



# WATER INDUSTRY SKILLS AND TRAINING NETWORK (WTAN) FORUM

3 September 2024

# Acknowledgement of Country



## WTAN Program

- Public Sector skills and training update – ITAB
- JSC Update – BuildSkills Australia
- Water Utility Spotlight – Rous County Council
- DCCEEW's Town Water Risk Reduction Program's Skills and Training Action Plan –  
Phase 2

# NSW ITAB – Industry Skills Update

**Lisa Giammarco**

Executive Officer

NSW Public Sector ITAB

[www.australianindustrystandards.org.au/nsw-itab/](http://www.australianindustrystandards.org.au/nsw-itab/)



# Industry Coverage

❖ LOCAL GOVERNMENT (LGA)



❖ PUBLIC SAFETY (PUA, POL, DEF)



❖ WATER (NWP)



❖ PUBLIC SECTOR (PSP)



❖ CORRECTIONS (CSC)



# ITAB Update

## The ITAB's remit is to:

- Collect employment and workforce development data for public sector industries
- Provide advice to DoE on sectoral and regional issues around skills and training
- Communicate issues related to critical skills shortages and training supply and demand
- Identify examples of best practice where employers are implementing innovative strategies to address unique local challenges
- Disseminate information on skills and training and VET more generally to NSW stakeholders

# ITAB activities and projects

- **Regional visits**
  - July: Illawarra Region
  - October: Mid North Coast Industry Forum – ‘Attraction and recruitment’
  - November: New England Regional Cross-Industry Roundtable - Tamworth and Armidale
- Jobs and Career events
  - May: Central West – Careers Facts Day Bathurst
  - July: Illawarra Apprenticeships and Traineeships & Jobs Expo
- **Water (WTAN) and Government (GTAN) Industry Network forums**
  - Tues 3 September
  - Tues 26 November



# NSW VET REVIEW – Final Report



Final Report released recently

- Highlights importance of skills development and vocational training in shaping the future workforce of the state
- Contains 21 recommendations designed to transform and better integrate the VET system while supporting its stakeholders
- Includes a new needs-based funding model, improved coordination of critical services, enhanced support for equity cohorts
- Advocates for stronger ties and collaboration between government and industry, including formal commitments on skills development within priority sectors as well as building links between high school and post school training.



<https://education.nsw.gov.au/about-us/strategies-and-reports/our-reports-and-reviews/nsw-vocational-education-and-training-review>

# NSW VET REVIEW – Final Report

## Governance Reform – p8

### Recommendation 3

Following the governance review recommended in the Interim Report, the NSW Government should reform skills governance to ensure there is:

- i. A single governance body with expert knowledge and skills, and clear accountability for system-wide strategic advice to the NSW Government.
- ii. A dedicated consultative advisory forum that harnesses the advice of all public and private providers, industry and students, to be convened quarterly by the NSW Department of Education.
- iii. Alignment between specific industry advice bodies and the new national architecture.





# NSW VET REVIEW – Final Report

## Industry Compacts - p10

### Recommendation 8

The NSW Government should establish industry compacts across government skills priorities that are driven by:

- i. Statements of commitment – outlining mutual obligations and principles for collaboration for government, industry and training providers towards skilling targets.
- ii. Co-investment – including cash and in-kind contribution across compact partners.
- iii. Governance structures – ensuring transparent mechanisms for monitoring progress, making decisions and upholding accountability.
- iv. Research and innovation – leveraging sector expertise and insights to develop skilling solutions.



# NSW VET REVIEW – Final Report

## Regional Skills – p10

### Recommendation 9

The NSW Government should develop and implement a new regional skills approach to meet the training needs of regional communities. The approach should:

- i. Promote community decision-making by:
  - Bringing together key local stakeholders (including education and training providers, industry, schools, and all levels of government) through a robust governance framework
  - Ensuring existing NSW Department of Education resources are committed to effectively facilitating and coordinating this new approach to community decision-making.
- ii. Revise current funding approaches – Current thin market funding should be consolidated into a Regional Skills Fund, a new outcomes-based funding program that incentivises innovation, collaboration and local solutions development.
- iii. Embed regional planning and data – A valid and reliable data-led regional skills planning approach should be embedded through the NSW Skills Plan
- iv. Provide a training commitment to regional areas

[www.australianindustrystandards.org.au/nsw-itab/](http://www.australianindustrystandards.org.au/nsw-itab/)



# NSW funding and grants

## Smart and Skilled

- 2024-25 Targeted Priorities Prevocational and Part Qualifications (TPPPQ) Program now open
- Budget for program is limited and funding of a TNI (Training Needs Identification) application is not guaranteed.

## 1000 NSW Public Sector Apprentices and Trainees Program

- Round 2 Applications for funding support are now open for all 67 NSW government agencies and state-owned corporations
- 440 apprentice and trainee positions announced for next 12 months. Further 340 positions will be available in the final round (2025-26 financial year).



## 1300 additional Apprentices and Trainees for Local Government Program

- To play a key role in training up new apprentices and trainees that will build better communities and alleviate skill shortages
- Guidelines being developed but expected to begin early 2025



# National Jobs and Skills Councils

- Jobs and Skills Council engagement
  - Developing relationships with BuildSkills Australia (BSA), Public Skills Australia (PSA) and Future Skills Organisation through direct consultation and feedback opportunities
  - Monitoring Annual Training Product Development Plans
- **Public Skills Australia (PSA)**
  - Regular GTAN Updates (PSA - Kirsty Waugh)
    - Review of 3 DEF Public Affairs Qualifications
    - Develop new PUA products for Firefighting Appliance Pump Technicians
    - Develop a Findings Report for Emergency Tree Operations
- **Build Skills Australia (BSA)**
  - Regular WTAN Updates (BSA - George Wall)
    - White Card Implementation
    - Minimum Australian Context Gap Training for Migrant Plumbers
- **Future Skills Organisation (FSO)**
  - 2024 Workforce Plan has been released
  - Active Projects include support for Workforce Digital Capability



# Funded Water Industry Training

Accessing latest reports on NSW training data - [Statistics on vocational education and training | NSW Government](#)



## Apprenticeship and Traineeship Currently In-Training

Qualification ID and Name	Number of Training Contracts
NWP20122 Certificate II in Water Industry Operations	12
NWP30219 Certificate III in Water Industry Operations	15
NWP30222 Certificate III in Water Industry Operations	91
<b>Total</b>	<b>118</b>

Training Type	Number of Training Contracts
Existing Worker Traineeship	<5
New Entrant Traineeship	115
<b>Total</b>	<b>118</b>

Provider Type	Number of Training Contracts
Private	100
TAFE	18
<b>Total</b>	<b>118</b>

# Funded NWP Water Industry Training – A&Ts In Training



Regional Office	Number of Training Contracts
Hunter & Central Coast	12
Illawarra & South East NSW	33
New England	32
North Coast & Mid North Coast	21
Riverina	8
Western NSW	7
Western Sydney & Blue Mountains	5
<b>Total</b>	<b>118</b>

Gender	Number of Training Contracts
Female	20
Male	98
<b>Total</b>	<b>118</b>

Age Group	Number of Training Contracts
19 and Under	38
20 - 25	34
26 - 45	38
46 - 60	7
Over 60	<5
<b>Total</b>	<b>118</b>

# Funded NWP Water Industry Training

## Smart & Skilled Commencements



Qualification ID & Name	2024	2023	Total
NWP20119 Certificate II in Water Industry Operations		<5	<5
NWP20122 Certificate II in Water Industry Operations	8		8
NWP30219 Certificate III in Water Industry Operations	<5	189	190
NWP30222 Certificate III in Water Industry Operations	323	223	546
NWP40120 Certificate IV in Water Industry Operations	67	42	109
NWP50118 Diploma of Water Industry Operations		9	9
<b>Total</b>	<b>399</b>	<b>464</b>	<b>863</b>

Delivery Mode	2024	2023	Total
Classroom-based	<5	16	18
Electronic-based		9	9
Employment-based	314	332	646
Other delivery (eg correspondence)	83	107	190
<b>Total</b>	<b>399</b>	<b>464</b>	<b>863</b>

Age Group	2024	2023	Total
19 and Under	27	26	53
20 - 25	53	66	119
26 - 45	219	262	481
46 - 60	94	102	196
Over 60	6	8	14
<b>Total</b>	<b>399</b>	<b>464</b>	<b>863</b>

# Funded NWP Water Industry Training

Training Region	2024	2023	Total
Capital Region	103	23	126
Central Coast	32	7	39
Central West	35	8	43
Coffs Harbour - Grafton	17	6	23
Far West and Orana		13	13
Hunter Valley exc Newcastle	7	<5	11
Illawarra	16	36	52
Mid North Coast	40	47	87
Murray	47	103	150
New England and North West	20	46	66
Newcastle and Lake Macquarie	<5	5	8
Richmond - Tweed	10	49	59
Riverina	6	12	18
Southern Highlands and Shoalhaven	15	<5	17
Sydney	45	88	133
Unknown	<5	15	18
<b>Total</b>	<b>399</b>	<b>464</b>	<b>863</b>





# Smart and Skilled RTO Contracts

## Smart and Skilled Program for 2024-25

- RTOs contracted to deliver NWP:
  - NWP Certificate II
    - Simmonds & Bristow
    - TAFE NSW
    - Fusion Training Solutions
  - NWP Certificate III
    - Simmonds & Bristow
    - TAFE NSW
    - Fusion Training Solutions
  - NWP Certificate IV
    - TAFE NSW
    - Fusion Training Solutions
  - NWP Diploma
    - Timber Training Creswick Ltd



# Revised Standards for RTOs

**Aim:** To lift quality and integrity across the entire sector, through a more flexible, robust, quality driven approach to regulation (Public Release in August)

## Revised Standards to offer expanded eligibility for training delivery

- initial modifications to the Standards aimed at broadening the pool of individuals authorized to deliver training are planned for implementation

## New Standards for RTOs – Full regulatory effect from 1 July 2025

- Guidance for RTOs – New Users Guide will be released in the coming months
  - To explain interpretation of key terms and concepts within the revised standards
  - To help RTOs understand their regulatory obligations and how provider performance will be assessed.

# Key challenges and training issues for Water Industry

## General Workforce challenges

- Attraction and retention of workers
- Impacts of climate change
- Rising energy costs
- Finite pool of skilled workers + housing shortages
- Diversity and inclusion issues
- Digital capability not meeting industry needs

## Prevailing training issues for Water

- Thin markets across regional NSW
- Access to funded and fit for purpose training
- Shortage of trainers and assessors
- Funding applied via S&S doesn't cover costs of delivery



## Jobs and Skills Council Update

### BuildSkills Australia (BSA)

**George Wall**, National Manager, Water Sector Industry Engagement  
BuildSkills Australia (BSA) [GeorgeW@buildskills.com.au](mailto:GeorgeW@buildskills.com.au)



## Water Utility Spotlight – Rous County Council

**Kirralee Donovan & Tim Hodgman**

Rous County Council

[www.australianindustrystandards.org.au/nsw-itab/](http://www.australianindustrystandards.org.au/nsw-itab/)



# Digital/smart metering & applications for mindful water consumption in the home

Overview: \*Smart metering rollout \*My Rous App \* Residential behaviour change pilot



**ROUS**  
COUNTY COUNCIL

3 September 2024



## Overview:

- We have installed almost all 2100 customers with no connection issues despite some early concerns about some areas having low reception.
- We are still in the early stages for application of the leak alarms information. But we are discussing options to contact customers as far as leak alarms go.
- Another application we are investigating with the meters is utilising the pressure sensors to detect main breaks.

## Overview:



Of the 2100 smart meters connected we have had a consistent 20% of customer uptake of the app. This has risen to 25% since the rollout ended with a few media releases and some minor advertising.

We plan to send a letter with further information and include information to the app on all future correspondence to customers. This should improve uptake.

Low uptake may be reflective of the type of customers that most of our connections are.



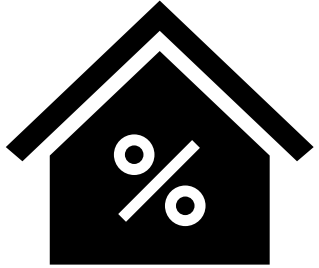
The L&G meters have a built-in alarm and Nucleus3 has programmed in at the platform level a leak alarm for the loggers that don't have one.

We have already had some positive stories coming from customers with some leaks that would never have been discovered.

The largest leak detected was 4500l/h for a customer. With several over 500L/h leaks that we contacted as soon as we were aware.

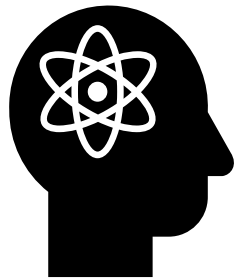


## The problem:



Residential sector accounts for **76% of demand** across our supply footprint.  
So, how do we most effectively reduce demand here?

## The solution:



Behaviour change methodology.

It's the science of **applying human psychology** to water consumption in the home.

## Objectives:

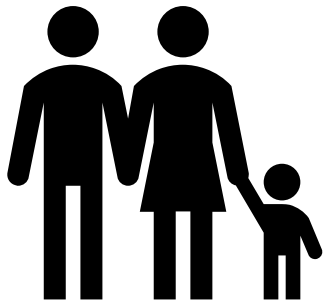


Identify tools, incentives and support.

Establish baseline consumption & end-use.

Quantify potential savings & determine if this is sustained.

## Intent:



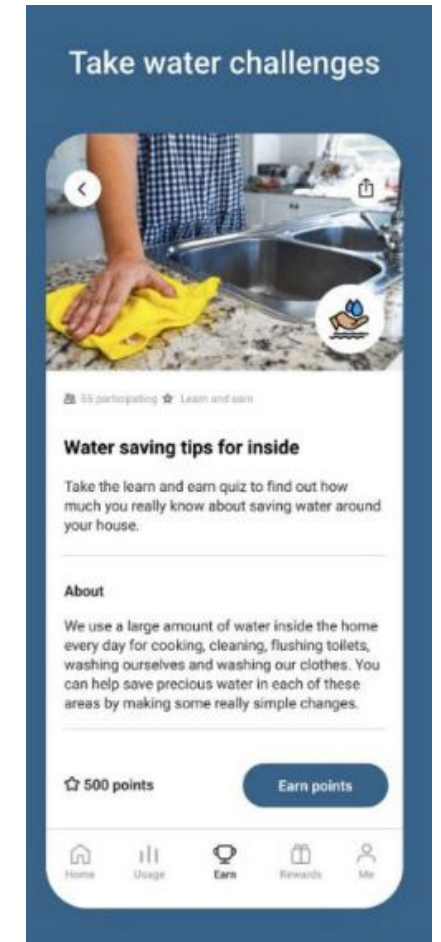
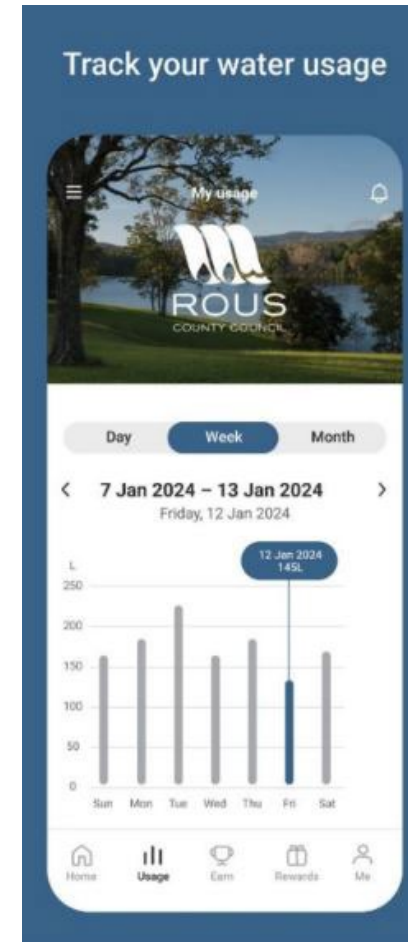
Provide effective customer engagement to achieve reduction.

Test incentives, customised support and tools.

Integrate concepts of co-design and social diffusion.

# Mindful water consumption: Residential behaviour change pilot

## Tools:



## **DCCEEW - Town Water Risk Reduction Program (TWRRP) Skills and Training Action Plan (Phase 2)**

**Lisa Andersons & Josh Tickell**

Local Water Utilities Branch,  
Dept of Climate Change, Energy, the Environment and Water  
(DCCEEW)

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Department of Climate Change, Energy, the Environment and Water



# NSW LWU workforce composition, training and development

**WTAN Meeting**

**Lisa Andersons**  
Skills and Training Coordinator

3 September 2024

# Workforce composition

Early insights

1

# Workforce composition survey

## Who?

91 NSW LWUs

## Why?

Establish baseline data

## What?

Workforce demographics

Vacancies and labour hire

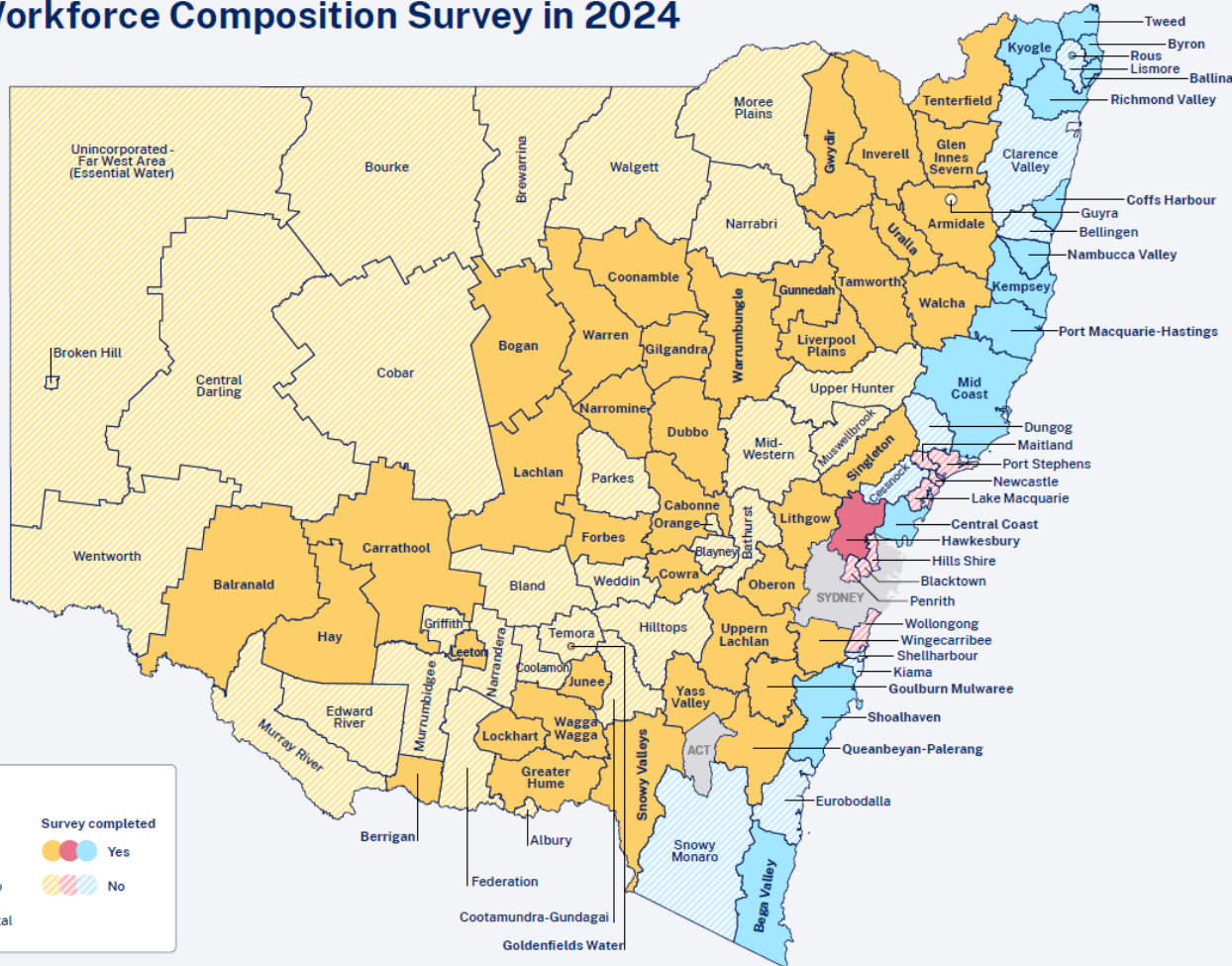
Remuneration and  
conditions

Workforce development  
challenges

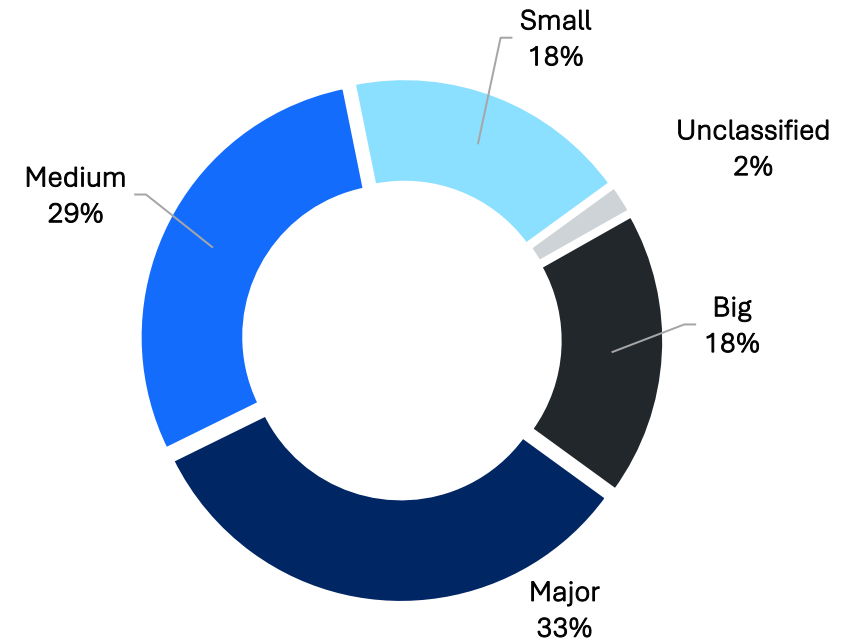


# Responses

**59% of all Local Water Utilities in NSW completed the Workforce Composition Survey in 2024**



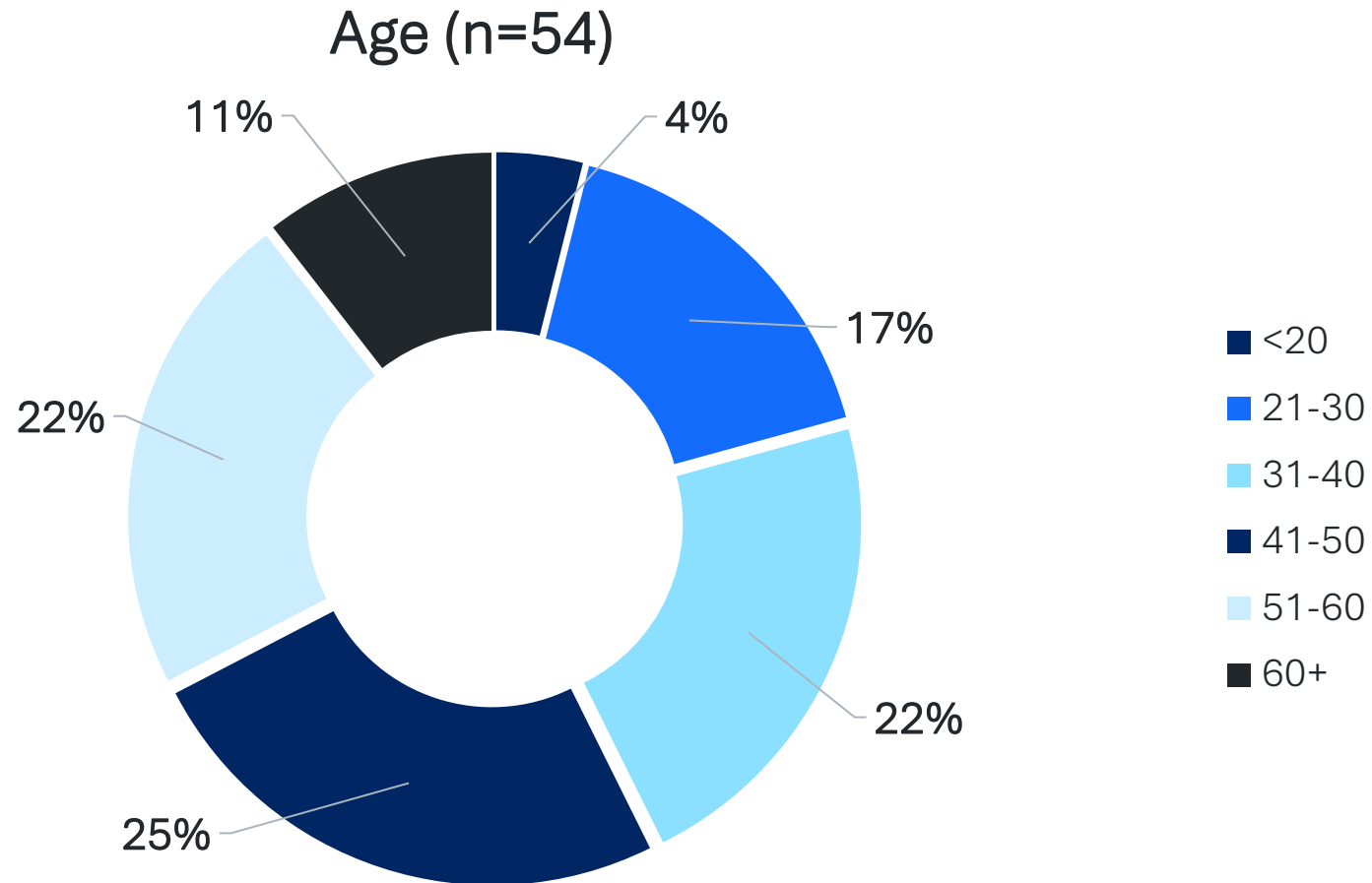
Size of utility (n=54)



Size	Connections
Small	< = 1,500
Medium	< = 4,000
Big	< = 10,000
Major	> 10,000

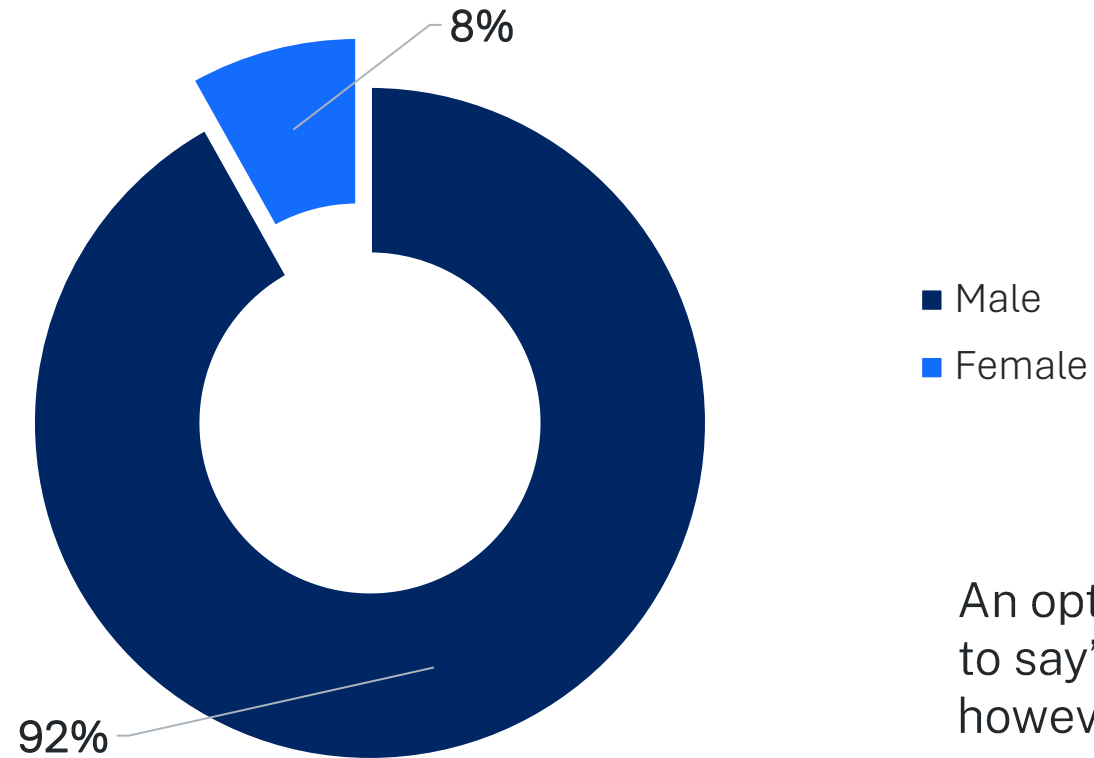


# Age representation



# Gender diversity

Gender (n=54)



An option for “other, or prefer not to say” was provided for gender, however, no results were recorded for this category.

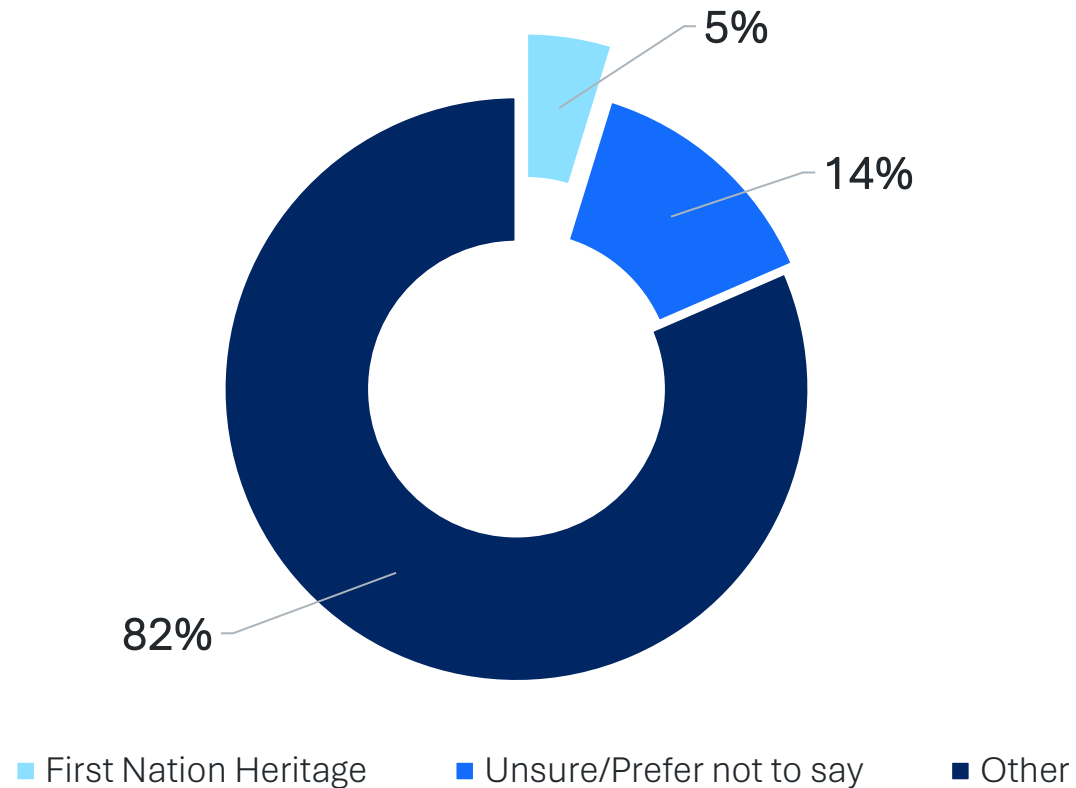
# Role and diversity

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# First Nations representation in LWU

First Nations participation (n=54)



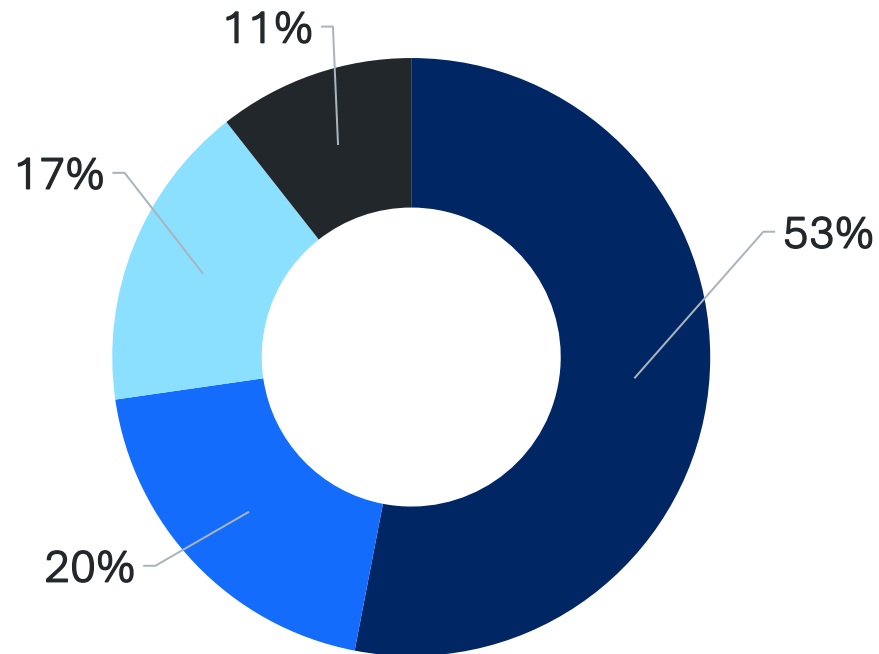
17% in 'other operational roles'

11% 'civil construction and maintenance-wastewater'

First Nations population across all NSW is approx. 3%.

# Role vacancies

Job vacancies (n=43)



- Roles vacant <6 months
- Roles vacant 6 - 12 months
- Roles vacant 1 - 2 yrs
- Roles vacant >2 yr

Roles Vacant	#	%
<6 months	140	53%
6-12 months	52	20%
1-2 years	44	17%
>2 years	28	11%
<b>Total</b>	<b>264</b>	<b>100%</b>
Labour hire/contractual arrangements	31.25	12%

# Impacts on future skilling needs



‘Which internal or external factors will impact your organisation's future skilling needs?’

Largest

95% increasing levels of government compliance  
93% ageing workforce  
93% technological change

Less

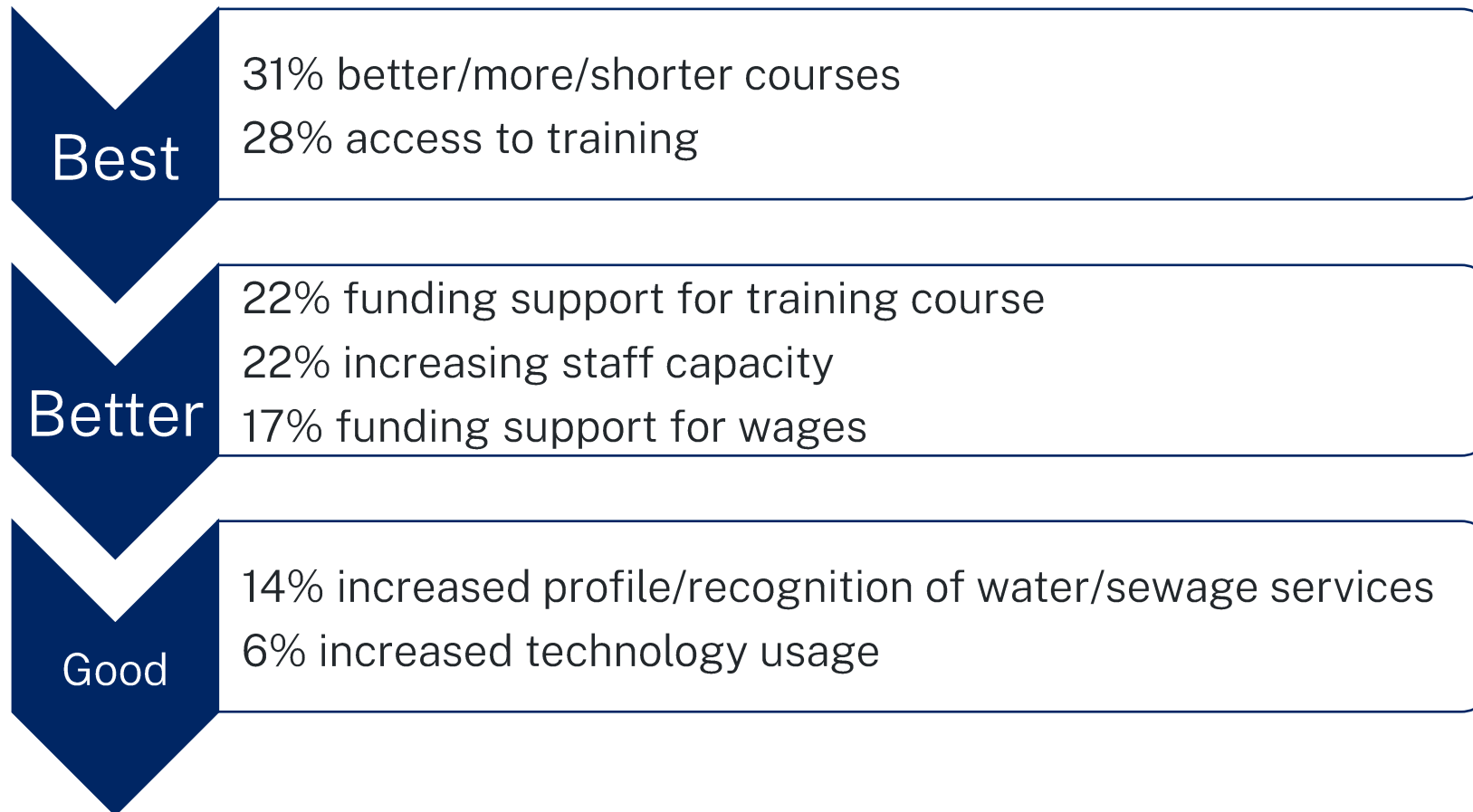
86% changes in government funding models  
85% major infrastructure projects (internal or external)

Least

66% growth in local government area  
51% climate change

# Support for future skill needs

‘What would help your organisation to meet future skill needs?’

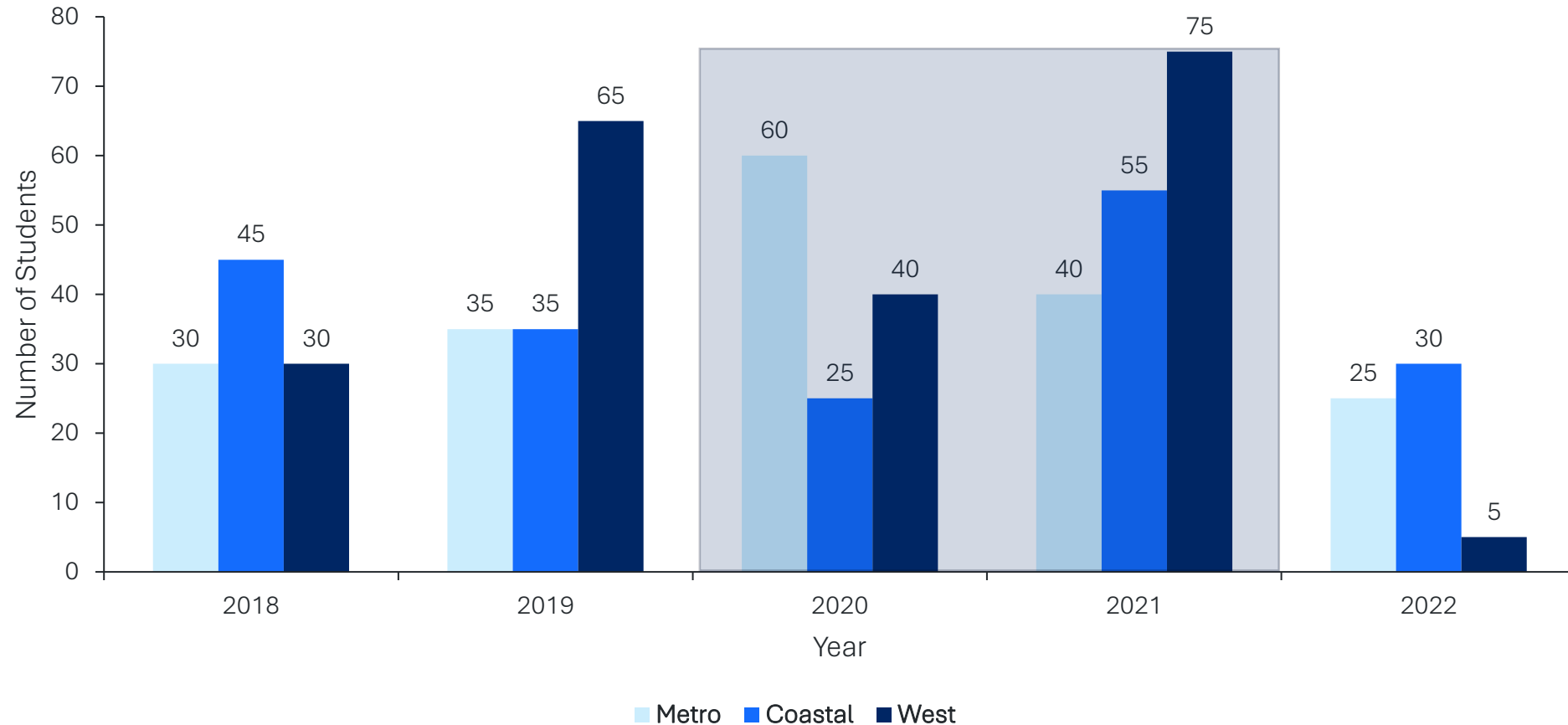


"Ensuring training courses are available, especially with face-to-face on-site delivery of content, and that content is **industry driven** to ensure the training is relevant and meets the needs of the LWUs and their employees."

(survey respondent)

# Certificate III Water Industry Operations completions

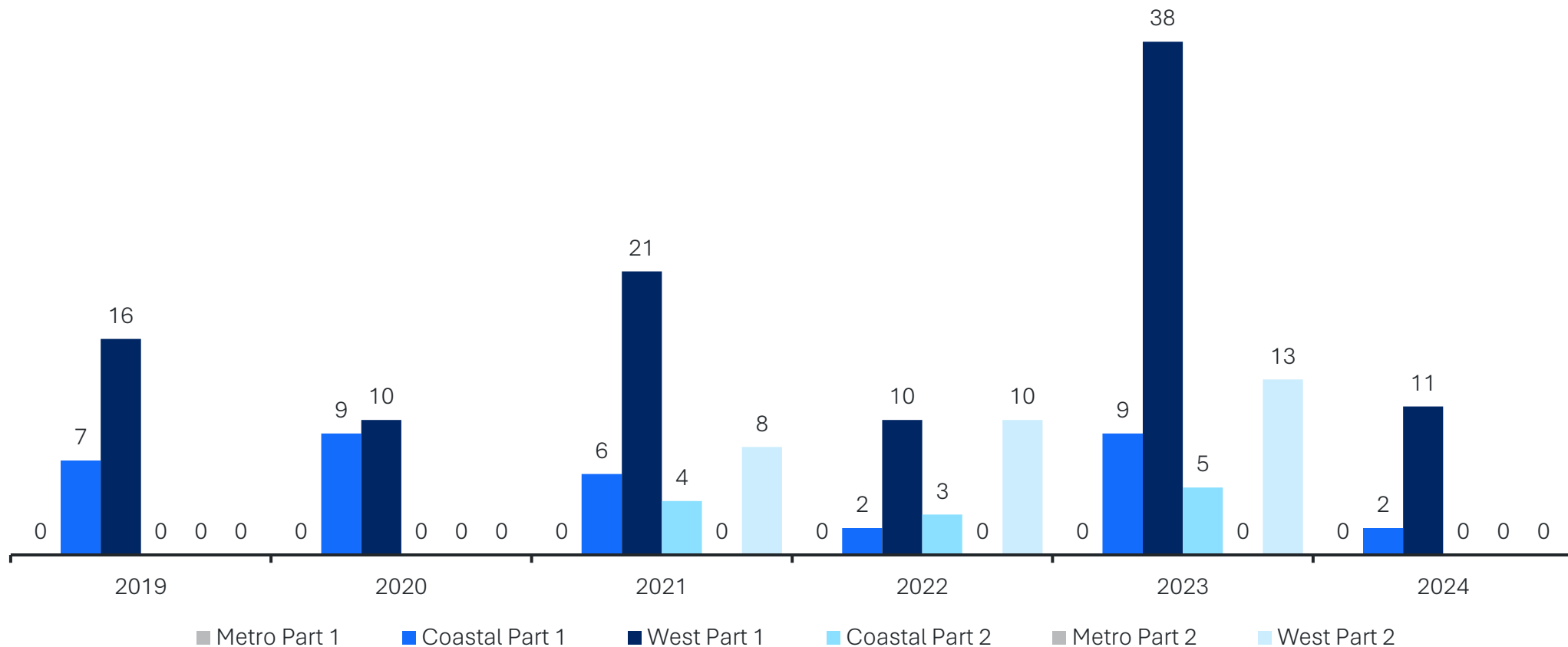
NSW Cert III completions





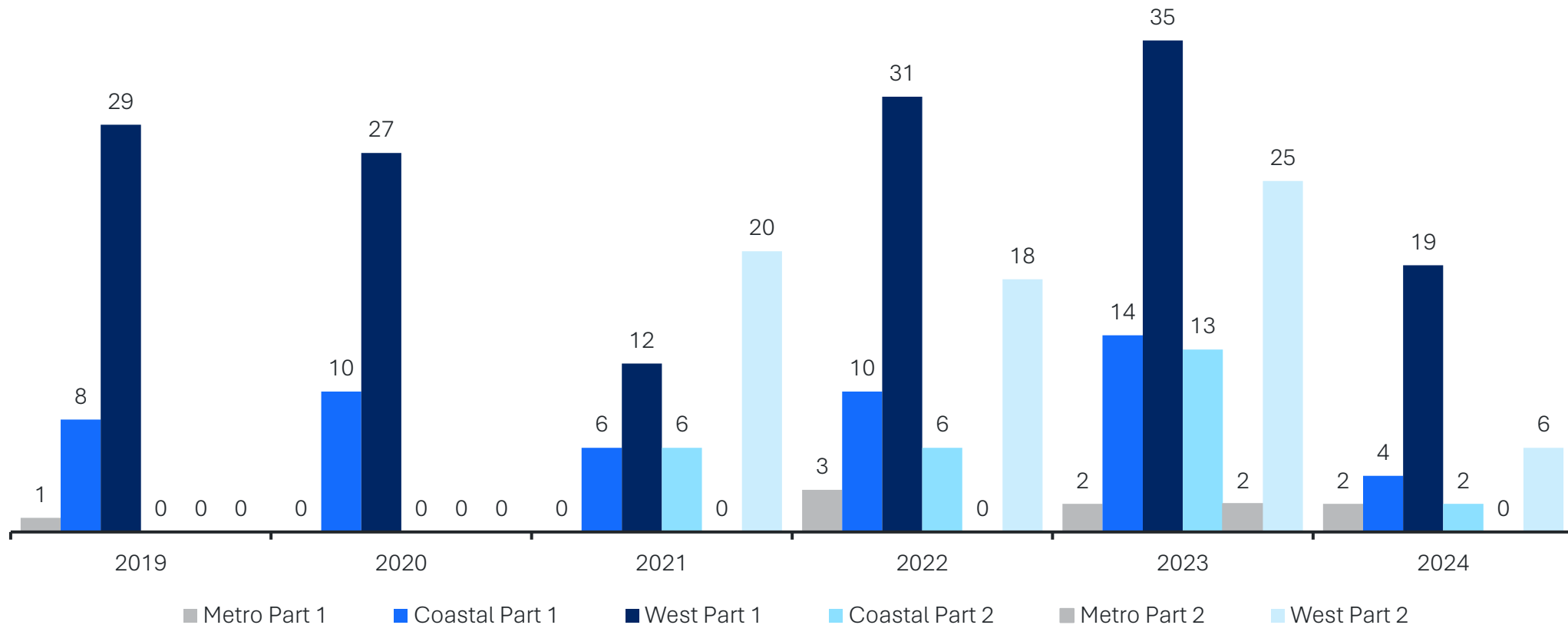
# Department training delivery – drinking water

## Drinking Water Treatment Training Completions



# Department training delivery - wastewater

## Wastewater Treatment Training Completions



# What's next?



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Final report and infographic  
available to industry in September

Survey repeated every 2 years to  
monitor trends

Data will inform workforce  
development strategy

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# Workforce development

Roadmap to 2030

2

# How are we going to develop the workforce?

Assessing industry  
and labour/skills  
gaps



High-level industry  
workforce planning

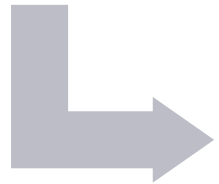


Government, regional  
and enterprise LWU  
actions and  
strategies

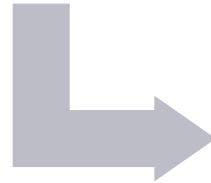


# LWU workforce development focus areas

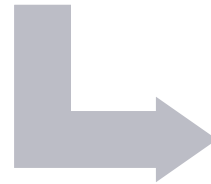
Attraction and recruitment



Retention and talent  
management

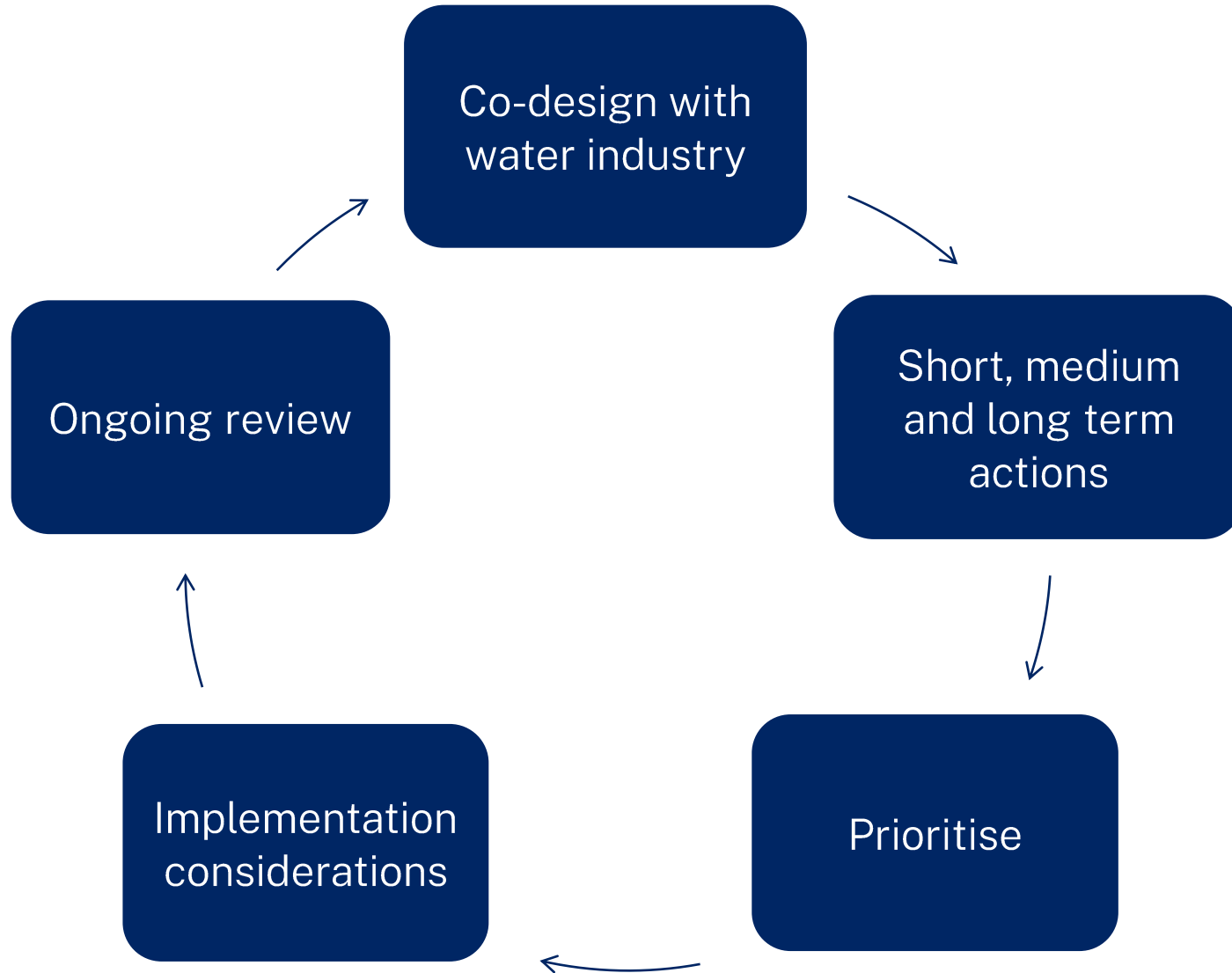


Growth and development



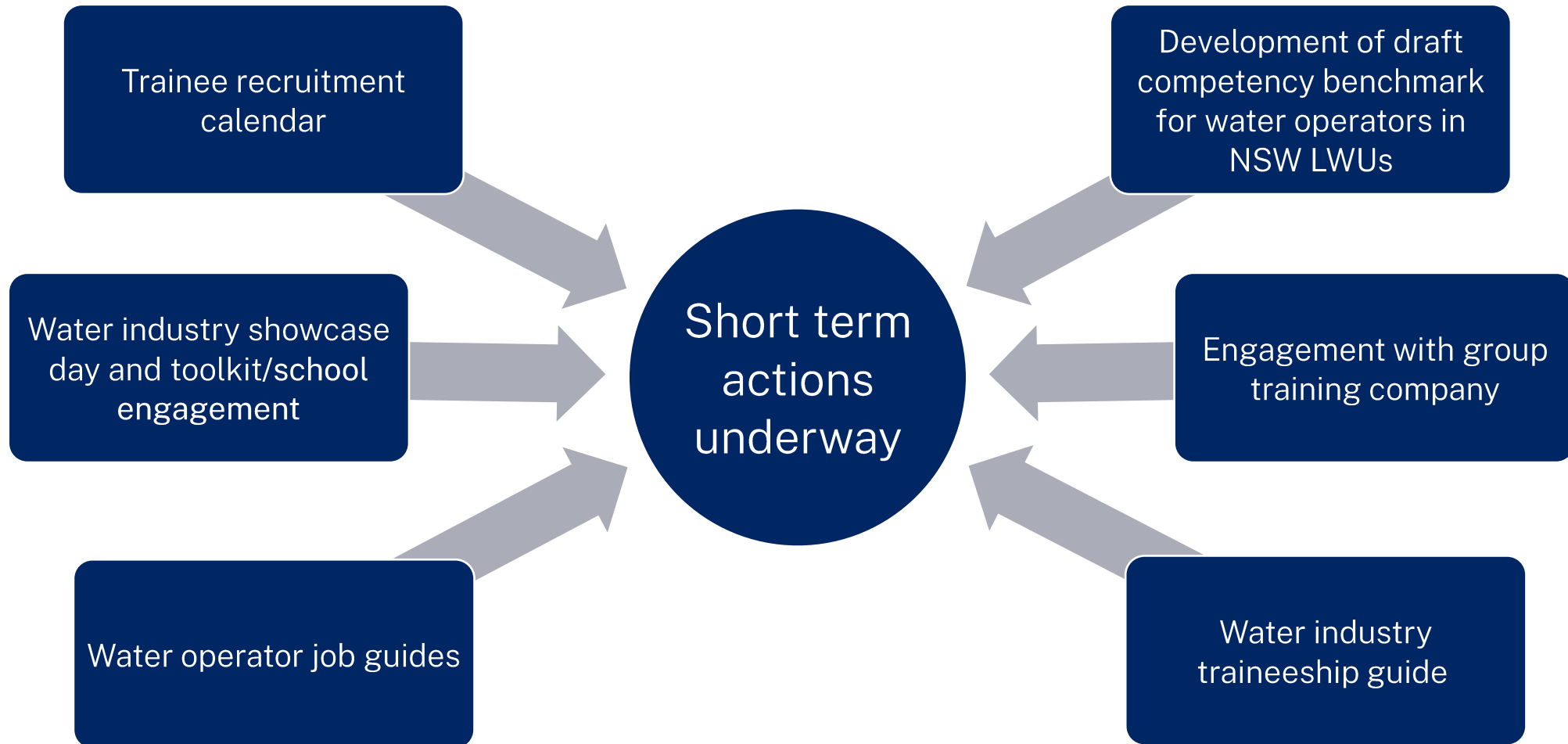
Leadership and  
management

# Workforce development roadmap to 2030



# Activities

Attraction and recruitment: to increase new entrant trainees into the water industry





## Medium term actions for consideration

- Competency benchmark implementation
- Support for regional training centres
- Regional collaboration on training delivery
- Regional traineeship intake programs
- Ongoing workforce composition survey data collection and reporting
- Mature engagement with group training organisations and high schools

## Long term actions for consideration

- Conversion of Certificate III Water Industry Operations to apprenticeship qualification
- Clear career pathways, e.g. VET to university
- Water operators appropriately classified : ANZSIC & ANZSCO codes
- Data collection to measure effectiveness

# Questions

# 3

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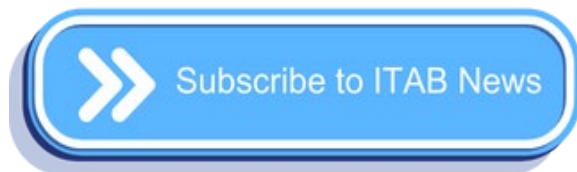


## Stay in touch with Water Industry Skills & Training News

The ITAB website is now rebuilt and can be found here.

[www.aisglobal.org.au/itab-home](http://www.aisglobal.org.au/itab-home)

You can subscribe to the ITAB Monthly Newsletter using this button:



[www.australianindustrystandards.org.au/nsw-itab/](http://www.australianindustrystandards.org.au/nsw-itab/)





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**Next WTAN – 26 November 2024**

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