

Australian Water Recycling  
Centre of Excellence



# Strategic Plan 2014-2016

## Foreword

The National Water Recycling Centre of Excellence (the Centre) was established in December 2009 and was officially launched in March 2010. Under a funding agreement with the Commonwealth Government the Centre received \$20 million from the Australian Government Department of Environment under the National Urban Water and Desalination Plan.

Since the launch, the Centre and its participants – Seqwater, GHD Pty Ltd, Veolia Water Australia, The University of Queensland, Griffith University, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), the University of NSW and Melbourne Water – have collaborated to develop the Centre. This included the establishment of an administering organisation, Australian Water Recycling Centre of Excellence Ltd.

The Centre is one of a number of organisations around Australia whose role is to broker outcomes between research investors (industry, State and Federal Governments) and research providers (universities, CSIRO, consultants). The Centre has a mandate to work with the urban water sector to develop and implement research programs that enhance the efficiency, expansion and acceptance of water recycling in Australia.

As part of this mandate the Centre defined a number of key research goals, and has implemented a rapidly maturing investment program seeking to deliver on these goals. With the research program now delivering the Centre is focussed on developing and implementing adoption and impact themes and pathways to maximise the national benefit of this work to Australia.

The Centre also continues to operate in a challenging environment. In the last four years the Centre has helped define the national urban water R&D needs, and has worked with the key industry, utility, research and government sectors to identify models for more efficient and coordinated delivery of the national applied R&D needs for urban water. This work has resulted in an agreed approach to future investment, but is yet to be adopted by the industry as a whole.

This Strategic Plan sets the Centre's direction and articulates priority investment areas through to September 2016. Successful implementation will be assessed and achieved through:

- Delivery of the Centre's quality research portfolio addressing the most significant national priorities in water recycling in Australia.
- Developing and implementing adoption and commercialisation pathways, frameworks and networks to ensure that the Centre's research outcomes have the greatest chance to engage, assist and influence utility, private enterprise and government sectors in Australia and overseas.
- Successfully completing the Centre's obligations to the Commonwealth (and project partners), while remaining receptive to opportunities to help implement a collaborative and efficient institutional framework for future national needs.
- Balancing the operational and administrative requirements to deliver an effective national R&D outcome with the desire to ensure maximum efficient spend on the research and development program.

## Strategic Planning Framework

Australia's uncertain water future provides communities the opportunity to develop a portfolio of water sources and types. This portfolio should comprise waters of varying quality, cost and security, and the portfolio would be managed to achieve the greatest social, economic and environmental benefit for our urban, regional and rural communities. As a climate resilient water source, water recycling has a substantive and important contribution to make to this future water portfolio.

The Australian Water Recycling Centre of Excellence Ltd oversees an investment strategy designed to enhance the efficiency, expansion and acceptance of water recycling in Australia. The Centre's strategic planning framework is designed to articulate and guide the Centre's investment to achieve these outcomes.

The Centre's strategic planning framework comprises:

- this Strategic Plan
- a Strategic Research Plan
- an Operational Plan ('Work Plan')
- a Communication and Engagement Strategy
- a Risk Management Framework.

**This Strategic Plan** outlines the Centre's vision and mission, the key objectives, purpose description and indicators of success for the Centre.

**The Strategic Research Plan** outlines the rationale and recommendations for priority areas of research investment, including four goals for guiding Centre research investment (Attachment 1).

**The Operational Plan** identifies an annual work plan and associated budget to guide the operational elements of the Centre's investment.

**The Communications and Engagement Strategy** articulates how the Centre engages with the broader water recycling industry, and how it will collaborate with other research investment entities both national and international.

**The Risk Management Framework** comprises a risk management policy, risk assessment procedure, risk register and risk reporting procedure.

All these framework elements are subject to ongoing review and refinement, and all need to align with, and ensure delivery of, the objectives specified within the Commonwealth Funding Agreement (Attachment 2).

## Strategic Plan Overview

This Strategic Plan for the Australian Water Recycling Centre of Excellence Ltd describes the vision, mission and values for the Centre, outlines corporate objectives which describe and define the company's strategic intent, and articulates key performance indices for the next two years, and priorities for Centre investment for 2014-2016.

### Vision and Mission

The Centre is a national organisation, is strongly industry focused, and has invested the majority of its funds into applied research and development.

When the Centre initially engaged the Federal Government and potential industry and research partners the foci of the Centre was seen as research investment, and ensuring research outcomes are provided the greatest opportunity to influence the water sector in Australia and overseas. These discussions also suggested that, in the future, the Centre may become an exemplar investment vehicle for applied research in the water recycling industry, a national voice for water recycling, and a model example of how to manage Government, utility, private enterprise and research sector R&D investment in Australia and overseas.

Recognising these inputs, the Centre's Vision is:

*"The Centre is recognised as a world leader in research and promotion of sustainable water recycling"*

and the Centre's Mission is:

*"To enhance management and use of water recycling through industry and research partnerships, build capacity and capability within the recycled water industry, and promote water recycling as a socially, environmentally and economically sustainable option for future water security".*

### Values

In developing the Strategic Research Plan for the Centre, the Board and Research Advisory Committee (RAC) agreed that the Centre should value:

**Leadership** – undertaking and promoting leadership of the water recycling research agenda in Australia

**Communication** – understanding and communicating the benefits of considering the full range of water recycling opportunities for scheme implementation

**Education** – building the skills and technical capacity and capability within utility, regulator, and private industry and research organisations

**Efficiency** – seeking and promoting enhanced efficiency and innovation within water recycling industry and research in Australia

## Key Objectives and Performance Indicators

### Objective 1: Research Quality

#### Outcome

Utility, regulatory, government and research stakeholders have confidence that the Centre has invested in priority research areas, the most appropriate projects and teams are selected, and projects will be managed to completion.

#### Description

One of the Centre's principle roles is to sponsor research programs that enhance the efficiency, expansion and acceptance of water recycling in Australia, and to ensure that Commonwealth and other research investment is well managed and the Centre is demonstrating value for money for utility, government and private enterprise sectors.

The Centre's research program is now rapidly maturing, and the Centre will:

- work with project teams, the RAC and Project Advisory Committees (PAC) to ensure projects are well managed, continuously reviewed and guided to a successful and timely outcome
- assist project leaders to identify, order, store and ensure metadata discovery of data generated as a result of the Commonwealth and stakeholder investment.

#### Key Performance Indicator

**Investment appropriate** – Water Services Association of Australian (WSAA), Australian Government Department of Environment (DoE), National Recycled Water Regulators Forum (NRWRF) and the private enterprise sector nominate annual satisfaction with > 75% research project outcomes (by \$) by the Centre.

**Projects delivered** – Final milestone reports for >90% contracted projects delivered by July 2015.

**Data managed** – >50% of research project data is discoverable through Research Data Australia's urban water collection by June 2016.

### Objective 2: Adoption and Impact

#### Outcome

Utility, government and private enterprise sectors identify they have benefited from the Centre's research outcomes.

#### Description

The Centre's investment focus is both to support quality research programs and to develop adoption mechanisms to ensure the research outcomes (IP) have optimal national and international impact. As the research programs mature the Centre will be assessing the most efficient and effective means to exploit the IP so research outcomes have the greatest opportunity to enhance the efficiency, expansion or acceptance of water recycling in Australia.

#### Key Performance Indicator

**Options identified** – Preferred exploitation pathways are identified for >80% of project IP by March 2015.

**IP Commercialised** – National and international licencing approaches defined (with key stakeholders) for agreed IP in impact themes by Sep 2015.

**Outcomes adopted** – By December 2015 WSAA, DoE, NRWRF and private enterprise sector collectively identify >75% Centre's applied research projects have outcomes/IP they have adopted.

## Objective 3: Activity Completion

### Outcome

Government, utility, private enterprise and research sectors achieve optimal value through fulfilment of the Centre's obligations to the Commonwealth and the future positioning of AWRCOE Ltd.

### Description

By September 2016, the Centre has a requirement to deliver on its objectives in the funding agreement with the Commonwealth, and define the future arrangements for the National Recycled Water Centre of Excellence and AWRCOE Ltd.

The Centre will seek to use decisions around the completion of these activities and transition of these enterprises to derive optimal value for Government, utility, private enterprise and research sectors.

### Key Performance Indicator

**Obligations clarified** – By March 2015 the AWRCOE Ltd has clarified and agreed its legal and reporting obligations to the Commonwealth to complete the 'Activity'.

**Commonwealth Obligations met** – by Sep 2016 the Centre has delivered on its obligations to the Commonwealth.

**AWRCOE Ltd future** – by Dec 2015 the AWRCOE Ltd has brokered agreement with Seqwater and the QLD government (with input from utility, research and private enterprise sectors) on its future, and articulated how the company will transition to this future by Oct 2016.

## Objective 4: Organisational Capability and Performance

### Outcome

The Centre and partners have the skills and capacity to efficiently and effectively deliver organisational objectives.

### Description

As the Centre's ca. \$40-60 million research portfolio matures and delivers outcomes, adoption and impact pathways for IP are clarified and implemented, and the AWRCOE Ltd consults on its future, it will need to ensure it has appropriate resources and that it expends these in the timely delivery of the corporate objectives. Resources are required to:

- support the delivery, review and evaluation of research
- develop and implement adoption and impact pathways for Centre IP



- complete all obligations to the Commonwealth, and clarify and implement an agreed future for AWRCOE Ltd
- support Centre and AWRCOE Ltd operations

**Key Performance Indicator:**

**Organisational skills and capacity** – By March 2015 the Centre has agreed a resourcing strategy with the Board to meet forward planning and Activity close-out.

**Resource retention** – The Centre’s Board, staff, advisory committees and external providers/champions are managed or encouraged to ensure optimal support for Centre activities to September 2016.

**Financial performance** – The Centre’s cash flow varies <10% of the forecast cash flow articulated within agreed budget.

## Priorities

As part of its strategic review the Centre has identified a number of priority areas which align with the four proposed strategic objectives. These priorities will be accommodated within the annual Work Plans for the Centre.

The priorities listed below are expanded further in Attachment 3.

Objective	Priority
Objective 1: Research Quality	1.1 Manage existing research program to ensure appropriate review, evaluation and reporting are implemented in a timely fashion
	1.2 Ensure all research final project milestone reports are delivered by 30 June 2015, and all projects are closed out by November 2015
	1.3 Develop strategy for identifying, optimising and closing out all pilot plant projects by February 2015
	1.4 Accelerate ANDS engagement with project leader institutions and scope data management by April 2015
Objective 2: Adoption & Impact	2.1 Preliminary impact pathways for six themes, target audiences and IP agreed by December 2014
	2.2 Phase 1 of Business Cases developed for 'licensed' IP by March 2015
	2.3 Post-2016 IP ownership resolved by September 2015 and (where appropriate) ownership transfer complete by March 2016
	2.4 Communication & engagement plan for 'discoverable' IP and target audiences initiated by March 2015, with >90% of plan delivered by March 2016
	2.5 Determine evaluation strategy for communication and commercialisation of outcomes of projects by March 2015 and implement to inform independent review
	2.6 Re-engage private enterprise sector in discussions and assessment of R&D outcomes, IP ownership and commercialisation
	2.7 Strategy to enhance international collaboration (through exploitation of IP) agreed with Board by June 2015
Objective 3: Activity Completion	3.1 Auditing, financial and performance reporting requirements for final Activity report agreed with Commonwealth by March 2015, and Commonwealth obligations clarified in Deed of Variation by this time
	3.2 Board and Member options and legal obligations for AWRCOE Ltd future clarified by March 2015, and agreement on AWRCOE Ltd wind-up, holding, or transition confirmed with Member (and Centre Partners) by September 2015, with any



	<p>legal arrangements necessary to transition the AWRCOE Ltd concluded by October 2016</p>
	<p>3.3 Research priorities and future industry needs for urban water recycling based on national engagement developed and incorporated into final report to Commonwealth</p>
	<p>3.4 Second independent Review of Centre activities (conducted by December 2015) which supports Centre processes and application of project outputs and outcomes</p>
	<p>3.5 Outline of final report to Commonwealth endorsed by Board and accepted by Commonwealth in September 2015, with final report submitted by 30 September 2016</p>
	<p>3.6 By March 2016, prepare and implement a program for communication on a) completion of Commonwealth obligations, b) future of the COE, and c) access to benefits/products (consider stakeholders/partners)</p>
<p>Objective 4: Organisational Capability and Performance</p>	<p>4.1 COE and AWRCOE Ltd resourcing (staffing requirements and budget and cash flows) to September 2016 endorsed by Board by March 2015</p>
	<p>4.2 Service Level Agreement requirements post-November 2015 (particularly accommodation and IT) clarified with Seqwater by June 2015</p>
	<p>4.3 By June 2015 recruit influential individuals to (directly or indirectly) assist with championing and delivery of Impact Theme outcomes to target audiences</p>
	<p>4.4 Determine role, responsibilities and exit strategy for RAC (and PACs) by February 2015</p>
	<p>4.5 <i>Monitor and manage cash flows to ensure available cash is &lt;+10% projected quarterly estimates</i>, and expense and commitment of 'Activity' cash holdings has been optimised at completion of Commonwealth obligations in September 2016</p>

## Attachment 1: Strategic Research Plan Goals

The Funding Agreement objectives with the Commonwealth are relatively broad and unbounded, and delivery on these objectives benefited from a set of goals to focus the Centre's R&D activities over the first four years. These goals effectively focus research investment, guide the business planning and help target stakeholder engagement for the Centre.

The CEO and Chair of the Research Advisory Committee undertook a national tour to seek feedback on priorities for water recycling investment. These discussions identified areas where Centre investment could leverage significant improvements in water recycling practice in Australia. These goal areas – which may be progressing at a state or territory scale, but for which there is little national uniformity– include:

**Goal 1. The social/economic/environmental value of water recycling is demonstrated and enhanced** – this includes projects to demonstrate and promote water recycling as a high value (social/economic/environmental) option to secure future water needs, including research with a focus on optimising water recycling for purposes including environmental, industrial and agricultural end uses.

**Goal 2. A national validation framework for water recycling is established** – this includes projects to support a national validation framework for water recycling schemes and the research to support regulator and industry confidence in regional and metropolitan implementation.

**Goal 3. Reclaimed water is seen as an acceptable 'alternative water' for augmenting drinking water supplies** – this includes projects that demonstrate water recycling as a viable option, including research into communication and other challenges associated with water recycling for potable use.

**Goal 4. A national knowledge, training and education program for water recycling is established** – this includes projects to consolidate recycled water knowledge and activities in Australia, with research that supports student and postdoctoral appointees and provides opportunities to capture and relay the industry learnings that are rapidly being developed at the jurisdictional level.

The Research Advisory Committee and an independent review panel reviewed the Strategic Research Plan in February 2012 and 2013 respectively, and found the goals above were still current and appropriate to focus Centre investment.

## Attachment 2: Australian Government Objectives<sup>1</sup>

The Australian Government's objectives for the Centre are for it to help secure Australia's water supply by:

1. Providing leadership in accelerating ground-breaking research on energy efficient water recycling technology for water supply being developed in Australia, including:
  - a. investigating ways of optimising and adapting water recycling technology for use in Australia's unique circumstances
  - b. expanding on research into the use of water recycling technology in rural and regional areas
  - c. researching ways of efficiently and affordably reducing the carbon footprint of water recycling facilities and technologies.
2. Providing facilities to researchers and industry to support the development of new technologies and practices, including pilot test facilities.
3. Commercialising the resultant new water recycling technologies, including patenting and promoting the uptake of new or improved water recycling technologies both within Australia and internationally.
4. Utilising and developing the research and industry skills base, including but not limited to providing high quality postgraduate and postdoctoral research opportunities and training.
5. Promoting increased public acceptance of alternate water sources and their opportunities for use in the context of a fit-for-purpose water use strategy.

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<sup>1</sup> The proposal to the Commonwealth also required the Centre to consider how water recycling R&D and the Centre could be sustainable once initial Federal funding is expensed



**Australian Government**  

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