

GLOBAL GOALS FOR LOCAL COMMUNITIES:

Urban water advancing the UN Sustainable Development Goals





We support the United Nations Sustainable Development Goals as a plan of action for people, planet and prosperity. As an industry we provide water, sanitation and stormwater services to over 20 million Australian customers and understand that water is critical to sustaining life.

As providers of essential services we want to see the realisation of **Sustainable Development Goal 6: Ensure availability and sustainable management of water and sanitation for all.**

We believe universal access to safe water and sanitation is key to creating a better future and we know there is more work to be done.

As an industry we will:

- 1) support and promote the 17 Sustainable Development Goals;
- 2) support and work with Governments and other agencies to increase the capability and capacity of our region to achieve Sustainable Development Goal 6;
- 3) commit to achieving Sustainable Development Goal 6 within the scope of our operations.

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The Sustainable Development Goals are a blueprint for a better future. They represent a compelling agenda for a sustainable and prosperous future for both people and planet. They are also a platform for water utilities, governments, regulators and the community to talk about current and future priorities.

Australia has a responsibility to advance the Sustainable Development Goals (SDGs) as a signatory to the United Nations 2030 Agenda for Sustainable Development. The SDGs provide a unique opportunity for the urban water industry to come together, learn from and contribute to international experience and make a significant positive impact on the community both locally and globally.

The SDGs help organisations focus on ways to achieve sustainable development and provide a platform to help us understand and communicate the breadth of value delivered by the water industry in Australia.

The SDGs provide Australian water utilities with an opportunity to demonstrate local, regional and global leadership in creating a sustainable future. In a world that is more interconnected now than at any point in human history. We must also recognise that we can make an impact and have an interest beyond our borders.

As outlined by the United Nations High-Level Water Panel, increased political will and commitment is required to tackle water challenges at local, national and international levels. This Paper outlines how the urban water industry in Australia is already meeting those challenges. It also provides a framework to enable, empower and advance the urban water industry's contribution to society through connecting with the SDGs.

Our desire is that this Paper will lead to more collaboration between water utilities, governments, regulators, other stakeholders and the community to enable us to focus on creating a sustainable and prosperous future.

Pat McCafferty

Take Made

Chair, Water Services Association of Australia

Executive summary

The United Nations Sustainable Development Goals (SDGs) articulate the economic, societal, and environmental challenges that Australian society and the rest of the world is facing. They provide a blueprint to achieve sustainable development through articulation of goals, targets and indicators. These goals present a long-term vision for a better world.

Australia's water utilities have a once in a generation opportunity to make a substantial contribution to advancing the SDGs, creating additional shared value through collaboration and partnership with government, industry, communities and customers.

"We have seen growing momentum and recognition for the SDGs within the urban water industry, as well as leadership around embedding the goals into organisational strategy. The SDGs also provide a framework for better understanding the broader value the water industry can deliver for its customers."

Adam Lovell, Executive Director Water Services Association of Australia

1. The Sustainable Development Goals

On 1 January 2016, the 17 Sustainable Development Goals (SDGs) officially came into force. Built on the Millennium Development Goals, the SDGs are unique in that they call for action by all countries, and are not solely focused on reducing extreme poverty. The SDGs define global priorities and aspirations for 2030.

The SDGs are a non-binding framework that provides countries, organisations and communities with aspirations they can work towards. The SDGs are not mutually exclusive. They rely on each other and are all dependent on a platform of Partnerships (SDG 17) that support people, planet, prosperity and peace.

2. The Australian Government is leading in water

"Australia knows how important effective and sustainable water management is to our communities and economy. We are very pleased to make a practical contribution to this global initiative, to share our water management expertise to help unlock food production, improve health outcomes, strengthen economies and reduce poverty."

Malcolm Turnbull, Prime Minister of Australia

The Australian Government recognises that increasing access to, and improving the sustainable management of clean water and sanitation (SDG 6) underpins the ability to achieve most, if not all, of the other SDGs. It has activities underway in the water sector that are consistent with its commitments to the SDGs. One of these is Prime Minister Malcolm Turnbull's representation on the High Level Panel for Water. This Panel comprises Heads of State and senior representatives from across the world.

The Panel's purpose is to increase access to safe drinking water and adequate sanitation for all, improve the sustainable management of water and sanitation (SDG 6), and contribute to the achievement of other SDGs that rely on the development and management of water resources.

Framing papers produced for the High-Level Panel by the Australian Water Partnership, contribute to the efforts to set an agenda and recognise that meeting the SDGs involves meeting the needs of individual communities.



Figure 1. The Sustainable Development Goals



Individual High-Level Panel members are responsible for championing initiatives. Prime Minister Malcolm Turnbull is championing initiatives around water data, recognising that greater knowledge and access to water related data can enhance water resource management through improved evidence based decision making and policy and regulatory reform.

3. Urban water and the Sustainable Development Goals

The SDGs envisage a strong role for businesses. Urban water utilities are increasingly placing customers at the heart of their operations, using their preferences to guide investment. The SDGs can provide a useful lens for viewing utility activities to identify opportunities for delivering broader value to customers and communities.

"Business is a vital partner in achieving the Sustainable Development Goals. Companies can contribute through their core activities, and we ask companies everywhere to assess their impact, set ambitious goals and communicate transparently about the results."

Ban Ki-moon, Former United Nations Secretary-General

Utilities deliver value beyond their core business of water and sanitation services that contribute to the liveability of cities, waterway health and the management of the environment. WSAA's recent occasional paper Next Gen Urban Water: The role of urban water in vibrant and prosperous communities, covers the broader value provided by utilities and includes over 20 case studies.

"Water is a vital part of the social fabric in every community and through the delivery of essential water and sanitation services, our activities support many of the SDGs. We are using the priorities set out by the SDGs as a lens to review and enrich our strategy to ensure we can maximise the value we provide to our community."

Sue O'Connor, Chair, Yarra Valley Water

The SDGs provide a framework for understanding the contribution the urban water industry is making — and can make in the future — to the community locally and globally. Equally, the SDGs provide a language to communicate and report strategies, goals and activities that serve all and a means to holistically measure their effectiveness.

This is consistent with the message in the Framing Papers for the High Level Panel on Water: Good valuation practices can inform future-focused and equitable water services pricing, pollution pricing, water market development, and administrative allocation of water. The SDG's provide a framework for transparent and effective valuation of water in its broader context.

The contribution utilities make across the individual SDGs will vary according to organisational capacity, structure, and the communities they serve. Despite the similarities between utilities, they are also diverse, serving some of the most urbanised cities in the world through to rural towns and remote Indigenous communities. Some are council owned and others are government enterprises. In some parts of remote Australia other agencies are responsible for delivering water and sanitation services. Wherever possible the water industry collaborates with those other agencies and the private sector to ensure services can be improved.

"We are already part of the community. We achieve goals implicitly. The governance arrangements – being part of a local council – means we have strong linkages. When decisions are made, they are made with the whole in mind."

Carmel Krogh, Director, Shoalhaven Water



4. Advancing the Sustainable Development Goals

In recognising that more can be done to advance the SDGs, WSAA's members are making a commitment to support and promote the SDGs as well as committing specifically to SDG 6. Some utilities have already taken steps to make a more formal commitment by signing onto the UN Global Compact.

This Paper sets out examples of how water utilities across the country are making a difference. It outlines a framework to enable wider uptake of the SDGs across the industry. It is also an invitation for others to come on the journey.

Water utilities and businesses can do more to advance the SDGs by coming together to develop a position and pathway to advance the SDGs, use common language to communicate value, and drive action through the supply chain.

Federal and State Governments will benefit from greater use of the SDG indicator framework in integrated urban planning. The SDGs also provide an opportunity to frame a new National Water Initiative that aligns with the Goals and their indicators. Many of the indicators are already well aligned with existing industry reporting requirements. Some additional indicators could provide benefits including greater transparency and visibility of the many facets of our urban communities that urban water services support.

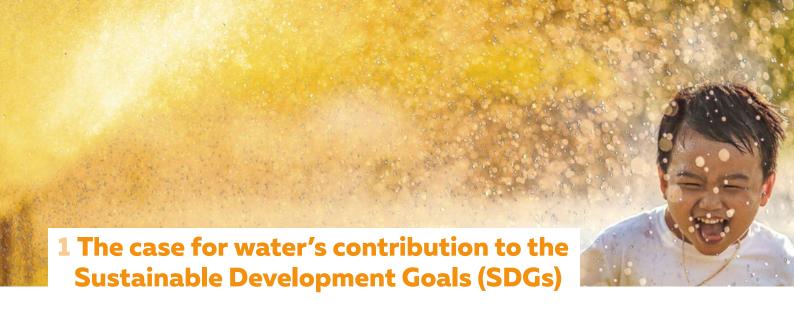
Collaboration is necessary to access the opportunities and benefits from the SDGs. Australian water utilities are ready to further collaborate and partner with governments, with each other and with those outside the water sector to create shared value for their communities and to advance the Goals.

Partnerships between Australian and international organisations can fast-track improved water services through the adoption of some of the initiatives and expertise developed in Australia. Not everything in Australia will be applicable and appropriate for our neighbours in the Pacific and Asia, however through dialogue and engagement, Australians and Australian organisations can lead, assist and train.

The Australian urban water industry is already helping to develop the SDGs globally. Building on the industry's expertise and lessons learnt, for example in relation to water security through diverse options, new partnerships can form. Existing partnerships can be enhanced, such as those with WaterAid, the Australian Water Partnership, ICE WaRM, the International Water Centre and the Australian Water Association.

As outlined at the front of the Paper, the industry will:

- 1) support and promote the 17 Sustainable Development Goals;
- 2) support and work with Governments and other agencies to increase the capability and capacity of our region to achieve Sustainable Development Goal 6;
- 3) commit to achieving Sustainable Development Goal 6 within the scope of our operations.



1.1 A world of possibility

Australia's water utilities have a once in a generation opportunity to be global leaders in substantially contributing to advancing the SDGs. The Goals provide a blueprint for the society the world needs and wants, with improved water and sanitation services fundamental to their achievement.

The SDGs provide a compelling platform for utilities, government, regulators and the community to engage in a conversation about what the water industry does and to guide priorities. They provide a framework for organisations to focus on multiple objectives, to achieve sustainable development and avoid the trade-offs and negative results that can occur with narrow-based or single issue planning. They provide a framework to identify gaps and opportunities. They provide a vehicle for the industry to understand and communicate the breadth of value delivered by the urban water industry.

"Water is seen as a critical prerequisite for the achievement of many of the SDGs. Outcomes in health, the environment, education, poverty reduction, and sustainable agriculture for example cannot be achieved unless the water goal, SDG 6, is also achieved... Achieving SDG 6 will reduce conflict; it will reduce poverty; in every sense it will enhance our natural environment; in every sense it will make the world a better place."

Tony Slatyer, Special Adviser for the High Level Panel on Water for the Australian Government

The water industry brings a strong understanding of the value water and sewerage services can bring to the liveability of a community. The industry understands how water links to health, urban planning, prosperity and social connectedness. Individually and collectively, utilities want to collaborate with others who work in these spaces to achieve liveability outcomes greater than the sum of individual parts.

The industry is committed to placing the customer at the centre of all that they do. Advancing the SDGs can help utilities contribute to the things their community value, offer benefits for water industry leadership and identify new approaches and opportunities.

Building on the strength of the industry's current services, the sector is already contributing to the SDGs by:

- influencing management of global supply chains
- providing and using data to drive sustainable, evidencebased decision making
- promotion of inclusive and sustainable economic growth
- partnering with local communities to drive sustainable production and industry and consumption patterns
- supporting vulnerable members of the community through financial hardship programs
- transferring world-leading knowledge to places where water services are developing.

Achievement of the SDGs is a long-term project, and every journey must start somewhere. This paper seeks to help those at the forefront of this work to continue to drive the next level of performance and, for those whose thinking is emerging, to find meaningful ways to start the journey.

The paper highlights that, while each individual utility can make a contribution, the industry as a whole can achieve greater things by working together. It sets an exciting vision for both private and public sector entities in the water industry to work together to advance the SDGs.

Over time, the aspirational goal is to see industry knowledge translated into better health outcomes in the developing world. Closer to home, the vision is for vibrant and liveable cities where water is managed in a way that enhances liveability. The water industry will have contributed to a strong and productive economy through efficient production and use of resources. Supply chain partners will be delivering on the goals across their global networks. The industry's carbon footprint will be reducing, and integrated water management approaches will be adapting to the residual impacts of climate change.

Advancing the SDG agenda provides an exciting opportunity to be part of a growing global movement to improve life for all. For the water industry, it also provides an opportunity to deliver broader value to its customers and communities, beyond water and sanitation, and build mutually beneficial partnership with others. It also offers an opportunity to learn from each other.

1.2 What are SDGs?

Building on the Millennium Development Goals, the SDGs are a non-binding set of 17 goals for global development to the year 2030. The Goals were globally negotiated, and adopted as part of the 2030 Agenda at the United Nations in New York in September 2015. The Goals form part of an SDG framework which outlines a global development blueprint to end poverty, protect the planet, and ensure peace and prosperity for all. Within the SDG framework, there are 169 targets and 232 indicators.

"The Sustainable Development Goals have equal weight here in Australia to countries overseas. While the Millennium Development Goals were for developing countries, the SDGs are for everyone."

Rosie Wheen, Chief Executive, WaterAid Australia

Targets and indicators gauge sustainable development progress. Each SDG has a number of targets, and each target has a number of quantitative indicators. The targets and indicators for water and sanitation goal (SDG 6) are attached in Appendix 1.

The SDGs are a blueprint to a better future. Despite being a developed nation, Australia has a responsibility to advance the SDGs as a signatory to the 2030 Agenda. The SDGs provide Australian water utilities with an opportunity to demonstrate regional and global leadership in creating a sustainable future.

The SDGs represent universal goals for the society we want. The directions that the SDGs provide are not radical – they are good government and corporate practice. The universal goals include gender equality, social inclusion, clean energy, universal access to water and sanitation – areas where Australian water utilities are already contributing.



Case study 1

Achieving gender balance in water utilities

The inclusion of women at all levels within the water sector is a priority for Australian water utilities and the Australian Government. The recent WSAA paper *Tapping the power of diversity in urban water* reflects the shared priorities of Australian water utilities. Many water utilities are undertaking specific action to support gender equity including targeted leadership programs for women.

Understanding and using the SDGs ensures water utilities are contributing further to achieve the Goals for their communities and reap wider benefits for Australia and the globe. An example of how utilities are working towards Gender Equality (SDG 5) is outlined in WSAA's Paper Tapping the power of inclusion and diversity in urban water. It describes approaches to inclusion and diversity in the industry and encourages collaboration through sharing leading practices.

The SDGs provide a common language, common goal set and measurement framework. This common ground provides for easier communication and collaboration across sectors and provides a framework for communicating the SDGs with customers. Common goals and measures help to highlight opportunities for sharing across sectors to deliver broader value to customers and community.

Australian water utilities can reap the benefits of **leadership** by early investment in the SDGs. Figure 2 below outlines these benefits.



Figure 2. Benefits to the water industry of advancing the SDGs

Greater recognition of the water industry's meaningful contribution to society can attract and retain top talent and help Australian customers and communities recognise the contribution of water to their society. In addition, early industry-led initiatives towards generating value for customers and community may avoid the perceived need for a regulatory response.

The SDGs have the potential to identify **new and innovative approaches and opportunities** for generating shared value by re-examining challenges and finding new solutions. These new approaches could be in the form of new or expanded partnerships where there is integration of activities and synergistic actions across multiple goals. They can unlock new business, refresh mandates and open the way to new ways of tackling challenges. For example, Queensland Urban Utilities has taken a unique approach to accelerating the development of next-generation sustainable solutions through the development of an Innovation Precinct.



Case study 2

Partnering and innovating to create shared value for future generations

The Innovation Precinct has enabled QUU to engage in diverse projects to support sewage-related infrastructure and treatment technologies and to inform future investment and operations. Importantly the Precinct and associated Innovation, Research and Development Program gives employees permission to create, collaborate, adapt, respond to change, to fail safely and to share lessons. In the last 12 months. QUU have delivered 53 projects including over 20 partnerships with universities and industry partners.

Water utilities are now seen as more than providers of water and sanitation. In collaboration with other stakeholders, water utilities are delivering outcomes that are key to the liveability of cities, to waterway health and management of the environment. One example is the work by Barwon Water with other utilities, council, developers and stakeholders in Integrated Water Cycle Management. The result has been better collaboration, improved relationships and better solutions for the community.

Over the past few years WSAA and its members have been exploring the current and potential contribution water utilities make to the liveability of cities and regions, the role for water in urban planning as well as publishing papers on regulation and reform. Part of this journey was a paper released in early 2017, which highlighted the greater role water utilities can play in creating value for communities.

The paper titled Next Gen Urban Water: The role of urban water in vibrant and prosperous communities includes over 20 case studies on the broader value provided by water utilities – particularly for goals where major or significant challenges remain. That paper sets out the actions required to make a systematic shift in the delivery of services.

The customer focus comes from the understanding that the customer and the community define value – not utilities in isolation.

To better understand what customers value, utilities are using sophisticated engagement tools and community preferences. Findings guide investment and help utilities understand the role customers expect from a water business and other key stakeholders. In addition, there are emerging industry initiatives that build customer engagement into operations, and regulatory reform initiatives that embrace increased customer participation.

Similarly, the SDGs provide a framework for water utilities to consider the broader value of their activities and provide a way of further engaging with customers and community. They provide a means and common language for holistically assessing customer value and trade-offs. Aligning to the SDGs enables Australian water utilities to communicate and deliver value for customers and community.



Case study 3 Integrated Water Cycle Management in the Barwon Region

For a system as complex as the urban water cycle, collaboration with key players is critical to achieving greater system resilience. Barwon Water spearheaded the establishment of the Barwon Region IWCM Network with local government and the Corangamite Catchment Management Authority to provide a more integrated approach to urban and water planning.

Melbourne Water and Yarra Valley Water demonstrate how to embed the SDGs in organisational strategy. Both organisations are also signatories to the UN Global Compact – the world's largest corporate sustainability initiative. The Compact is both a practical framework for action and a platform for demonstrating corporate commitment and leadership.



2.1 Building on a strong foundation

Australia is world-leading in water and sanitation services and Australia's high ranking for Clean Water and Sanitation (SDG 6) reflects that position. This strong performance means the industry has the capacity to 'lift their gaze' and consider what might be possible across the broader and interconnected components of the SDGs. It also means the industry is well-placed to help others who are developing in the area of water and sanitation.

A dashboard produced by Sustainable Development Solutions Network (SDSN) and Bertelsmann Stiftung shows Australia's performance on Clean Water and Sanitation goal (SDG 6) is good (Figure 3). The colour codes represent absolute performance against predetermined thresholds, rather than relative performance against other countries. As the measure and relative indication of performance matures over time, the story of performance can be used to guide future investment, government policy making and partnerships. In other words, it shows where there is need for improvement and where Australia can provide leadership.

Australia's good rating for water and sanitation (SDG 6) shown in Figure 3 uses indicators with available data. It measures access to improved water sources (indicator 6.1.1), access to improved sanitation facilities (indicator 6.2.1), freshwater and groundwater withdrawal (indicator 6.4.2). It does not include the other indicators for SDG 6, which

are listed in Appendix 1. The limitations of available data requires caution about analysis of Australia's performance.

While this ranking of Australia and other wealthy nations provides a sense of relative performance across a range of categories, investigating individual goals is more useful. Figure 3 also indicates areas for the opportunity to 'lift the bar' and improve Australia's performance across other SDGs. By collaborating with other stakeholders and sharing costs, stakeholders can deliver more value for less across all the Goals.

The SDGs require new datasets and measurement. The World Water Data Initiative recognises the importance of data to advance the SDGs. The initiative focuses on developing datasets and measurements, in addition to new and innovative ways to collect data to measure contribution to SDG 6. Australian water utilities are well-placed to share their experience of developing, agreeing on and using national performance indicators.

Built on years of collaborative effort and consultation, the Bureau of Meteorology (BoM) now compiles the National Performance Report (NPR) each year for Australian urban water utilities. The NPR is a requirement of the 2004 National Water Initiative (NWI) – the national blueprint for water reform, agreed to by the Council of Australian Governments (COAG). It has helped drive improvements in water resource management and utility value through measuring performance against a range of metrics.



Figure 3. Performance dashboard of Australia for each SDG, 2017. Source: SDSN & Bertelsmann Stiftung



The NPR reports performance across 182 indicators for financial, health, and environmental criteria. Indicators that overlap between the NPR and the SDG indicator framework primarily measure access to water and sanitation services (NPR customer and health indicators and SDG 6 indicators). There are also complementary indicators for renewable energy sources and emissions (NPR environment indicators and SDG 7) and solid waste treatment (NPR environment (biosolids) and SDG 12).

While the NPR measures contribution towards some of the SDGs, the broader framework of the SDGs may highlight areas for consideration and improvement beyond the scope of the existing NPR. Utilities can more holistically assess their performance and contribution to the SDGs, which would have the additional benefit of enabling the collective contribution of the Australian water industry to the SDGs to be measured. Providing access to this information will allow regulators to consider evidence based regulatory incentives and impediments to delivering value to communities and better measure the outcomes of such initiatives.

2.2 Delivering beyond SDG 6: Clean Water and Sanitation

The mandate of Australian water utilities is inherently broad. They have legislated responsibilities to ensure sustainable management of water resources, to encourage and facilitate community involvement in water resource management. In addition, they are responsible for integrating long and short-term economic, environmental and social considerations. Conservation of biological diversity and ecological integrity are also fundamental considerations.



Case study 4

Managing wetlands for sensitive waters

Unitywater are investing in catchment management works, such as wetlands, to offset increases in nutrient loads from sewage treatment plants to waterways and the ocean. This approach provides for beneficial environmental outcomes at a lower cost.



South East Queensland's Water Security Program

The Millennium Drought combined with population growth highlighted the need for South East Queensland to improve its resilience. Seqwater's Water Security Program is a plan for the region's drinking water supply over the next 30 years, including during times of drought and flood. Importantly the Program incorporated extensive community consultation so the Program reflected the values of the community. The Program is also adaptive meaning the right decisions based on community values for the region can be made at the right time.

Utilities run programs to support customers, communities and their local environment. Many water utilities are seeking more collaborative approaches to support vulnerable customers through engaging with organisations and Governments to put the customer first. Work by Yarra Valley Water to develop WaterCare is one example. The water industry also recognises its role in liveability, reducing greenhouse gas emissions and impacts on the water environment.



ase study 6

WaterCare: supporting vulnerable customers

Yarra Valley Water's WaterCare initiative reduces the risk of vulnerable customers falling into serious debt, and helps customers already experiencing financial hardship to get back on track. The program is based on long-term trusted relationships across the sector, sharing knowledge and learning from each other. The program has been recognised as best practice within the industry and won the Prime Minister's Award for Excellence in Community Business Partnerships.

The industry recognises their broader community responsibility and that Australian customers and communities are diverse. Customer values, local conditions, and the authorising environment in which they operate will guide utilities.

Understanding that the water industry can contribute beyond SDG 6 provides practical leverage points for individual utilities as they seek to connect with the SDGs. Engagement with the SDGs will be on each utility's own terms and will vary as their customers vary. A utility's size, operations, population, ownership, regulation and community values will determine the scope of SDG action and leverage points.

Both Yarra Valley Water and Melbourne Water, for example, have identified how they are contributing to each of the Goals by mapping their activities to each of the SDGs. Figure 4 shows the breadth of Yarra Valley Water's interaction with the Goals across the range of activities they undertake. The organisation has used the SDGs as a lens to review and enhance their Strategy to ensure it meets their community needs and values. It has also helped to contribute to the conversation about how to implement the goals, to help raise awareness through thought pieces and to illustrate how their activities align with the direction outlined by the SDG framework.

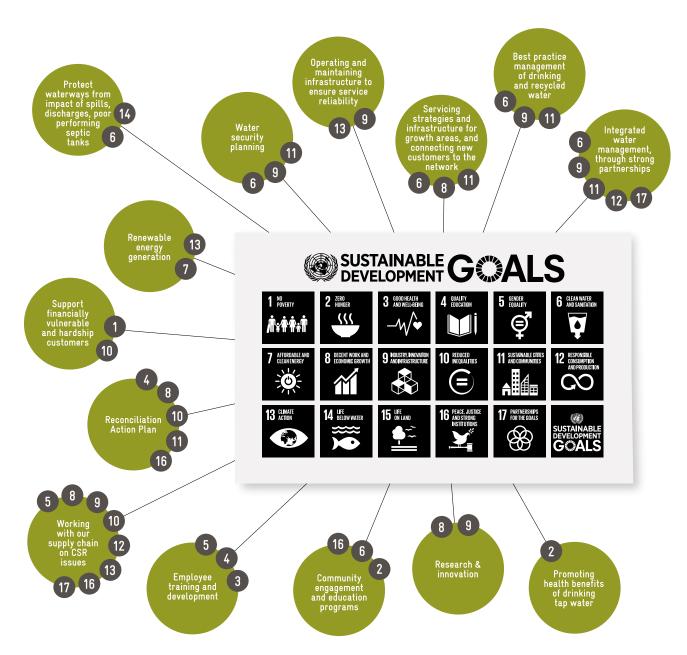


Figure 4. Yarra Valley Water has mapped their contribution to SDGs across a range of activities. Source: Yarra Valley Water

Melbourne Water has taken a similar approach to identify focus areas to meet the needs of their community.

Melbourne Water - aligning the SDGs

Melbourne Water has joined the United Nations Global Compact and has signed a public CEO Statement of Support for the SDGs.

Melbourne Water has engaged with staff, customers and stakeholders about what goals are important and what the opportunities are for leadership. The feedback from this engagement was that Melbourne Water can have the most impact by focusing on core business and demonstrating leadership, innovation, and strengthening partnerships to deliver shared value outcomes for the community.

Melbourne Water aims to enhance their contribution across all the SDGs through all of their activities. In particular they will focus on demonstrating leadership for SDG 6 - Clean Water and Sanitation, SDG 11 - Sustainable Cities and Communities and SDG 15 - Life on Land, which align with the three pillars of Melbourne Water's strategic direction. Performance in progressing these goals will be through strategic KPIs which align to the strategic direction.

Melbourne Water also intends to actively promote the SDGs throughout their supply chain and in delivery of services through the customer

"The UN Sustainable Development Goals provide us, our stakeholders and our community with a common framework and targets to deliver improved community wellbeing and a better natural environment. We are proud to support the Sustainable Development Goals."

Michael Wandmaker, MD Melbourne Water

By drilling down into the indicators, organisations can further identify gaps and opportunities to make both a local and global contribution.

SDG 7 provides a good example of how the industry contributes to affordable and clean energy. This Goal has five targets and six indicators. Target 7.2 states that '... by 2030, increase substantially the share of renewable energy in the global energy mix...'. An opportunity to contribute exists because the Australian water industry is a large energy user during the supply, treatment and distribution of water.



Renewable energy

Many utilities are turning to renewable energy to reduce costs and avoid challenges in a carbon-constrained world. The portfolio is broad and ranges from contributions through mini-hydro systems, to biogas, to wind and solar to generation. Cogeneration facilities not only produce additional biogas to generate renewable energy, but also contribute to avoided community costs by diverting organic waste from landfill.

Another example is the contribution the industry makes to SDG 11: Sustainable Cities and Communities. The targets and indicators for SDG 11 include accessible green space, land consumption, democratic urban planning and management, and the integration of population projections and resource needs into development plans. The water industry contributes to SDG 11 by working with local stakeholders to achieve local community goals and aspirations.

Case Study 8 on business resource efficiency at City West Water outlines work to address water, energy and waste issues holistically leading to more responsible consumption and production and sustainable cities and communities.



Business resource efficiency

Customer energy efficiency and solid waste is not the direct responsibility of a water utility. However, City West Water has shown that helping customers understand the water, energy and waste impacts of their decisions is important to improving water efficiency and managing trade waste.

Work with Indigenous communities is an example of how different utilities will focus on different Goals. Case studies 9 and 10 highlight the work by Power and Water Corporation in Northern Territory and Water Corporation in Western Australia to engage and improve relationships with Aboriginal communities. These programs seek to reduce inequalities experienced by Aboriginal communities in their respective area of operations.



Case study 9

Engaging remote Indigenous communities

Power and Water employed, mentored and trained four local Indigenous Water Conservation Ambassadors to educate remote communities on positive water behaviours and water efficiency. Building on the program and collaboration with local organisations and Governments, Power and Water is leading the way in exploring more opportunities for Indigenous community engagement, training and employment programs.



Case study 10

Reconciliation Action Plan – turning good intentions into measurable actions

Water Corporation's Reconciliation Action Plan includes target areas with actions and measurable targets. The Plan has seen an increase in Aboriginal workforce to 3.1 per cent of total workforce in 2017, previously 2.68 per cent in 2016. Ambitious stretch targets have been set of 5 per cent for 2018.

2.3 Learning from others

The water industry is a mix of publicly owned utilities supported by a knowledgeable and strong private sector (consultants, suppliers and service providers). The water industry brings to the table a long history of building successful partnerships and a willingness to collaborate.

Working with the strengths and skills of others, the SDGs can provide a framework to identify gaps and opportunities for synergistic relationships. The SDGs strongly reflect the importance of cross-sectoral partnership through alignment towards goals and the use of a common language to articulate benefits.

The case studies in this paper demonstrate the benefit of partnerships and provide practical examples of how water utilities work with governments and other organisations in creating value for their communities. The SDGs provide a framework, which supports and encourages partnerships.

Sydney Water's work with water utilities in the Pacific Islands is one example of partnerships in action to achieve the Goals. The program is facilitated by the Asian Development Bank and has resulted in improvements

in health and environmental management through the sharing of industry knowledge.

Australian water utilities are global leaders in many areas of sustainable water management, however they recognise the importance of learning from others, particularly those who are at the forefront of advancing the SDGs. The industry recognises that there can be some constraints to progress and will look to learn from and partner with other organisations and sectors who are leading in their respective fields.



Lase study 11

Twinning with water utilities in developing countries

Partnerships with utilities in developing countries benefits both the mentor and recipient organisation. Sydney Water has twinned with water utilities to assist with safe and reliable water services in Papua New Guinea and Fiji.

Some areas of the Australian corporate sector have moved fast to understand and integrate the SDGs. The UN Global Compact has assisted information sharing and individual organisations to integrate the SDGs into their frameworks.

The UN Global Compact

The UN Global Compact Network is the world's largest corporate sustainability initiative to support the UN globally. The Australian network has held a number of events to support knowledge sharing and action on SDGs, and coordinated a statement from CEOs alongside leaders from civil society, academia and youth organisations committing their support to advancing the goals. The UN Global Compact is network which offers opportunities to share experiences and learnings of other organisations and industries

Yarra Valley Water and Melbourne Water have both signed the UN Global Compact.

Examples from the corporate sector demonstrate growing knowledge and use of the SDGs to communicate value. Water utilities can learn from these examples and would benefit from knowledge sharing activities and using SDGs to communicate value.

The industry can also do more to advance the SDGs by building on its expertise and lessons learnt to form new partnerships e.g. sharing diverse options for water security with countries facing similar challenges in a changing climate.



Existing partnerships can be enhanced, such as those already in place with WaterAid, the Australian Water Partnership, ICE WaRM, the International Water Centre and the Australian Water Association. The industry is working with these and other partners to advance the SDGs globally. International twinning arrangements are helping build capacity through sharing of initiatives developed in Australia with water managers in developing countries.

Water Operators Partnerships

In September 2014, the Australian Minister for Foreign Affairs agreed that the Department of Foreign Affairs and Trade (DFAT) should establish an initiative to support public and private partnerships for sharing Australia's water expertise in the Indo-Pacific region. Initially funded through the Australian aid program, the Australian Water Partnership (AWP) has been set up to provide more efficient access to Australian water industry experience and expertise in response to growing demand for collaboration from governments and multilateral agencies in the region.

In early 2017 WSAA signed an Memorandum of Understanding to become a partner with AWP to assist delivery of the initiatives. This has resulted in WSAA coordinating our first Water Operator Partnership for the AWP with two of our members – Hunter Water and Logan City Council.

In June 2017, Logan City Council and Hunter Water hosted a delegation from the Nepal water authority (Kathmandu Upatyaka Khanepani Limited – KUKL). The delegation was part of a three year knowledge transfer program sponsored by AWP in association with AusAid, being coordinated by WSAA. The delegation was learning how to optimise the management of their treatment plants and supply systems. It will be followed up by hands on training in Kathmandu over the next few years. These partnerships showcase a number of goals including SDG 17 – Partnerships for the Goals.

2.3.1 Government partnerships

The Australian Government has a number of activities underway in the water sector that are consistent with its commitments to the SDGs. One of these is Prime Minister Malcolm Turnbull's representation on the High Level Panel for Water. This Panel, which includes 11 sitting Heads of State and Government and one Special Adviser, and is jointly convened by UN Secretary–General Ban Ki-moon and World Bank Group President Jim Yong Kim.

High Level Panel on Water

This Panel, launched at the World Economic Forum in Davos on 21 January 2016, aims to mobilise effective action and advocate on financing and implementation. The purpose is to increase access to safe drinking water and adequate sanitation for all, improve the sustainable management of water and sanitation (SDG 6), and contribute to the achievement of the other SDGs that rely on the development and management of water resources.

The Australian Water Partnership produced framing papers for the High-Level Panel. Written by senior industry and academic experts and sent to the Secretariat of the Panel, these papers contribute to the efforts to set an agenda. The papers recognise that achieving the SDGs involves meeting the needs of individual communities.

The water industry has initiatives and programs which could be shared internationally with the Australian Government support. Domestic policy successes such as the Water Efficiency Labelling Standards (WELS) scheme is one such example now being considered by the High Panel for Water.



Water efficiency - taking WELS to the world

The evolution of the Water Efficiency Labelling and Standards scheme illustrates the benefits of industry and governments working together.

In 1999 WSAA commenced managing the 5A Water Efficiency Labelling Standards scheme to promote water efficiency of appliances and fittings in the home. While effective, to maximise its potential the Scheme needed a legislative base. With the Commonwealth Water Efficiency Labelling and Standards Act 2005, and corresponding legislation in each state and territory, the WELS scheme was born. Its objectives are to conserve water supplies by reducing consumption, through providing information to consumers about the water efficiency of products and by promoting the adoption of water efficient technologies, including by setting minimum efficiency standards. Highly successful within Australia the WELS framework is now underpinning development of an international standard on water efficiency testing, rating and labelling of water-using products.

At a State level, the Victorian government has referenced the SDGs in recent planning processes. Plan Melbourne is a Victorian Government blueprint for Melbourne. The Plan shapes a sustainable, productive, and liveable city as its population approaches 8 million people over the next 35 years. The Plan is consistent with, and progress can be reported against, the SDGs. Specific directions in the Plan can be matched against goals for climate action, industry, innovation, and infrastructure, sustainable cities and communities, responsible consumption and production, domestic and economic growth.

2.3.2 Not-for-profit partnerships

The not-for-profit sector, particularly for aid and development, has high awareness and understanding of the SDGs. A joint initiative between the Australian Council

of Social Service, the Australian Council for International Development, and the Global Compact Network Australia saw many sectors come together for a SDG Summit in 2016. Key themes were collaboration and partnerships, and communication and awareness raising.



Case study 12 Partnering with the Australian water industry to achieve SDG 6

Partnerships are formed not only on commercial or moral imperative, but also on shared mission and purpose. WaterAid is an international development organisation borne out of water professionals who share the common mission to provide people worldwide with a basic human right – access to safe water and sanitation.

The Summit identified areas of common interest for improvement, including poverty, inequality, gender equality, sustainable cities, environment, and climate change. It also resulted in a CEO statement of commitment from over 30 business leaders as well as similar statements from civil society, academic institutions and youth networks.

The Australian SDGs Summit provides a reference point for the water industry for awareness building within the sector and for potential partnership opportunities. The Summit's public communications about priorities and pathway forward provide an invitation for partnership to advance the SDGs.

Work by WaterAid Australia demonstrates how partnerships can benefit society and address SDG 6. Many Australian water utilities are members of WaterAid recognising the role this type of partnership plays in strengthening their corporate social responsibility and sustainability programs while progressing SDG 6.



With increasing pressures from population growth and climate change, the reasons to adapt to a changing world are compelling. The SDGs help articulate a pathway for a sustainable world. As a new, emerging and valuable framework, these integrated global Goals will need to translate into meaningful local action.

For the Australian water industry, engagement with the SDGs must be on each organisation's own terms, mindful of local concerns and desires and within the bounds of their authorised environments. These will vary from utility to utility and from rural to regional to urban areas.

3.1 Next steps for the water industry

Despite their differences, water utilities can benefit from taking a common approach of learning and prioritising action on the SDGs. More can be achieved by working together and working towards common goals.

Build up the water industry position and pathway:

individual organisations aligning to the SDGs will be better supported if there is communication, coordination and collaboration to advance the SDGs. A national summit would assist the water industry's efforts to raise awareness of the SDGs, share opportunities, seek like-minded partners and develop a position and pathway forwards. An earlier example was the 2016 Australian SDGs Summit, which has supported education, collaboration and coordination within and between the not-for-profit, corporate and aid and development sectors.

Use a common language: the water industry will benefit from using the SDG framework as a common language to talk about their activities and contribution. The common language gives the industry a way of communicating value

and builds on the initiatives of the industry to generate shared value. The common language is the indicator framework – programs that benefit society, the economy and the environment can be labelled. This moves the industry away from bespoke metrics around sustainability that neither compare between industry participants nor compare to other sectors, nor compounded to show collective impact and progress.

Activate within the supply chain: implementation of a common language and framework for SDG reporting will enable much greater change within the water industry supply chain. Supply chain actions can include supplier reporting of performance metrics and more nuanced activities across the whole industry towards global goals.

Partnership and skill sharing: Australia has great skills and experience to share through supporting and partnering with operations in other nations. It means the industry is well-placed to help others from developed and developing countries alike. Australia's innovation in the water industry, such as technology, governance and management, and skills in problem-solving for rural, regional and remote communities can be used to great benefit to assist our neighbours in the region. In sharing and partnering with regional neighbours, the water industry supports the global advancement of the SDGs.



3.2 Next steps for individual water utilities

While each utility will have a different focus and circumstances, the process to move forward is the same. The following three step process can assist water utilities

to build on their understanding, embed the Goals into their organisational planning and strategies, and monitor their contribution. The SDG Compass is another tool that provides guidance on how a business can align their strategies as well as measure and manage their contribution.

Step 1

PREPARE AND COMMIT

Undergo an internal education process with the organisation to understand the SDGs.

Actions

- Understand any internal and external harriers
- Gather relevant documents and examples
- Engage with internal management about the benefits and impacts. For example, you might ask: How does our business interact with global supply chains and can we enhance our practices? Where are we leading in water and sanitation practices and can we share with others? Can we better promote sustainable production and consumption to our customers? Who can we partner with and learn from as we start the journey to advance the SDGs?

Step 2

ASSESS AND EMBED

Assess how current utility activities and operations contribute to the SDGs.

Actions

- Map the SDGs against activities and operations
- Consider what measurements are already in place which align to SDG targets and indicators
- Prioritise focus areas
- Communicate with stakeholders and customers so they understand the role of water utilities in the SDGs
- Determine roles and responsibilities and measures of success.

Step 3

MONITOR AND REVIEW

Report against and review indicators identified as relevant (existing or new).

Actions

- Report on progress
- Assess any changes needed as projects are completed
- Consider new projects and activities and their contribution to the SDGs
- Look for gaps and opportunities.

3.3 Reporting on progress

The water industry generates shared value with governments at national, state, territory and local government levels. Recent national reform initiatives offer an opportunity to integrate SDGs into the framework for shared value generation. The integration of the SDGs can be through aligned industry reporting, and integration of SDGs into planning.

Water utilities measure performance under the National Performance Report (NPR), a requirement under the National Water Initiative (NWI). Some indicators for measures of population served by clean water and sanitation align between the NPR and the SDGs. There are many complementary but not identical SDG indicators which could better show not only performance but value of water utilities activities.

Aligning performance indicators to the SDGs enables the industry to more clearly demonstrate value. Australian water utilities can lead by example by developing metrics, methods and techniques for measuring the contribution

to the SDGs in general and particularly SDG 6. Measuring contribution with the SDG framework enables the industry to move from reporting costs to reporting value generated.

The Australian Government has announced it will present its first Voluntary National Review (VNR) at the 2018 High Level Political Forum, the central platform for follow-up and review of the SDGs. The voluntary reviews...

"...aim to facilitate the sharing of experiences, including successes, challenges and lessons learned, with a view to accelerating the implementation of the 2030 Agenda. The VNRs also seek to strengthen policies and institutions of governments and to mobilize multi-stakeholder support and partnerships for the implementation of the Sustainable Development Goals."

UN Department of Economic and Social Affairs

Melbourne Water and Yarra Valley Water have already committed to reporting publicly each year on progress in supporting the Global Compact and the SDGs.



The SDGs are a long-term vision for a better world. They describe the values that communities seek, and the values that water utilities must generate. The Goals are ambitious, interconnected and complex – they require breakthrough thinking and commitment to a collaborative approach.

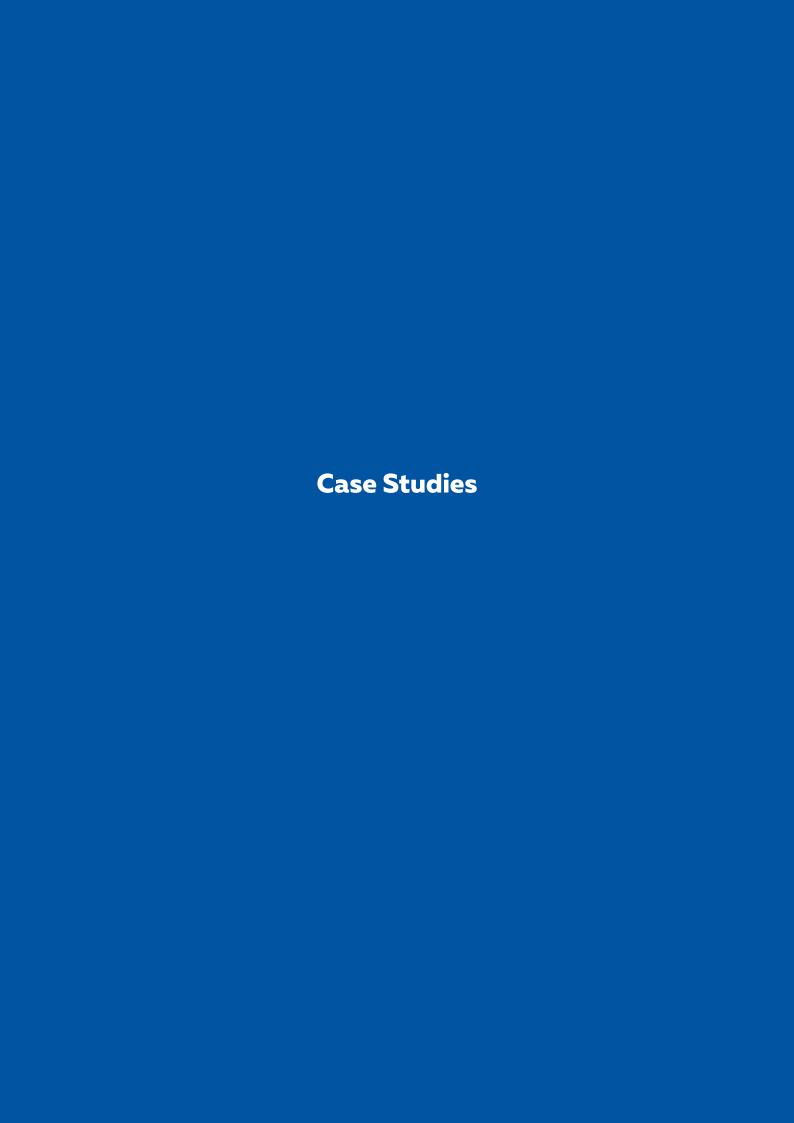
For Australian water utilities, the SDGs broaden the way many have traditionally viewed sustainability – from environmental stewardship to include economic prosperity and social inclusion.

This Paper demonstrates that water utilities already contribute to advancing the SDGs as world leaders in the provision of water and sanitation services. The case studies provide practical examples of the SDGs applied in the Australian water utility context. However, more can be achieved at both an individual utility level and at a broader industry level.

Individual utilities should use the steps outlined in Part 3 to embed the SDGs in their organisations and consider opportunities both locally and globally. At an industry level, WSAA will seek to promote learnings from individual utilities as they continue the journey of connecting with SDGs. WSAA will engage with key stakeholders about the broader value the industry delivers and how it aligns with the SDGs.

The commitment at the front of the Paper articulates the intent of the water industry to support and promote the SDGs in partnership with other utilities, customers and stakeholders. Through advancing the SDGs the industry is embracing its responsibility and demonstrating leadership to help create a sustainable and prosperous future for people and planet.

Achievement of the SDGs is a long-term project, and every journey must start somewhere. The urban water industry is ready to be part of the exciting opportunity to contribute to a worldwide movement to improve life for all, both locally and globally.





Achieving gender balance in water utilities

Numerous water utilities









The inclusion of women at all levels in the water sector is a priority for Australian water utilities and the Australian Government. Utilities recognise that having an inclusive work environment and diverse workplace is recognised as a way to sustainably respond to industry challenges, including growing customer expectations, climate change and technological capability.

Many water utilities are undertaking specific action to support gender equity including targeted leadership programs for women.

One example is the recent board position process in Victoria where 50 per cent of appointees were women and the number of female chairs increased from three to eight of the 19 boards.

Implementation

Water industry efforts for inclusion of women at all levels in the sector is outlined in the WSAA paper *Tapping the Power of Inclusion and Diversity in Urban Water.* It has sought to boost inclusion and diversity in the workforce. Increased participation and leadership of women is a key target within these efforts.

Similarly the Australian Government has outlined case for women in water through the High-Level Panel with the Women for Water Initiative. The Australian Water Partnership's recent paper *Gender & SDG 6 The Critical Connection* outlines the critical role of women in achieving the clean water and sanitation goal (SDG 6).

Actions being undertaken by water utilities around Australia to help achieve gender equity include:

 Communicate the value of gender equity to the organisation.

- Feature profiles of men and women in non-traditional roles, and of employees utilising flexible work practices.
- Include an explicit diversity commitment in job advertisements.
- Request that shortlists for management roles include at least one woman.
- Ask 'if not/why not' in selection decisions to achieve gender-balance across all leadership levels and monitor the pipeline for women leaders.
- Set targets (for example, Sydney Water has a target to achieve 40 per cent female representation of leadership roles by 2020).
- Encourage participation of high-potential women in internal and industry-wide leadership programs.
- Train all leaders to recognise unconscious gender bias and to promote inclusive leadership behaviours.
- Provide reverse-mentoring and sponsorship program for women.



Promote gender equity in community engagement activities.

The Women in Water Leadership Program offered by the Peter Cullen Trust is an example of a water industry program designed to support women in leadership roles.

Benefit / Outcome

- Increases in the proportion of women in roles traditionally held by males (for example at Queensland Urban Utilities, the proportion of women in civil infrastructure project manager and engineering roles has increased from 10.7 per cent in 2010 to 19.8 per cent in 2016).
- Better gender balance on water utility boards.
- Increased focus on inclusion and diversity, including gender equity.

Further References

WSAA, 2017, Tapping the Power of Inclusion and Diversity in Urban Water (wsaa.asn.au/publication/tapping-powerinclusion-and-diversity-urban-water)

AWP, 2016, Gender & SDG 6 The Critical Connection (waterpartnership.org.au/publications).



Partnering and innovating to create shared value for future generations

Queensland Urban Utilities









Queensland Urban Utilities' (QUU) customers, shareholders and the community expect that essential services will continue to be sustainable, affordable, reliable, and resilient for future generations. QUU aspires to be a Utility of the Future – an organisation that thinks about the future and acts accordingly. This is the primary driver for innovation.

To accelerate the development of next-generation sustainable solutions, QUU has established an Innovation Precinct, which extends the reach of the existing Innovation Program by engaging and partnering with universities and industry, providing career pathways, and enabling community engagement.

Implementation

In the last twelve months QUU has delivered 53 Projects-13 Technology trials targeting efficiencies, 18 Pilot Investigations into water quality and wastewater practices, 12 University partnering projects exploring new products and technologies and 10 industry partnering projects enabling process optimisation. The utility hosts \$5 million in research across the university projects at the innovation centre with in excess of 30 partners. QUU observes significant leverage on investment with \$15 of partnered investment for every \$1 of QUU research and development investment.

The Innovation, Research & Development (IRD) Program gives employees permission to create, collaborate, adapt, respond to change, to fail safely and to share lessons. The principle is that culture is vital to successful innovation, in particular, leadership, corporate strategy and a capable and motivated workforce. It also makes it economically feasible to ask 'what-if' questions and generate preliminary answers.

The Innovation Precinct has enabled QUU to engage in diverse projects to support sewage-related infrastructure and treatment technologies, and to inform future investment and operations. Information and learning from projects has been disseminated widely, to benefit the industry and community. Every dollar invested in innovation supports the objectives of the partnerships. The Precinct catalyses the reach of innovation, attracting community, partners and investment.

Co-locating the Innovation Precinct at a sewage treatment plant and partnering with other Utilities and Research and Development agencies gives QUU the ability to create value beyond their own capability and capacity. Instead of transferring small test samples back to laboratories for analysis, staff can plug and play technologies in-situ with access to live sewage flows.

The focus of the current research is in energy and resource recovery. Two key projects housed at the Innovation Precinct are:

- Electrodialysis this identified as a blue sky method for the recovery of trace nutrients from wastewater. In this project, the potentially low-cost treatment will be investigated for the removal of a difficult-to-treat colour compound from the water. This will enable improved and lowercost disinfection of the water, and recovery of the contaminant as a valuable bio product.
- UGold a patented microbial fuel cell technology. The technology can be used for high-value fertiliser recovery from source-separated urine. A purpose-built toilet block enables staff and visitors to make donations for experimental purposes.

The Precinct facilitates efficient investigations and delivery of multiple activities in partnership with industry bodies and research organisations. QUU also leverage opportunities to enhance outcomes.

Benefit / Outcome

- Enhanced global partnerships.
- Innovation in waste reduction and resource recoveries.
- Cost reduction (current projects are expected to achieve \$15 million in cost reduction, revenue resilience, customer benefits, new knowledge and intellectual property).
- Improved organisational culture (71 per cent feel encouraged to have new ideas and better ways of working and 66 per cent have the opportunity to have ideas adopted and put into use.

Further References

For more information please go to QUU's website (<u>urbanutilities.com.au/about-us/innovation</u>).



Integrated Water Cycle Management in the Barwon Region

Barwon Water









Utilities, councils, developers and other key stakeholders in the Barwon region have a keen interest in adopting good practice Integrated Water Cycle Management (ICM) particularly in the context of prolonged water stress and population pressures and the opportunity to influence the design of new urban developments.

Barwon Water realised that for a system as complex as the urban water cycle, collaboration with key players is critical to achieving greater system resilience. In 2012, they spearheaded the establishment of the Barwon Region IWCM Network with local government and the Corangamite Catchment Management Authority to commit to a more integrated approach to urban and water planning. Through collaborative projects the Network have developed clear processes and tools to help facilitate implementation of IWCM in practice.

Implementation

The Geelong region is one of the fastest growing in Australia and experienced considerable water management challenges during the millennium drought. New urban landscapes are being planned and designed at a rapid rate. A key challenge for urban planners, developers and governments is how to design and build new urban landscapes which are more liveable for residents and more resilient to external pressures like climate change.

While utilities, councils, developers and other key stakeholders share an interest in adopting good practice, integrating urban and water planning can be complex and difficult meaning opportunities are missed and/or inefficiencies arise. All participating stakeholders have recognised the need and opportunity for greater cross agency collaboration to help ensure the water cycle is considered as early as possible in the design stages of new

developments. Barwon Water led the creation of Victoria's first Integrated Water Cycle Management Network. Established as a partnership between the water corporation, Catchment Management Authorities and Local Government, the Network commits the agencies to working towards a more integrated approach to urban and water planning. The partnership assists to coordinate, raise awareness, and build knowledge and confidence in tools around IWCM. The Network has initiated various projects across the region pioneering a more integrated approach. These include:

- Colac IWCM Plan a whole of city water cycle-based masterplan. This was developed in collaboration with key agencies in Colac to deliver a broader community vision.
- Urban Water Cycle Planning
 Guide an online resource to help
 urban developers, consultants and
 planners embed the concept of
 IWCM into the design of new urban
 subdivisions. This includes built and
 natural infrastructure as a well as
 water servicing options.



 Atlas of alternative water opportunities – a detailed database describing all existing, planned and potential demands and supply nodes for alternative water for use in all serviced areas across the region.

In the past five years the region has continued to push the boundaries of integrating water and urban planning with Barwon Water leading the preparation of IWCM plans at various scales, (township, precinct and sub-precinct). The utility has created an online guide to help consultants negotiate the integration process (www.urbanwaterplanner.com.au). Key members also developed an innovative process to better integrate the water cycle considerations in urban masterplanning and developed a peer reviewed paper with presentations at various state and national forums (Overman et al, 2016).

Benefit / Outcome

- Cross agency collaboration and relationship building.
- Capability building in Integrated Water Cycle Management.
- Efficient city planning and decision making.
- Better solutions for resilient communities.

Further References

For more information please go to the Barwon Water online guide (urbanwaterplanner.com.au).



INTEGRATING WATER CYCLE MANAGEMENT



Managing wetlands for sensitive waters

Unitywater









Unitywater has 17 sewage treatment plants (STPs), 13 of which discharge to a waterway or the ocean, and the other four discharge to land. Unitywater has investigated options that would allow investment in catchment management works, such as wetlands, to offset increases in nutrient loads released from sewage treatment plants. As a result of investigations a large former sugar cane plantation (190 Ha) has been purchased that will become a managed wetland. This will enable nutrients to be taken up in vegetation.

Implementation

With its understanding of the importance of waterway health and operating within environmental licence standards, Unitywater is considering options to offset increases in nutrient loads released from sewage treatment plants.

The Queensland Government's nutrient management mechanism enables Unitywater to invest in alternative options to meet water emission discharge limits for sewage treatment plants, while delivering an improvement in water quality in receiving waterways. Nutrient management solutions include riparian area restoration, constructed wetlands and stormwater management. Unitywater has implemented nutrient management opportunities for the Maroochy River catchment and the Caboolture River.

Unitywater purchased two lots of former cane-farming land on River Road, Maroochy River as part of a larger program to improve the health of the rivers and creeks in the area. Much of the former cane land will be restored as wetlands. These wetlands will remove nutrients and sediments from the river, which will improve river health.

Unitywater will be able to offset the amount of nutrients removed by these wetlands against the nutrients discharged to the Maroochy River following treatment of the local community's sewage.

The project has led to further opportunities including the potential for an education/tourist centre for this site, to bring together neighbouring sites, which include a 15 megawatt solar plantation built and run by Sunshine Coast Council, and a State owned forest reserve, to provide an eco-information hub and tourist destination. Other future nutrient management opportunities to explore include Yandina Creek Wetland, Caboolture River, Pine River, South Pine River, and the Mooloolah River.

Benefit / Outcome

- Environmental outcomes at lower cost using alternative approach.
- Improved river health.
- Improved stakeholder relationships.

Future References

For more information please go to Unitywater's website (<u>unitywater.com.au/Coolum-Demonstration-Wetlands-Project</u>).





South East Queensland's Water Security Program

Segwater











Seqwater is the sole bulk water supplier for the South East Queensland Region and is tasked with delivering a safe, secure and cost-effective water supply.

The severity of the Millennium Drought combined with population growth highlighted the need for the region to improve its resilience, with the largest regional dam reaching 15 per cent storage capacity in 2007.

In response to the Drought, the community and industry reduced water consumption and constructed climate resilient infrastructure (desalination and recycled water schemes) and an interconnected water grid to move water around the region.

The Drought demonstrated the need to plan future water supply well in advance to prevent a crisis and that deterministic planning based on previously observed conditions was not adequate to respond to a changing and uncertain future. Additionally, planning needed to consider climate extremes, including drought and flood.

Implementation

The Water Security Program is Seqwater's plan to provide South East Queensland with drinking water for 30 years. This includes planning for extreme weather to improve resilience of supply and adapt to changing conditions, including climate change. The Water Security Program investigated water security options spanning new supply options, demand management options and options to change how the system is operated. The trade-offs between options and their ability to respond to different conditions including drought and flood were explored in the development of the program.

The Program incorporated community consultation which shaped the program to reflect the values of the community. Community forums provided information on water security options and their trade-offs, generated discussion amongst community members in relation to options and provided the opportunity for community members to decide on the relative importance of considerations.

Investing in water infrastructure, particularly new sources of water, is an intergenerational decision – the cost, benefits and implications will be felt by generations to come. South East Queensland's Water Security Program helps to make the right decisions based on community values for the region at the right time.



The Water Security Program is adaptive. It does not propose one water security solution with a set timeframe. Rather, it identifies ways to respond to changing influences and sets triggers for implementing options or reviewing and changing responses. While responses are planned in advance, investment decisions will be made based on conditions at the time and depending on what options have previously been implemented.

Benefit / Outcome

- A resilient and adaptive plan for future water security.
- Improved stakeholder relationships.
- Better understanding of community values.

Further References

For more information please go to Seqwater's website (<u>seqwater.com.au/waterforlife</u>).



WaterCare: supporting vulnerable customers

Yarra Valley Water













Yarra Valley Water (YVW) has developed industry leading programs to support their vulnerable customers and those facing financial hardship. These programs focus on early identification and intervention, including increasing the organisation's awareness of groups with a higher risk of vulnerability.

YVW has demonstrated there is a positive business case for proactively intervening to support the most financially vulnerable in a community. Research by Saul Eslake suggests that measures to address financial inclusion and resilience would see potential economic benefits of an increase in nominal GDP of approximately \$2.9 billion per annum over a ten-year period.

Financial hardship threatens 42 per cent of Victorian residents. In 2013, the Essential Services Commission allocated \$5.25 million to the retail water utilities in Melbourne to assist customers who are financially vulnerable and to manage the impact of rising prices. YVW used that funding to create WaterCare—an initiative that reduces the risk of vulnerable customers falling into serious debt, and helps customers already experiencing financial hardship get back on track.

WaterCare has been recognised as best practice by the Energy and Water Ombudsman Victoria, the Consumer Policy Research Centre (CPRC) and the Essential Services Commission in Victoria and won the Prime Minister's Award for Excellence in Community Business Partnerships. It has produced significant improvements in the number of YVW customers accessing government support, meeting their payment plans, and transitioning back to mainstream bill payments.

Implementation

WaterCare is designed around three customer support 'pillars':

Identification – Early identification of financial vulnerability enables more opportunity for proactive intervention, therefore reducing the risk of customers falling into serious hardship.

Visibility – Being 'seen' in the community builds greater awareness and helps YVW build trusting relationships with their customers, ensuring customers know their water utility is available to assist them manage their bills.

Support – Relevant, efficient programs prevent at-risk customers from falling into serious debt, and help those already experiencing hardship to get back on track.

Central to YVW's customer outcomes is a team of people dedicated to delivering the best possible service to vulnerable customers. Community outreach for the WaterCare program includes running information/training sessions with community support workers so they can inform their clients about the support available, and developing



targeted communications and outreach programs for customers who may be at risk. The online resource WaterCare Hub (www.watercare.com.au) gives community sector workers quick and easy access to all YVW support programs, updates and connection to other Hub members and experienced utility staff.

Fundamental to the success of YVW's approach is the long-term commitment in building trusted relationships across the sector, and working in partnership with the community sector, other government agencies and businesses. Collaboration with industry has also seen YVW take the lead and partner with other utility businesses to develop and implement cross referral programs.

YVW also participated in the pilot phase of Kildonan Uniting Care's 'CareRing', which was subsequently rolled out to other utility businesses. The project, described as an Australian-first, aims to identify vulnerable customers at the earliest stages of financial stress while also screening for co-occurring issues that could be contributing to or compounding problems.

Benefit / Outcome

- Around 50 per cent reduction in number of supported customers whose debt levels exceed \$1000.
- Customers transitioning back to mainstream payment plans has increased by 168 per cent.
- Cross sector collaboration to take action on inequality, disadvantage and exclusion, to tackle the systemic societal issues that co-exist with financial vulnerability.
- Development of a successful and well-founded business case for supporting the most financially vulnerable.

Further References

For more information please go to WaterCare's website (<u>watercare.com.au</u>).



Renewable energy

Australian water utilities











The Australian water sector is a large energy user during the supply, treatment and distribution of water. Energy use is heavily influenced by the requirement to pump water and sewage and by sewage treatment processes. To avoid challenges in a carbon constrained world, future utilities will need to rely more on renewable sources of energy. Many utilities already have renewable energy projects underway to meet their energy demands.

Implementation

Sydney Water has built a diverse renewable energy portfolio made up of cogeneration, hydroelectricity and solar, which now accounts for approximately 20 per cent of its total energy demand. Of this, cogeneration accounts for approximately 15 per cent of energy production, having been rolled out in eight of the larger wastewater treatment plant sites. Sydney Water are now trialling co-digestion of sewage sludge and organic food wastes; reflecting a gradually changing mindset that Sydney Water could provide broader benefits as a 'waste services' provider by expanding its current capability treating one significant stream of waste. Hydroelectricity and a small amount of solar is also generated in suitable sites within the network.

Melbourne Water also has a significant renewable energy program. Nine mini-hydros across Melbourne's water supply system generate 61,000 Megawatt hours of electricity each year - enough to power 9,000 households. In all, the water supply network generates more electricity than it uses. On the wastewater side, Melbourne Water captures biogas from the waste treatment processes at both treatment plants, and uses it to power 40 per cent of the electricity required for treatment processes. The Western Treatment Plant is on track to become energy self-sufficient (utilising its own biogas) in 2016/17. As part of its continued commitment to reduce

emissions, Melbourne Water also has a pipeline of R&D and commercialisation. These projects include algae for treatment and biofuel production, advanced biogas recovery and small scale hydro and solar generation.

Yarra Valley Water, has constructed a waste to energy facility linked to a sewage treatment plant and generating enough biogas to run both sites with surplus energy exported to the electricity grid. The purpose built facility provides an environmentally friendly disposal solution for commercial organic waste. The facility will divert 33,000 tonnes of commercial food waste from landfill each year. The waste is delivered by trucks from commercial waste producers, such as markets and food manufacturing. As well as helping to keep organics out of landfill it is also helping to make recycling commercial organic waste easier and more affordable for businesses.

SA Water's Bolivar wastewater treatment plant is 87 per cent energy self-sufficient following new infrastructure at the plant to make the best use of biogas to produce renewable energy. The renewable electricity generated at the Plant is enough to power 4000 houses a year. SA Water is also taking large strides in energy efficiency across its other sites. Since 2013-14, its innovative energy management program has helped reduce carbon emissions by 13,000 tonnes per year across wastewater treatment sites.

Queensland Urban Utilities operates three cogeneration units at its biggest sewage treatment plants at Oxley Creek and Luggage Point. The state-of-the-art technology produces up to 50 per cent of the plants' electricity needs, delivering savings of up to \$2.5 million a year. They have also unveiled Australia's first poo-powered car. The car runs on electricity generated from sewage at the Oxley Creek Sewage Treatment Plant in Brisbane's west.

Water Corporation are offsetting the electricity needs of their Southern Seawater Desalination Plant by purchasing all outputs from the Mumbida Wind Farm and Greenough River Solar Farm. Greenough River Solar Farm produces 10 megawatts of renewable energy on 80 hectares of land. The Mumbida wind farm comprise 22 turbines generating 55 megawatts of renewable energy. In 2015-16, planning started for a project to provide a significant reduction in operating costs and greenhouse gas emissions by offsetting most of the power consumed by the Beenyup Wastewater Treatment Plant. Delivery of this project is expected to be complete in 2018.

Many other utilities across the country are also making a contribution. These contributions range from small to large scale. They include small-scale solar to shared large-scale solar farms, wind towers to supply all of a utility's needs and off-grid solutions.

Benefit / outcome

- Financial benefits reduced energy costs and hedge against future price increases and insecurity of supply.
- Reduction in greenhouse gas emissions/climate change mitigation.
- Contribution to liveable and resilient cities
- Reputational benefits for utilities.

Further References

For more information please go to the websites for:

- Sydney Water (sydneywater.com.au/ SW/water-the-environment/what-we-redoing/energy-management/index.htm);
- Melbourne Water (<u>melbournewater.</u> com.au/whatwedo/Liveability-andenvironment/energy/Pages/Energyefficiencies-and-renewable-sources.aspx).



Business resource efficiency

City West Water









City West Water has long recognised its role in reducing its own environmental impact, but also assisting its customers to do the same. Although assisting customers with energy efficiency and solid waste reduction is not the direct responsibility of City West Water, helping them understand the water, energy and waste impacts of their decisions is important to water efficiency and managing trade waste. It can also help avoid unintended consequences when implementing water efficiency and cleaner production initiatives. Addressing water, energy and waste issues holistically is more cost effective and can achieve overall better outcomes than addressing them individually.

Implementation

In response to severe drought, in 2003, a team was created to work with City West Water's large non-residential customers to improve water and resource efficiency. This included helping the largest water users to identify and implement water efficiency opportunities. It also included at-source cleaner production initiatives to reduce salt and other critical contaminants discharged, as high levels of contaminants were constraining recycled water opportunities.

The program began with the three Melbourne metropolitan water retailers working with the top 200 water users to develop Water Management Action Plans, 104 were City West Water customers. In 2007, the program was expanded to all customers using ten or more megalitres of potable water each year across Victoria, capturing approximately 500 City West Water customers. City West Water then further expanded the work to provide all 40,000 non-residential customers with a path to become more resource efficient.

City West Water decided to take a holistic approach to water and resource efficiency to help avoid unintended trade-offs between the systems when implementing initiatives, as well as making business cases more viable.

For example, City West Water has been working closely with Melbourne Water to support the development of a codigestion trial at the Western Treatment Plant. Co-digestion involves adding high strength organic waste to the treatment process at the Plant resulting in increased energy production through the creation of biogas. This connects businesses with a more sustainable and cost effective alternative disposal route compared to landfill.

Relationships with customers and other complementary partners are key to the success of a holistic resource efficiency program. Business customers want a level of certainty of success to engage in the process. A simple, low cost audit with high level prioritised opportunities is not only an important tool to engage customers, but also helps the water utility identify key opportunities.



City West Water also provides assistance to overcome barriers to implementation through provision of incentives (rebates, co-funding), expert advice, research and development, information and behavioural change materials.

City West Water also developed a Resource Efficiency Assist Program in partnership with the Australian Industry Group on behalf of Sustainability Victoria, to provide small to medium businesses with water, energy and materials assessments.

Benefit / Outcome

- Resource efficiencies through holistic management.
- Improved community capability in resource management and efficiency.
- Support and creation of more jobs in businesses as a result of higher resource productivity and profitability.

Further References

For more information please Citywest's website (<u>citywestwater.com.au/business/saving_water_energy.aspx</u>).



Engaging remote Indigenous communities

Northern Territory Power and Water













Many remote Indigenous communities in the Northern Territory rely on stressed groundwater or freshwater sources and are exposed to critical water shortages. Communication on the importance of water conservation with these communities has been difficult. Power and Water Corporation has employed, mentored and trained local Indigenous Water Conservation Ambassadors to educate the remote community of Galiwin'ku on positive water behaviours and water efficiency.

Implementation

Residents of the townships in these remote communities retain ties to traditional culture with English as a secondary language. They are not well educated on the systems and processes of water or other utility services, i.e. where it comes from, where it goes and the governance that surrounds it. Therefore they do not often make the connection between water that comes out of the tap and local issues of water stress. The communities are plagued with other social pressures such as high levels of unemployment and water efficiency is not high on the agenda for most. As they often live in public housing, there is no price signal to use less water. Power and Water Corporation in the Northern Territory face a strong cultural, language and distance divide in getting their water efficiency messaging across.

Through consultation with the local Indigenous communities, Power and Water began to understand that effective engagement would need to come from those with the same cultural and language backgrounds, and with understanding of community needs and values.

In 2012, Power and Water employed, mentored and trained four local Indigenous Water Conservation Ambassadors to educate the remote community of Galiwin'ku on positive water behaviours and water efficiency. Power and Water worked with local organisations, Community Development Employment Program providers and Community Enterprise Australia to assist in ensuring the right community ambassadors were chosen and provide culturally appropriate training and ongoing mentoring.

Following the success of this program, in 2013, Power and Water took part in the Low Income Energy Efficiency Program (LIEEP), a Federal Government funded project which in the Northern Territory was trialled in six remote communities, including Galiwin'ku.



The LIEEP program built upon the community engagement process used in Galiwin'ku, and also took the opportunity to leverage this funding in energy efficiency to include some water efficiency education/services. The program involved recruiting and training 80 local Indigenous community members in local languages, and preparing communications materials that spoke to the communities. Part of the training also involved more general activities such as experience in workplaces.

Power and Water are now leading the way to explore opportunities with other government agencies who may have the need for similar Indigenous community engagement programs to pool resources and implement joint training or employment programs.

Benefit / Outcome

- Water efficiency outcomes with savings of up to 8 per cent observed after household water education survey.
- Upskilling and empowering remote Indigenous community.
- Employment opportunities in a region where unemployment rate is high.
- Better relationship with and understanding of the local community.
- Sustainable management of water.

Further References

For more information please go to Power and Water's website (<u>powerwater.com.au/sustainability_and_environment/remote_sustainability_initiatives</u>).



Reconciliation Action Plan – turning good intentions into measurable actions

Water Corporation









The Water Corporation's 2015-18 Reconciliation Action Plan (RAP) is the Corporation's fourth RAP and aims to achieve "Elevate" status with Reconciliation Australia. This status is achieved by organisations considered to be leaders in reconciliation. All target areas contain actions and measurable targets.

Water Corporation formally began its journey to support better outcomes for Aboriginal people in 2006 with an Aboriginal Engagement Story and Plan. In 2008 the Corporation's first Reconciliation Action Plan was developed. The RAP has been refreshed with new priorities developed every three years.

A RAP committee of employees, chaired by the Chief Executive Officer, meets every three months to progress priority programs and actions.

Implementation

The Water Corporation has a range of activities underway as part of the RAP in 2016-17.

Awareness raising activities include Aboriginal Cultural Awareness training and on-line Aboriginal Cultural Awareness Program. External partnerships including with the Clontarf Foundation and Yirra Yaakin Theatre Company support Aboriginal development and raise awareness of Aboriginal culture. There is also continued promotion of Aboriginal cultural events and reconciliation activities to the Corporation's employees throughout the year.

The development of a Native Title Strategy ensures the Water Corporation undertakes its business with native title stakeholders in a way that not only meets the legal requirements of the Native Title Act 1993, but also the contractual obligations set out in Indigenous Land Use Agreements (ILUAs) and other formal arrangements. One outcome is the 'Two people's Bay' partnership which enables Noongar people to legally carry out certain land-based Aboriginal customary activities within Public Drinking Water Source Areas in the south west of Western Australia.

Water Corporation supports Aboriginal suppliers through a Supplier Diversity Strategy, to encourage and sustain the future growth of Aboriginal supplier engagement in Western Australia. Contracts of almost \$1 million have been awarded to Aboriginal suppliers as head contractors and subcontractors.

Support for Aboriginal employment through an Aboriginal employment retention strategy provides support to both managers and employees. It also supports development of a specifically focussed Aboriginal Leadership program for aspiring leaders, partnership engagement with Clontarf Foundation, South Metropolitan Youth Link and Job Networks.

Visible support from the Chief Executive Officer and key staff on the RAP committee have been critical to the success of the program.

Moving forward, the focus is to continue the significant work with Aboriginal businesses and to increase the Water Corporation's relationships with the Aboriginal community specifically in relation to the protection of native title rights and interests.

Water Corporation is committed to increasing the number of contracts awarded to Aboriginal owned and operated suppliers from Western Australia. By engaging suppliers locally owned and operated by Aboriginal people, the organisation is increasing their customer focus, delivering products more effectively, valuing every dollar and ensuring the future of supplier diversity, and continues to be at the forefront of leadership in the water sector.

Benefit / Outcome

- Increase in Aboriginal workforce to 3.1 per cent of total workforce, previously 2.68 per cent in 2016.
- Creation of ambitious but achievable stretch targets – 2018 workforce target has been revised up from 3.2 per cent to 5 per cent.
- Improved relationships with Aboriginal communities.
- Increase in opportunities for Aboriginal contractors and suppliers.

Further References

For more information please go to Watercorp's website (<u>watercorporation</u>. <u>com.au/about-us/our-commitments/aboriginal-people-and-communities</u>).



Twinning with water utilities in developing countries

Sydney Water









Twinning with utilities in developing countries helps build their capacity to deliver safe and reliable water and wastewater services, protecting public health and the environment. It benefits mentoring organisations like Sydney Water, showcasing expertise in particular areas and allowing them to share knowledge that will help increase operational efficiency while protecting public health and the environment in developing economies.

Sydney Water has twinned with water utilities in Papua New Guinea and Fiji, working with them on key issues like environmental regulation and trade waste management.

Implementation

Since 2013, Sydney Water has been working with water utilities in the Pacific Islands to help them build capacity in key operating areas such as customer service, laboratory testing and trade waste management. The program, facilitated by the Asian Development Bank (ADB), is designed to increase water utility employees' skills through twinning with experienced operators. This helps utilities derive greater value from investments.

The ADB aims to improve the life of people in Asia and the Pacific by investing in infrastructure, health care services, financial and public administration services.

ADB has been working with developing countries like Fiji and Papua New Guinea to develop water and wastewater infrastructure through loans, grants, policy dialogue and technical assistance. As part of this,

Sydney Water has twinned with the Water Authority of Fiji (WAF) and Eda Ranu, the water supply company in Port Moresby, Papua New Guinea.

In 2013, Sydney Water's first twinning arrangement was with Eda Ranu - the water utility servicing greater Port Moresby in Papua New Guinea. Sydney Water trained Eda Ranu lab staff in sampling and analysing drinking water. Eda Ranu staff visited Sydney Water's labs, where they received training and underwent proficiency assessment in best practise techniques. Sydney Water's subject matter experts helped them develop procedures to achieve NATA accreditation. The twinning has resulted in Eda Ranu remodelling their lab, establishing procedures manuals and training its sampling and analysis in the application of Coilert-18.

With ADB's assistance, Sydney Water and Water Authority of Fiji (WAF) have entered into a Water Operators Partnership (WOP). This partnership aims to develop capability in the areas of customer water conservation, trade waste management and environment protection. Like many Pacific Islands,



Fiji is concerned with the impact of El Niño weather events, particularly with the growth in tourism and investment placing stress on urban water supplies and wastewater networks. Fiji is implementing stronger environmental legislation and WAF wanted to learn from Sydney Water's experience of managing the relationship with their environmental regulator. As part of the twinning arrangement, WAF and Environment Ministry officers visited Sydney Water and NSW Environment Protection Authority to observe how the relationship works at a strategic and operational level. WAF has now used the model for engaging with the environmental regulator in Fiji.

Sydney Water and WAF are now planning to continue this relationship, with a focus on supply chain, strategic asset management and developing better processes for working with business customers.

Benefit / Outcome

- Helping achieve sustainable growth in developing countries.
- Sharing of industry knowledge to upskill and empower water utilities in developing countries.
- Acknowledgement of skills and experience of Australian water utilities.
- Improvements in health and environmental management and operational efficiency.



Partnering with the Australian water industry to achieve SDG 6

WaterAid

















WaterAid is an international development organisation borne out of a socially conscious group of water professionals who felt morally responsible to share their knowledge and resources to provide people worldwide with the basic human rights – access to safe water and sanitation – that almost all Australians enjoy. This origin continues to drive how WaterAid partners with the Australian water

industry to help create a better, fairer

WaterAid campaigned tirelessly over the last three years to ensure a dedicated SDG for water and sanitation. Access to water and sanitation has such farreaching impacts for all aspects of development, they simply couldn't be left out of any framework focused on tackling poverty, hunger, inequality and environmental degradation.

Implementation

Given this involvement in the SDG process, WaterAid's vision is most strongly aligned with Goal 6. The organisation is focused on bringing about a world where everyone everywhere has safe water, sanitation and hygiene by 2030. This vision is core to WaterAid's business model; their unwavering commitment to providing sustainable solutions and sector-wide knowledge-sharing in water, sanitation and hygiene. This is strengthened by corporate partnerships to bring this vision closer to reality.

As part of this commitment, in December 2013, WaterAid Australia signed onto the UN Global Compact (UNGC), and joined the Global Compact Network Australia. WaterAid became a signatory as an action-orientated organisation committed to eradicating

global poverty. The organisation supports the UNGC's sustainability framework as a mechanism to significantly enhance an organisation's ability to contribute WaterAid also hope to encourage others – corporate partners and sector allies – to align their culture and strategy with the ten universally accepted principles. WaterAid use a company's commitment to the principles as part of their ethical checks on corporate partners.

Partnerships are not formed just on a moral imperative (although this is certainly a key driver for many), but also on one of deep engagement in WaterAid's mission. This mission outlines a keen desire for knowledge and skills transfer to build capacity in developing countries in Australia's region, connectivity with neighbours, and the pursuit of innovation for scalable, sustainable solutions.

Mutually beneficial corporate partnerships are a critical starting point for partnership conversations. Any worthwhile relationship takes time and energy to develop. Hopefully this approach leads to a longer 'marriage',

approach leads to a longer 'marriage',

founded on mutual respect and closely aligned values, in which both parties are deeply satisfied.

WaterAid works with local partners to deliver clean water and toilets and promote good hygiene, and campaign to make change happen for everyone everywhere. In 2015-16, they reached 1.9 million people with clean water and over 3 million people with sanitation.

Benefit / Outcome

- Strong partnerships and coalitions.
- Reducing inequalities through access and education.
- Working towards a vision of water, sanitation and hygiene for everyone, everywhere by 2030.

Further References

For more information please go to Wateraid's website (<u>wateraid.org/au</u>).



Advancing the SDGs in practice

Melbourne Water

















Melbourne Water aspires to make a meaningful contribution to advance the SDGs. By supporting the SDGs, Melbourne Water is building a solid foundation provided by its vision of 'Enhancing Life and Liveability' and a strong history of sustainability.

The SDGs provide a broad lens for planning and a common framework for communicating with partners, enabling shared value outcomes and fostering innovation. Melbourne Water stakeholders, customers, and staff contributed to an understanding of what is important and where opportunities for leadership lie in relation to the SDGs. Following broad engagement, mapping of strategies and activities helped identify areas of activity for the most impact.

Implementation

Melbourne Water has signed up to the United Nations Global Compact, the world's largest corporate sustainability initiative. Linked to this, the Corporation also signed a public CEO Statement of Support for the SDGs along with over thirty other leaders in the Australian business community.

To continue to enhance their contribution to the SDGs, Melbourne Water has identified three broad areas of focus that align its strategy, culture and day-to-day operations to the SDGs:

1. Melbourne Water aims to increase its contribution across all the goals

Melbourne Water has embedded the SDGs into strategy development and business planning processes. Using the SDGs as a lens in planning facilitates a broader perspective and encourages innovative solutions.

2. Melbourne Water will be leaders for SDGs 6. 11 and 15.

Melbourne Water seeks to have a significant impact on SDG 6, SDG 11 and SDG 15. These three goals closely

align with the three pillars to drive the organisation's strategic direction, to demonstrate leadership against these goals, and assess performance in progressing these goals using strategic KPIs.

3. Melbourne Water will advance the goals through strong partnerships

Valuable outcomes can be realised with a strong commitment to partnership and co-operation. Melbourne Water intends to actively promote the SDGs throughout their supply chain and in delivery of services through the customer value chain.

Specific examples of how Melbourne Water is contributing to the goals include:

- Partnering with the Hope City Mission to use Melbourne Water land for a community garden project that will help feed over 100 hundred families a week.
- Transforming 27 kilometres of the decommissioned Main Outfall Sewer pipeline into a parkland for the growing western suburbs.
- Applying best practice adaptive management to sites of biodiversity significance, more than 9,000 ha, which has led to improved

environmental health scores at 21 of the sites.

- Generating renewable electricity by installing mini hydroelectric power stations.
- Trialling co-digestion to assess new organic waste management opportunities that enable new revenue streams, reduce waste to landfill and create extra renewable energy.

Benefit / Outcome

- Promotion of SDGs through leadership of how they can be embedded in organisational strategy.
- Improved outcomes for customers and communities through programs that link to SDGs.
- Broader value outcomes for customers by aligning SDGs to corporate strategy.

Further References

For more information please go to Melbourne Water's website (melbournewater.com.au/aboutus/whoweare/Pages/United-Nations-Global-Compact.aspx).



Healthy People

Strengthening the wellbeing of the community





Healthy Places

Co-creating the world's most desirable places to live





Healthy Environment

Enhancing the natural environment





Appendix 1

Targets and indicators for SDG 6

Targets and indicators behind the Clean Water and Sanitation goal (SDG 6).

Sustainable Development Goal 6 (SDG 6)

- **6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- **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
- 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, having the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- 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
- 6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
- 6.a By 2030, expand international cooperation and capacity-building support to developing countries in water-and sanitationrelated activities and programmes including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- **6.b** Support and strengthen the participation of local communities in improving water and sanitation management

- **6.1.1** Percentage of population using safely managed drinking water services
- **6.2.1** Percentage of population using safely managed sanitation services, including a hand-washing facility with soap and water
- 6.3.1 Percentage of wastewater safely treated
- **6.3.2** Percentage of bodies of water with good ambient water quality
- 6.4.1* Percentage change in water efficiency over time
- **6.4.2*** Percentage of total available water resources used, taking environmental water requirements into account (level of water stress)
- **6.5.1** Degree of integrated water resources management implementation (0-100)
- **6.6.1** Percentage of change in the extent of water-related ecosystems over time
- 6.a.1 Amount of water-and sanitation-related official development assistance that is part of a government coordinated spending plan
- **6.b.1** Percentage of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management

Appendix 2 **Glossary**

To assist readers, the defined terms in this paper are explained here.

Term	Explanation
Global Compact Network Australia (GCNA)	The United Nations Global Compact is the world's largest corporate sustainability initiative, with over 12,000 participating businesses and other organisations. In Australia, the business-led Global Compact Network Australia (GCNA) brings together signatories to the UN Global Compact, including a number of Australia's leading companies, non-profits and universities, to advance corporate sustainability and the private sector's contribution to sustainable development.
Millennium Development Goals (MDGs)	The MDGs were part of the United Nations Millennium Declaration, which was adopted in September 2000 with a deadline of 2015. The eight MDGs addressed: poverty and hunger, primary education, gender equality, child mortality, maternal health, HIV/AIDs and malaria, environmental sustainability and partnership for development.
National Performance Reporting (NPR)	The NPR is a national water utility performance reporting activity established under the National Water Initiative. It was formerly undertaken by the National Water Commission and is now undertaken by the Bureau of Meteorology.
National Water Initiative (NWI)	The NWI is an Australian intergovernmental agreement on water reform. It was agreed by the Council of Australian Governments (COAG) in 2004 and included commitments for reform and performance reporting.
Sustainable Development Goals (SDGs)	Building on the Millennium Development Goals, the SDGs are a non-binding set of 17 goals for global development to the year 2030. The Goals were globally negotiated, and adopted as part of the 2030 Agenda at the United Nations in New York in September 2015.
Water Operators Partnerships (WOPs)	WOPs are peer to peer relationships for exchange of practical knowledge between water utilities. They comprise a mentor and recipient organisation and typically last 12 to 24 months.



The Water Services Association of Australia (WSAA) is the peak body that supports the Australian urban water industry. Our members provide water and sewerage services to over 20 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

WSAA facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. The collegiate approach of its members has led to industry-wide advances to national water issues.

WSAA can demonstrate success in standardising industry performance monitoring and benchmarking, as well as many research outcomes of national significance. The Executive of the Association retains strong links with policy makers and legislative bodies and their influencers, to monitor emerging issues of importance. WSAA is regularly consulted and its advice sought by decision makers when developing strategic directions for the water industry.

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