally with population growth, level of service requirements and risk	Leveraging the existing asset base to meet future needs
Single purpose assets	Upcycling and repurposing assets for multiple outcomes
Linear delivery model	Circular delivery model

Table 1. Making the systemic shift to shared value (from WSAA 2017)

For the Utility of the Future, shared value will be achieved through the leveraging and coordination of resources beyond the immediate remit of the utility itself, through processes of engagement and co-development of outcomes with key stakeholders of the urban water cycle, those of other sectors and importantly, the community. In this respect, the growing of industry capability and stewardship must extend beyond the immediate internal environment of the urban utility, and where possible seek to enhance the capabilities and stewardship for shared value outcomes across the broader urban landscape. This presents a complex challenge, and as previously stated, one that can be supported by the SDGs which offer a unifying vision and a framework for embracing complexity and systems thinking.

Through the 'Priority' and 'Future focused' key performance indicators, the WSAA SDG framework provides an enabling tool to build the capabilities of urban water utilities and stewardship to leverage opportunity for shared value. This includes

- Identifying those strategic initiatives that leverage an organisation's resources and capability ^[1]_[SEP]
- Supporting SDG led communication and education of internal and external employees, stakeholders and community. ^[1]_[SEP]
- Supporting shared value intentions through internal alignment with processes such as materiality assessments, business case development and decision frameworks. ^[1]_[SEP]
- Developing appropriate indicators and metrics to support the collection of data to guide future strategic direction and reporting both internally and with external stakeholders.

Sustainability Outcome 2. Education Training and Capacity Building

For this outcome, a priority indicator has been established that encourages utilities to critically assess the breadth and perceived value of organisational training and education programs, in accordance with current servicing arrangements and outputs.

Recognising the increasing role of stakeholders, suppliers and community in future 'shared value' utility service delivery, a Utility of the Future indicator has been developed to guide utilities to deliver effective education, training and capacity building outcomes across both internal (organisational) and external (collaborative) environments.

Importantly, as water utility mandates and service capacities can vary significantly from region to region and business to business, the SDG framework has been designed to accommodate for the diverse capabilities and priorities of different urban water utilities. Indicators associated to each Sustainability Outcome are designed to encourage utilities to consider the 'maturity', 'progress' and/or 'impact' of services relative to their context and capabilities. By this feature the framework is supporting a transition to shared value that is "operationally doable" from the outset. Utilities are encouraged to adopt, embed or align SDG- led service indicators within existing internal strategic, reporting and decision-making processes, and explore transformative potential and future development opportunities based on their own operating and organisational environment and capabilities.

Through the Utility of the Future indicator utilities are encouraged to critically consider ways of leveraging their capability to build capacities and stewardship for shared value servicing throughout their region. With richer insight from both internal value delivery (priority indicator) and external or public value (future indicator) metrics, utilities are afforded deeper insights to support continued planning and decision making, business case establishment and strategic development for ongoing stewardship and capability building both internally and across their serviceable region.

Urban water utility sustainability outcomes and links to the SDGs

1. Workplace inclusion and diversity 
2. Education, training and capacity building 
3. Occupational health, safety and wellbeing 
4. Job creation and decent work 
5. Diversification and innovation 
6. Empowering vulnerable customers 
7. Support & strengthen the participation of local communities in water & sanitation planning and management 
8. Strengthen efforts to safeguard cultural and natural heritage 
9. Uptake and implementation of sustainable development 
10. Universal access to safe and affordable drinking water 
11. Universal access to adequate and equitable sanitation 
12. Improve water quality by reducing pollution, minimising dumping, treating hazardous waste and increasing safe re-use 
13. Substantially increase water use efficiency across all sectors to address water security 
14. Implement Integrated Water Management at all levels 
15. Integrated and inclusive climate planning and management 
16. Climate resilient utility infrastructure and services 
17. Liveable and healthy places 
18. Restore, protect and enhance water related ecosystems 
19. Increase energy efficiency 
20. Increase renewable energy production and GhG emissions reduction 
21. Sustainable consumption and production 
22. Waste recycling and circular economy 

Appendix 1: Development of the Water Utility SDG Framework

Throughout 2019-20 the WSAA SDG Working Group and MSDI co-developed the SDG framework through a four-part process that sought to ‘Map’, and ‘Localise’ and ‘Prioritise’ SDG Targets for their application in a framework to drive SDG related outcomes in utility operations and practice. A summary of the components of each stage are outlined in the following table

Key Consideration	Task	Outcome
How do water utilities contribute to the SDGs?	<p>1. Mapping Water Utility contributions to the SDGs</p> <p>A workshop and surveying process with the WSAA SDG WG was conducted by MSDI to identify the way water utilities contribute to the SDGs. The working group reviewed and prioritised relevant targets and indicators based on:</p> <ul style="list-style-type: none"> - Current practice - Current strategic direction - Future priorities <p>Relevant utility services, operational and organisational procedure and practices were identified and mapped to each target where they were believed to have impact either directly or indirectly.</p>	<p>The Working Group found that Water utilities contribute to targets across all 17 goals</p> <p>This highlighted the diversity of water utility contributions to SDG Goals and the breadth of capabilities that contribute to targets.</p> <p>The WSAA WG considered the contributions of utility service delivery and operations, and their contributions as organisations with corporate social, cultural, environmental and economic responsibilities that seek to mitigate impact and ensure the prosperity of people and the environment.</p>
How can water utilities measure this contribution?	<p>2. Localising SDG Targets to the Utility context</p> <p>In this task WSAA WG representatives surveyed the business units and subject expertise of their organisations to develop indicators that would measure the contributing processes and practices they had identified in the Mapping Task.</p> <p>From each utility, a proposed list of Indicators was developed that included</p> <ol style="list-style-type: none"> 1. procedures/metrics for reporting on current practices, processes; and 2. procedures/metrics for reporting on future/strategically prioritised practices. 	<p>The SDG Long List</p> <p>Through this task, the spectrum and extent of Sustainable Development contributions of utilities was identified.</p> <p>An extensive ‘long-list’ of priority SDG targets and utility specific indicators was developed that reflect the suite of current (from compliance to best practice) and strategic or ‘future focused’ SDG contributions, as articulated through the expertise of utilities.</p> <p>This included indicators for demonstrating the contributions of water utilities as businesses (organisational indicators) and the contributions made through service provision and practice (impact indicators).</p> <p>The SDG Long List can be viewed in Appendix 2.</p>
How can the SDGs support the capabilities and priorities of water utilities to deliver sustainable	<p>3. Prioritising Water Utility Sustainability Outcomes</p> <p>A thematic analysis across the SDG targets, and utility indicators (the SDG long-list) was undertaken to understand</p> <ol style="list-style-type: none"> a) The common and overarching “sustainability outcomes” of urban water utilities; and 	<p>While the SDG long-list (comprising 70 targets and 300+ indicators) serves as a rich enabling tool, that can support sustainable development engagement, reporting and innovation there was the need to ensure it could be effectively harnessed to drive sustainability outcomes in current and future practice and strategy.</p>

development outcomes?

- b) The relating targets and indicators that cluster around each of them, including the common synergies and areas of duplication across targets, where similar indicators have been used (or similar processes and practices of SDG contribution are inherent)

4. Establish a set of current and future focused service delivery indicators to drive SDG outcomes in practice.

Following the prioritisation exercise in the previous task, a secondary analysis was undertaken by the WSAA WG to identify and propose

- a) A common “priority indicator” for both reporting and progressing current utility contributions to the SDGs.
- b) A common “Utility of the Future” Indicator to guide water servicing outcomes in ways that optimise utility contributions to the SDGs

Importantly, these were required to support the identified variability in utility capacity and priority for SDG engagement, progress and innovation to support broad-scale adoption.

A framework for Sustainability Outcomes for Water utilities

From this analysis, the common Sustainable Development themes of activity were identified across

- a) the organisational environment of urban water utilities; and
- b) operational environment-which include those that support a richer enabling context for SDG advancement and those directly related to service delivery.

These are described throughout this report as sustainability outcomes and represent the common utility *processes and practices that* drive SDG related outcomes.

For each Suitability outcome, a “priority” and “Utility of the Future” indicator has been developed. These have been determined through the Tasks 3 and 4 analyses in which synergies and duplication across the SDG Long List Targets and Indicators were identified, and specially tailored indicators established to provide a transformative framework that encourages utilities identify how they can deliver SDG outcomes both now- through current processes and practices- and in more optimised ways as the utility of the future.

The WSAA SDG framework for Water Utility Sustainability Outcomes can be seen in Appendix 1.

Appendix 2: Water utility sustainability outcomes and links to SDG targets

A. Internal Organisational environmental

1. Workplace inclusion and diversity: Availability and Access
2. Education, training and capacity building
3. Occupational health and safety
4. Job creation and decent work
5. Diversification and innovation

B. Operational environment- Enabling Factors

Inclusion and Empowerment

6. Empowering vulnerable customers
7. Support and strengthen the participation of local communities in water and sanitation planning and management
- 8 Strengthen efforts to safeguard cultural and natural heritage

Sustainable Development

9. Uptake and implementation of Sustainable Development

C. Operational environment- Delivery Focus

Essential Service Provision

- 10 a & b Universal access to safe and affordable drinking water
- 11 Universal access to adequate and equitable sanitation
12. Improved water quality by reducing pollution, minimising dumping, reducing hazardous waste and increasing safe re-use
13. Substantially increase water use efficiency across all sectors to address water scarcity
14. Implementing IWM at all levels, across entire water cycle

Climate Change and Disaster Management

15. Integrated and inclusive climate planning and management
16. Climate resilient utility and services

Ecological Health and Liveability

17. Liveable and healthy places
18. Restore, protect and enhance water related ecosystems

Resource efficiency and Recovery Towards Regenerative Planning

19. Increase energy efficiency

20. Increase renewable energy production and emissions reduction

21. Sustainable consumption and production

22. Waste recycling and circular economy

SDG Targets and Water Utility Indicators

For each of the twenty-two Sustainability Outcomes the Working Group has identified SDG targets that relate – either:

- **Directly or indirectly**, and
- In areas for which water utilities **currently have responsibilities** (Priority area) or could have in the context of a **Utility of the Future**.

For each Sustainable Outcome, a set of specific indicators have been developed that would allow water utilities to measure and report on their performance and consequently their contribution to the United Nations SDG agenda. For each indicator there is to be a specific description, definition and metric. The Working Group is yet to complete the work to finalise these features.

A. Internal Organisational Environment

1. Workplace inclusion and diversity
2. Education, training and capacity building
3. Occupational health, safety and wellbeing
4. Job creation and decent work
5. Diversification and innovation

1. Workplace inclusion and diversity

SDG Value Proposition: Water utilities make substantial contributions to the SDGs as organisations that ensure all staff have the same opportunities, and are supported to access and take up these opportunities. The Priority Indicator supports utilities to consider their internal processes for ensuring inclusion and diversity and the extent of progress they have made in implementing these plans. The Utility of the Future Indicator encourages utilities to critically assess the suitability and effectiveness of these plans for both immediate staff, and those in their supply chain.

Priority Indicator: Maturity and implementation progress of utility Diversity and Inclusion strategy.

Description: Maturity scale and criteria to be based on existing frameworks (e.g. Australian Network on Disability) and allow for assessment of negative progress and impact.

Definition: Working Group to define

Metric: Working Group to define



Target 5.1,
5.5



Target 8.5



Target 10.3,
10.4, 10.5



Target 11.4



Target 16.7,
16b

1. Workplace inclusion and diversity

SDG Value Proposition Through the Future Focused Indicator utilities are encouraged to consider the effectiveness of diversity and inclusion processes and strategies by measure of progress. This encourages utilities to continue to develop processes that further support the capacities of both internal staff and those engaged through the supply chain.

Indicator Utility of the Future: Proportion of workforce by gender, age, persons with disabilities, indigeneity, culturally and linguistically diverse background etc.

- a) In workforce,
- b) In leadership/management positions
- c) Represented across salary bands
- d) Represented across supply chain

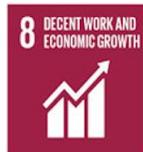
Description: Working Group to Define

Definition: Working Group to define

Metric: Working Group to define



Target 5.1,
5.5



Target 8.5



Target 10.3,
10.4, 10.5



Target 11.4



Target 16.7,
16b

2. Education, training and capacity building

SDG Value Proposition: Water utilities make substantial contributions to the SDGs through the delivery of education, training and capacity building programs and planning. This includes organisationally focused staff and contractor training and development programs and external programs supporting the ongoing literacies and capacities of customers and stakeholder groups to participate in water planning, management and sustainability. The Priority Indicator encourages utilities to consider the breadth of training, development and education services they provide both internally and externally. The Utility of the Future Indicator encourages utilities to critically assess the effectiveness of these services, encouraging the continued development of education resources and programs for staff and supply chain, and communities- recognising the increasingly critical role they play in water planning and management.

Priority Indicator: Participation rate of all employees in formal and informal education and training programs delivered or funded by the utility in the previous 12 months.		
Description: Working Group to define	Definition: “Education and Training” includes but are not limited to environmental management and cultural competency training, anti-discrimination training, natural and cultural heritage protection, health and Safety training, disaster response and climate change mitigation training, vulnerable communities support (general e.g. international development and specific e.g. domestic Violence support etc.), graduate placement and early career employer programs, community engagement and participation training (e.g.. citizen science), IWM and water efficiency programs, global citizenship and sustainable development training etc.	Metric: Working Group to define Employees comprising all internal staff, aggregated across salary band.



Target 4.3,
4.5, 4.7



Target 8.3,
8.6



Target 10.2,
10.3



Target 12.8

2. Education, training and capacity building

SDG Value Proposition Through the Utility of the Future Indicator, utilities are encouraged to critically examine the effectiveness of education services and programs, as indicated through the “progress pipeline” for immediate staff, those contracted through supply chains and communities engaged in water planning, management and sustainability advocacy. This encourages utilities to continue to develop and refine education programs that optimise outcomes for integrated sustainable development, recognising the increasingly important role of communities and stakeholder in planning, management and operational processes in the future.

<p>Utility of the Future Indicator: Progress through engagement, training and employment pipeline(s) of internal and external employees and customers, as result of formal and informal education and training programs delivered or funded by utility in the previous 12 months.</p>		
<p>Description: Working Group to define</p>	<p>Definition: “Education and Training” includes but is not limited to environmental management and cultural competency training, anti-discrimination training, natural and cultural heritage protection, health and safety training, disaster response and climate change mitigation training, vulnerable communities support (general e.g. international development and specific e.g. domestic violence support etc.), graduate placement and early career employer programs, community engagement and participation training (e.g. citizen science), IWM and water efficiency programs, global citizenship and sustainable development training etc.</p> <p>“All employees” aggregated by demographics/region/ supply chain services and across salary band.</p>	<p>Metric: Working Group to define</p>



Target 1.2,
1.5



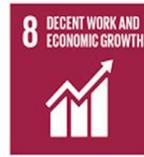
Target 4.3,
4.5, 4.7, 4a



Target 5.1



Target 6.5, 6b



Target 8.2,
8.6



Target 10.2,
10.3



Target 11.3,
11.5, 11b



Target 12.8



Target 13.1,
13.3



Target 14.1,
14.2



Target 16.6,
16.7



Target 17.7

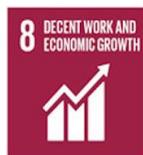
3. Occupational health, safety and wellbeing

SDG Value Proposition: Water utilities, as organisations with corporate and social responsibilities make a substantial contribution to the SDGs through provision of safe and enjoyable working conditions that ensure the health and wellbeing of their staff base. The priority indicator actively supports utilities to continue to develop health and wellbeing procedures and practices, while the Utility of the Future indicator encourages the diversification of these services to better suit the needs of immediate staff and those procured through the supply chain and public engagement and participation practices

Priority Indicator: Index of WSAA’s Health and Safety Maturity Model.		
Description: Working Group to define	Definition: Working Group to define	<p>Metric: maturity model derived from WSAA OHS model and Health & Safety benchmarking indicators. Must include maturity representation of mental health framework</p> <p>Metrics: MH Maturity should assess</p> <ul style="list-style-type: none"> - Progress on H&S index (as above) - Maturity of partnerships to deliver health and wellbeing programs and policies for staff, - Diversity and Inclusion progress. - Description ‘mental Health framework’ may also include utility Programs, strategies or Action Plan that detail partnerships and integrated processes. <p>e.g. of index. Progress on OHS principles assessed as lagging (-1), Minimum (2), Progressing (5) and Leading (8).</p>



Target 3.3, 3.4



Target 8.5



Target 10.2, 10.3



Target 16b

3. Occupational health, safety and wellbeing

SDG Value Proposition: The Utility of the Future indicator encourages utilities to extend occupational health and wellbeing policies, procedures and practices in ways that will more intricately support the diverse and growing staff base utilities are likely to expect over future years. Public, private and community based partnerships are encouraging to ensure staff, either directly employed by the utility, employed through supply chain processes or engaged in community and stakeholder based participative procedures have appropriate and effective occupational health, safety and wellbeing procedures in place.

<p>Utility of the Future Indicator: % Investment (\$/ in-kind) and implementation maturity of cross-organisation, public, private and community partnerships to deliver health and wellbeing programs and policies for staff, supply chain and customers.</p>		
<p>Description: Working Group to define. Indicator designed to measure the outcomes of these partnerships. Maturity to include alignment with diversity and inclusion targets and protocols, enterprise agreements and other organisational policies.</p>	<p>Definition: Working Group to define</p>	<p>Metrics: Working Group to define</p>



Target 3.2, 3.3, 3.4



Target 5.1, 5.5



Target 8.5



Target 10.2, 10.3, 10.4



Target 11.4



Target 12.7



Target 16.1, 16b, 16.7



Target 17.17

4. Job creation and decent work

SDG Value Proposition: Water utilities contribute to the SDGs through the provision of safe, fare and inclusive employment opportunities across a broad range of skillsets, expertise and working arrangements. The priority indicator encourages utilities to monitor the rate and quality of meaningful employment provision the offer, while the utility of the future indicator encourages utilities to optimise these arrangements, ensuring safe, meaningful and fulfilling working arrangement across both their internal workforce and supply chain.

Priority Indicator: Net annual new job uptake, net annual new job creation, net annual living wage consistent with enterprise, OHS and wellbeing agreements and policies.

Description: Working Group to define

Definitions: 'New job creation' to include new positions and new graduate positions.

Metric: Working Group to define

'New job uptake' and 'living wage' to be aggregated by geography (as indicator/proxy for local employment), gender, age, cultural background (as indicator of diversity and inclusion), consistency with policies and agreements as indicator for equity.



Target 5.1,
5.5



Target 8.2,
8.3



Target 9.5



Target 10.2,
10.4

4. Job creation and decent work

SDG Value Proposition: The Utility of the Future indicator encourages utilities to extend their contribution of safe, meaningful and fulfilling employment opportunities both internally and broadly through their supply chain. Through a critical consideration of their internal enterprising, OHS and diversity and inclusion procedures, utilities are also encouraged to consider how a commitment to job creation and decent work for all employees (including fixed, contracted, casual and procured) will be prioritised and embedded as business as usual.

Utility of the Future Indicator: Net annual new job uptake, net annual new job creation, net annual living wage across utility and supply chain consistent with enterprise, OHS and wellbeing agreements, diversity and inclusion and procurement policies.		
Description: Working Group to define	Definition: compliance to utilities polices and agreements to include Vic disability enterprises, social enterprises, jobs for indigenous Australians.	Metrics for supply chain include <ul style="list-style-type: none"> • % of tenders or procurement spend utilising local providers • Jobs supported through procurement • Local traineeships supported & provided



Target 5.1,
5.5



Target 8.1,
8.2, 8.3, 8.5,
8.6



Target 9.5



Target 10.2,
10.4



Target 12.7

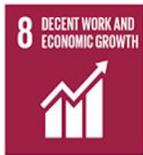


Target 16.6,
16.7, 16b

5. Diversification and innovation

SDG Value Proposition: Research and development is critical to ensuring the ongoing growth of water utilities, particularly in relation to the capability utilities possess to meaningfully contribute to the SDGs. The priority indicator encourages utilities to consider the effectiveness of research and development activities as indicated by the extent of uptake and investment. The Utilities of the Future indicator then encourages utilities to consider the value of Research and development investment and practice in supporting ongoing sustainable development contributions as articulate through this SDG framework.

Priority Indicator: Extent of uptake of Research and development comparable to Research and Development expenditure.		
Description: Working Group to define	Definition: proportion of R&D projects or spend that results in X (WG to define)	Metric: Working Group to define



Target 8.1,
8.2, 8.3



Target 9.5

5. Diversification and innovation

SDG Value Proposition: The Utility of the Future indicator encourages utilities to continue to peruse innovative and diverse servicing solutions that build their capabilities to advance the SDGs. Through a critical consideration of the extent of research and development uptake in relation to SDG advancement utilities are encouraged to monitor the effectiveness of research and developmental activities in optimising sustainable development outcomes both now and for the future.

Utility of the Future Indicator: Extent of uptake of research and development in relation to annual advancement of WSAA SDG indicators.

Description: Proportion of R&D projects or spend that results in Priority and Future Indicators progression

Definitions: Working Group to define

Metric: Working Group to define



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All

A. Operational Environment- Enabling Factors

Inclusion and Empowerment

6. Empowering vulnerable customers
7. Support and strengthen the participation of local communities in water and sanitation planning and management
8. Strengthen efforts to safeguard cultural and natural heritage

Sustainable Development

9. Uptake and implementation of Sustainable Development

6. Empowering vulnerable customers

SDG Value Proposition Water utilities can further their SDG contribution by providing concession and vulnerability support services that more effectively reach and engage diverse and previously less-engaged community subsections. The Priority Indicator supports utilities to assess the reach of their services- ensuring that concession and support services are being accessed by those in need of them. The Utility of the Future Indicator encourages utilities to critically assess the suitability and effectiveness of tools for empowering customers.

Priority Indicator: Percentage of eligible customers in jurisdiction receiving/accessing concession and vulnerability support services.

Description: Working Group to define

Definition: *'Eligible customers'* to include concession holders, low income earners, the under-employed or unemployed, Family or domestic violence victims, financial abuse victims and others which concession and vulnerability program seek to support.

Metric: Working Group to define



Target 1.2,
1.4



Target 5.1

6. Empowering vulnerable customers

SDG Value Proposition: Through the future focused indicator utilities are encouraged to assess how effective the concession and support services they offer are at supporting the needs and capacities of their community. In particular, utilities are encouraged to ensure the engagement and participation of diverse community sub-sections including the under-engaged, to ensure that water services can empower everyone.

Utility of the Future Indicator: Customer trust and satisfaction ratings of less heard and under-engaged customer segments, compared with overall customer satisfaction and trust ratings.

Description: This indicator is a perception measure to provide indication on the quality of inclusive engagement. It should be pared with the priority indicator which serves as an indication of the breadth of engagement itself (e.g. effectively service uptake).

Definition: Working Group to define, including overarching criteria for “less-heard and under engaged”.

Metric: Working Group to define



Target 1.2,
1.4



Target 4.3,
4.7, 4a



Target 5.1



Target 6.4,
6.5, 6b



Target 10.3



Target 11.3,
11.5, 11b



Target 12.8



Target 13.1



Target 14.1,
14.2



Target 16.6,
16.7



Target 17.17

7. Support and strengthen the participation of local communities in water and sanitation planning and management

SDG Value Proposition: Water utilities make substantial contributions to the SDGs through processes of community education and engagement, capacity building and participation in planning and management practices. The Priority Indicator encourages utilities to consider the extent and quality of community engagement and participation throughout their service region. The Utility of the Future Indicator seeks to provide a richer articulation of this extent and quality through the correlation of processes with the degree of community competency and satisfaction in planning and management service delivery (including the extent to which community has had the opportunity to participate).

Priority Indicator: Extent (degree of engagement) and reach (across jurisdiction) of community engagement and consultative programs and processes (by program, demographics, region, % population in management jurisdiction) and maturity of engagement programs.		
Description: Working Group to define	Definition: “Metrics for degree and breadth of participation, and satisfaction of outcomes of engagement using CRCWSC IAP2 Guidelines for community engagement and/or WSAW IWM guidelines).	Metric: Working Group to define



Target 1.4,
1.5



Target 4.3,
4.7



Target 6.4,
6.5, 6b



Target 10.3



Target 11.3,
11.5, 11b



Target 12.8



Target 13.1



Target 14.1,
14.2



Target 16.6,
16.7, 16.10,
16b



Target 17.17

7. Support and strengthen the participation of local communities in water and sanitation planning and management

SDG Value Proposition: The Future Focused Indicator provides utilities with a more qualitative assessment of processes for community participation, providing an indication of their capacities for participation and satisfaction of the opportunities provided by utilities for participation in water and sanitation planning and management. This supports utilities to refine their service delivery processes in ways that are more suited to the capabilities and priorities of their customer base,

Utility of the Future Indicator: Extent, reach and maturity of community participation and engagement programs and processes (by program, demographics, region and % population in management jurisdiction) coupled with community water planning and management literacy and satisfaction.

Description: Working Group to define

Definition: “Program” to include price setting, planning, project-based engagement etc.

Metric: ‘extent and reach’ of participation, and satisfaction of outcomes of engagement using CRCWSC IAP2 Guidelines for community engagement or the recently agreed IWM metrics).



Target 1.5



Target 4.3, 4.7



Target 6.4, 6.5, 6b



Target 10.3



Target 11.3, 11.5, 11b



Target 13.1, 13.3



Target 14.1, 14.2



Target 16.6, 16.7, 16.10, 16b



Target 17.17

8. Strengthen efforts to safeguard cultural and natural heritage

SDG Value Proposition: Water utilities make substantial contributions to the SDGs through service related partnerships and programs that seek to preserve and where appropriate enhance the natural and cultural heritage of their region. The Priority Indicator encourages utilities to consider the extent and progress of this contribution, in particular relating to procedure to ensure protection. The Utility of Future Indicator supports utilities to extend beyond their protection remit through embedding conservation and preservation practices and procedures in utility operations.

Priority Indicator: Maturity of utility cultural and natural heritage protection procedures.		
Description: Working Group to define	Definition: "Program" to include price setting, planning, project-based engagement etc.	Metric: maturity level should be determined through a scale -2-10 with specific criteria relating to <ul style="list-style-type: none"> a) Degree of compliance with natural and cultural heritage protection strategies, protocols and procedures b) Degree of implementation of natural and cultural heritage protection strategy (-2= no strategy) c) The extent of engagement with Traditional Owners (-2+ no consultation, 10= TO led operations) d) The level of impact Traditional Owner engagement has had on decisions, planning and operations.



Target 6.5



Target 11.3, 11.4, 11.7, 11a



Target 12.8



Target 14.1, 14.2



Target 15.1, 15.5, 15.8, 15.9, 15a

8. Strengthen efforts to safeguard cultural and natural heritage

SDG Value Proposition: Through the Utility of the Future Indicator, utilities are encouraged to extend cultural and natural heritage protection practices by ensuring cultural and natural heritage conservation and preservation actions are reflected through their immediate operational procedures, in their ecological footprint and subsequent supply chain.

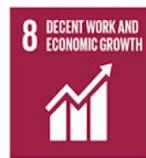
Utility of the Future Indicator: Maturity of utility cultural and natural heritage conservation and preservation procedures in utility specific operations, ecological footprint and supply chain.		
Description: Working Group to define	Definition: include policies, strategies and plans and practices that consider Impact/ risk & mitigation, protection and enhancement.	Metric: Working Group to define



Target 3.4



Target 6.5,
6.6



Target 8.4



Target 9.2



Target 11.3,
11.4, 11.7,
11a



Target 12.2,
12.8



Target 14.1,
14.2



Target 15.1,
15.5, 15.8,
15.9, 15a

9. Uptake and implementation of Sustainable Development

SDG Value Proposition: Water utilities play a critical role in the advancement of the SDGs, both directly through their daily operations and indirectly engagement with stakeholders and community. The priority indicator encourages utilities to quantify this contribution through an assessment of the yearly progress utilities make to the advancement of sustainable development indicators articulated through this framework. The utility of the future indicator encourages utilities to extend on their SDG commitment through processes and practices designed to foster a culture and broader the commitment to an SDG led development agenda throughout their region.

Priority Indicator: Extent of annual progress to Sustainable Development (per Target/Indicator).		
Description: Working Group to define	Definition: Working Group to define	Metrics: 'Extent' determined through contribution to Priority and Utility of the Future Indicators



Target All



Target All



Target All



Target All



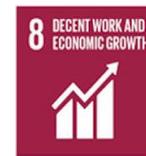
Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All



Target All

9. Uptake and implementation of Sustainable Development

SDG Value Proposition: The Utility of the Future indicator encourages utilities to play a role in championing the SDGs throughout their serviceable region. This could include processes, programs and actions to foster a culture for sustainable development progress and SDG related partnerships, and encouraging a commitment to sustainable development through the UN global compact. Through this indicator utilities are

Utility of the Future Indicator: % Workforce, supply chain and stakeholders who are a signatory to the UN global compact.

Description: Working Group to define

Definitions: Working Group to define

Metric: Working Group to define



Target 12.6,
12.7



Target 17.4

C. Operational Environment- Delivery Factors

Essential Service Provision

- 10 a & b Universal access to safe and affordable drinking water
- 11 Universal access to adequate and equitable sanitation
- 12. Improved water quality by reducing pollution, minimising dumping, reducing hazardous waste and increasing safe re-use
- 13. Substantially increase water use efficiency across all sectors to address water scarcity
- 14. Implementing IWM at all levels, across entire water cycle

Climate Change and Disaster Management

- 15. Integrated and inclusive climate planning and management
- 16. Climate resilient utility and services

Liveability

- 17. Liveable and healthy places

Improved Ecological Health and biodiversity

- 18. Restore, protect and enhance water related ecosystems

Resource efficiency and Recovery Towards Regenerative Planning

- 19. Increase energy efficiency
- 20. Increase renew able energy production and emissions reduction
- 21. Sustainable consumption and production
- 22. Waste recycling and circular economy

10A. Universal access to safe and affordable drinking water

SDG Value Proposition: The SDGs encourage beyond the meter service provision that can ensure universal, safe access to clean drinking water for all. The priority indicator support utilities to consider current progress consistent with best practice standards of reticulated servicing. the Utility of the Future indicator encourages utilities to deliver optimised servicing outcomes by accounting for community members within the serviceable region accessing non-reticulated or non-metered drinking water sources.

<p>Priority Indicator A: Proportion of population in serviceable area using safely managed drinking water services, metrics consistent with NPR and Aus Safe Drinking Water Guidelines.</p>		
<p>Description: Current best practice reporting focused on population receiving drinking water services (e.g. connected to retic)</p>	<p>Definition: “Using safely managed drinking water services” indicated by % of time these services are compliant with NPR/ASDW guidelines.</p>	<p>Metric: ‘Household’ as an indicator of population. Potential requirement to consider data sources to quantify ‘population’ e.g. number of residents per household (ABS data).</p>



Target 1.2, 1.4



Target 3.2, 3.3, 3.9



Target 4a



Target 6.1



Target 9.1

10A. Universal access to safe and affordable drinking water

SDG Value Proposition: Through the Future Focused indicator, utilities are encouraged to deliver beyond the meter service provision by considering community members within their jurisdictional boundary either without a metered water supply or accessing non-reticulated drinking water supplies. Through this additional consideration a higher standard of universal, safe access to clean drinking water is achieved.

<p>Utility of the Future Indicator A: Beyond the meter: proportion of population in serviceable area (by Household, public/private facility etc.) without access to safe and affordable drinking water (Metrics consistent with NPR and ASDG) whether receiving utility services or not.</p>		
<p>Description: Future best practice reporting focused on the entire population in serviceable region, whether receiving drinking water services (e.g. connected to retic) or not.</p>	<p>Definition: “Using safely managed drinking water services” indicated by % of time these services are compliant with NPR/ASDW guidelines.</p>	<p>Metric: ‘Household, public facility and private facility/ source as an indicator of population. Potential requirement to consider data sources to quantify ‘population’ e.g. number of residents per household (ABS data), usage per private/public source etc.</p>



Target 1.2, 1.4



Target 3.2, 3.3, 3.9



Target 4a



Target 6.1



Target 9.1

10B. Universal access to safe and affordable drinking water

SDG Value Proposition: The SDGs support water utilities to deliver beyond best practice standards for affordable and safe drinking water. The priority indicator support utilities to provide an articulation of the general affordability of their services. The Utility of the Future indicator encourages utilities to consider a more tailored service delivery, through providing a more intricate understanding of the financial impact of their services for community subsections in varying economic circumstances.

Priority Indicator B: Proportion of household disposable income spent on water and wastewater services.		
Description: Working Group to define	Definition: Working Group to define	Metric: Working Group to define



Target 1.2



Target 3.2,
3.3



Target 4.3



Target 6.1



Target 9.1

10B. Universal access to safe and affordable drinking water

SDG Value Proposition: Through the Future Focused indicator, utilities are encouraged to consider the impact of water pricing for households in varying income brackets and the potential for more servicing arrangements that best suit community experiences, needs and capacities.

Utility of the Future Indicator B: To be determined		
Description: Working Group to define	Definition: Working Group to define	Metric: Working Group to define



Target 1.2



Target 3.2, 3.3



Target 4.3



Target 6.1



Target 9.1

11. Universal access to adequate and equitable sanitation

SDG Value Proposition: The SDGs encourage beyond the meter service provision that can ensure universal safe access to sanitation services for all. The priority indicator support utilities to consider current progress consistent with best practice standards of reticulated servicing. The Utility of the Future indicator encourages utilities to deliver optimised servicing outcomes by considering access to reliable and safe sanitation beyond immediate infrastructure service provision requirements.

Priority Indicator: Proportion of population using safely managed sanitation services, metrics consistent with NPR and National guidelines		
Description: Working Group to define	Definition: Working Group to define	Metric: Working Group to define



Target 1.4



Target 3.2, 3.9



Target 6.2

11. Universal access to adequate and equitable sanitation

SDG Value Proposition: Through the future focused indicator utilities are encouraged to consider beyond the meter requirements such as social, cultural and physical household dimensions that ensure safety and function of sanitation services, and consider the reliability and suitability of public, private and off-grid sanitation facilities within the utility service boundary.

Utility of the Future Indicator: Beyond the meter: Number of people (by. Households, public/private and 'off-grid' facilities etc.) in management jurisdiction without safe and reliable sanitation services (consistent with NPR and ASDG) whether directly serviced or not.		
Description: Working Group to define	Definition: Working Group to define	Metric: Working Group to define



Target 1.2,
1.4



Target 3.2,
3.3



Target 4a



Target 6.2



Target 9.1

12. Improve water quality by reducing pollution, minimizing dumping, treating hazardous waste and increasing safe re-use

SDG Value Proposition: The SDGs support utilities to optimise safe and effective waste treatment and reuse. The priority indicator support utilities to deliver best practice standards of core business wastewater treatment. The Utility of the Future indicator encourages utilities to deliver optimised servicing outcomes by identifying pathways for sustainable reuse of wastewater, biosolids and recoverable materials.

Priority Indicator: Volume/% of total wastewater safely treated, consistent with NPR and state and local regulatory Guidelines

Description: Working Group to define

Definition: Working Group to define

Metric: Working Group to define



Target 3.9



Target 6.3



Target 11.6



Target 12.4



Target 14.1,
14.2

12. Improve water quality by reducing pollution, minimizing dumping, treating hazardous waste and increasing safe re-use

SDG Value Proposition: Through the future focused indicator utilities are encouraged to extend practice beyond current best practice wastewater treatment to develop options for the effective and safe reuse of wastewater and operational products such as biosolids and recoverable materials. Importantly this will require regulatory and reporting measures to support an appropriate enabling environment for optimised outcomes.

Utility of the Future Indicator: Volume/% of total wastewater, total biosolids and total recoverable materials safely reused, consistent with NPR and state and local regulatory Guidelines		
Description: Supporting utilities to transcend regulatory compliance to optimise water/waste reuse.	Definition: Working Group to define	Metric: Working Group to define



Target 2.4



Target 6.3



Target 8.4



Target 11.6



Target 12.2, 12.4, 12.5

13. Substantially increase water use efficiency across all sectors to address water scarcity.

SDG Value Proposition: The SDGs support utilities to deliver enhanced water efficiency products and servicing arrangements that build the capabilities of customers to play a role in addressing water scarcity. The priority indicator supports utilities to monitor the overall efficiency of their serviceable region and their extent of influence (including the effectiveness of products and services offered). The Utility of the Future indicator encourages utilities to consider both the accessibility and suitability of efficiency measures in their portfolio to enhance the uptake and investment of efficiency measures throughout their serviceable region.

Priority Indicator: Change in water-use efficiency over time (L/pp/year) with account of seasonal /climatic variability, population of manageable jurisdiction and utility locust of influence.		
Description: Working Group to define	Definition: Working Group to define	Metric: Working Group to define including a) How seasonal and climatic variability is measured, and b) Utility locust of influence



Target 2.4



Target 6.4



Target 8.4



Target 9.1,
9.2



Target 14.1,
14.2

13. Substantially increase water use efficiency across all sectors to address water scarcity.

SDG Value Proposition: Through the future focused indicator utilities are encouraged to identify areas for continued water efficiency gains within their management region and consider tailored servicing approaches and options that enhance stakeholder engagement and uptake, thus enriching their capability to address water scarcity.

<p>Utility of the Future Indicator: Proportion of public/private uptake and investment (\$ and in-kind) in utility water efficiency initiatives (by industry/sector, suburb, sex, age, socio-economic status and other demographics relative to jurisdiction).</p>		
<p>Description: Working Group to define</p>	<p>Definition: 'Water efficiency initiatives' to include water saving, reuse, recycling and other alternative sources substitution, options and projects.</p>	<p>Metric: Working Group to define</p>



Target 1.5



Target 2.4



Target 4.3



Target 6.4



Target 9.1



Target 11.6, 11.7, 11a



Target 12.2, 12.8



Target 14.1, 14.2

14. Implement Integrated Water Management at all levels

SDG Value Proposition: Water utilities make substantial contributions to the SDGs through multi-stakeholder and integrated processes for water planning and management. The priority indicator supports utilities to deliver best practice integrated water management outcomes pursuant to the WSAA IWM guidelines for urban water utilities framework. The Utility of the Future indicator encourages utilities to continue to drive whole of water cycle planning and management processes through the enhancement community and customer participation in utility planning and management procedures.

Priority Indicator: Maturity and coverage of Integrated Water Management.		
Description: IWM is coordinated across scales and management jurisdictions. This includes but is not limited to processes of state-wide, catchment-scale, regional, jurisdictional, precinct, local/streetscape water planning and management.	Definition: IWM as defined by WSAA IWM Guidelines, but also including other forms with relating principles (e.g. total water cycle management etc.)	Metric: WM maturity (Scale -1-10) or index model with utility specific criteria to guide progress to beyond best practice. Criteria to (potentially) include reflections of project maturity, number of projects, levels of collaboration, levels of community and environmental outcomes.



Target 1.5



Target 6.4, 6.5, 6b



Target 11.3, 11.4, 11.5, 11a



Target 13.2, 13.3



Target 14.1, 14.2



Target 16.6, 16.10, 16a



Target 17.4, 17.17

14. Implement Integrated Water Management at all levels

SDG Value Proposition: Through the future focused indicator utilities are encouraged to continue to extend ‘whole of water cycle’ servicing outcomes that actively seek to engage all residents and stakeholders in water planning and management, supporting their participation at all levels.

<p>Utility of the Future Indicator: Maturity and coverage of ‘beyond the meter’ processes and practices in</p> <ol style="list-style-type: none"> 1) multi-stakeholder 2) cross sector and 3) cross utility <p>collaboration in IWM planning and management.</p>		
<p>Description: Working Group to define</p>	<p>Definition: Working Group to define</p> <p>‘Beyond the meter’ to include Traditional Owner groups/Registered Aboriginal Parties, serviceable/non-serviceable community, public and private organisations.</p>	<p>Metric: Working Group to define</p>



Target 1.5



Target 6.5, 6b



Target 11.3, 11.4, 11.5, 11a, 11b



Target 13.3



Target 14.1, 14.2



Target 16.6, 16.10, 16a



Target 17.14, 17.17

15. Integrated and inclusive climate planning and management

SDG Value Proposition: Water utilities make substantial contributions to the SDGs through multi-stakeholder, integrated planning and management approaches that build a collective social resilience to climate change impact prevention and response. Through a maturity model the priority indicator guides utilities to adopt and embed integrated planning and management actions across their business and jurisdiction for climate change response and mitigation. The utility of the future indicator then encourages utilities to strengthen these processes through providing a critical reflection of the extent, breadth and effectiveness of these processes for communities and stakeholders.

Priority Indicator: Maturity of utility climate response/mitigation, adaptation and transformation plans		
Description: Working Group to define	Definition: Working Group to define	Metrics: Maturity scale to reflect <ul style="list-style-type: none"> - presence/absence of plan - extent of plan implementation - extent of integration across organisation and s/holders - extent of adaptive planning - alignment of plan with national, state and local science based targets (e.g. 1.5 degree future) - public accessibility of plan <p>e.g. -1 no plans, 4-initial plan, 6- BAU across business units, 7. Science based targets 8- integration across business units 9 adaptive planning etc.). WG to develop.</p>



Target 1.5



Target 6.5, 6a, 6b



Target 11.5



Target 12.8



Target 13.1, 13.2, 13.3



Target 15.9, 15a



Target 16.6



Target 17.14, 17.17

15. Integrated and inclusive climate planning and management

SDG Value Proposition: The Utility of the Future Indicator encourages utilities to critically monitor the success of climate planning initiatives, through insights relating to the quality of customer and stakeholder engagement, at all stages of the planning and management process (Before, during and after events). This ensures a planning and management process that is co-determined, strengthening systems resilience to climate change related stresses for everyone in the process.

Utility of the Future Indicator: Proportion and breadth of cross sector, stakeholder and customer participative planning and management for climate change impact response/mitigation, adaptation and transformation and extent of climate literacy (Define) and customer satisfaction by serviceable area.

Description: Working Group to define

Definition: Working Group to define

Metrics

'Proportion' represented by

- % of customers who are prepared for climate impacts (based on scale survey)
- % of low-income customers who have received targeted adaptation support
- % of priority/impact vulnerable customers who have received targeted adaptation support

'Breadth' maturity scale with criteria to include

- % community vulnerability mapping completed
- % of people trained to strengthen resilience (disaster risk reduction and climate change adaptation)
- level of Climate Change Literacy across jurisdiction.
- % of people and/or organisations assisted through climate change advisory support or technology transfer / exchange



Target 1.5



Target 3.4



Target 4.3,
4.7



Target 6.5,
6a, 6b



Target 11.3,
11.4, 11.5,
11a



Target 12.8



Target 13.1,
13.2, 13.3



Target 14.1,
14.2



Target 15.9,
15a



Target 16.6,
16.7, 16a,
16.10



Target 17.7,
17.14

16. Climate resilient utility infrastructure and services

SDG Value Proposition: Through the provision of resilient water infrastructure water utilities make a substantial contribution to the SDGs. This contribution is supported through best practice infrastructure planning and management ensuring the ongoing reliability of essential water infrastructure in the face of climate related events with minimal disruption or negative impact to the community and environment. The Priority Indicator encourages utilities to consider the effectiveness of infrastructure planning, management and investment related activities and encourages each utility to strengthen internal processes and procedures through a maturity model. The utility of the future indicator then encourages utilities to strengthen these processes through a 'whole of water cycle' consideration of water related infrastructure planning, that seeks to engages key stakeholder and communities in the planning and management process.

<p>Priority Indicator: Number of climate related disruptions to services and extent of community impact (define metrics) consistent with maturity of utility climate adaptation and mitigation planning and investment.</p>		
<p>Description: Working Group to define</p>	<p>Definition: 'disruption to services': hours of water / sewer services not delivered 'impact': impact of spills on public and/or private amenity, health, environment</p>	<p>Metrics: 'Maturity of planning and investment' as indicated by scale with criteria relating to - Level and extent of vulnerability assessment Level and extent of control factors inc. s/holder and customer consultation and engagement, research and development.</p>



Target 9.1



Target 11.3, 11.5



Target 13.1, 13.2, 13.3

16. Climate resilient utility infrastructure and services

SDG Value Proposition: With urban population growth and the frequency and severity of climate related episodes both expected to increase in future years, an integrated approach to infrastructure planning, management and investment will be required to ensure the ongoing viability of the water system. The utility of the future indicator seeks to account for this, encouraging utilities to consider the extent and quality of multi-stakeholder processes to planning and management. This indicator bares relevance to the UOF indicator 14 for ensuring participative outcomes in climate planning and management, however while the former is concerned with the process for enhancement of community resilience, this indicator concentrates on the enhancement of water infrastructure resilience.

Utility of the Future Indicator: Number of climate related disruptions to services and extent of community impact (define metrics), consistent with maturity of utility climate adaptation and mitigation planning and investment relative to IUF indicator 14 (utility, community, mutli-stakeholder and cross-sector investment).

Description: Working Group to define

Definition: Working Group to define

Metrics: As above in pp15 incorporating metrics from IUF14.



Target 1.5,
1.5.4



Target 4a



Target 6.5,
6a, 6b



Target 9.1,
9.2



Target 11.3,
11.4, 11.5,
11.6



Target 12.8



Target 13.1,
13.2, 13.3



Target 15.9



Target 16.7,
16.10, 16a

17. Liveable and healthy places

SDG Value Proposition: Water utilities contribute to the SDGs through liveability and amenity outcomes that result from essential service delivery. These enhance the social, economic and environmental character of places, supporting a thriving and healthy environment and community. The priority indicator encourages utilities to identify service delivery options that deliver greater health and liveability outcomes to their community. The Utility of the Future indicator supports utilities to critically consider the extent and breadth of this contribution and identify internal processes and practices that see liveability outcomes embedded as a core priority across the business in all future water planning and management operations.

Priority Indicator % of capital projects and operations delivered with co-benefits pertaining to best practice IWM/ Whole of water cycle planning and management guidelines		
Descriptions: best practice IWM see WSAA IWM report outcomes 5 and 6.	Definition: Working Group to define	Metrics: Working Group to define



Target 3.4



Target 6.4, 6.5, 6b



Target 7.2, 7.3



Target 9.1



Target 11.4, 11.5, 11.7, 11a



Target 12.2, 12.8



Target 13.1, 13.3



Target 14.1, 14.2



Target 15.9



Target 16.6, 16a



Target 17.7, 17.14

17. Liveable and healthy places

SDG Value Proposition: The Utility of the Future indicator supports utilities to optimise liveability outcomes in service delivery through considering the extent and effectiveness of liveability planning procedures across the breadth of their operations. Utilities are encouraged to consider and embed liveability planning requirements and procedures across existing and future policies, service standards, guideline sand strategies. A maturity index is designed to support utilities with this transition and will encompasses steps and stages for internal progress and indicator of external progress such as community sentiment.

Utility of the Future Indicator: Maturity of community liveability outcomes embedded in utility policies, guidelines, strategies, procedures, standards.		
Description: Indicator measuring breadth of utility priorities for Liveability and health outcomes in services.	Definition ‘community liveability outcomes’: community values and sentiment for operations and project delivery that achieves fit for purpose water supply, compliance with waste and wastewater treatment standards, flood and drought mitigation, urban greening, social and cultural cohesion, recreation and enjoyment and/or other liveability or IWM indicators.	Metric: Maturity index that accounts for the extent and breadth of community sentiment and liveability outcomes embedded in utility planning, management and operations.



Target 1.5



Target 2.4



Target 3.9



Target 6.4,
6.5, 6b



Target 9.1



Target 11.4,
11.5, 11.6,
11.7



Target 12.2,
12.8



Target 13.1,
13.3



Target 14.1,
14.2



Target 15.9



Target 16.6,
16a



Target 17.7,
17.14

18. Restore, protect, and enhance water related ecosystems

SDG Value Proposition: Water utilities make substantial contributions to the SDGs through planning and management practices that ensure the protection and enhancement of water related ecosystems. The Priority Indicator encourages utilities to monitor the change in quality and investment in water related ecosystems they are either directly responsible for or manage through partnerships. The Utility of the Future Indicator provides a richer articulation of utility contribution through the aggregation of “extent” by the initial quality of the ecosystem in question, and the value type of their contribution. This supports utilities to refine and enhance management practices and investment to deliver optimised outcomes in their respective jurisdictions.

Priority Indicator: Change in the extent of utility managed and/or serviceable water-related ecosystems over time.

Description: Working Group to define

Definition of “utility managed and/or serviceable” To include utility landholdings and/or serviceable region managed through partnership (\$ and/or in-kind investment).

Metric for “Change”:

To include

- a) Number of land holdings with active biodiversity improvement & harm minimisation plans (including non-water specific operational environments)
- b) % of land/no. landholdings assessed for biodiversity management requirements to meet minimum ecosystem resilience threshold
- c) % progress on biodiversity improvement and ecosystem resilience improvement for landholdings and serviceable area
- d) \$ investment in restorative management to offset any loss of biodiversity or ecosystem resilience
- e) % improvement in suitable habitat (per year) for threatened species (consider metrics: case specific)



Target 6.6



Target 14.1,
14.2



Target 15.1,
15.5, 15.8,
15.9

18. Restore, protect, and enhance water related ecosystems

SDG Value Proposition: Through the Utility of the Future Indicator utilities are provided with a more intricate understanding of the extent of ecosystem protection and improvement in relation to investment and management effort. This includes biodiversity metrics that are important for near natural and high-quality water related ecosystems and additional environmental and human health related metrics that assist in providing an articulation of the value of more heavily modified systems.

Utility of the Future Indicator: Change in the Extent (e.g. Index/scorecard) of utility managed and/or serviceable water related ecosystems health for near natural, modified and heavily modified (including urban) environments.

Description: Working Group to define

Definition: “Program” to include price setting, planning, project-based engagement etc.

Metrics: “Change” measured as above and including additional metrics for biodiversity health, threatened species protection, pest and pollution reduction, phys-chem characteristics of water, air and land in relation to “natural” “modified” and “heavily modified” environments.

Were applicable seek alignment to state of the environment reporting.



Target 2.4



Target 3.4



Target 6.6



Target 11.4,
11.6, 11.7



Target 14.1,
14.2



Target 15.1,
15.5, 15.8,
15.9

19. Increase energy efficiency

SDG Value Proposition: Water utilities make substantial contributions to the SDGs through achieving efficiencies in water related energy use. From a ‘whole of cycle’ perspective supply side energy use accounts for a small percentage of total energy use, with substantial energy efficiency saving to be made through demand side measures. The priority indicator encourages utilities to continue to pursue energy efficiency measure in water and waste water essential service delivery. The Utility of the Future Indicator encourages utilities to extend these practices to demand side processes within the water cycle, actively accounting for and seeking efficiencies in water related energy consumption.

Priority Indicator: Energy intensity through KL of water delivered and KL of wastewater treated in accordance with utility Net Zero transition strategy objectives.

Description: Working Group to define

Definition: Working Group to define

Metric: Working Group to define



Target 7.1,
7.2, 7.3



Target 9.4



Target 12.2



Target 13.2,
13.3

19. Increase energy efficiency

SDG Value Proposition: The Utility of the Future Indicator drives a whole of water cycle approach to water related efficiency, encouraging utilities to go 'beyond the meter' in service delivery, developing practices, processes and technologies that optimised water related energy efficiency in their serviceable region. Importantly, appropriate regulatory and policy based reform will be required to support utilities with these transitions.

Utility of the Future Indicator: Energy intensity per KL of water delivered and treated, and KL of water used by customer in serviceable region, in accordance with utility Net Zero transition strategy objectives.

Description: Working Group to define

Definition: Working Group to define

Metric: Working Group to define



Target 6.4,
6b



Target 7.1,
7.2, 7.3



Target 9.4



Target 11b



Target 12.2



Target 13.1,
13.2, 13.3



Target 17.14

20. Increase renewable energy production and GhG emissions reduction

SDG Value Proposition: Water utilities make substantial contributions to the SDGs through the production of renewable energy and reduction in greenhouse gas (ghg) emissions through essentials service provision. From a 'whole of cycle' perspective, supply side ghg production accounts for a small percentage of total emissions, with substantial reductions to be made through demand side measures. The priority indicator encourages utilities to continue to pursue renewable energy production and ghg reduction in water and waste water essential service delivery. The Utility of the Future Indicator encourages utilities to extend these practices to demand side processes within the water cycle, actively accounting for and seeking to reduce ghg emissions in water related energy consumption.

Priority Indicator: Renewable energy % and ghg emissions reduction (define and consider metrics) per KL water/waste (review metric) in accordance with utility net zero transition strategy objectives (define criteria for industry standard or alternative metric for ensuring consistency).

Description: Working Group to define

Definition: Working Group to define

Metric: To include:

- Renewable energy generation in kWh
- Australia – use of Renewable Energy Certificates as proof
- Scope I and II GHG emissions in tones CO₂e-
- Amount of reduction in GHG (intensity figure)
- missions measured using Australian NGER guidance or GHG Protocol (NZ?)



Target 7.1,
7.2, 7.3



Target 9.4



Target 12.2



Target 13.2,
13.3

20. Increase renewable energy production and GhG emissions reduction

SDG Value Proposition: The Utility of the Future Indicator drives a whole of water cycle approach to greenhouse gas (ghg) emissions reduction, encouraging utilities to go 'beyond the meter' in renewable energy and ghg reduction based service delivery, by developing practices, technologies and adoption pathways that optimised water related renewable energy use and ghg reduction in their serviceable region. Importantly, appropriate regulatory and policy based reform will be required to support utilities with these transitions.

Utility of the Future Indicator: Renewable energy % and ghg reduction (define and consider metrics) by utility servicing, and beyond the meter practices (e.g. customer Behaviour and technology uptake) in serviceable region, in accordance with Net Zero Water Cycle objectives.

Description: Working Group to define

Definition: Working Group to define

Metrics: as above and including Net GHG position or additional removals/offsets.



Target 6.4, 6b



Target 7.1, 7.2, 7.3



Target 9.4



Target 11b



Target 12.2



Target 13.2, 13.3



Target 17.14

21. Sustainable consumption and production

SDG Value Proposition: Water utilities make a substantial contribution to the SDGs through the use of recycled and reprocessed materials in operational practices, construction and maintenance. The Priority Indicator supports utilities to identify the immediate extent of this contribution through monitoring the efficiency of their total material flow. The Utility of the future indicator encourages utilities to optimise their resource efficiency through considering their broader material and environmental footprint encompassing immediate consumption and those associated to supply chain based resource procurement.

Priority Indicator: % of recycled/reprocessed content in identified priority material flows.

Description: Working Group to define

Definition: Working Group to define

Metrics: Working Group to define



Target 6.3



Target 8.4



Target 11.6



Target 12.2,
12.4, 12.5

21. Sustainable consumption and production

SDG Value Proposition: The utility of the future indicator encourages utilities to optimise their sustainable resource consumption and use practices through actively considering their resource procurement related material, ecological and carbon footprint, and were possible seeking to optimise recycled and reprocessed material use to limit their environmental and climate related footprint.

Utility of the Future Indicator: Total material, ecological and carbon footprint, in utility operations and construction.		
Description: Working Group to define	Definition: Definition “utility operations and construction” encompassing utility non-surface water extraction, embodied carbon and fossil fuel consumption in construction, office and connection materials (define metrics). Working Group to define ‘Total Material Footprint’, ‘Ecological Footprint’, ‘Carbon Footprint’.	Metrics: to encompass utility supply chain and customer production, consumption and procurement practices (define metrics).



Target 2.4



Target 3.9



Target 6.3



Target 8.4



Target 9.2,
9.4



Target 11.6



Target 12.2,
12.4, 12.5,
12.7



Target 14.1,
14.2



Target 15.9

22. Waste recycling and circular economy

SDG Value Proposition: Water utilities make a substantial contribution to the SDGs through the recycling and reuse of solid waste materials associated to essential service delivery. This include both biosolids and residuals associated to the treatment of waste water and other service related activities. The priority indicator actively supports utilities to account for this through an articulation of the extent of waste products recycled and safely reused. The Utility of the Future indicator encourages a transition to circular economy, through the total recycling and reuse of all materials.

Priority Indicator: % annual solid waste (including biosolids and residuals) recycled and/or safely reused by the water utility expressed as a % of solid waste generated by the utility.

Description: Working Group to define

Definition: Working Group to define

Metrics: Solid Waste Recycling (including biosolids and residuals) recycled and/or safely reused by the water utility expressed as a % of solid waste generated by the utility.



Target 3.9



Target 6.3



Target 11.6



Target 12.2,
12.4, 12.5

22. Waste recycling and circular economy

SDG Value Proposition: The Utility of the Future indicator encourages utilities to transition to circular economy objectives through a move to zero waste based operations and supply chain related procurement.

Utility of the Future Indicator: Circular economy/ zero waste objectives as reflected in both organisation and utility related customer and supply chain practices		
Description: Working Group to define	Definition: Working Group to define	Metrics: 1) encompassing % of materials using recycled content, 2) % reduction in new materials used 3) \$ saved and contribution to local economy as a result of circular economy initiatives (as % of overall utility revenue or similar)



Target 2.4



Target 3.9



Target 6.3



Target 8.4



Target 9.2,
9.4



Target 11.6



Target 12.2,
12.4, 12.5,
12.7



Target 14.1,
14.2



Target 17.1

Appendix 3: The ‘SDG long list’ articulating water utility contributions to SDG targets

1. No Poverty
2. Zero Hunger
3. Good Health and Wellbeing
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Production and Consumption
13. Climate Action
14. Life Below Water
15. Life on Land
16. Peace, Justice and Strong Institutions
17. Partnerships for the Goals

SDG 1: No poverty

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
<p>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.</p>	<p>1) maintain affordability and security of drinking water through innovation, efficiencies and hardship programs</p>	<p>1. Proportion of customers receiving/accessing vulnerability support services (by region/Suburb, age, gender, SES etc.).</p> <p>2. Proportion of customer disposable income spent on water.</p> <p>3. Internal Policy ensuring water supply maintained regardless of ability to pay.</p> <p>4. % staff undertaken Vulnerable customer support training programs</p> <p>5. % Social Procurement programs supporting vulnerable communities.</p>
<p>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.</p>	<p>1) ensuring access to water is not cut off if customers cannot pay their bills</p> <p>2) Vulnerable customer support/empowerment programs.</p>	<p>1. Proportion of population (By region/suburb, age, gender SES etc.) using/accessing safely managed drinking water and sanitation services.</p> <p>2. Proportion of customers accessing support services (by region/Suburb, age, gender, SES etc.).</p>
<p>1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.</p>	<p>1) cool the urban environment via urban cooling/greening initiatives</p> <p>2) assist emergency management initiatives</p> <p>3) social and physical resilience strategies for high risk (flood, drought, fire) areas.</p>	<p>1. Blue Green Infrastructure contribution (%heat/flood mitigation)</p> <p>2. Emergency response plans established and coordinated in collaboration with community and stakeholders (Y/N)</p> <p>3. Water efficiency, flood mitigation program uptake by suburb, gender, demographic.</p> <p>4. Processes for community participation in emergency planning and management (before, during, after events). (% participation by suburb/region).</p>

<p>1.5.4 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies.</p>		<ol style="list-style-type: none">1. Water utility has adopted and implemented local disaster risk reduction strategies in line with national disaster risk reduction strategies (Y/N)2. Emergency response plans established and coordinated in collaboration with community and stakeholders3. Processes for community participation in emergency planning and management (before, during, after events) (% participation by suburb/region).
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SDG 2: Zero hunger

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
<p>2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.</p>	<ol style="list-style-type: none"> 1) fit for purpose water to support agrifood 2) use of water owned land for food purposes, e.g. community gardens, grazing. 3) Internal catering/food purchase 	<p>Impact:</p> <ol style="list-style-type: none"> 1.(%/Volume) Alternative water sources/ Fit for purpose water sources, Resource recovery (Bisolid use). 2. Proportion/ % of utility owned land used for productive and sustainable agriculture. <p>Organisational:</p> <ol style="list-style-type: none"> 3.Sustainably produced food criteria in supply chain

SDG 3: Good health and well-being

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
<p>3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.</p>	<ol style="list-style-type: none"> 1) Safe water and sanitation provision to urban, regional and remote areas. 2) water planning with remote indigenous communities. 3) Supporting not for profit, NGO and foreign aid agencies both internationally and domestically in non-serviceable areas. 	<p>Impact:</p> <ol style="list-style-type: none"> 1.% annual compliance with drinking water and sanitation guidelines. 2. Child and Neonatal mortality through water borne diseases and related illnesses by jurisdiction. <p>Organisational:</p> <ol style="list-style-type: none"> 3.\$ contributed to charities/ corporate sponsorship.
<p>3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.</p>	<ol style="list-style-type: none"> 1) ongoing monitoring, research and management of emerging contaminants 2) Coordination of health federal/state agencies on the communication of emerging risks 	<p>Safe Drinking Water Measures set out in NPR. including:</p> <ol style="list-style-type: none"> 1. Water borne disease incidence per 1,000 population (for area of operation - consider source?) 2. Malaria incidence per 1,000 population (for area of operation - consider source?) 3. Number of people requiring interventions against neglected tropical diseases (for area of operation - consider source?) <p>Organisational:</p> <ol style="list-style-type: none"> 4.# of staff vaccinated
<p>3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and wellbeing</p>	<ol style="list-style-type: none"> 1) Develop active transport paths or greenspace/blue space which supports active recreation on utility owned land 2) support existing or new greenspace with a drought secure water source - avoid water restrictions 3) Develop partnerships with other organisations to encourage greenspace development and community access to utility owned land for recreation 	<p>Impact:</p> <ol style="list-style-type: none"> 1. Proportion of assets available/accessible for recreation/green space (consider metric) 2. Partnerships/ Policy with local and state governments to provide green spaces, mental health and wellbeing programs (Consider metric). <p>Organisational:</p> <ol style="list-style-type: none"> 3.Availability/Uptake Staff wellbeing programs (Consider metric).

<p>3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.</p>	<p>1) emerging pathogens & contaminants projects</p>	<p>1. Consistent with compliance standards established in NPR, EPA, Trade Waste policy for compliance and exposure prevention: Consider Metric.</p> <p>2. Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services).</p>
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SDG 4: Quality education

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	1) The impact of learning and development opportunities for employees. 2) internal and external training and Education programs, 3) employee self-led opportunities.	Organisational: 1. Participation rate of employees in formal and non-formal education and training in the previous 12 months, by sex. Impact: 2. Number of student participation in learning programs, by sex 3. Number of public participation in technical/vocational learning programs, by sex 4. number of learning-based partnerships with technical, vocational and tertiary institutions.
4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations	1) Learning and development for own employees. 2) working with universities 3) providing internships	Organisational: 1. Participation rate of employees in formal and non-formal education and training in the previous 12 months, by disability status, Aboriginal and Torres Strait Islander peoples, culturally and linguistically diverse.
4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	1) Professional development programs. 2) School Water Efficiency programs	Organisational: 1. Percentage of staff completed environmental awareness training 2. Organisation: Production of sustainability report- detailing SDG contributions (internal and external) Impact: 3. Participation of customers in education program/water efficiency program (number of participants, sex, age and locality within jurisdiction) 4. Water Literacy of serviceable community.
4a Build and upgrade education facilities that are child, disability and gender sensitive and	1) Professional development programs.	Organisational: 1. ensure all education assets are compliant

<p>provide safe, non-violent, inclusive and effective learning environments for all</p>	<p>2) School Water Efficiency programs.</p> <p>3) International Development/ twinning Programs</p>	<p>Impact:</p> <ul style="list-style-type: none">2. Proportion of schools in area of operations with access to drinking water3. Proportion of schools in area of operations with access to wastewater services4. Provision of decentralised water and sanitation services for off-grid schools.
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SDG 5: Gender equality

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
5.1 End all forms of discrimination against all women and girls everywhere	1) Diversity & Inclusion strategy implementation 2) promotion within the supply chain (e.g. Supplier Code of Practice and social procurement) 3) Shared care responsibility promotion within households	Organisational: 1. representation of women in workforce (%), 2. women in leadership (%), 3. gender pay gap (%). 4. gender inclusive facilities, uniforms (consider metrics) Impact: 5. Proportion of community support programs for customers experiencing DV 6. customer support training to recognise and support customers experiencing DV.
5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life	1) Consider women's full and effective participation at all levels of decision-making (e.g. representation of women in management) 2) remuneration equity 3) ending discrimination in the workplace	Organisational: 1. Proportion of women in managerial positions, representation across salary band, distribution index. 2. Gender equality distribution in supply chain.

SDG 6: Clean water and sanitation

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	1) Core business- secure and affordable provision of water supplies 2) focus on remote and indigenous communities	1. Proportion of population using safely managed drinking water services consistent metric with NPR 2. Beyond the meter: proportion of population in serviceable area (by Household, public/private facility etc.) without access to safe drinking water (consistent with NPR and ASDG) whether receiving utility services or not.
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	1) Core Business- sanitation 2) focus on remote indigenous communities	1. Proportion of population using safely managed sanitation services, metrics consistent with NPR 2. Beyond the meter: Number of people (by. Households, public/private facilities etc.) in management jurisdiction without safe sanitation services (consistent with NPR and ASDG) whether directly serviced by utility or not.
6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	1) Catchments and environments maintained as healthy, natural landscapes with flow on health benefits 2) IWM 3) Focus on remote indigenous communities	1. Volume of wastewater safely treated, consistent with NPR. 2. % Wastewater reuse 3. % Waste Water spill-over/ leakage during events
6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	1) IWM 2) water conservation programs, 3) digital water metering trials	1. Change in water-use efficiency over time (Consider metric- L/pp/day or annual/ seasonal volume per capita etc.) 2. % Proportion of uptake in community water efficiency programs by suburb, age, gender, socio-economic status. 3. % Proportion of uptake in industry water efficiency programs by industry, region (consider metric).

		4. Proportion of expenditure on alternative water supply and wastewater recycling projects
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Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	1) Core business- IWM 2) Include adequate representation of diverse customers and community in decision making processes. 3) include incorporation of Indigenous values	1. Degree of integrated water management (Inc. total water cycle management etc.) implementation (0-100). 2. Degree of IWM contribution/ implementation (consider metric) 3. Extent of stakeholder engagement (consider metric)
6.6 By 2020 protect and restore water-related ecosystems including mountains, forests, wetlands, rivers & aquifers		1. Change in the extent of water-related ecosystems over time. Consider Metric: a) an indicator for "extent" in terms of richness of biodiversity b) "extent" in terms of richness of footprint C) extent in terms of change over time 2. Establish Reference/index condition for near natural, and target conditions for moderately modified and modified waterbodies. 3. Environmental/cultural flow objectives and provisions as part of IWM processes.
6a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programs, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies	1) Twinning programs 2) WaterAid and International development programs	1. Amount of donation that is part of government coordinated spending plan 2. Amount of in-kind contribution that is part of government coordinated spending plan 3. Amount of donation and in-kind as part of utility coordinated programs (e.g. twinning, education, tours, development programs).
6b Support and strengthen the participation of local communities in improving water and sanitation management	1) Includes engagement with Traditional Owners. 2) Also with other segments that are traditionally not heard (e.g. disability, CALD etc.)	1. Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management (consider metrics). 2. Funds allocated to engagement and participation processes. 3. Amount of consumption reduction in demand end through customer water-energy efficiency programs

		4. Amount of renewable energy generated and exported at demand end through customer water-energy efficacy programs.
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SDG 7: Affordable and clean energy

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	1) contribution from hydroelectricity and solar generation, 2) contributions to carbon neutrality, energy mix 3) carbon offset initiatives.	Organisational: 1.amount of consumption (renewable/non-renewable) 2. Amount of non-renewable offset Impact: 3.amount of renewable energy generated (exported to grid) 4. Amount of consumption reduction in demand end through customer water-energy efficiency programs 5. Amount of renewable energy generated and exported at demand end through customer water-energy efficacy programs
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	1) Utility programs such as solar carpark, W2E 2) collaboration with other water corps	Organisational: 1. amount of consumption (renewable/non-renewable) 2. Amount of non-renewable offset 3. Net Zero transition strategy implemented throughout business and % annual compliance Impact: 4. Amount of renewable energy generated (exported to grid) 5. Customer/demand side water energy generation/use encompassed in Net Zero transition strategy 6. Amount of consumption reduction in demand end through customer water-energy efficiency programs 7. Amount of renewable energy generated and exported at demand end through customer water-energy efficiency programs

<p>7.3 By 2030, double the global rate of improvement in energy efficiency</p>	<p>1) Emissions reduction 2) energy efficiency 3) renewable energy generation for own operations</p>	<p>Organisational:</p> <ol style="list-style-type: none"> 1. Energy intensity per kL of water delivered 2 Energy intensity per kL of wastewater treated 3. Energy Generation per kl of water delivered 4. Energy Generation per kl of wastewater treated 5. Energy Saved through supply side water efficiency measure <p>Impact:</p> <ol style="list-style-type: none"> 6. Energy intensity per kL of water used by customer 7. Energy intensity per kL of wastewater produced by customer 8. Energy Generation per kl of water used 9. Energy Generation per kl of wastewater produced 10. Energy Saved through demand side water efficiency measure
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SDG 8: Decent work and economic growth

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	1) Economic development opportunities 2) Social procurement 3) Work with Traditional Owners	TO BE DISCUSSED
8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors		TO BE DISCUSSED
8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of micro-small- and medium-sized enterprises, including through access to financial services	1) Remuneration for own staff 2) Supporting employment opportunities for vulnerable segments 3) Organisation specific programs such as Bridge Project, skilled migrants, Aboriginal cadets, disability inclusion)	TO BE DISCUSSED
8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production, with developed countries taking the lead	1) Waste 2) Water efficiency 3) Circular economy	Organisational: 1. Material footprint total 2. Ecological Footprint total Impact: 3. Material footprint per customer 4. Ecological Footprint per customer

		5. Contribution to Circular Economy
8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	<ul style="list-style-type: none"> 1) Diversity and Inclusion Strategies 2) Gender Pay Audit 3) Targeted D&I employment programs across full lifecycle (e.g. schools etc.) 	<ul style="list-style-type: none"> 1. Average hourly earnings of female and male employees, by occupation and sex 2. Average hourly earnings of male and female staff consistent with organisational diversity targets
8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training	<ul style="list-style-type: none"> 1) Training Policies 2) Targeted D&I employment programs across full lifecycle (e.g. schools etc.) 	<p>Organisational:</p> <ul style="list-style-type: none"> 1. Number of graduate placements filled per annum 2. Number of filled entry level positions 3. % of total employment base filling youth demographic 4. consistent with diversity targets

SDG 9: Industry, innovation and infrastructure

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	1) Rewaste 2) Renewable energy 3) Water treatment and recycling	1. Capex expenditure by serviceable region 2. % region/towns with fit for purpose water supply (potable, recycled, storm water) (Consider metric) 3. % individuals in serviceable area with safe and affordable water and sanitation including those unserved by grid
9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	1) Ecological Footprint of operations and procurement 2) Infrastructure Resilience through procurement and construction	1. Ecological footprint of procurement practices (define and consider metric) 2. Ecological footprint of maintenance and operations 3. Contribution of procurement related projects and operations to Climate Resilience (drought, flood, heat, disaster)
9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	1) Emissions Reduction 2) Renewable Energy Production 3) Co2 Offset.	Impact 1. CO2 emissions per kL of water delivered 2. CO2 emissions per kL of wastewater treated Organisational: 3. % renewable energy produced and used per kl of water delivered 4. % renewable energy produced and returned to grid per Kl of wastewater treated 5. % Co2 Offset
9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million	1) Research and Development 2) Network of excellence 3) Internal/external research expenditure	1. Research and development expenditure as a proportion of total expenditure 2. Research and development in-kind expenditure 3. Contribution of R and D expenditure to other indicators (impact on sustainability) (consider metrics)

people and public and private research
and development spending



SDG 10: Reduced inequalities

Target	How water utilities contribute to this target.	Common Indicators Identified by Aus/NZ Water Utilities
<p>10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status</p>	<ol style="list-style-type: none"> 1) minimising bills hardship programs, 2) water efficiency 3) advocacy for tenancy reforms (minimum standards on water efficiency), maximising concession uptake 4) collaboration with other essential services 5) reconciliation - employment outcomes, traineeships etc. 6) Supply chain - modern slavery and other risks (e.g. cleaning contract - ensuring no exploitation) 7) Current Human Rights review 	<ol style="list-style-type: none"> 1. Proportion of water utility workforce (inc. participating community) living below 50 per cent of median income, by sex, age, persons with disabilities, Aboriginal and/or Torres Strait Islander, culturally and linguistically diverse background 2. Proportion of water utility workforce (including participating community) by age, sex, persons with disabilities, Aboriginal and/or Torres Strait Islander, culturally and linguistically diverse background and/or other status 3. % Compliance with organisation Diversity and inclusion and OHS strategy 4. % of supply chain compliant with Diversity Targets (e.g. Partners, suppliers, contractors, consultants etc.).
<p>10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard</p>	<ol style="list-style-type: none"> 1) Diversity & inclusion strategies 2) Signing up to Racism It Stops with Me 3) Honest, transparent and authentic responses to these social issues 	<ol style="list-style-type: none"> 1. Proportion of water utility's workforce reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law 2. Proportion of water utility's customers reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law 3. % staff undertaken anti-discrimination training

10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality	<ol style="list-style-type: none"> 1) Gender pay review 2) Primary Caregiver Leave 3) Flexible working policy 	<ol style="list-style-type: none"> 1. % Compliance with Fiscal, Wage and Social protection policies set out in enterprise agreement 2. % Compliance with Diversity Strategy 3. % staff accessing parental leave, flexible working arrangements, career's leave, cultural leave etc., as defined through Diversity strategy
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SDG 11: Sustainable cities and communities

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	<ol style="list-style-type: none"> 1) Community Engagement programs 2) Citizen Jurys 3) IWM 	<ol style="list-style-type: none"> 1. Customer Satisfaction by demographic and region 2. % serviceable community by demographic (age, sex, occupation, region) accessing community engagement programs 3. % Serviceable community participating in planning and management and IWM programs
11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	<ol style="list-style-type: none"> 1) Relationships with Traditional Owners - how we tell the story 2) cultural heritage plans- share knowledge, bring it to life. 3) Cultural competence training 	<p>Organisational:</p> <ol style="list-style-type: none"> 1. %/ Staff completed cultural and environmental competency training <p>Impact:</p> <ol style="list-style-type: none"> 2. % Expenditure on cultural and natural heritage protection 3. Volume of environmental flows returned to waterway and % of target 4. Volume of cultural flows returned to waterways and % of target 5. % expenditure in participative water cycle planning and management such as IWM
11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters,	<ol style="list-style-type: none"> 1) Emergency response. 2) Climate Resilience Strategy 3) working with communities on their disaster resilience 	<p>Impact:</p> <ol style="list-style-type: none"> 1. Number of disruption to services 2. number of flood events with community impact 3. % expenditure on flood mitigation by region

including water-related disasters, with a focus on protecting the poor and people in vulnerable situations		4. % expenditure on flood, drought management with vulnerable costumers.
11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	<ol style="list-style-type: none"> 1) Cogen 2) Recycling 3) Resource recovery 4) Reducing waste 5) Reduce emissions 6) Support the provision of urban 7) Greening initiatives 	<p>Organisational</p> <p>5. % Solid waste reused/recycled as percentage of waste generated</p> <p>Impact</p> <ol style="list-style-type: none"> 1. % days compliant with Env. regulations (EPA) air quality, waste etc. per year. 2. % Biosolid reuse % 3. % Wastewater reuse 4. %. Stormwater harvested and reused
11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	<ol style="list-style-type: none"> 1) shared benefit 2) place-making programs 3) liveability plans/strategies 	<ol style="list-style-type: none"> 1. Proportion of water utility owned/managed land available for public use 2. % regional yearly urban greening/ canopy cover targets met 3. % urban greening supplied with recycled water
11a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	<ol style="list-style-type: none"> 1) IWM 2) Council relationships 3) Cross-sector collaboration (waste, food, energy, transport etc.) 	<ol style="list-style-type: none"> 1. Proportion of expenditure on alternative water supply projects 2. Proportion of expenditure on cross sector collaboration/partnerships 3. Proportion of in-kind expenditure on cross-sector collaboration
11b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk	<ol style="list-style-type: none"> 1) Risk frameworks 2) Risk & resilience planning 3) Climate change adaptation & mitigation strategies 4) EMS certified <p>Other contributions:</p> <ul style="list-style-type: none"> - Risk Management Policy - Risk Management Framework & 	<ol style="list-style-type: none"> 1. Proportion of expenditure on cross sector collaboration/partnerships through IWM Framework 2. Utility adoption and implementation local disaster risk reduction strategies in line with national disaster risk reduction strategies 3. Proportion of expenditure on processes and program for community participation in local risk reduction planning and Management

Reduction 2015-2030, holistic disaster risk management at all levels

Procedure

-Emergency Management Plan, Framework and Procedure
-Risk Appetite statement, Strategic Risks, controls, treatments including (monitoring and reporting)

5) Risk & Resilience planning including Business Continuity Testing

6) Climate change adaptation & mitigation strategies

7) EMS certified

SDG 12: Responsible consumption and production

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
12.2 By 2030, achieve the sustainable management and efficient use of natural resources	1) Use of materials for construction, maintenance and operations 2) Organisation land and assets management 3) partnership with Landcare, nature trust and other conservation organisations	Organisational: 1. Material/ Ecological footprint (Define and consider metrics) Impact: 2. Indicators for %Water, Wastewater and Energy Efficiency and reuse
12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	1) Screening waste, asbestos pipes 2) Waste water odour, methane, and chemical contaminant control	1. Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment 2. Circular Economy Objectives (Define and consider metrics Inc. all Waste Treatment Plants adapted to recycle residuals, networks adapted to capture lost energy and reuse)
12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	1) Supply Chain consumables	1. Percent of solid waste recycled or reused by the water utility expressed as a percentage of solid waste generated by the water utility 2. Percent of biosolids recycled or reused by the water utility expressed as a percentage of biosolids generated by the water utility 3. Circular economy objectives (Define and Consider metric Inc.- % of materials using recycled content; % reduction in materials used; zero waste organisation and in supply chain)

<p>12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle</p>	<p>1) SDG Reporting- e.g. Planet, People, prosperity 2) Encourage/Advocate through supply chain</p>	<p>1. Does the water utility publish a sustainability report? (Y/N) 2. Is the Utility a signatory to UN Global Compact 3. Contribution to SDGs by serviceable region</p>
<p>12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities</p>	<p>1) Social procurement strategy 2) Modern Slavery response, 3) Supplier Code of Practice. 4) Working with Victorian water industry</p>	<p>1. Does the water utility implement a sustainable procurement policy and action plan? (Y/N) 2. Contribution to SDGs (Define and Consider metrics Inc. meeting objective /targets of sustainable procurement strategy that includes: 100% supply chain trade based on fair trade diversity index of partners, suppliers, contractors, consultants, retention rates of Aboriginal & Torres Strait Islander employees, women, people with disabilities % assets/machinery/materials are locally sourced, from renewable material (consistent criteria amongst utilities)</p>
<p>12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature</p>	<p>1) Climate mitigation strategies 2) Education and training programs 3) Billing information provision</p>	<p>Impact: 1. Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in: (a) utility education policies (b) curricula and programs (c) practitioner education and training; and assessment</p>

SDG 13: Climate action

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	1) Emergency response 2) Climate resilience strategy 3) working with communities on their disaster resilience	1. Water utility has a natural disaster emergency response place in place (Y/N) 2. Water utility has a climate resilience strategy or equivalent (Y/N) 3. extent of investment in cross sector collaboration (Financial/In-kind contribution) for strategy development/coordination. 4. community engagement in participative disaster planning and management processes (by region, gender, socio-demographics)
13.2 Integrate climate change measures into national policies, strategies and planning	1) Internal climate mitigation plan 2) emissions reduction and renewable energy production pledges and programs	1. % Policies, Strategies and Plans that reference climate change (Impact/ risk/ mitigation and adaption) of total. 2. % Policies, Strategies and Plans that reference Net Zero Carbon Targets and Carbon footprint (consider metrics) of total
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning ¹	1) Climate change adaptation guidelines 2) Climate Change Energy & Environment network 3) Adaptation plans 4) Resilience planning 5) Demand management plan	1. Water utility has relevant guidelines and information in place for climate change adaptation, impact reduction and early warnings 2. % Proportion of uptake/ participation in community education, planning and management and water efficiency programs by suburb, age, gender, socio-economic status

SDG 14: Life below water

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
<p>14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution</p>	<p>1) Improving waste water quality discharge</p> <p>2) reducing nutrient loads in stormwater</p> <p>3) Customer engagement and capacity building</p>	<p>1. Health of water environments (Consider metrics, Alignment to regulator/ NPR)</p> <p>2. % Recycled Water reuse vs ocean discharge.</p> <p>3. % Community engagement/participation in water cycle protection education/ capacity building programs</p> <p>4. Degree of Coastal Eutrophication (1-100)</p> <p>5. Degree of floating plastic debris (1-100)</p>
<p>14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans</p>	<p>1) Community and stakeholder partnership programs- I Sea, I Care, Dolphinwatch etc.</p> <p>2) restore and manage waterways and riparian zones</p>	<p>1. Health of water environments (Consider metrics, Alignment to regulator/ NPR)</p> <p>2. % Recycled Water reuse vs ocean discharge</p> <p>3. % Community engagement/participation in water cycle protection education/ capacity building programs</p>

SDG 15: Life on land

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
<p>15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</p>	<p>1) Restore and protect urban waterways and riparian zones, and vulnerable species</p> <p>2) Partnership programs such as Helmeted Honeyeater protection</p>	<p>1. Total forest area (per hectares) owned/managed by water utility</p> <p>2. Total area of native vegetation rehabilitated due to replanting, weeding and protection by the water utility</p> <p>3. % improvement per year</p>
<p>15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</p>	<p>1) Restore and protect urban waterways and riparian zones, and vulnerable species</p> <p>2) Partnership programs such as Helmeted Honeyeater protection</p> <p>3) Conservation initiatives on utility land and assets</p>	<p>1. %/ Population of IUCN/ State and National Conservation List species (or similar) per utility owned and managed I.</p> <p>2.% improvement in suitable habitat (per year) for threatened species (consider metrics: case specific.</p> <p>3. Change in suitable habitat over 10, 30 and 50 years (define and consider metrics)</p>
<p>15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species</p>	<p>1) Responsible construction activities</p> <p>2) Weed management on sites and assets (WSUD)</p>	<p>1. Proportion of waterways managed by water utility where weeds and pests are controlled</p> <p>2. Proportion of land managed by water utility where weeds and pests are controlled</p>
<p>15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts</p>	<p>1) State of the environment reporting</p>	<p>1. % Policies, Strategies and Plans that reference Biodiversity (Impact/ risk & mitigation and protection and enhancement) of total).</p> <p>2. Biodiversity Reference in Alignment with Ecological footprint (Indicators, approaches)</p>

15a Mobilise and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

- 1) Partnership Programs
- 2) Regional conservation alliance and biosphere programs

1. % Funding allocation and investment to conservation outcomes (direct/indirect)
2. % Funding allocation and investment to net biodiversity enhancement (define and consider metric).

SDG 16: Peace, justice and strong institutions

Target	How water utilities contribute to this target.	Common Indicators Identified by Aus/NZ Water Utilities
16.6 Develop effective, accountable and transparent institutions at all levels	1) Customer at the centre; Citizen's Jury 2) Audit of regulatory landscape- benefits and potential impediments	1. Proportion of population satisfied with their last experience of water utility 2. % Contribution (financial and in-kind) to public participation in planning and management. 3. % Contribution (financial and in-kind) to IWM and multi-stakeholder collaboration in planning and management.
16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels	1) Strengthening how we engage with disadvantaged segments (as per price submission commitment) 2) Systematic support for CALD and emerging communities, and people with disabilities. 3) Ensuring diverse community representation/ voice in our decision making	1. Proportions of positions (by sex, age, persons with disabilities and population groups) included in stakeholder engagement by water utility compared to national distributions 2. Proportions of positions (by sex, age, persons with disabilities and population groups) included in planning and management processes by water utility compared to national distributions
16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements	1) Public disclosure of strategic documents and reports	1. Number of policies, reports, strategies and plans (out of total) disclosed and available for public access

<p>16a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime</p>		<p>TO BE DISCUSSED</p>
<p>16b Promote and enforce non-discriminatory laws and policies for sustainable development</p>	<ol style="list-style-type: none"> 1) Sexual harassment / misconduct policies 2) Employ training and development programs 3) Advocacy through Supply chain 	<ol style="list-style-type: none"> 1. Proportion of water utility's workforce reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law 2. Proportion of water utility's customers reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law 3. % staff undertaken anti-discrimination/ inclusion and diversity training 4. % Supply chain compliant with Diversity Targets (e.g. Partners, suppliers, contractors, consultants etc.). Consider metrics.

SDG 17: Partnerships for the Goals

Target	How water utilities contribute to this target	Common indicators identified by Aus/NZ water utilities
17.14 Enhance policy coherence for sustainable development	1) IWM 2) Council Relationships 3) Stakeholder empowerment program (e.g. Thriving Communities Partnership)	1. Utility is signatory to UN global compact (Y/N?) 2. % investment in cross-sector collaboration 3. % total investment in IWM
17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	1) IWM 2) Council Relationships 3) stakeholder empowerment program (e.g. Thriving Communities' Partnership) 4) Integrated sustainable management through cross sectoral collaboration (water-energy-food-waste-transport etc.)	1. % investment (financial and in-kind) in cross-sector collaboration 2. % total investment (financial and in-kind) in IWM 3. % Investment (financial and in-kind) in Community participation in planning, management and governance (by region and demographics)

References

Victorian State Government Department of Environment Land Water and Planning (DELWP). 2016. Water for Victoria: Water Plan. The State of Victoria Department of Environment, Land, Water and Planning 2017.

GRI & United Nations Global Compact (UNGC). 2018. Integrating the SDGs into Corporate Reporting a Practical Guide. UNGC, New York, USA.

Moore, M., 1995 Creating Public Value: Strategic Management in Government Cambridge, Mass: Harvard University Press

Porter M and Kramer M, 2011 Creating shared value, Vol. 89 Issue 1/2, p62-77 Harvard Business Review

Water Services Association of Australia (WSAA). 2017. Next Gen Urban Water: The role of urban water in vibrant and prosperous communities. WSAA Occasional Paper 23. Water Services Association of Australia, Australia.