



CRC for
Water Sensitive Cities

2016-17 Program of Activities

30 May 2016



Australian Government
Department of Industry and Science

Business
Cooperative Research
Centres Programme

Proposed 2016/17 Program

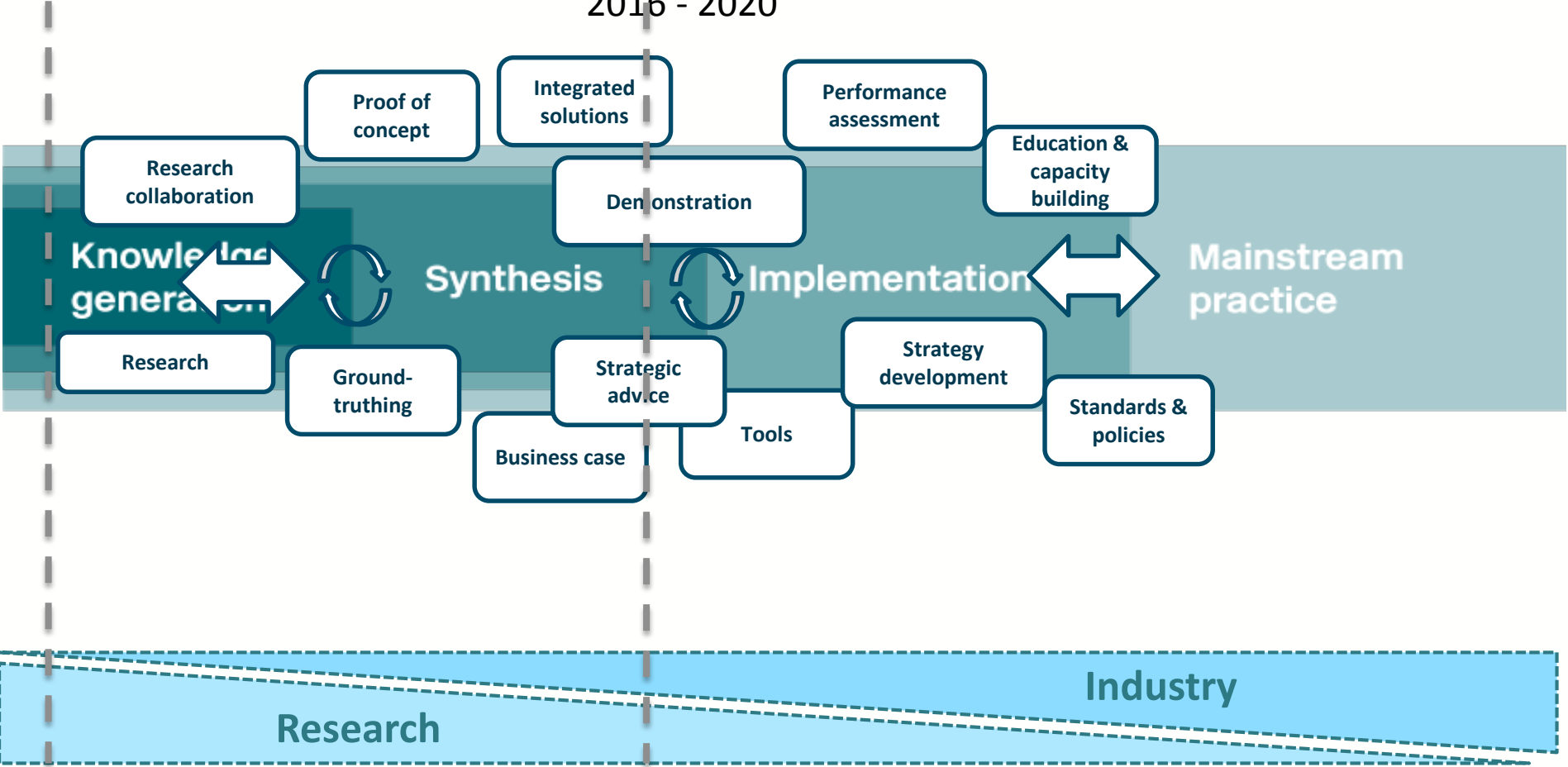
- **Purpose of Tranche 2**
- **Project Program**
 - T2 project types and structure
 - T1 Projects continuing in 2016/17
- **WSC Tools and Products**
- **Knowledge Translation Tools and Services**
- **Synthesis Activities**
- **Regional Advisory Panels**
 - Evolving role in 2016/17
- **Other Activities**
 - Advisory Committees
 - CRCWSC Strategic Plan 2017 – 2021
 - Centre's Governance transition

Purpose of Tranche 2

- To optimise the value of the investment made to-date in Tranche 1 through:
 - the testing and refinement of research concepts
 - utilisation in real contexts / projects
 - translation of research outputs into industry-ready tools and products
- Influence and embed water sensitive city outcomes in key policy and planning instruments
- To build the capacity and empower industry to lead the long term transition of water sensitive cities

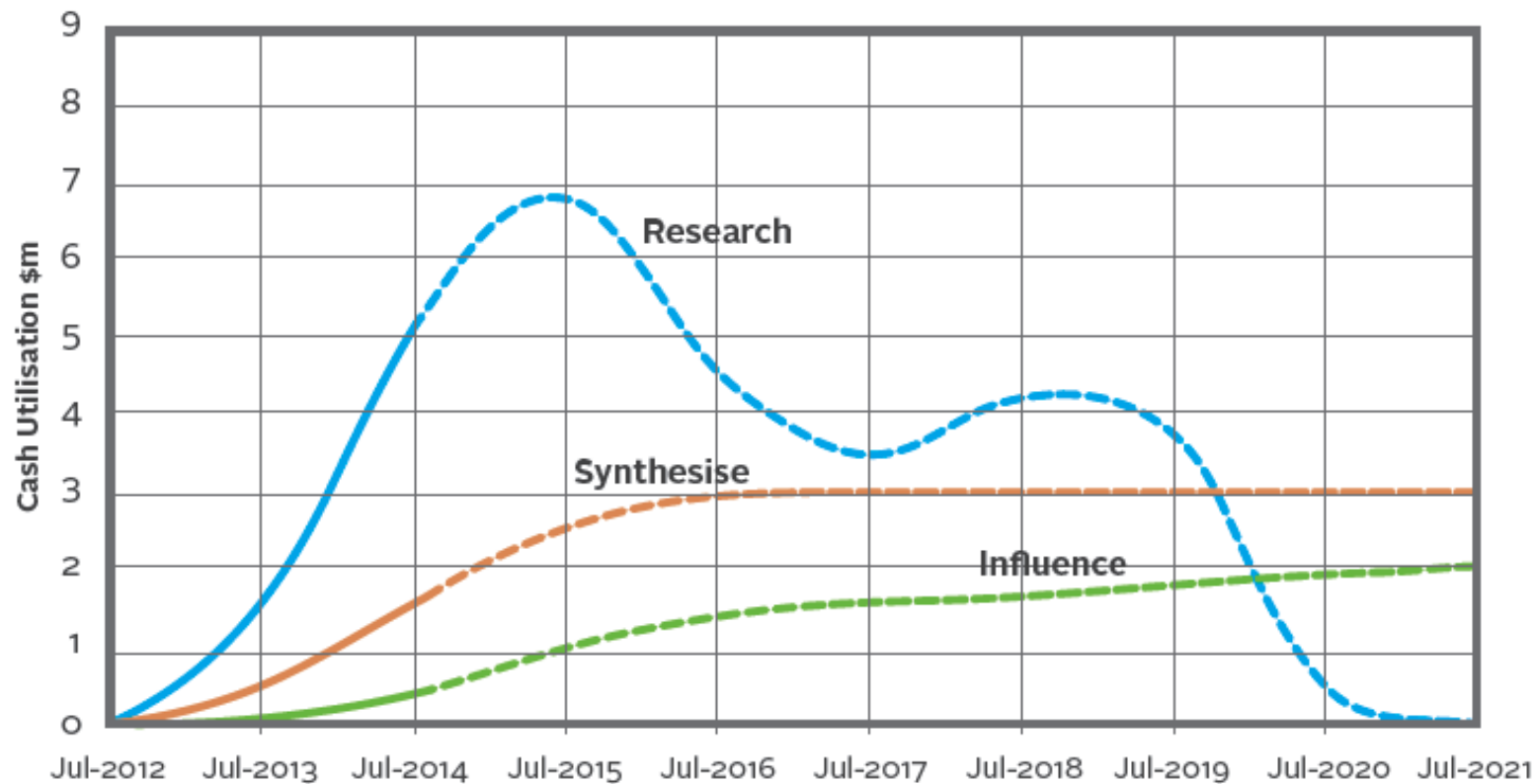
Tranche 2

2nd Tranche of Projects 2016 - 2020



Resources Utilisation

- 2016/17 funding allocations are consistent with 'Resources Utilisation' in CRCWSC Strategic Plan 2014-2017



Key Activities for 2016/17

- Completing Tranche 1 projects
- Translating Tranche 1 research outputs into relevant knowledge tools (e.g. policy notes, case studies etc...)
- Initiating the first Tranche 2 projects and development of the on-going program
- Proactively contribute to policy reform processes
- Testing and enhancing WSC Tools and Products (e.g. WSC Toolkit, WSC Index)
- Commence development of regional WSC Transition Strategies
- Evolution of the Regional Advisory Panels
- Continue research synthesis activities that establish the foundation for integrated, regional WSC solutions
- Transition of the CRCWSC's governance to support the transition and implementation of WSC outcomes

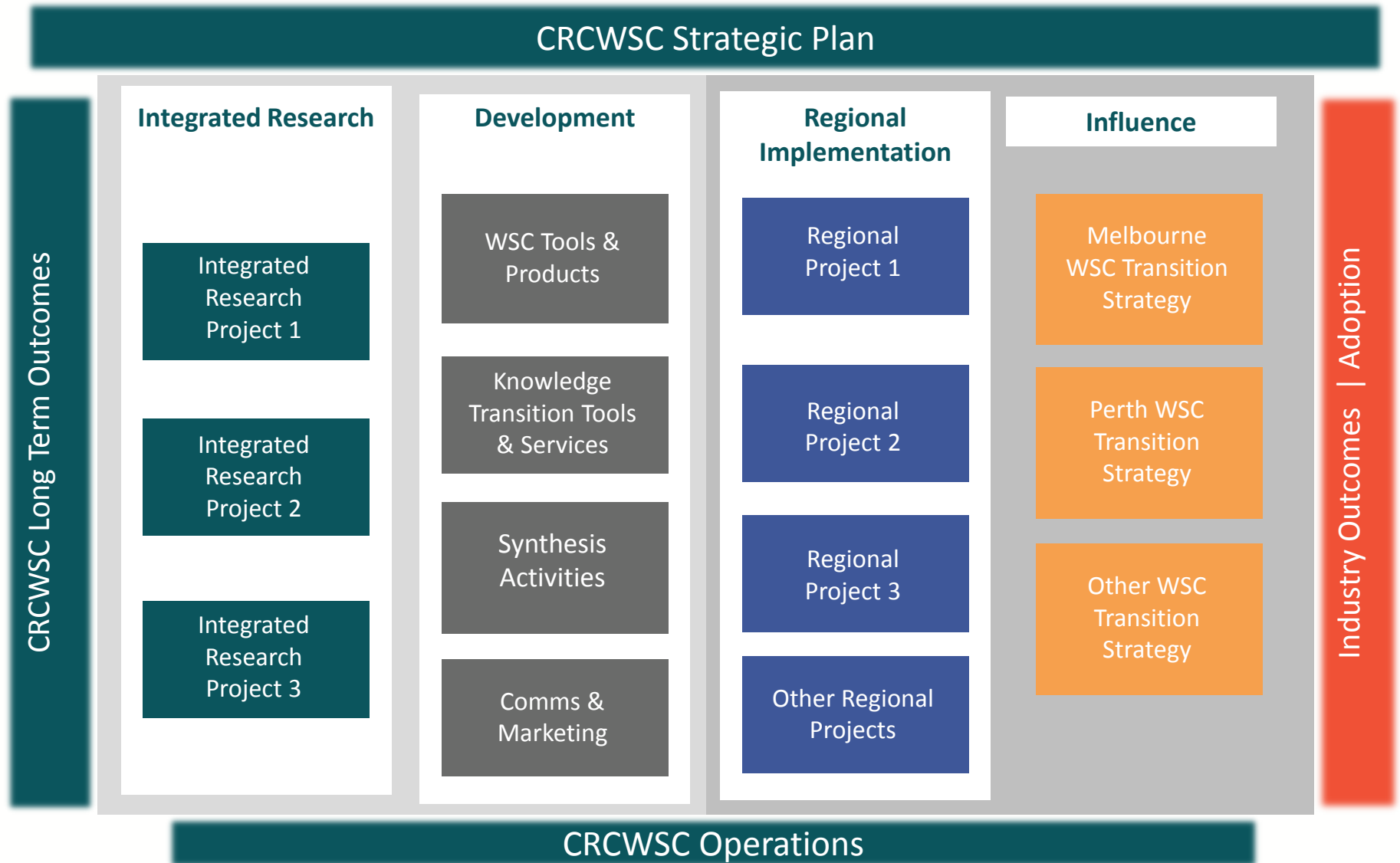
2016/17 Tranche 1 Projects

T1 project teams will assess opportunities for the application of Tranche 1 project outputs into the 'Project Ideas' identified by the RAPs and their transition into Tranche 2 IRPs

Key Tranche 1 Projects continuing in 2016/17 are:

- A4.2 – Mapping WSC scenarios
- B1.2 – Catchment-scale landscape planning for WS Cities-regions
- B2.2/3 – Protection & restoration of urban freshwater ecosystems
- C2.1 – Resource recovery from wastewater
- C3.1 – Managing interactions between decentralised & centralised water systems
- C4.1 – Integrated multi-functional urban water systems
- C5.1 – Intelligent urban water systems
- D5.1 – Urban intensification & green infrastructure towards a WSC

Tranche 2 Projects and Activities



Tranche 2 Project Types

- Project Teams will comprise both industry and research members
- Four types of T2 Projects are proposed to be developed from the RAP project ideas and the Research Activities:
 - **Integrated Research Projects (IRP)** – national projects and researcher lead
 - **WSC Tools & Products (TAP)** – examples are DAnCE4Water, integrated WSC Toolkit and WSC Index, industry or researcher lead and will have potential commercial value
 - **Regional Projects (REG)** – regional focus, industry lead with transferability of outputs to other regions. Potential to have additional investment from local stakeholders
 - **WSC Transition Strategies** – a national WSC Transition Strategy framework, researcher lead, that will be tailored to the local situation. Local WSC Transition Strategies will be RAP led and managed by the Regional Manager

Tranche 2 Project Development

- National priorities of Research Activities based on RAP feedback
 - Overall Priorities of Research Activities across all RAPs

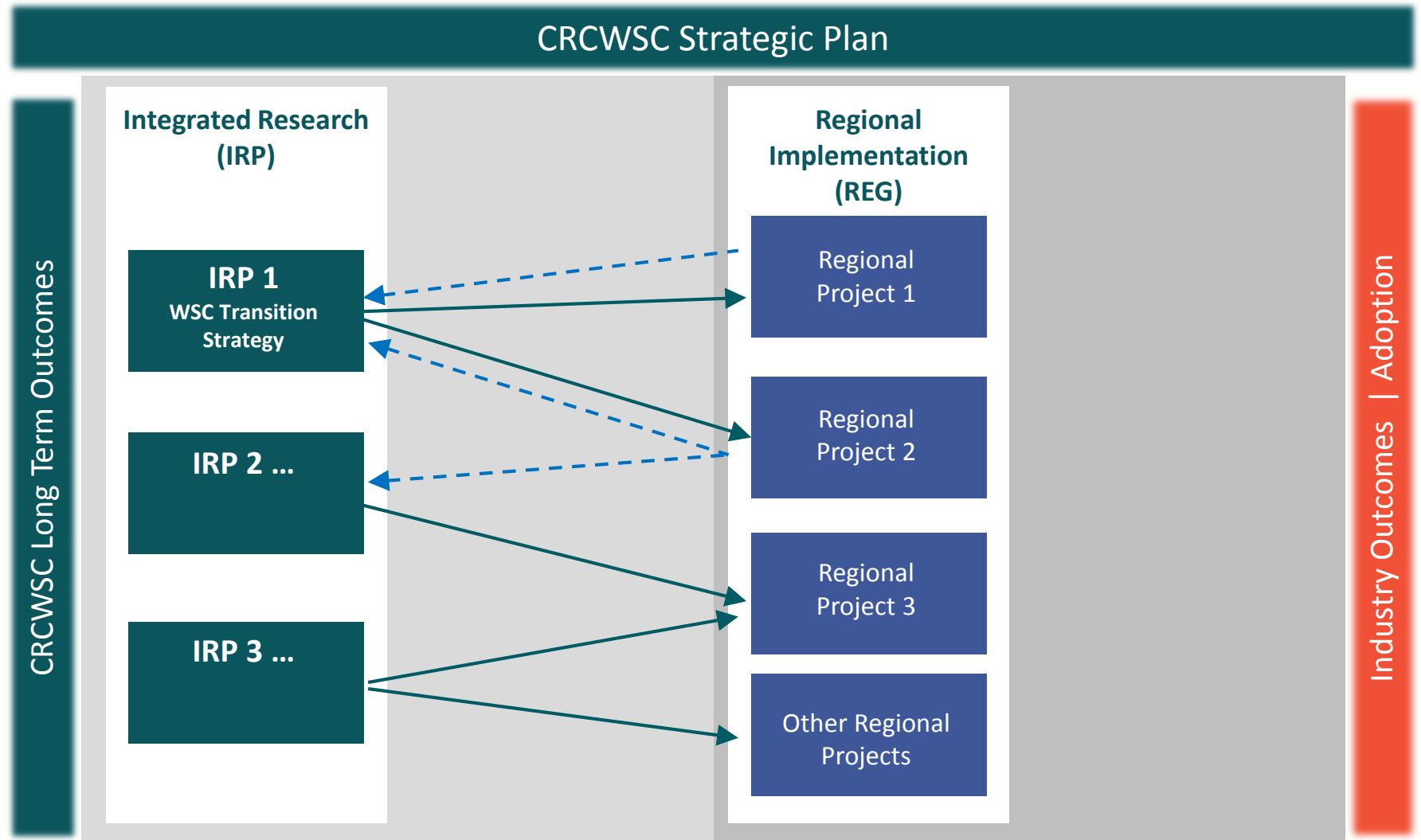
Ranking*	Research Activity No.	Title
* Based on RAP Priorities		
Very high	1.3	Developing community support for water sensitive innovation
Very high	5.1	Economic values, evaluation and incentives
High	1.4	Strategic policy influence for water sensitive cities
High	2.2	Integrating WSC values across urban planning, urban design and implementation activities at sub-city scales
Medium	1.5	Transition laboratories for water sensitive cities
Medium	2.1	Operationalising Visions & Narrative through “joined up” planning and implementation processes
Medium	2.5	Operationalising and modelling urban water mass balance for strategic planning
Medium	3.1	In-fill developments
Medium	3.2	Urban microclimate

Tranche 2 Project Development

- National priorities of Research Activities based on RAP feedback
 - Other identified Research Activities of importance to particular RAPs

Ranking* <small>*Based on RAP priorities</small>	Research Activity No.	Title	RAP
High	3.3	WSUD Groundwater Science	WA
Medium/high	5.2	Evaluation to inform compelling narratives & decision-making – WSC Integrated Modelling	QLD & NSW
Medium/high	3.4	Maintenance and sustainability of WSUD systems	VIC & QLD
Medium/high	1.1	Enabling the development of water sensitive institutions	WA

Tranche 2 Project Structure



Proposed Tranche 2 Integrated Research Projects (IRP)

Projects that will commence in 2016/17:

IRP1: WSC Transition Strategy and Implementation Plans

- **Aim:** Develop WSC Transition Strategies for each RAP region with strong alignment of vision and support across all relevant stakeholders
- **Output:** WSC Transition Strategies and Implementation Plans for each RAP region to outline shared pathway towards overall beneficial outcomes

IRP2: Comprehensive Economic Evaluation Framework

- **Aim:** Create an agreed evaluation framework to identify economic, environmental and community values of water-related investments
- **Output:** Accepted and aligned evaluation framework that is applied to business case development and decision making at multiple levels in public and private sector organisations

Proposed T 2 Integrated Research Projects (IRP)

Project Proposals will be developed for the following projects in 2016/17:

IRP3: Evidence-based integrated urban planning across different scales

- **Aim:** Enable integrated planning processes across different scales and jurisdictions utilising knowledge-based evidence as key input
- **Output:** Policy development and implementation framework that supports and demonstrates the application and value of evidence based integrated planning at different scales

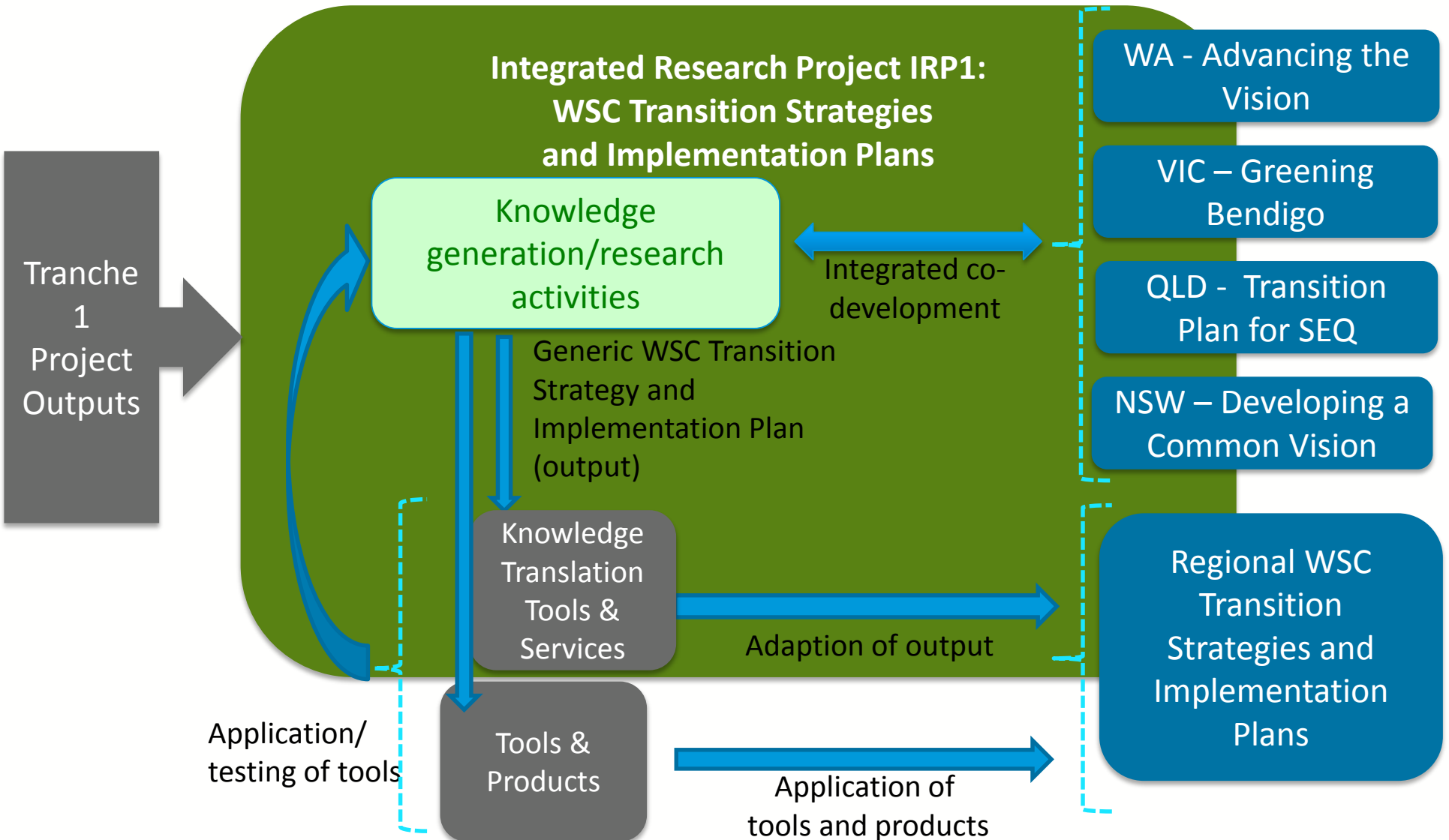
IRP4: Achieving WSC outcomes for in-fill developments

- **Aim:** Developing solutions that deliver overall beneficial WSC outcomes for in-fill developments at different scales
- **Output:** Innovative solutions and integrated strategies across policy, regulatory, financial, technology and community approaches to achieve positive WSC outcomes for in-fill developments

IRP5: Knowledge-based WSC solutions for groundwater impacted developments

- **Aim:** Understanding the impact and generating WSC solutions for developments in regions with high groundwater tables.
- **Output:** Guidelines and innovative solutions that achieve effective WSC outcomes for groundwater impacted developments

Example of Project Interactions – IRP1



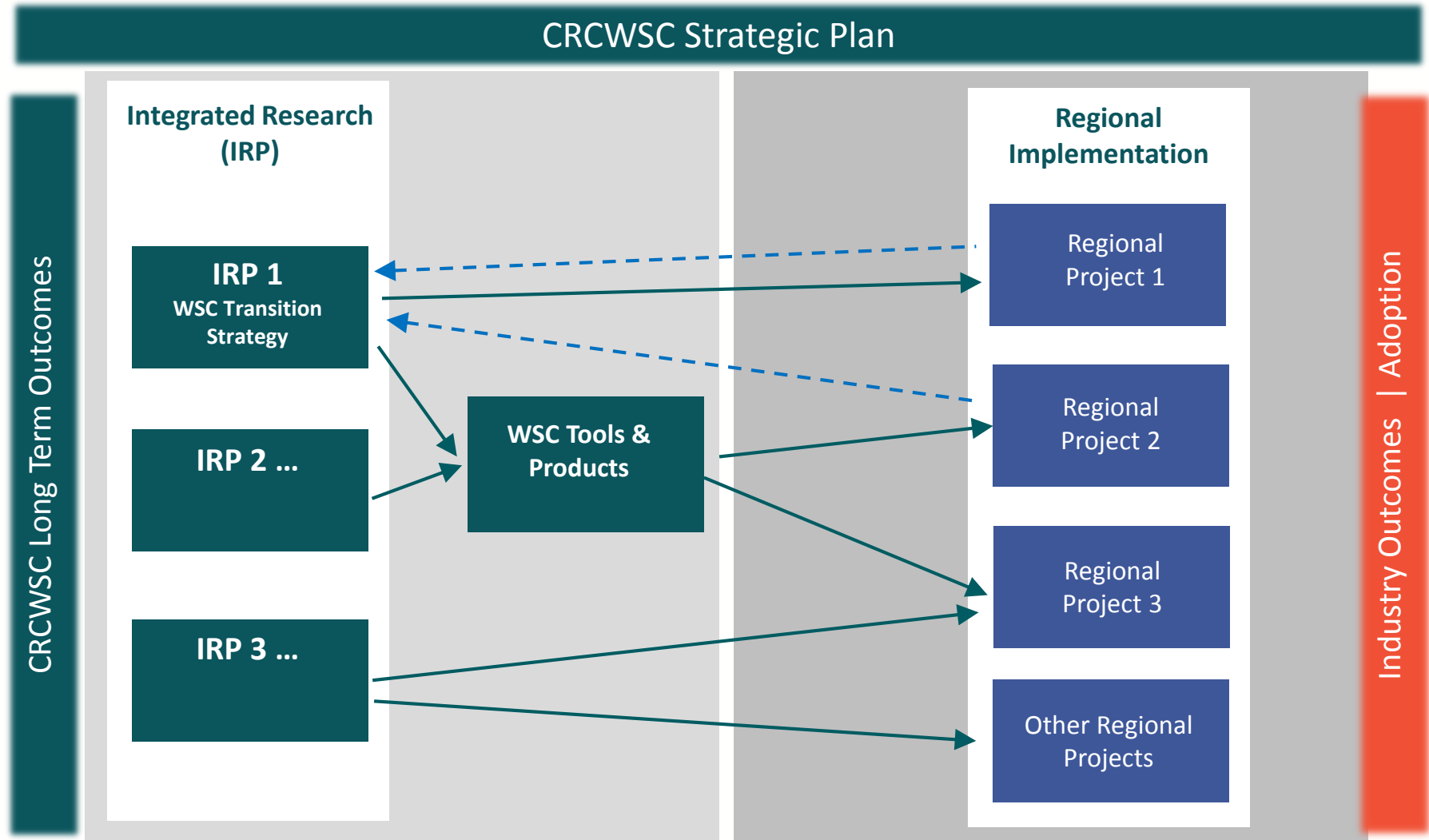
2016/17 Integrated Research Project (IRPs)

- WSC Transition Strategies (IRP1)
 - Project approved at August Board Meeting
 - Draft Transition Strategies completed by July 2017
- Economic Framework (IRP2)
 - Related Tranche 1 Projects will be completed by July 2016
 - Project approved at November 2016 Board meeting
 - Draft framework and tool by end 2017
- Remaining projects (IRP3, IRP4, IRP5)
 - Related Tranche 1 Projects will be completed by July 2017
 - Project Proposal developed during 2016/17
 - Projects approved at May 2017 Board meeting

Proposed Tools and Products (TAP)

- 2016/17 funding will complete the development of the following tools, including testing (and capacity building) in pilot projects and synthesis activities:
 - **WSC Index**
 - **WSC Toolkit**
- The following Tranche 1 Tools and Products will also be tested, during 2016/17, in projects and synthesis activities:
 - **DAnCE4Water modelling tool**
 - **Urban microclimate model**
- Other Tools and Products from Tranche 1 Project outputs and industry needs

Tranche 2 Tools and Products

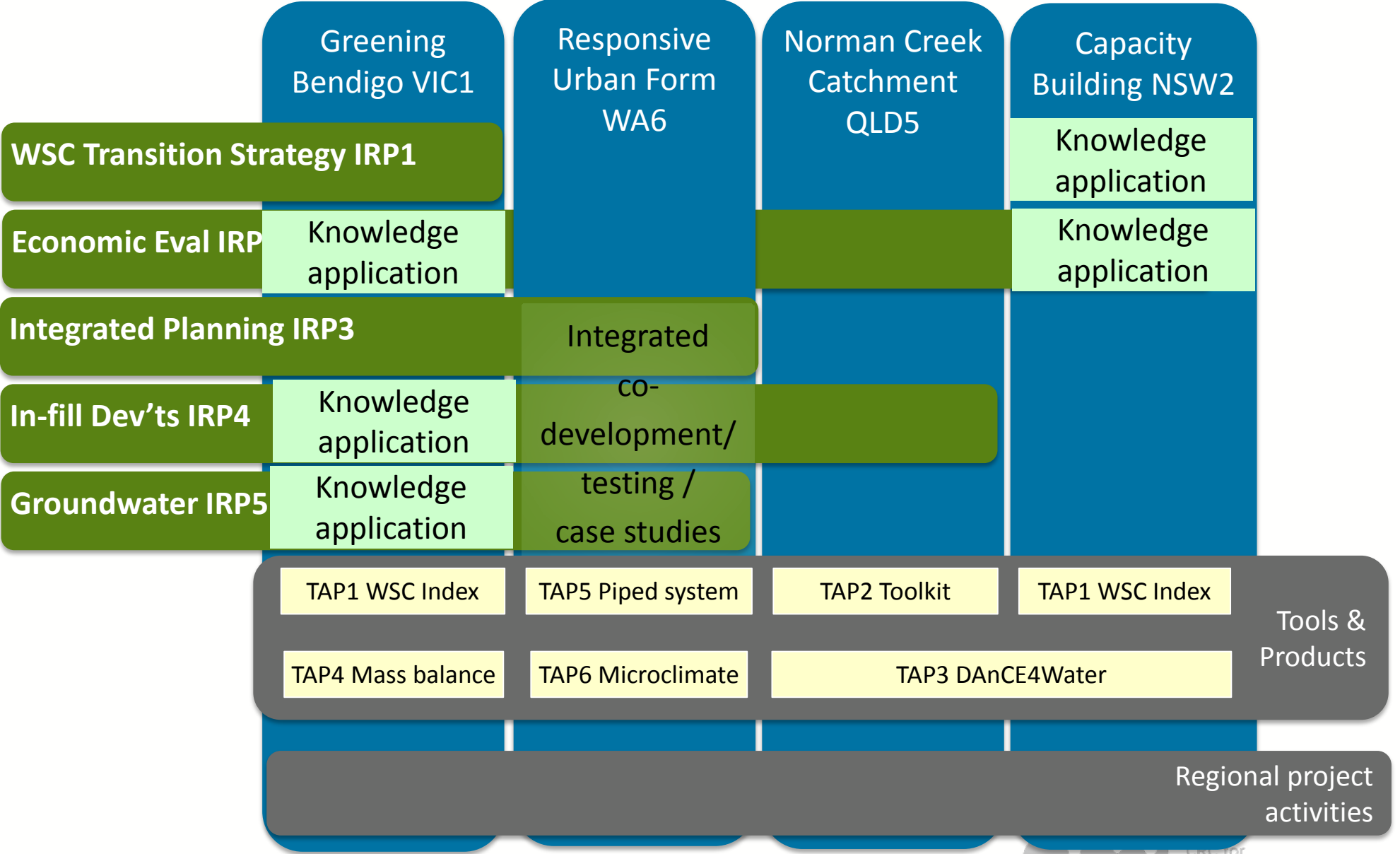


Tranche 2 Regional Projects (REG) – Victoria

- Proposed links of the Regional (REG) projects to the relevant Integrated Research (IRP) projects
- Activities categorised as:
 - Co-Development (CD) - directly through integrated testing and/or co-developed case studies
 - Knowledge Application (KA) - application of outputs from IRP Projects & Tranche 1 Project outputs

VIC RAP Project Idea		Type	Link to IRPs					Comments
			1	2	3	4	5	
VIC1	Greening Bendigo (Regional City-based WSC)	REG/IRP	CD	KA	CD	KA	KA	Partly covered by IRP1&3; knowledge applications require regional participation; link to NSW4
VIC2/3	Arden-Macaulay Redevelopment/Fisherman's Bend (Urban City-based WSC)	REG/IRP		CD		CD		Partly covered by IRP 2&4; needs regional participation to include broader activities
VIC4	Sunbury Growth Corridor (Emerging City-based WSC)							Lower priority; synthesis workshop?
VIC5	Dandenong Catchment (Catchment-based WSC)	REG			CD	KA		Integrated planning aspects covered in IRP3

Examples of Regional Project Structures

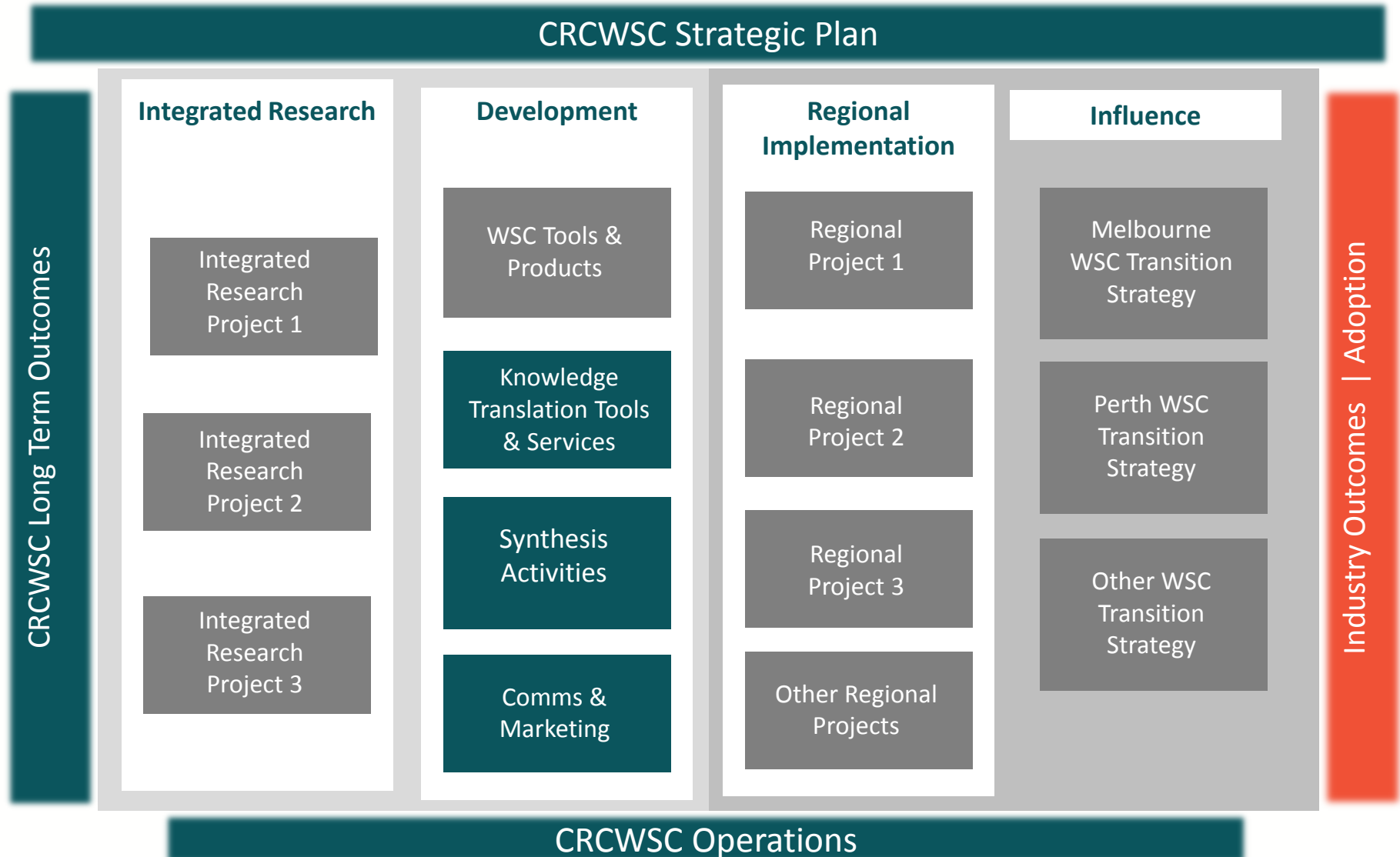


T1 & T2 Development Activities

Additional project types/activities that focus on the translation of the research and building the capacity of stakeholders. These activities may (or may not) provide commercial opportunities. These activities can be grouped as follows:

- **Knowledge Translation Tools & Services** – a range of support or enabling activities co-designed with industry including capacity building, knowledge resources, policy influence, knowledge dissemination etc..
- **Research Synthesis Projects** – both CRCWSC and partner funded knowledge sharing and integrating workshops that have the potential to provide foundations for on-going CRCWSC activities
- **Communications and Marketing** –multiple forms of communication (e.g. website, newsletters, Industry Partner Workshops, WSC Conference etc. used to inform and influence stakeholders on the products and tools of the CRCWSC and the value of WSC solutions

Tranche 2 Development Activities



2016/17 Knowledge Translation Tools & Services

Capacity Building

- Collaboration and co-delivery between RAP and capacity building organisations and centers'
- Knowledge translation – guidelines, policy notes, case studies
- Demonstration projects and case studies
- Evaluation and learning framework

Policy influence

- With IRP1 – proactive support for key policy enhancement

Education and Training

- PhD support & capacity building
- PhD training/retreat
- Professional development and post-graduation education

Synthesis Activities

Five Partnership synthesis charrettes with our participants such as:

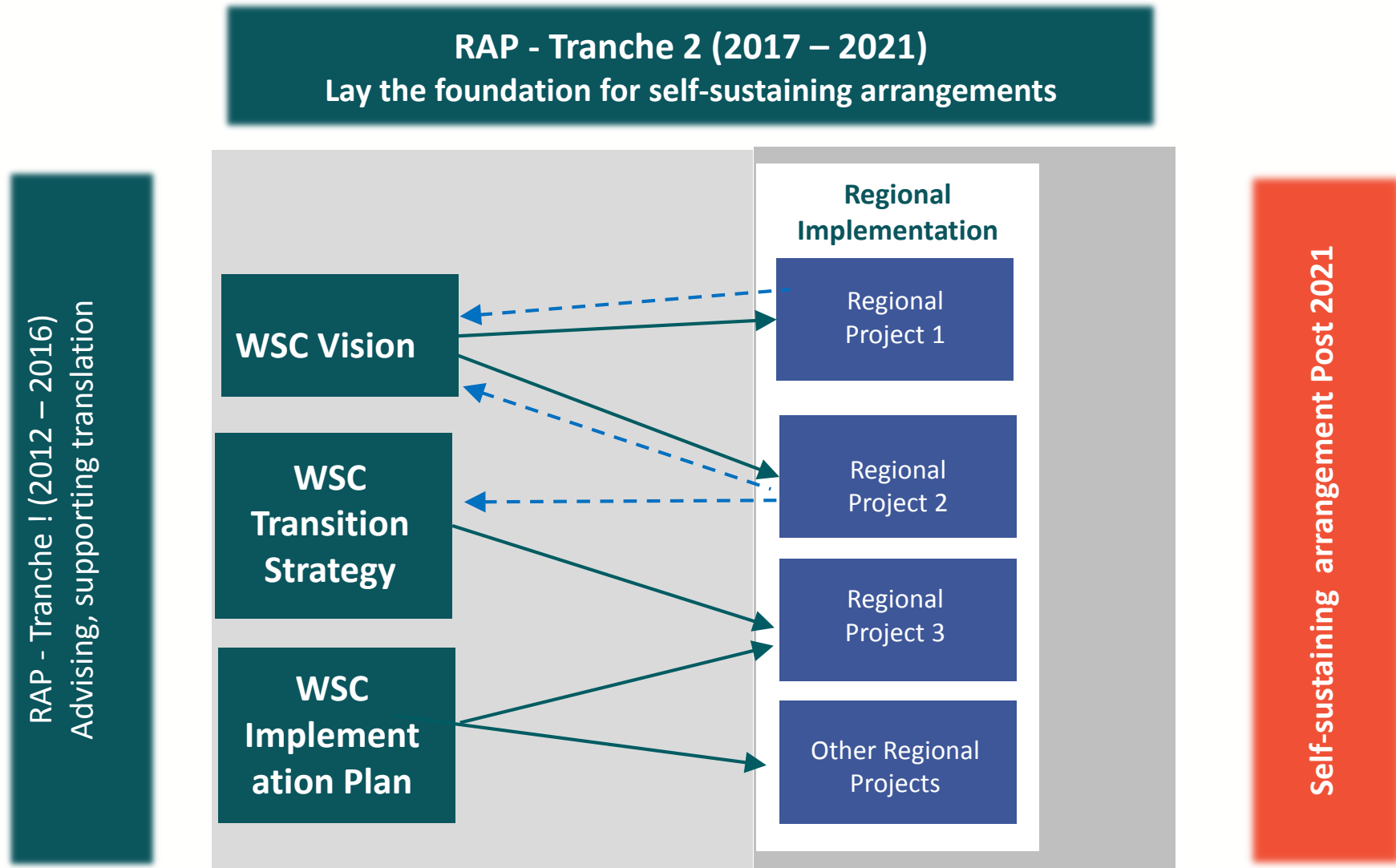
- Norman Creek
- Bays Precinct
- Arden Macaulay
- Pinja South

Up to five 'Full Fee' synthesis charrettes such as:

- Southbank

These charrettes will demonstrate immediate-term benefits and establish a foundation for integrated regional WSC solutions

Evolution of RAPs



Evolution of the RAPs in 2016/17

Role of the RAPs to evolve in 2016/17 with the following key functions:

- the 'custodian' of the development of the Water Sensitive City Transition Strategy and implementation plan for their region
- provide a forum for the dissemination of information regarding CRCWSC outputs
- foster a community-of-practice amongst industry participants in the region through shared advice, collaboration and participation in regional water sensitive city initiatives
- identify opportunities to integrate the 'Project Ideas' into existing Tranche 1 projects
- promote the regional activities to CRCWSC Participants, members of their organisations and professional networks.
- obtain matching funds to facilitate the appointment of a Regional Manager

Other 2016/17 Activities

Transition of Advisory Committees

- Research Advisory Committee
- CRC Advisory Committee

CRCWSC Strategic Plan 2017 – 2021

- Commence development in late 2016
- Joint Board/EPRG/Executive session in Feb/March 2017
- Draft to August 2017 Board meeting

CRCWSC's Governance transition process



CRC for
Water Sensitive Cities



Australian Government
Department of Industry and Science

Business
Cooperative Research
Centres Programme