Queensland Waste and Recycling

Economic Contribution and Workforce Report

2025-26

WRIQ

Essential for community Essential for environment

Contents

CEO Foreword

Queensland's waste and recycling industry is responsible for collecting, processing and managing millions of tonnes of material every year, supporting public health, environmental outcomes and the functioning of communities across Queensland. Yet behind these essential services sits a growing workforce challenge that cannot be ignored.

This study confirms that workforce shortages are already affecting the industry's ability to recruit and retain critical frontline roles, particularly drivers, machinery operators, mechanics and labourers. These pressures are being felt most acutely in regional Queensland, where competition from other industries and an ageing workforce are reducing the available labour pool.

Within 10 years we will lose 849 workers from the industry to ageing workforce retiring, with 519 in the current pipeline, leaving a 330 shortfall in workers. We will start to see the effects of these shortages within an estimated 5 years, assuming the industry continues to attract and retain its workforce at current rates. This also assumes there won't be a need to expand operations within that timeframe.

The challenge is not simply replacing retiring workers. The industry must also attract younger workers, women, First Nations peoples, people with disability and other under-represented groups while building the specialised skills required for increasingly complex recycling, resource processing and compliance activities.

While the findings identify significant workforce risks, they also highlight opportunities. The industry offers stable employment, competitive wages, meaningful environmental outcomes and strong long-term career pathways. With targeted investment in workforce attraction, training and capability development, Queensland can build the workforce needed to support future growth and circular economy ambitions.

This report provides the evidence base to support that investment and to ensure Queensland's waste and recycling industry remains safe, productive and sustainable for decades to come.

Alison Price
Chief Executive Officer

Industry action already underway

WRIQ has already commenced a range of workforce initiatives through Workforce Connect and the Waste and Recycling Academy Queensland (WRAQ), including industry-specific training, workforce attraction activities, mentoring programs, micro-credentials and workforce research.

These initiatives demonstrate strong industry commitment and have been well supported by employers. However, the evidence presented in this report confirms that current programs alone are not sufficient to address the scale of the challenge.

Workforce shortages, increasing technical skill requirements, demographic change and growing demand for waste and recycling services will require sustained investment in workforce attraction, training, leadership development and retention initiatives.

The findings of this report provide a clear evidence base for future industry and government investment to ensure Queensland has the workforce required to deliver essential waste and recycling services into the future.

Executive Summary

This report presents the findings of the Queensland Waste and Recycling Industry: Economic Contribution and Workforce Study 2024–25, delivered as part of a Queensland Government–funded Workforce Connect project. The study was commissioned to provide an evidence base to support workforce planning, policy development, and targeted investment across Queensland's waste and recycling sector at a time of increasing demand, structural labour constraints, and industry transition.

The waste and recycling industry is an essential service that underpins public health, environmental protection, and the delivery of Queensland's circular economy objectives. It is also a significant contributor to the State's economy, supporting thousands of direct and indirect jobs and substantial private and public infrastructure investment. Over coming decades, population growth, rising waste volumes, and policy-driven increases in recycling and resource recovery will require sustained expansion of industry capacity and workforce capability.

At the same time, the industry is experiencing growing workforce pressure. Evidence from this study demonstrates that workforce availability, capability and retention are emerging as material risks to service continuity, safety outcomes and the achievement of Queensland's waste and recycling targets.

Evidence base

The findings in this report draw on multiple, complementary sources of evidence including:

- an organisational census capturing workforce composition, recruitment challenges and training practices
- an employee survey providing insight into workforce experience, expectations and retention drivers
- economic and employment contribution modelling
- qualitative validation through a regional employer workshop conducted in November 2025, with a particular focus on operational and regional workforce challenges.

Taken together, these sources provide a robust and balanced picture of both employer and employee perspectives across the sector.

Headline workforce challenges

The evidence confirms persistent and structural workforce challenges across the Queensland waste and recycling industry, most acutely in frontline operational roles.

Recruitment pressures are strongest for Machinery Operators, Mechanics, Drivers and Labourers, with a majority of businesses reporting insufficient staff in these roles and significant difficulty attracting suitably qualified applicants. These shortages are driven by a combination of competition from higher-paying industries (particularly mining), an ageing workforce, increasing requirements for industry-specific skills and qualifications, and enduring negative perceptions of the industry.

Retention pressures mirror recruitment challenges. Frontline operational roles experience the highest levels of turnover and reported difficulty in retention, increasing workload pressure on remaining staff and compounding recruitment demand. While the industry provides stable employment as an essential service, retention is increasingly influenced by leadership quality, career development opportunities, work-life balance and organisational culture.

Workforce capability is also under pressure as the industry transitions toward more technologically complex and regulated operations. Employers report high and growing upskilling needs across operational, technical and managerial roles, yet training delivery remains heavily reliant on internal, non-accredited systems. Smaller and regional businesses, in particular, face constraints in accessing structured and scalable training pathways.

Employee perspectives

Employee survey results reinforce and contextualise employer-reported challenges. Employees place highest importance on work–life balance, leadership quality, meaningful work, career development and fair remuneration. While many are strongly motivated by the industry's environmental purpose and essential role, employees also identified opportunities to strengthen areas such as leadership, career development and work-life balance.

The most pronounced negative gap relates to work–life balance, with many employees reporting long hours, high workloads and limited flexibility. Leadership quality is identified as a critical determinant of retention, with positive leadership strongly associated with engagement and poor leadership amplifying turnover risk. Employees also highlighted workload pressures, career progression opportunities, leadership capability and work-life balance as factors influencing their long-term commitment to the industry.

These findings highlight that workforce challenges are not solely a matter of labour supply, but are closely linked to job design, organisational capability and the pace of industry transition.

Implications and opportunities

Taken together, the evidence indicates that workforce constraints are no longer a marginal issue for the Queensland waste and recycling industry. Without targeted intervention, existing shortages and retention pressures are likely to intensify as demand for services grows and operational complexity increases.

The report identifies a set of evidence-led opportunities to strengthen workforce sustainability across the sector. These include improving workforce supply for frontline operational roles, expanding access to structured and accredited training pathways, building leadership and supervisory capability, addressing emerging technical skill requirements, improving job quality and career pathways to support retention, enhancing industry perception and awareness, and supporting regional workforce resilience.

These opportunities are not presented as prescriptive solutions, but as priority areas where coordinated, industry-led action – supported by government programs such as Workforce Connect – can deliver measurable improvements in workforce capacity, capability and retention.

Conclusion

Queensland's waste and recycling industry is entering a period of sustained growth and transformation. Its ability to meet future service, safety and environmental outcomes will depend on the strength and stability of its workforce. This report provides an evidence base to support informed decision-making and targeted investment, demonstrating both the scale of the workforce challenge and the opportunity to address it through timely, coordinated and evidence-driven action.

Within 10 years Queensland's waste and recycling industry is projected to face a shortfall of workers due to workforce ageing and retirement, with workforce pressures expected to emerge within the next five years.

01

Introduction

This report has been prepared as part of the Workforce Connect Funded project to support improved understanding of workforce capability and future workforce needs within Queensland's waste and recycling industry. The project was undertaken by Waste Recycling Industry Association Queensland (WRIQ) in response to growing interest from industry and government in the sustainability of the sector's workforce over the medium to long term.

The waste and recycling industry plays an essential role in Queensland, delivering collection, processing, recycling, recovery and disposal services that underpin public health, environmental protection and broader economic activity. As population growth, infrastructure investment and waste diversion targets continue to shape demand for services, understanding the capacity of the workforce to support ongoing service delivery is increasingly important.

The purpose of this Study is to establish an evidence base on the current profile of the waste and recycling workforce, including workforce demographics, recruitment and retention dynamics, training practices and emerging skill requirements. The findings are intended to inform industry-led workforce planning and to support consideration of future workforce development initiatives.

The Study draws on multiple sources of evidence, including an organisational census of waste and recycling businesses, an employee survey capturing workforce perspectives, qualitative engagement with employers, and economic contribution analysis examining the role of the industry within Queensland's economy. Together, these inputs provide a comprehensive view of workforce conditions across metropolitan and regional Queensland.

This report presents the findings of the Study and outlines their implications for workforce capability and sustainability within the waste and recycling industry. It should be read as an evidence-based assessment of workforce conditions rather than a prescriptive action plan.

Waste Recycling Industry Association Queensland (WRIQ)

Waste Recycling Industry Association Queensland (WRIQ) is the peak industry body representing Queensland's waste and recycling sector. WRIQ represents more than 100 organisations operating across the waste and recycling value chain, including collection, recycling, resource processing, organics, landfills and energy-from-waste.

WRIQ members manage approximately 97 per cent of Queensland's waste collections and collectively own and operate more than $3.8 billion in essential waste and recycling infrastructure. The sector contributes approximately $2.7 billion to Queensland's economy and supports more than 16,000 jobs.

WRIQ represents more than

100

Queensland-based organisations

Ranging from multinational operators

To small, family-owned businesses

Collection → Processing → Recovery → Reuse

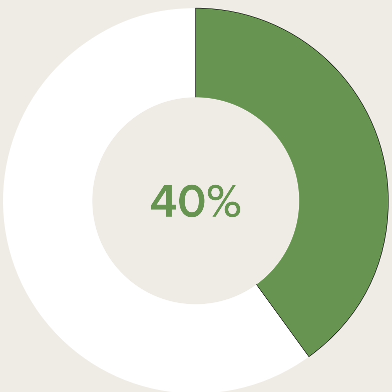
Energy and water savings from recovered secondary materials.

594
BUSINESSES
operate across Queensland

9.81 M
TONNES
of waste managed annually across Queensland

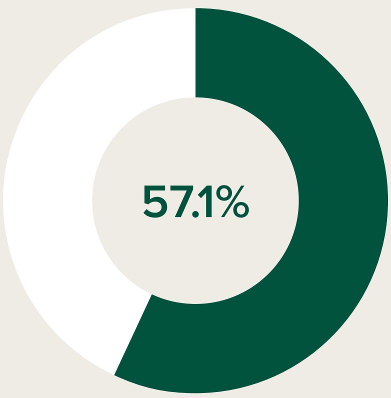
5.6 M
TONNES
recovered and recycled

Powering Regional Queensland



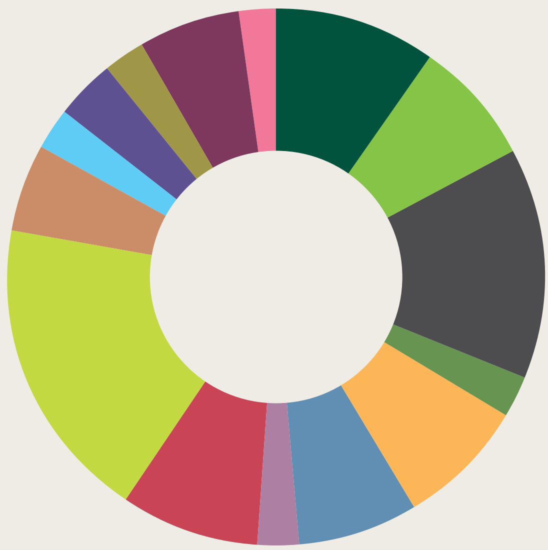
of operators are based outside South East Queensland

Recovery rate



5.6 million
tonnes diverted from 9.81 M total

WRIQ Membership by Service Category



11.00%	Domestic Waste & Recycling Collections
8.70%	Commercial & Industrial (C&I)
15.60%	Construction & Demolition (C&D)
2.90%	Tyre Recycling
8.70%	Organics & Specialist Recyclers
8.10%	Liquid & Hazardous Waste
2.90%	MRF / Processing Facilities
9.20%	Landfill & Transfer Stations
20.80%	Operating Waste & Recycling Facilities
5.80%	Metal Recycling
2.90%	General Transport
4.00%	Skip & Hook Operations
2.90%	Consultants
6.90%	Suppliers
2.30%	Councils

***Source:** State of the Environment Report 2024, Queensland Government*

02

Methodology and evidence base

Overview

This Study was undertaken as part of the Workforce Connect Funded project to establish an evidence base on workforce conditions within Queensland's waste and recycling industry. The methodology comprised four complementary components designed to capture both quantitative and qualitative dimensions of workforce supply, demand and capability.

Together, these components provide a triangulated view of workforce demographics, recruitment and retention pressures, training practices and workforce capability across metropolitan and regional Queensland.

Organisation Census

An organisational census was undertaken to capture information on workforce size and composition, recruitment and retention challenges, training practices and anticipated workforce needs within the waste and recycling industry.

The organisational census methodology included the following steps:

A preliminary workshop with WRIQ to confirm project scope, methodology, issues to be covered and timeframes.

Preparation of a census questionnaire, which was circulated to the WRIQ Board for review and comment, with feedback incorporated prior to distribution.

Distribution of the census via an electronic survey platform between 1 May and 30 June 2025.

Responses from organisation employing
2719
PEOPLE

Responses received from 30 organisations employing a total of 2,719 people, representing approximately 31.1 per cent of the estimated Queensland Waste and Recycling workforce.

The organisational census questionnaire is provided in **Appendix A.**

Employee Survey

An employee survey was undertaken to capture workforce perspectives on employment conditions, job satisfaction, training and development, career pathways and motivations for joining and remaining in the industry.

The employee survey methodology included:

A workshop with WRIQ to confirm survey scope, content and administration.

Development of the employee survey instrument, which was reviewed by WRIQ prior to finalisation.

Online administration of the survey between April and May 2025

114
RESPONSES

A total of 114 valid responses received from employees working across the waste and recycling industry.

The employee survey questionnaire is provided in **Appendix B.**

Regional employer workshop

In addition to the organisational census and employee survey, a facilitated regional employer workshop was conducted in November 2025 to obtain qualitative insights on workforce recruitment, retention and development challenges.

The workshop focused on issues affecting heavy vehicle drivers, plant and machinery operators and other frontline operational roles, and was designed to supplement survey data where quantitative responses were more limited.

Workshop discussion prompts are provided in **Appendix C.**

Economic and employment contribution analysis

Economic and employment contribution analysis was undertaken to examine the role of the waste and recycling industry within the Queensland economy, including its contribution to gross state product and employment.

The analysis estimates direct, indirect and induced economic impacts using established economic modelling techniques.

A detailed description of the modelling approach, assumptions and limitations is provided in **Appendix D.**

Limitations and data interpretation

As with all studies of this nature, certain limitations apply. Participation in both the organisational census and employee survey was voluntary, and response coverage varied by organisation size, role type and geographic location.

To mitigate these limitations, the Study draws on multiple evidence sources, including employer and employee surveys, qualitative workshop insights and economic modelling. Findings should be interpreted as indicative of industry-wide workforce conditions and pressures, rather than as precise measures for individual businesses or roles.

03

The Queensland Waste and Recycling Industry

Industry scope and activities

Queensland's waste and recycling Industry provides essential waste collection processing, recycling and disposal infrastructure and services across the state. The industry plays a critical role in supporting public health, environmental protection and economic activity through the safe and efficient management of waste materials generated by households, businesses and industry.

Industry activities span waste transport, material processing, recycling and recovery, fuel manufacture and landfill management. The sector processes all major waste streams including municipal, commercial, industrial, construction and demolition, hazardous and liquid wastes.

In 2023-24, the industry processed more than 9.81 million tonnes of resources from waste streams recovering 5.6 million tonnes, equivalent to a recovery rate of 57.1 per cent.

Beyond service delivery, the recovery of secondary resources contributes to environmental outcomes including energy savings, reduced greenhouse gas emissions, water savings and reduced emissions to air, water and land. These outcomes support Queensland's broader circular economy objectives

Defining the Industry

For the purposes of this Report, waste is defined as any material collected by (or on behalf of) an organisation that has no further use or value to the previous owner in its current state and has therefore been discarded. This definition includes materials that may subsequently be recycled and/or reused.

The waste and recycling industry includes waste collection, transfer, sorting, recycling and reuse activities, as well as the final disposal of residual waste to landfill. The industry comprises both private sector firms and local government enterprises.

For analytical purposes, Queensland Economic Advocacy Solutions (QEAS) has defined the industry using the Australian Bureau of Statistics' Australian and New Zealand Standard Industrial Classification (ANZSIC) Group 291 (Waste Collection Services) and Group 292 (Waste Treatment, Disposal and Remediation Services).

According to the Australian Bureau of Statistics there are 594 businesses operating in the Queensland waste and recycling industry. The majority operate in solid waste collection services and waste remediation and material recovery services. Of these businesses, 355 are classified as small, 184 as medium-sized and 55 as large enterprises.

The broader industry includes not only waste collection, recycling and disposal operators, but also suppliers, consultants, transport businesses, equipment providers and other ancillary service organisations that support the sector. As a result, the number of businesses operating within the industry is substantially larger than the number of organisations directly undertaking waste collection activities.

Table 1 Queensland waste and recycling industry by sector

Industry sector	Number of businesses
Solid Waste Collection Services	243
Other Waste Collection Services	48
Waste Treatment and Disposal Services	77
Waste Remediation and Materials Recovery Services	226
Total	**594**

Source: Australian Bureau of Statistics

Economic contribution and scale

Directly

The Queensland waste and recycling industry is a significant contributor to the state economy. Macro-economic analysis undertaken as part of this Study indicates that, on an annual basis, the industry directly:

8,748
JOBS
Employs 8,748 Queensland residents

$768.7m
PAID IN WAGES
Pays $768.7 million in wages and salaries

$86,611
AVG WAGE
Provides an average annual livelihood of $86,611 per employee

$4.5B
TURNOVER
Generates a collective turnover exceeding $4.5 billion

$1.5B
TO ECONOMY
Contributes more than $1.5 billion in industry value-added

$1.1B
INVESTMENTS
Invests approximately $1.1 billion in land, buildings, plant, equipment and vehicles

Indirectly

In addition to its direct contribution, the industry generates substantial indirect economic activity through supply chain expenditure and household spending by employees. Indirectly, the industry supports a further:

$445m
TAXES
Contributes over $445 million in Commonwealth and State taxes

$452m
REVENUE
Collects approximately $452 million in waste levy revenue for the Queensland Government

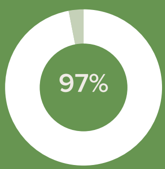
$3.8B
ASSETS
Owns and operates $3.8 billion of essential waste and recycling infrastructure and assets

$2.2B
IN WASTE LEVIES
Waste levies raised between 2019 and 2025

In total, the waste and recycling industry supports approximately 16,094 jobs in Queensland – equivalent to one in every 186 jobs – and contributes around $2.7 billion to Queensland's gross state product, or approximately $0.53 in every $100 of the state economy.

16,094
JOBS

$2.7B
TO QUEENSLAND'S GROSS STATE PRODUCT



of Queensland's waste collections handled by WRIQ members

$3.8 BILLION

in essential waste and recycling infrastructure

$4.5 BILLION

annual industry turnover

Economic Engine

$2.7 B
contribution to Queensland's Gross State Product

$1.5 B
direct value-add each year

$445 M
paid in taxes and charges

$1.1 B
annual capital investment (land, vehicles, bins, facilities)

Workforce Impact

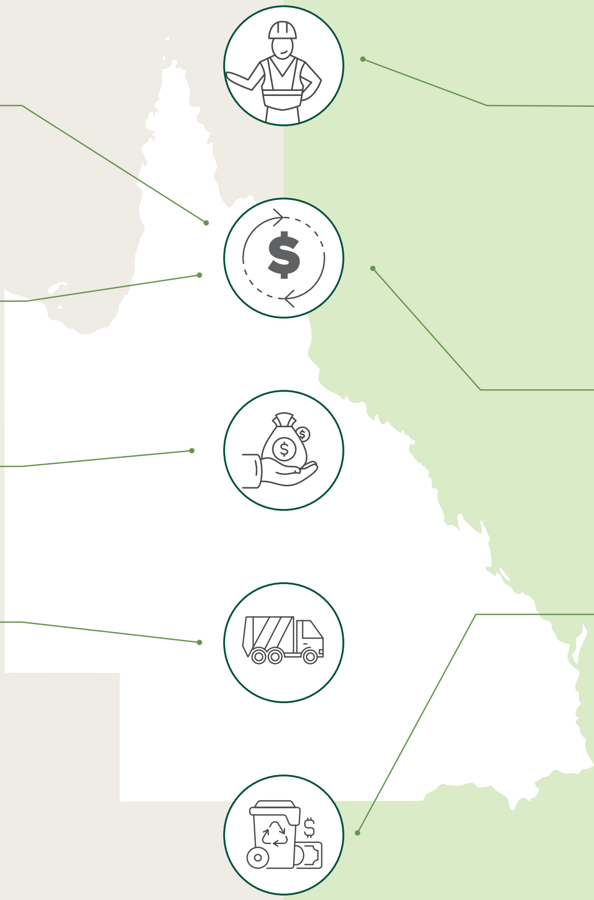
16,094
Queensland jobs supported

8,748 direct
7,346 indirect

$1.35 Billion
total wages

$86,611 average salary

1 in every 186
Queensland jobs supported by the sector



**Based on WRIQ members' waste collection and fate analysis.*

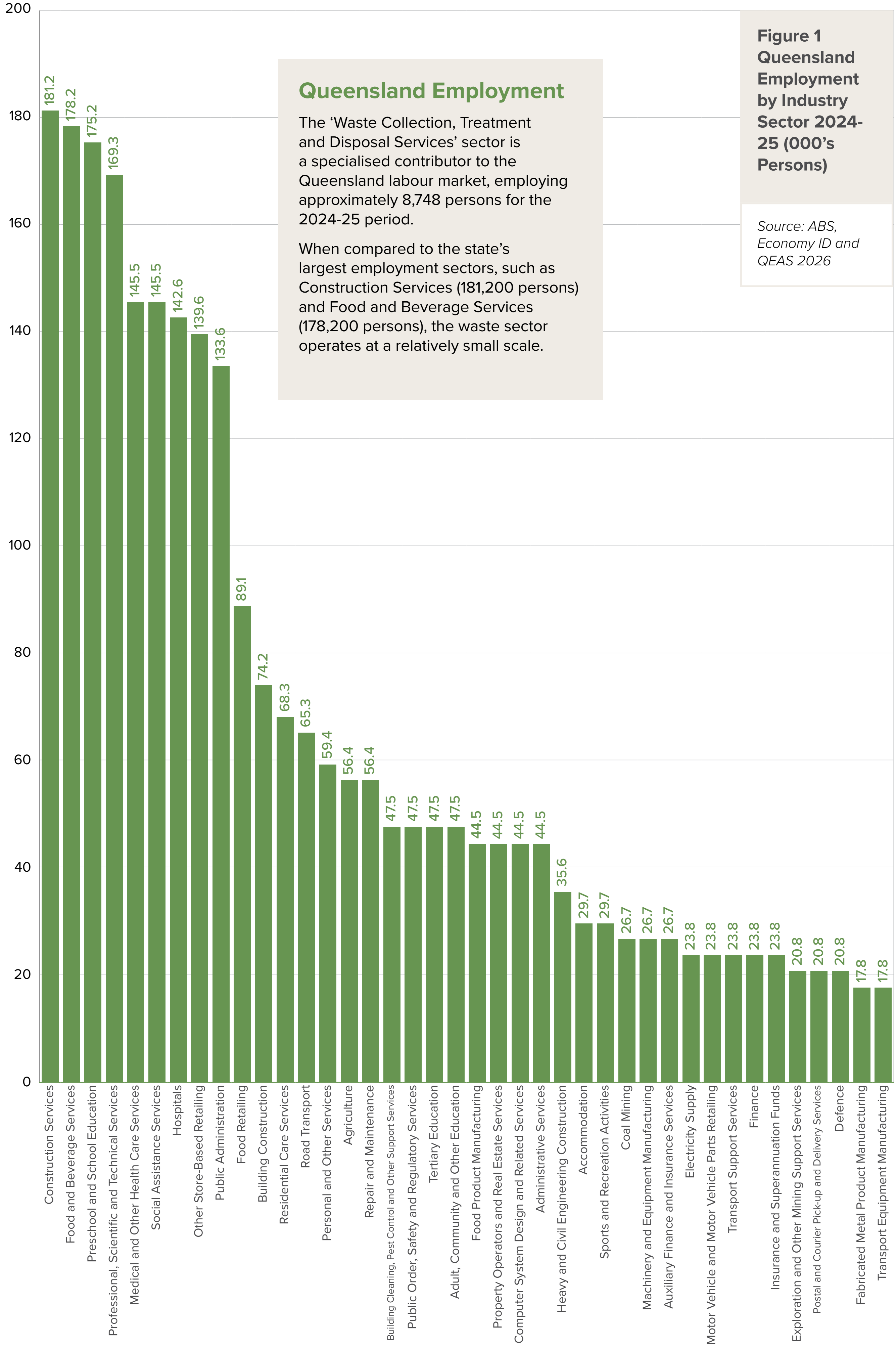
How does the industry compare?

While Queensland's waste and recycling industry employs fewer people than many of the state's largest industries, it delivers strong economic performance relative to its size.

The industry employs approximately 8,748 Queenslanders and contributes around $1.5 billion in direct economic activity annually. While this places the sector in the lower quartile for total employment and economic output, it outperforms many larger industries when measured on a per-worker basis.

Each employee generates approximately $174,230 in economic activity, placing the sector ahead of many labour-intensive industries including construction and road transport. The industry also provides an average annual wage of $86,611, significantly above the Queensland average wage of $65,931 and comparable with a range of professional and technical industries.

These results demonstrate that waste and recycling is not only an essential service industry, but also a provider of stable, skilled and productive employment that delivers significant economic value to Queensland.



Queensland Employment

The 'Waste Collection, Treatment and Disposal Services' sector is a specialised contributor to the Queensland labour market, employing approximately 8,748 persons for the 2024-25 period.

When compared to the state's largest employment sectors, such as Construction Services (181,200 persons) and Food and Beverage Services (178,200 persons), the waste sector operates at a relatively small scale.

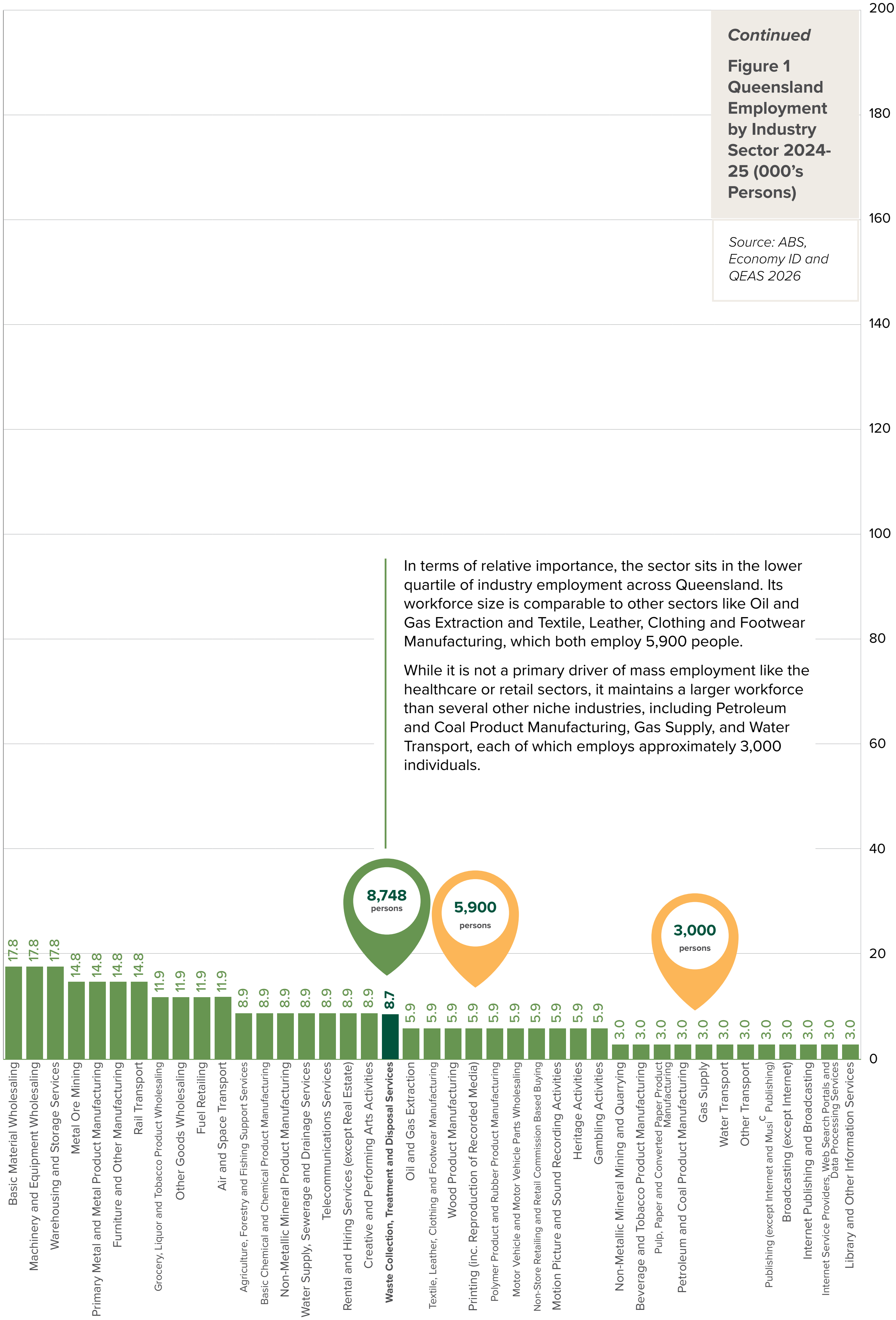
Figure 1 Queensland Employment by Industry Sector 2024-25 (000's Persons)

Source: ABS, Economy ID and QEAS 2026

Continued

Figure 1 Queensland Employment by Industry Sector 2024-25 (000's Persons)

Source: ABS, Economy ID and QEAS 2026



In terms of relative importance, the sector sits in the lower quartile of industry employment across Queensland. Its workforce size is comparable to other sectors like Oil and Gas Extraction and Textile, Leather, Clothing and Footwear Manufacturing, which both employ 5,900 people.

While it is not a primary driver of mass employment like the healthcare or retail sectors, it maintains a larger workforce than several other niche industries, including Petroleum and Coal Product Manufacturing, Gas Supply, and Water Transport, each of which employs approximately 3,000 individuals.

Contribution to Queensland Economic Activity

The ‘Waste Collection, Treatment and Disposal Services’ sector contributes approximately $1,516 million to Queensland’s economic activity for the 2024-25 period.

In the context of the broader state economy, this contribution is relatively modest, placing the industry in the lower quartile of economic output across all sectors.

It stands in contrast to major economic drivers such as Coal Mining, which contributes $48,332 million, and Professional, Scientific and Technical Services, which adds $30,932 million to the state’s economy.

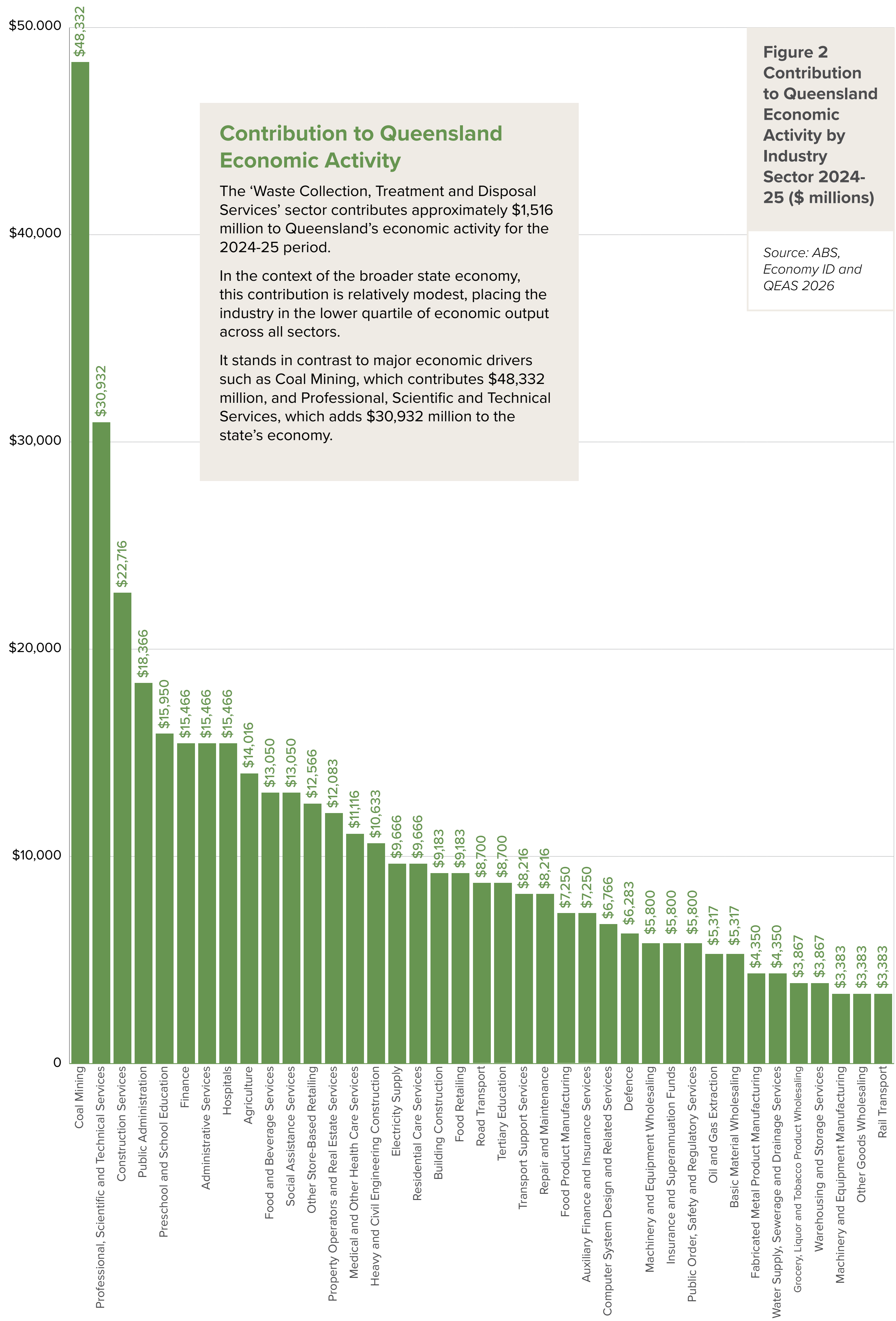


Figure 2 Contribution to Queensland Economic Activity by Industry Sector 2024-25 ($ millions)

Source: ABS, Economy ID and QEAS 2026

Continued

Figure 2 Contribution to Queensland Economic Activity by Industry Sector 2024-25 ($ millions)

Source: ABS, Economy ID and QEAS 2026

Queensland Average Annual Wage by Industry

The 'Waste Collection, Treatment and Disposal Services' sector offers competitive remuneration within the Queensland labour market, with an average annual wage of $86,611.

This level of compensation is significantly higher than the Queensland average for all selected industries ($65,931).

The sector's ability to provide wages well above the general state average highlights its importance as a provider of high-quality, stable employment for the Queensland workforce.

When compared to other specific industry sectors, the waste industry's average annual wage sits in a middle-to-high tier. It is positioned closely to sectors such as Professional, Scientific and Technical Services ($87,312)

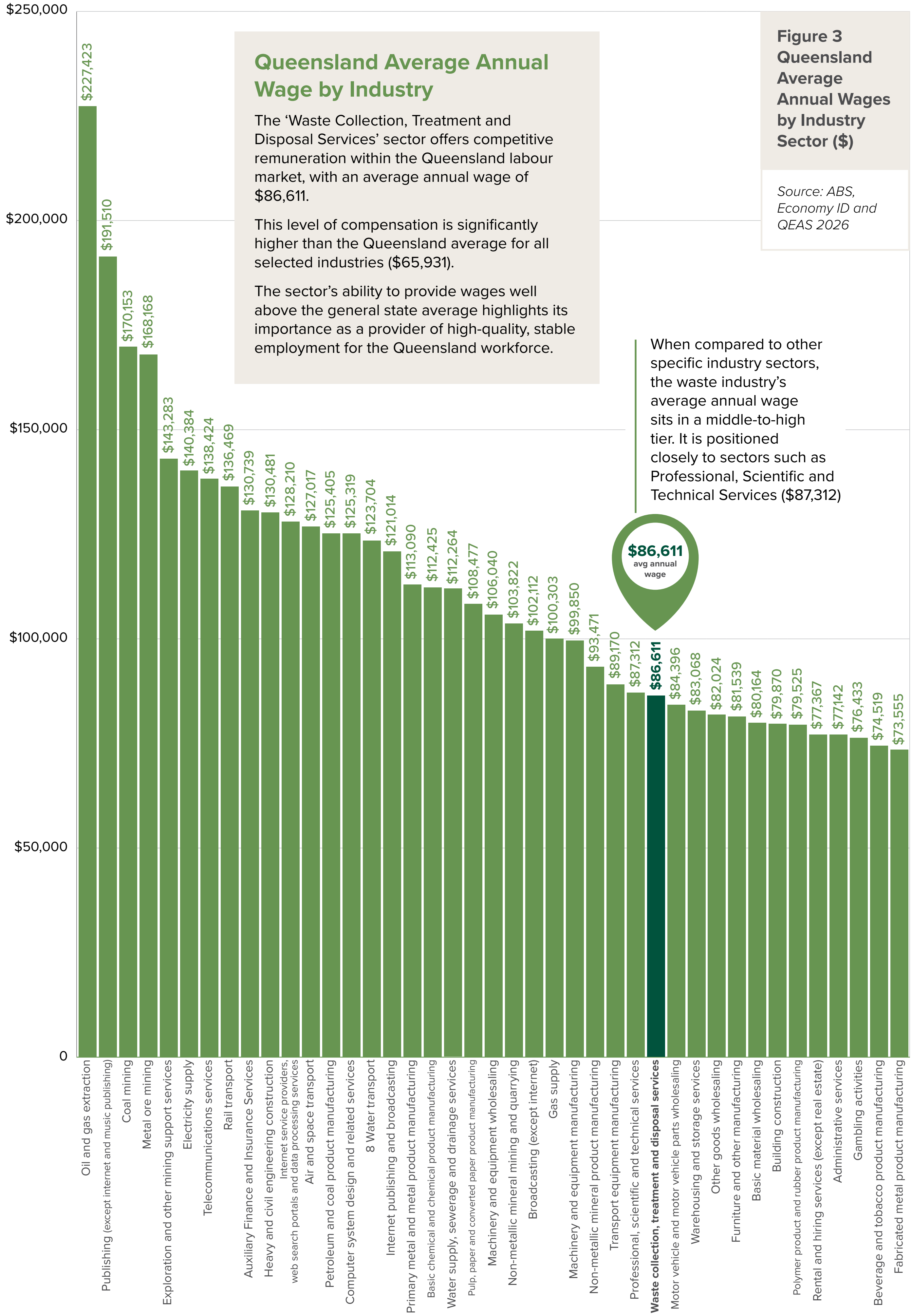


Figure 3 Queensland Average Annual Wages by Industry Sector ($)

Source: ABS, Economy ID and QEAS 2026

Continued

Figure 3 Queensland Average Annual Wages by Industry Sector ($)

Source: ABS, Economy ID and QEAS 2026

While it does not match the peak earnings found in the mining and utilities sectors—such as Oil and Gas Extraction ($227,423) or Coal Mining ($170,153)—it offers substantially higher pay than major employment drivers like Construction Services ($60,674) and Food and Beverage Services ($30,091).

Economic Activity

The 'Waste Collection, Treatment and Disposal Services' sector demonstrates a high level of industry productivity, generating $174,230 in economic activity per employee in 2024–25.

This performance is particularly significant when compared to Queensland's largest employment sectors, which often exhibit lower productivity rates.

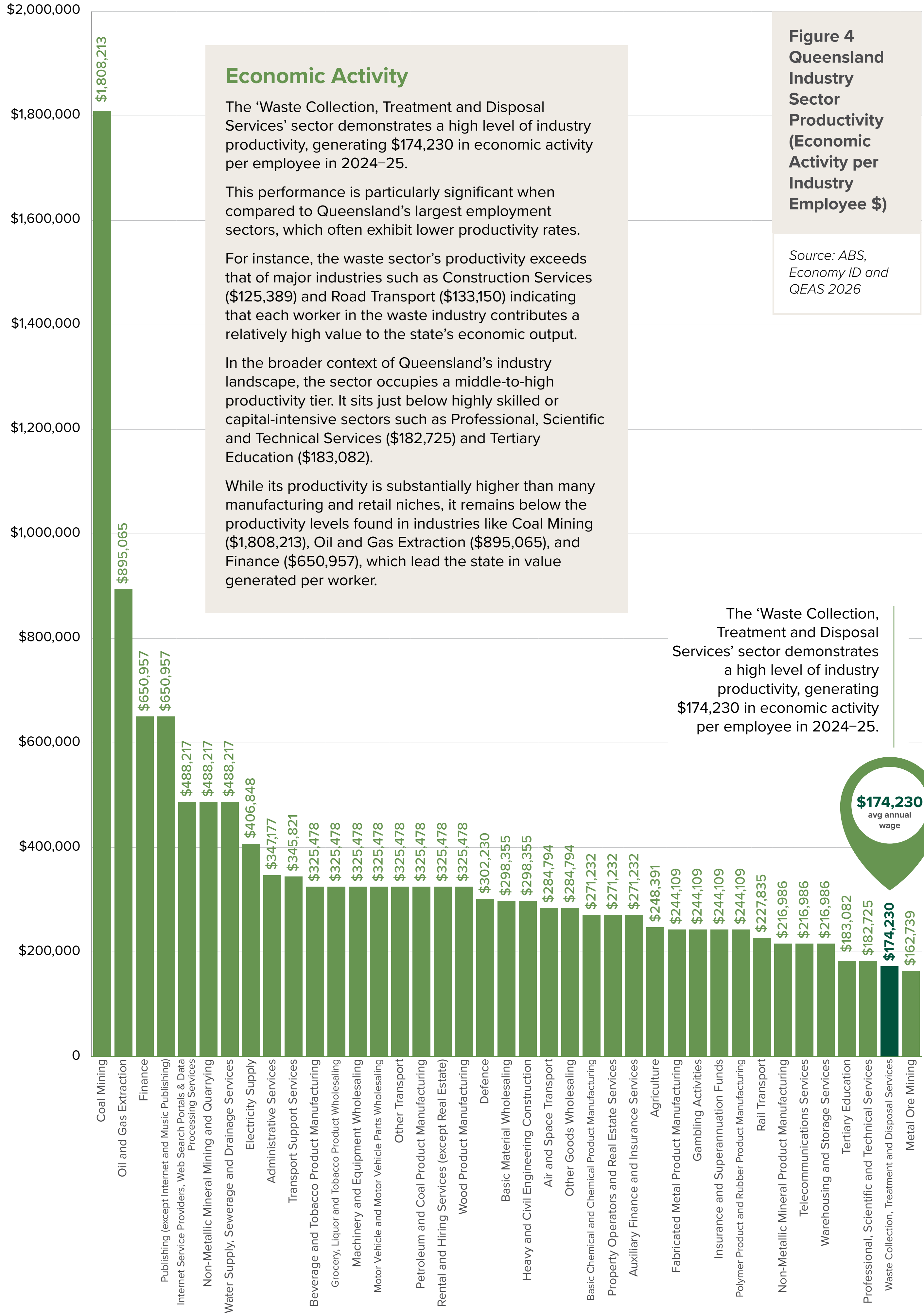
For instance, the waste sector's productivity exceeds that of major industries such as Construction Services ($125,389) and Road Transport ($133,150) indicating that each worker in the waste industry contributes a relatively high value to the state's economic output.

In the broader context of Queensland's industry landscape, the sector occupies a middle-to-high productivity tier. It sits just below highly skilled or capital-intensive sectors such as Professional, Scientific and Technical Services ($182,725) and Tertiary Education ($183,082).

While its productivity is substantially higher than many manufacturing and retail niches, it remains below the productivity levels found in industries like Coal Mining ($1,808,213), Oil and Gas Extraction ($895,065), and Finance ($650,957), which lead the state in value generated per worker.

Figure 4 Queensland Industry Sector Productivity (Economic Activity per Industry Employee $)

Source: ABS, Economy ID and QEAS 2026



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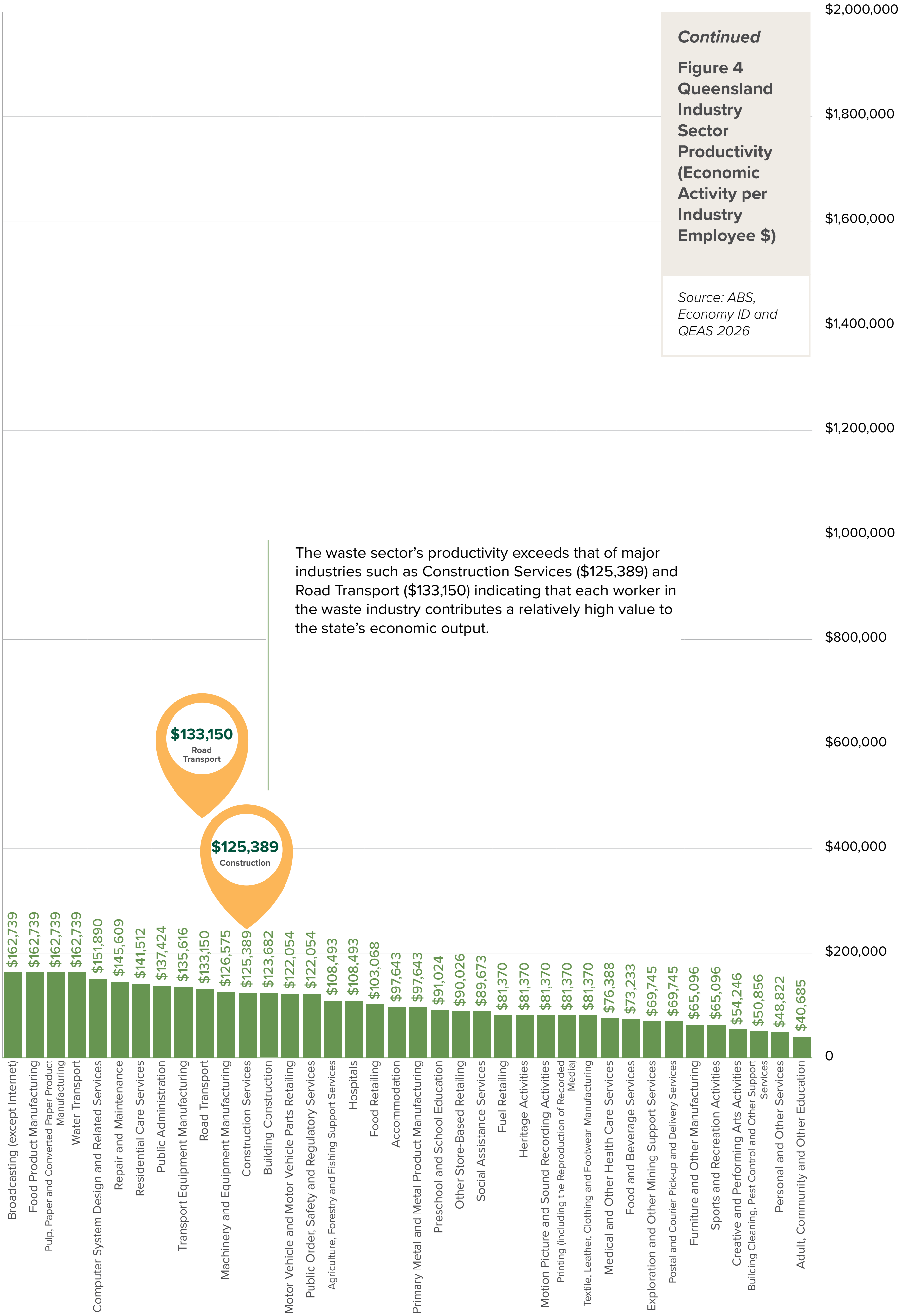

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Figure 4 Queensland Industry Sector Productivity (Economic Activity per Industry Employee $)

Source: ABS, Economy ID and QEAS 2026

04

Workforce profile and demographics

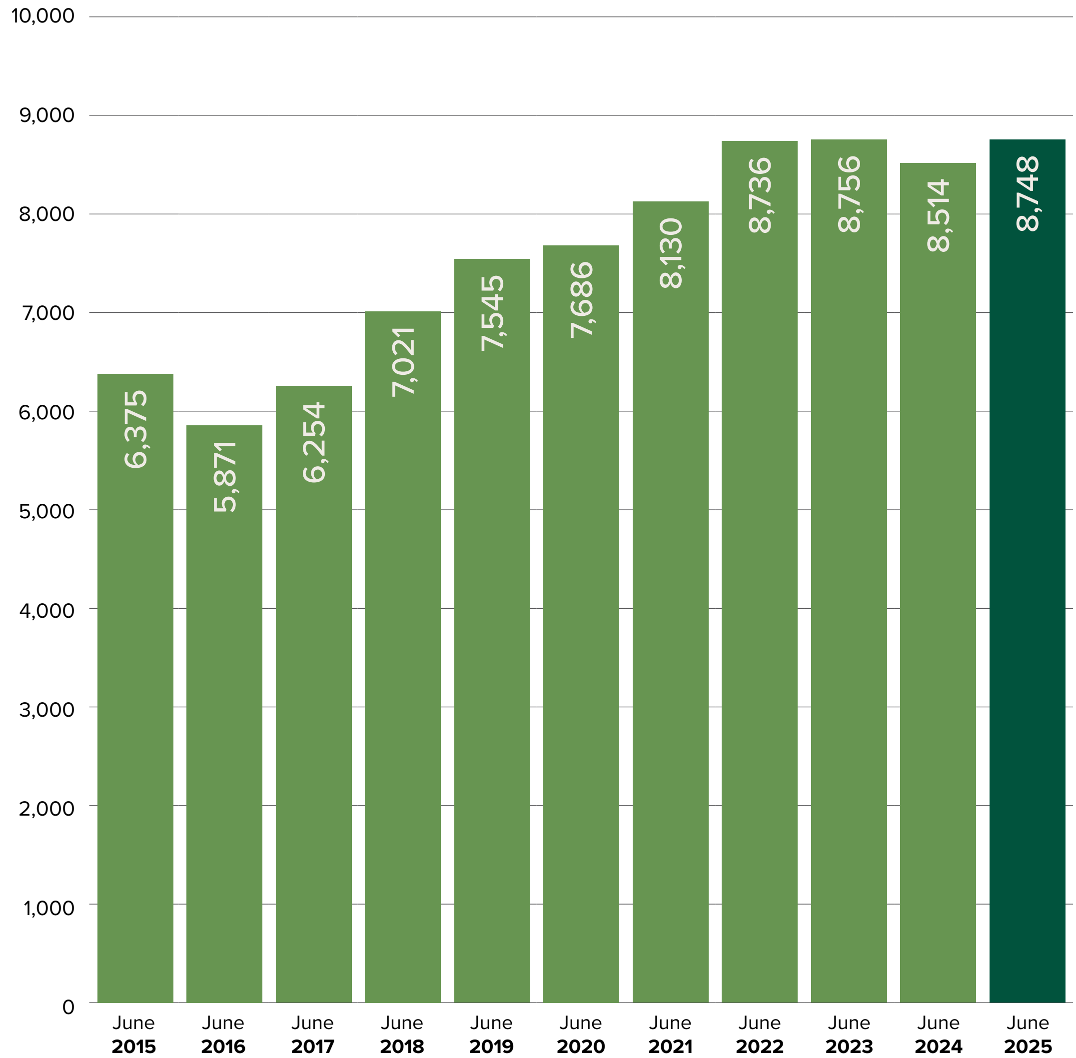
Overview

The estimated direct workforce of Queensland's waste and recycling industry comprises approximately 8,748 employees. The workforce spans a broad range of occupations, including truck and forklift drivers, recycling and waste collection staff, plant and machinery operators, process and production workers, technical and trade roles, and management and administrative positions.

Data presented in this section draws primarily from organisational census responses covering 2,719 employees, representing approximately 31.1 per cent of the estimated total industry workforce. This provides a substantial and representative evidence base for analysing workforce composition, distribution and demographic characteristics.

Figure 5 Queensland waste industry employees

headcount



Geographical distribution of workforce

Employment within the waste and recycling industry is geographically dispersed, reflecting the essential service nature of the sector and its presence across metropolitan, regional and remote Queensland.

The largest concentration of reported employees is located in **Greater Brisbane** (including Logan, Ipswich, Redland and Moreton Bay), followed by the **Gold Coast, Mackay–Isaac–Whitsunday, Sunshine Coast**, and **Toowoomba–South West Queensland** regions. Significant employment is also recorded across other regional areas, underscoring the industry's role as a major regional employer.

This geographic spread has implications for workforce availability, recruitment pipelines and access to training, particularly in regional and remote locations.

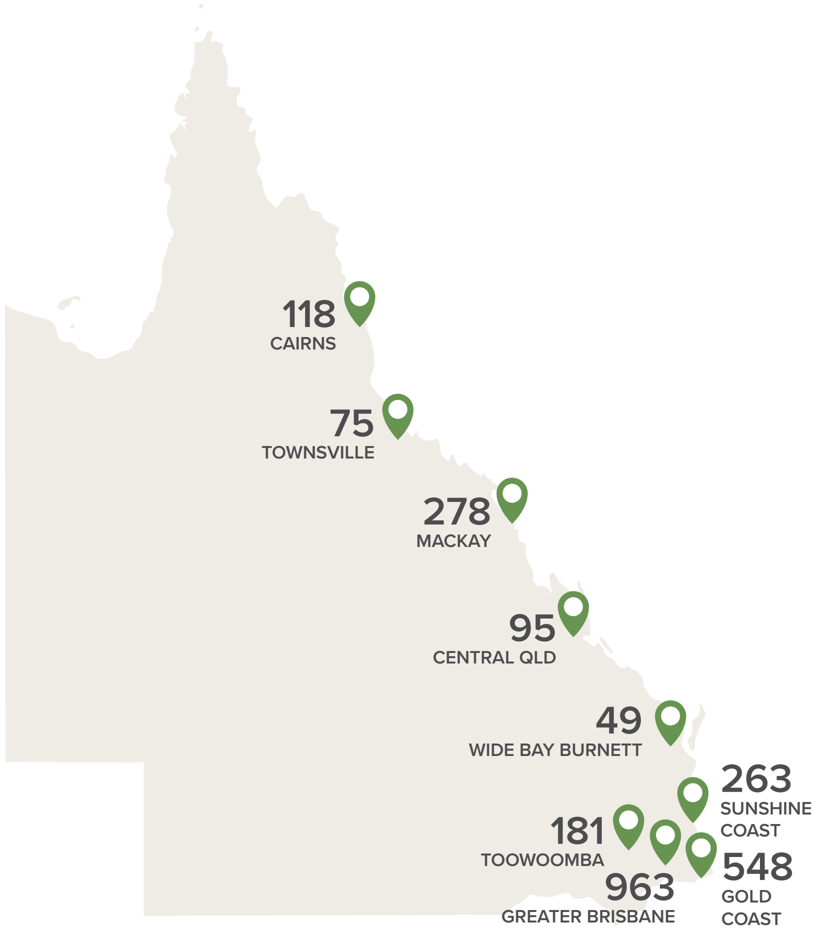
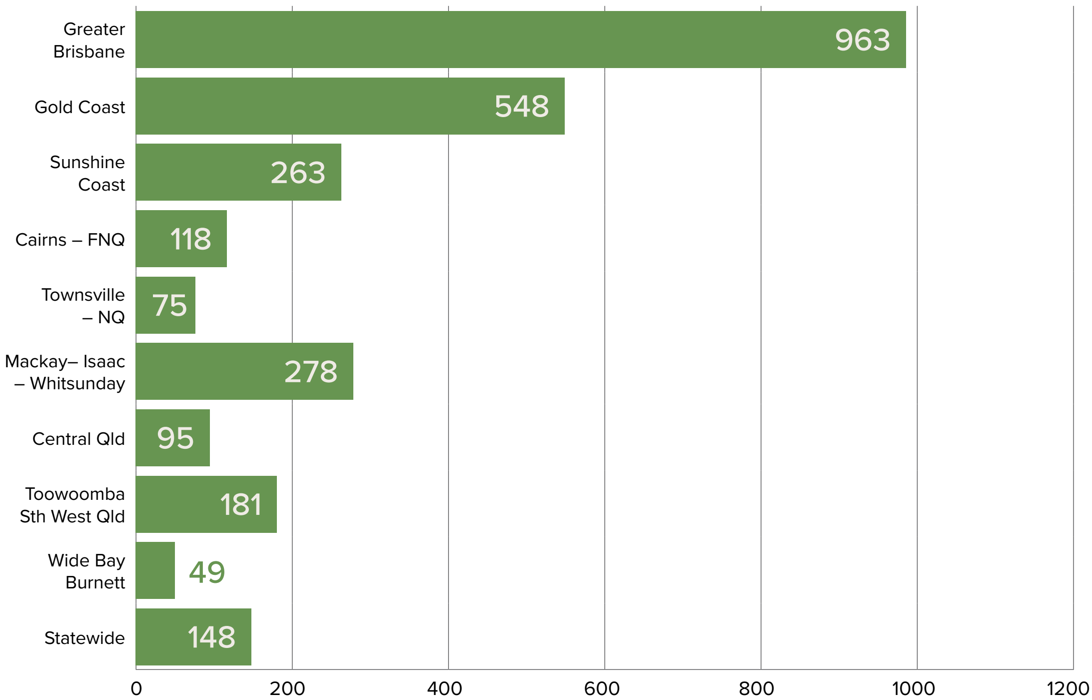


Figure 6 Employees by region

Queensland headcount



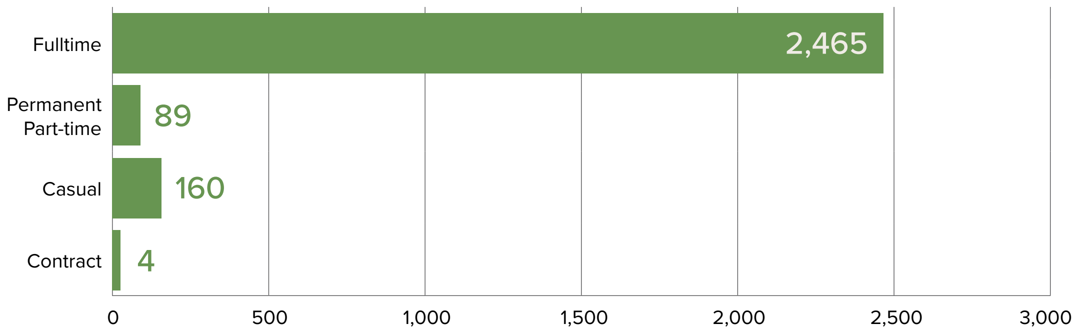
Employment type

The industry is characterised by a prevalence of secure employment. Of the employees captured through the organisational census, the majority are employed on a full-time basis, accounting for 2,465 employees.

Permanent part-time employment accounts for 89 employees, while 160 employees are engaged on a casual basis. This employment profile reflects the operational requirements of the industry and the need for stable, reliable staffing to deliver essential services.

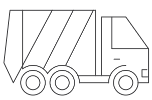
Figure 7 Employees by type of employment

Queensland headcount



Occupational distribution

The workforce is heavily weighted towards operational roles. Machinery operators and drivers constitute the largest occupational group, accounting for 1,252 employees, reflecting the labour-intensive and asset-heavy nature of industry operations.



1,252
Machinery operators and drivers

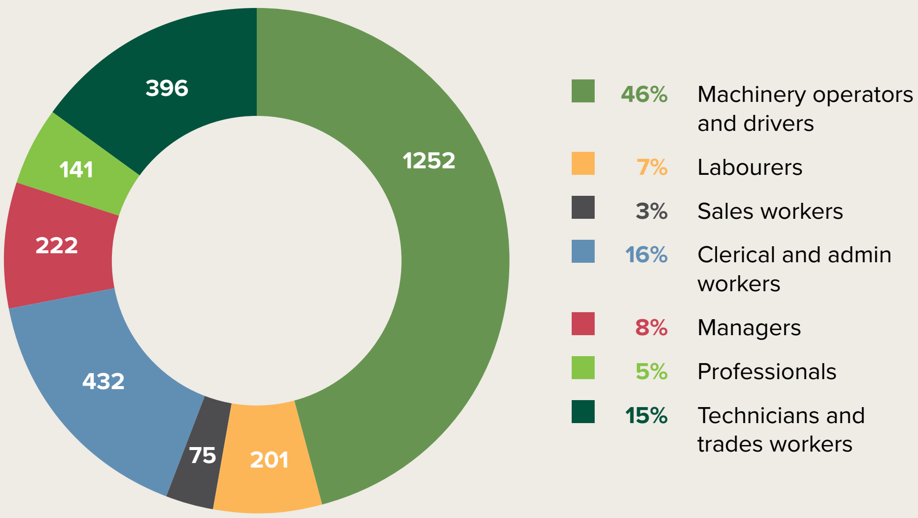
Other significant occupational groups include:

- Clerical and administrative workers (432 employees)
- Technicians and trades workers (396 employees)
- Managers (222 employees)
- Labourers (201 employees)
- Professionals (141 employees)
- Sales workers (75 employees)

The dominance of operational roles reinforces the importance of workforce availability, licensing, skills capability and retention within these occupations.

Figure 8 Employees by occupation

Queensland headcount



Age profile

The age profile of the workforce shows a strong concentration in mid-career age groups. Nearly half of the workforce (49.7 per cent) is aged between 30 and 49 years, with the 40-49 cohort representing the single largest group (25,3 per cent).

Employees aged 50-59 years account for a further 22.3 per cent, while those aged 60 years and over represent 9.0 per cent of the workforce. Younger workers aged 15-24 years collectively account for 8.3 per cent.

The distribution indicates a workforce that is currently experienced but facing longer-term succession and replacement considerations as a substantial proportion approaches retirement age.

The ageing profile of the workforce presents a significant medium-term workforce risk. With a substantial proportion of employees currently aged 50 years and over, workforce replacement and succession planning will become increasingly important over the next decade.

Within 10 years we will lose 849 workers from the industry to ageing workforce retiring, with 519 in the current pipeline, leaving a 330 shortfall in workers. We will start to see the effects of these shortages within an estimated 5 years, assuming the industry continues to attract and retain its workforce at current rates. This also assumes there won't be a need to expand operations within that timeframe.

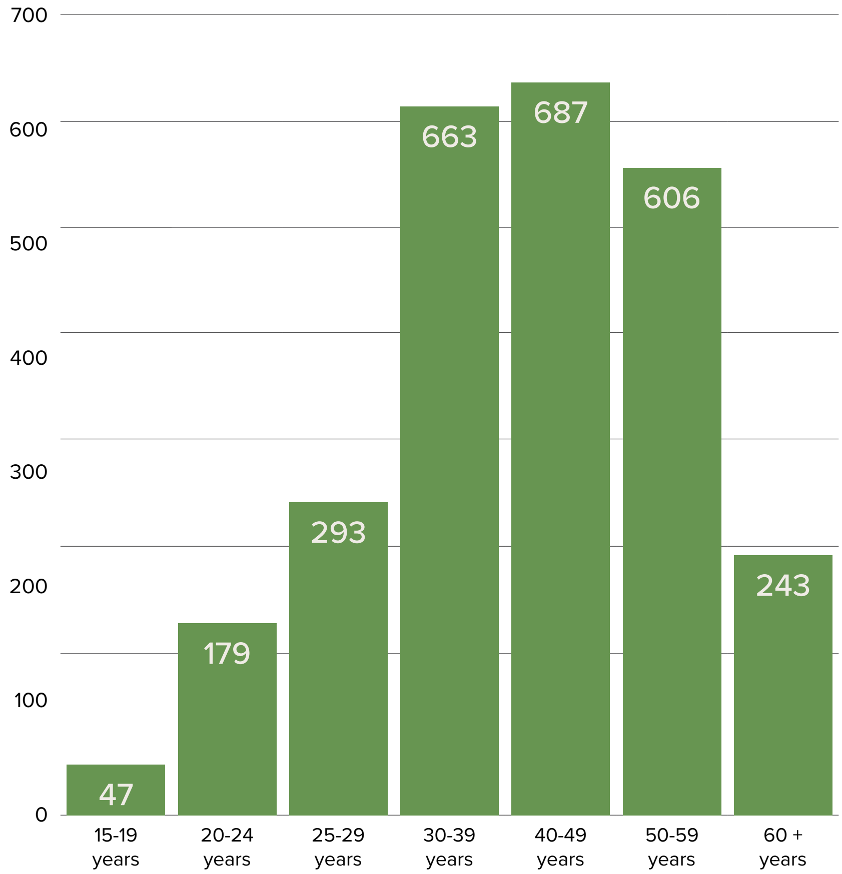


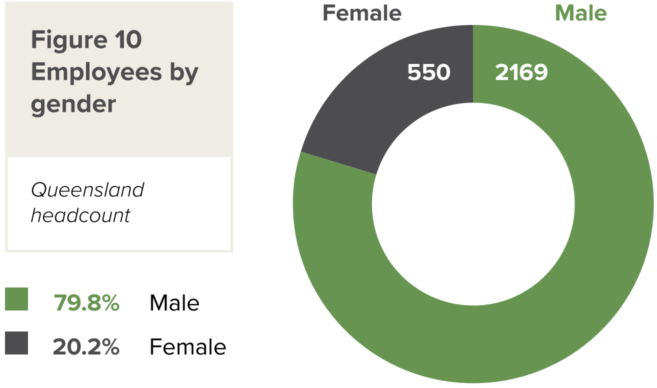
Figure 9 Employees by age group

Queensland headcount

Gender distribution

Figure 10 Employees by gender

Queensland headcount



The waste and recycling workforce in Queensland is predominantly male. Census data indicates that 79.8 per cent of employees are male with 20.2 per cent female

This gender distribution contrasts with the broader Australian labour market, where 51.9 per cent of workers are male and 48.1 per cent female, as indicated by Australian Bureau of Statistics, highlighting a significant gender imbalance within the industry workforce.

However in terms of industry management and administration the workforce aligns much more closely with the broader labour market, with a 51 per cent male and 49 per cent female split.

Annualised base salary bands

Reported salaries indicate a broad distribution across income bands. The largest cohort of employees earns between $50,000 and $74,999 per annum, accounting for 1,407 employees, followed by those earning $75,000 to $99,999 (555 employees).

Higher salary bands are progressively smaller in size, with 229 employees earning between $100,000 and $124,999, and 427 employees earning above $125,000. A relatively small number of employees earn below $50,000 per annum.

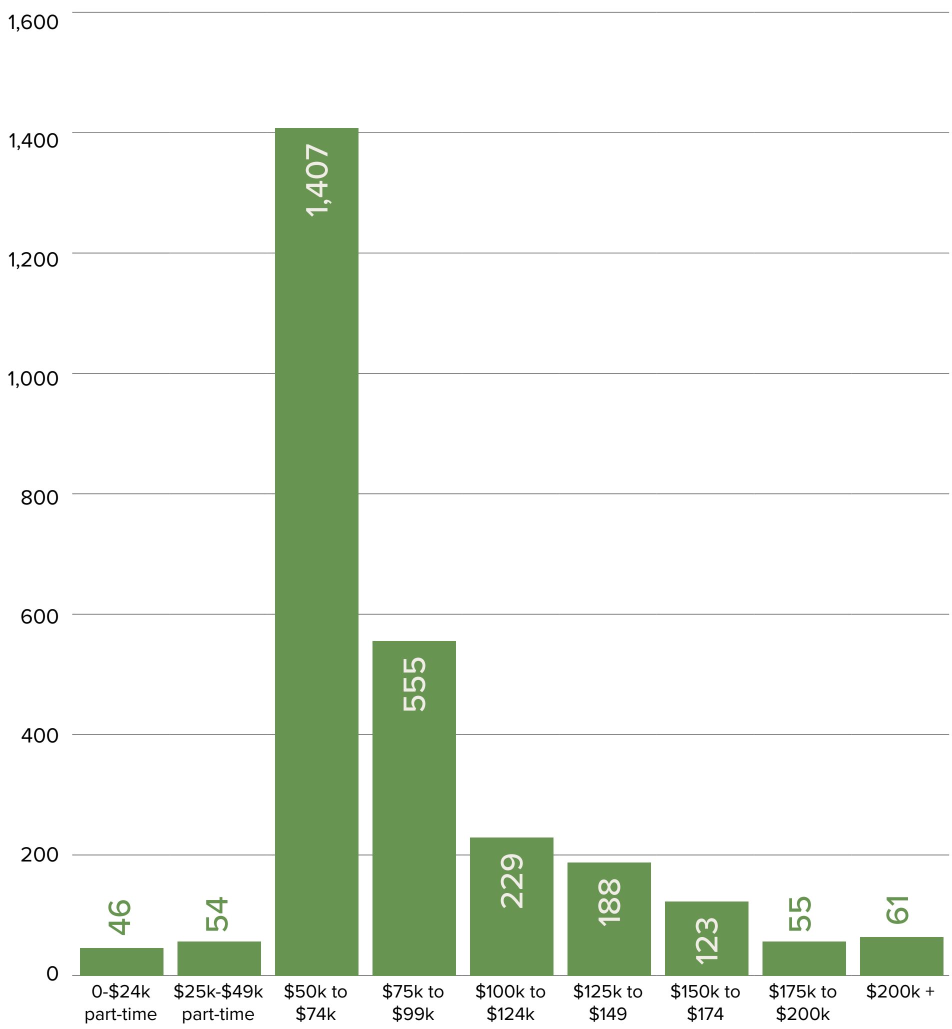
The average annual salary across the industry is $86,611, reflecting the mix of operational, technical and managerial roles within the workforce.

Recommendation

The average annual salary across the industry is $86,611, significantly higher than the Queensland average wage of $65,931 and broadly comparable with professional and technical industries. This demonstrates that workforce shortages are not solely driven by pay levels, but by competition for skilled labour, workforce availability and industry awareness.

Figure 11 Employees by base salary band

Queensland headcount



The average annual salary across the industry is $86,611, reflecting the mix of operational, technical and managerial roles within the workforce.

Tenure within organisations

Workforce tenure data indicates a relatively high level of recent turnover or workforce mobility. The largest tenure group comprises employees with 1–3 years of service (1,117 employees), followed by those with less than one year of tenure (689 employees).

Longer-tenured employees remain a significant component of the workforce, with 390 employees reporting tenure of 10 years or more, and a further 524 employees reporting tenure between 4 and 10 years.

This distribution suggests a workforce with a core of experienced staff alongside a substantial cohort of relatively recent entrants.

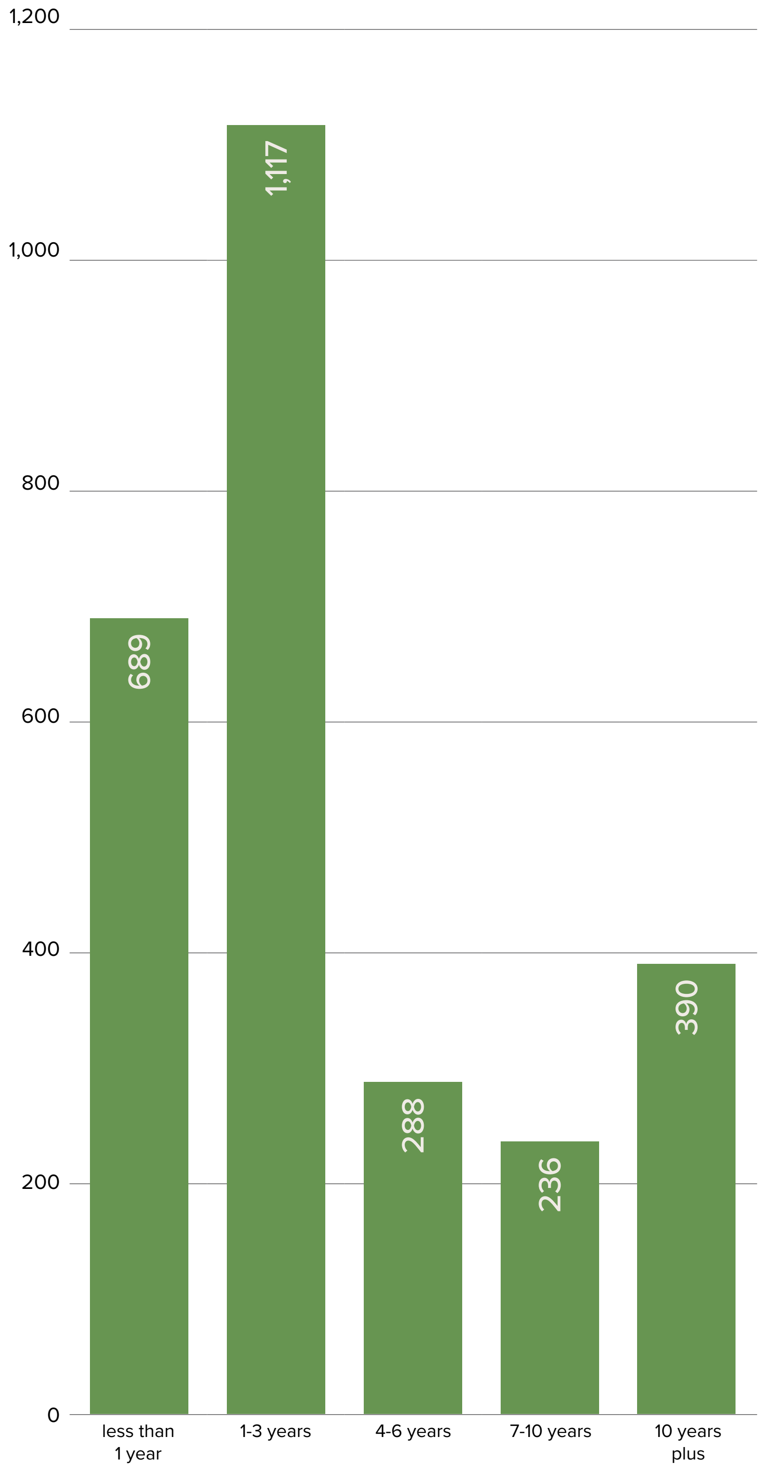
Compared with the national average, the Queensland waste and recycling industry has a similar proportion of employees with six to ten years' experience, but a smaller share who have worked in the industry for more than ten years. Instead, a larger proportion of the workforce has less than five years' tenure. As at February 2025, the ABS reports that 57 per cent of the Australian workforce has been with their current employer for less than five years, compared with 66.4 per cent in the Queensland waste and recycling industry.

On a national basis, employee mobility rates (measured as having changed jobs in the past year) are lowest in Electricity, Gas, Water and Waste Services (around 3 per cent), Public Administration (around 3 per cent), and Mining (around 4 per cent). In contrast, turnover is highest in Accommodation and Food Services (over 25 per cent) and Retail Trade (around 19 per cent).

While workforce mobility can introduce new skills and experience into the industry, the high proportion of employees with less than five years' tenure highlights the importance of structured onboarding, training and leadership development to support retention and long-term workforce capability.

Figure 12 Employees by tenure

Queensland headcount



Highest level of education

Educational attainment within the workforce is diverse. The most common highest level of education is Year 12, reported by 1,080 employees. A substantial proportion of employees hold Bachelor degrees or equivalent qualifications (740 employees).

Trade qualifications (Certificate III/IV) are held by 340 employees, while 500 employees hold either diploma-level or postgraduate qualifications. This mix reflects the operational, technical and professional skill requirements of the industry.

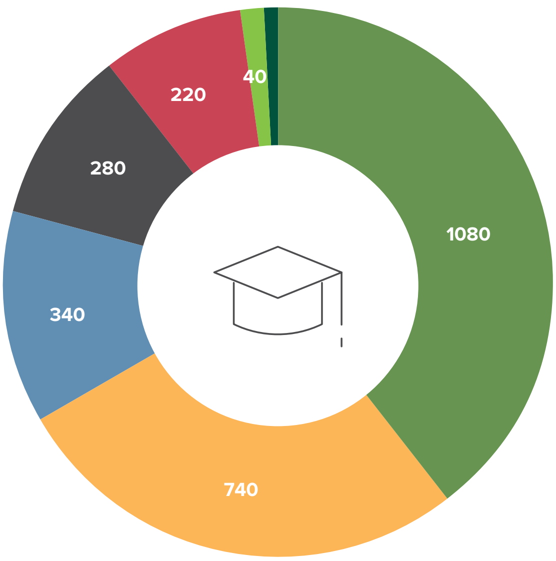


Figure 13 Employees by highest level of education

Queensland headcount

■	1,080	Year 12
■	740	Bachelor Degree or Equivalent
■	340	Trade Certificate/ Cert III/IV
■	280	Post Graduate Study
■	220	Diploma/Advanced Diploma
■	40	Year 10
■	20	Year 11

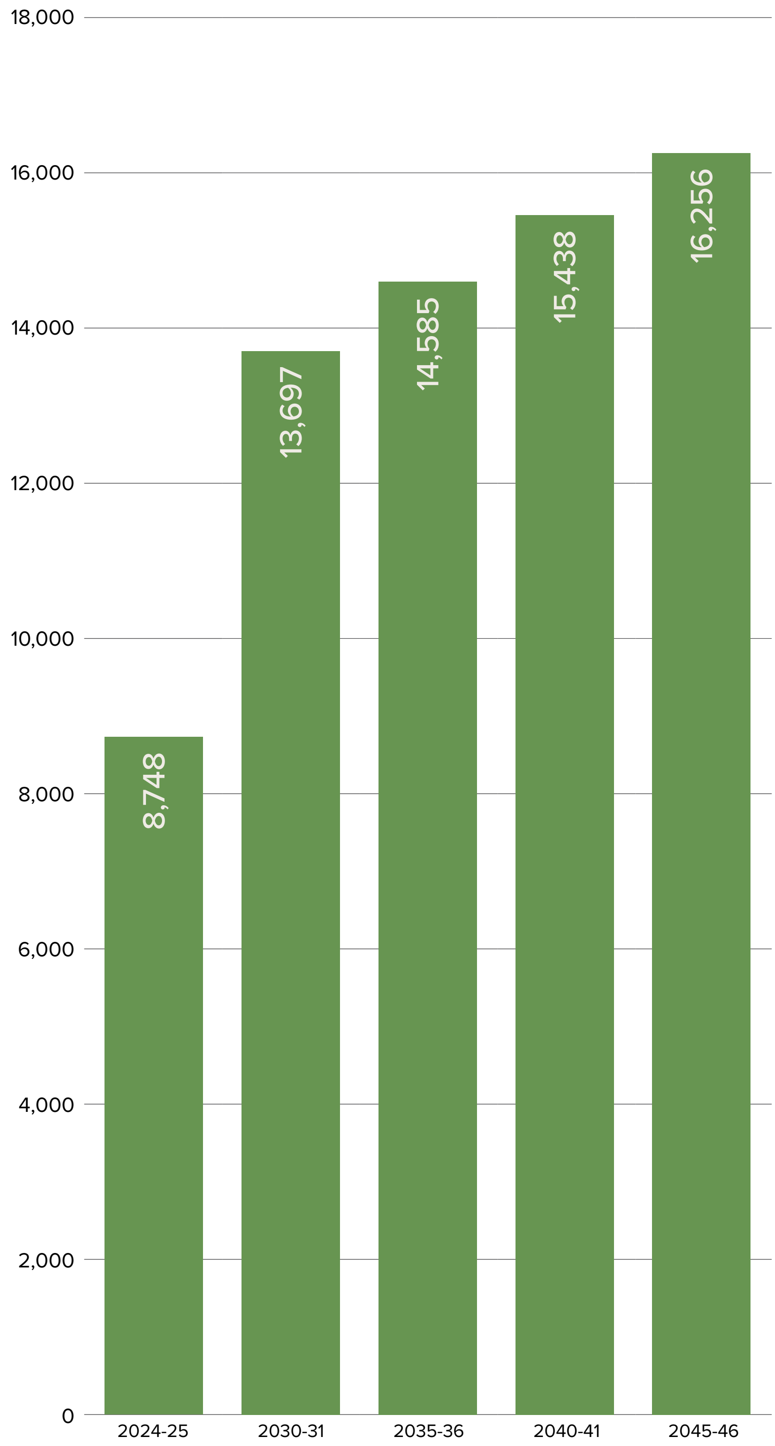
Future workforce requirements

Economic modelling undertaken by QEAS indicates that workforce demand within Queensland's waste and recycling industry is expected to increase significantly over the coming decades. Based on ABS medium-series population forecasts and government waste and recycling targets, total employment demand is projected to grow from 8,748 employees in FY2025 to approximately 13,397 employees by FY2031, and to 16,256 employees by FY2046.

This growth is driven by increasing waste volumes associated with population growth, alongside a structural shift from disposal towards recycling and energy recovery, which is expected to increase labour demand across processing, recovery and compliance-intensive activities.

Figure 14
Queensland waste management and resource recovery industry – future workforce requirement

headcount



05

Workforce Recruitment

Workforce sufficiency by role

Organisational census responses indicate that current staffing levels are not sufficient to meet operational needs in several frontline roles. The most substantial reported shortfalls are concentrated in operational occupations:

Managers
90.9%
reported staffing levels are **sufficient**

Professionals
14.3%
reported **insufficient** employees

Technicians and trades workers
28.6%
of businesses reported **insufficient** employees

Machinery operators and drivers
55.6%
of businesses reported they **do not have sufficient** employees in this category

Labourers
57.1%
of businesses reported they **do not have sufficient** employees

Sales workers
80%
of businesses reported staffing levels are **sufficient**

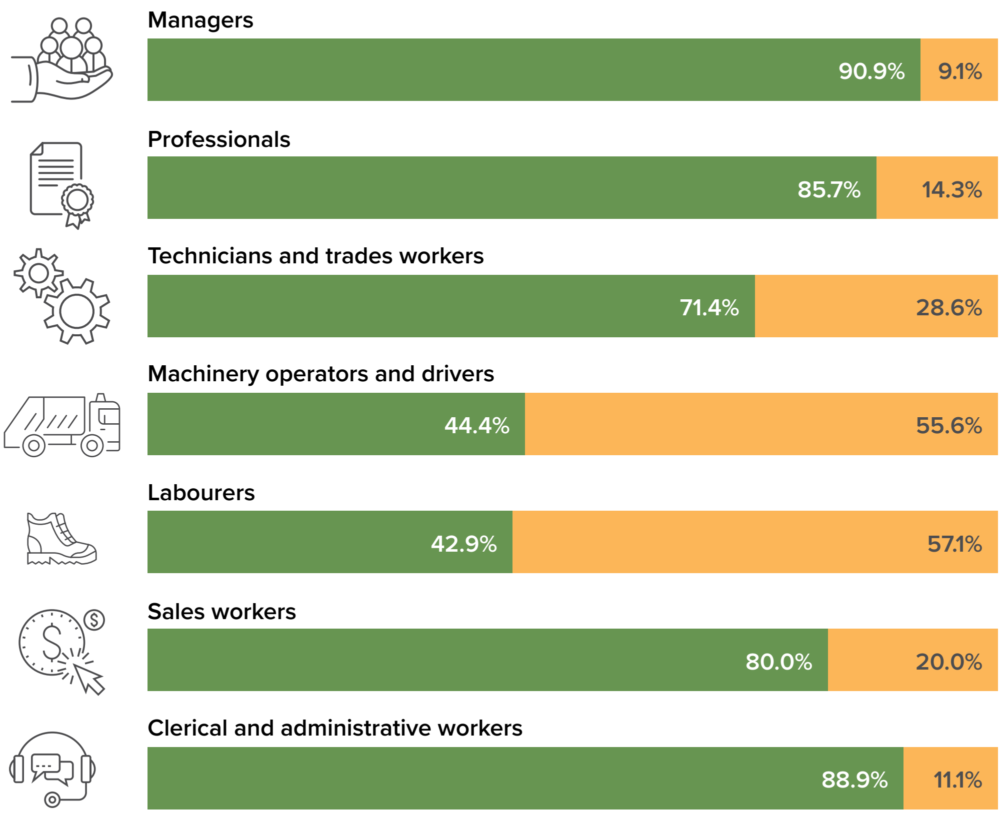
Clerical and administrative workers
88.9%
reported staffing levels are **sufficient**

Overall, the results indicate that while businesses report relatively adequate staffing in administrative and management roles, there are clear shortfalls in frontline operational roles critical to day-to-day service delivery.

Figure 15
Does the current number of employees meet the existing Queensland operational needs of the business/ organisation?

% of businesses

Yes
No

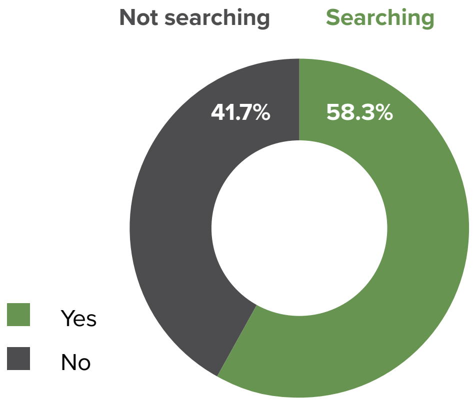


Current recruitment activity

Recruitment activity is widespread. 58.3% of responding businesses reported that they are currently or have recently been searching for new employees in Queensland.

Figure 16
Is the business/ organisation currently or recently searching for new employees in Queensland

% of businesses



Reported vacancies are concentrated in the same operational roles identified as insufficiently staffed, including machinery operators, drivers, labourers, and technicians/ trades (particularly mechanics and workshop roles). This consistency across workforce sufficiency and active recruitment indicates ongoing workforce pressure rather than short-term vacancy spikes.

Factors driving recruitment

Businesses reported that recruitment demand is driven primarily by:

- Staff turnover and replacement recruitment, including vacancies created by staff departures or terminations and challenges securing suitable applicants who remain long-term.
- Business growth and operational expansion, including increased waste volumes, expanded collection routes and growth in processing capacity.
- New projects and greenfield facilities, creating additional positions beyond baseline workforce requirements.
- Government policy and funding initiatives, which support investment in recycling and recovery infrastructure and can expand workforce demand.
- Internal promotions, which create vacancies in entry-level and mid-level roles.

Drivers indicate that recruitment demand reflects both workforce churn and structural industry expansion.

Drivers	Direct Quotes	Analysis
Staff turnover and retention issues	*"Turnover"* *"Lack of staff retention"* *"Vacancies through staff leaving or being terminated"* *"Staff turnover in the first few days/ months until a suitable applicant is found."*	This consistently shows up as a strong driver. Industry experience both voluntary departures (staff leaving for other opportunities or better conditions) and involuntary separations. High turnover, especially in "unskilled" roles and those facing "major" or "critical difficulty" in retention (like machinery operators and labourers), creates a need for continuous replacement recruitment. Finding a "suitable applicant" who then "tend[s] to stay long term" highlights that the initial recruitment phase is challenged by churn.
Business growth and operational expansion	*"Business growth and operational changes"* *"Natural turnover, internal promotions and business growth."*	The industry is expanding, driven by increasing waste volumes, stricter regulations, and a shift towards resource recovery. This organic growth necessitates more personnel to handle increased operations, new collection routes, and expanded processing capabilities.
New projects and greenfield facilities	*"Development of greenfield facilities"* *"Requirements on top of existing staff numbers is purely project based"* *"New projects"*	Significant capital investment in new infrastructure, such as greenfield recycling facilities, creates new job opportunities that require dedicated recruitment efforts. The Queensland Government's "Recycling and Jobs Fund" and various grants (e.g., ReMade in Queensland program) are explicitly aimed at boosting recycling capacity and creating jobs through new infrastructure.
Government funding and policy initiatives	*"State funding of Let's Get It Sorted and business growth through word of mouth in the local government sectors."*	More broadly, the Queensland Government's "Waste Management and Resource Recovery Strategy," including the waste levy and various funding programs (e.g., the $1.1 billion Recycling and Jobs Fund, ReMade in Queensland program), are designed to stimulate investment in recycling infrastructure and create jobs. This governmental push directly drives the need for a larger and more skilled workforce.
Internal promotions	*"Natural turnover, internal promotions."*	As employees are promoted internally to fill higher-level roles, their previous positions become vacant, driving recruitment for those entry or mid-level positions. This is a healthy sign of career pathways but still contributes to overall recruitment needs.

Difficulty finding qualified and/or suitable applicants

Census results indicate significant difficulty sourcing qualified and suitable applicants in several roles.

Machinery operators and drivers	Technicians and trades workers	Labourers
88.9% of businesses reported **difficulty** finding quaified applicants	**71.5%** of businesses reported **difficulty** or **very high difficulty** 42.9 per cent difficult and 28.6 per cent very difficult	**50%** of businesses reported **difficulty** finding suitable applicants

Qualitative comments suggest that perceived "candidate quality" issues are shaped by a combination of experience requirements, labour market competition and role-specific conditions. One respondent noted challenges attracting candidates due to perceptions of the industry, particularly for landfill roles.

Regional employer workshop insights (November 2025)

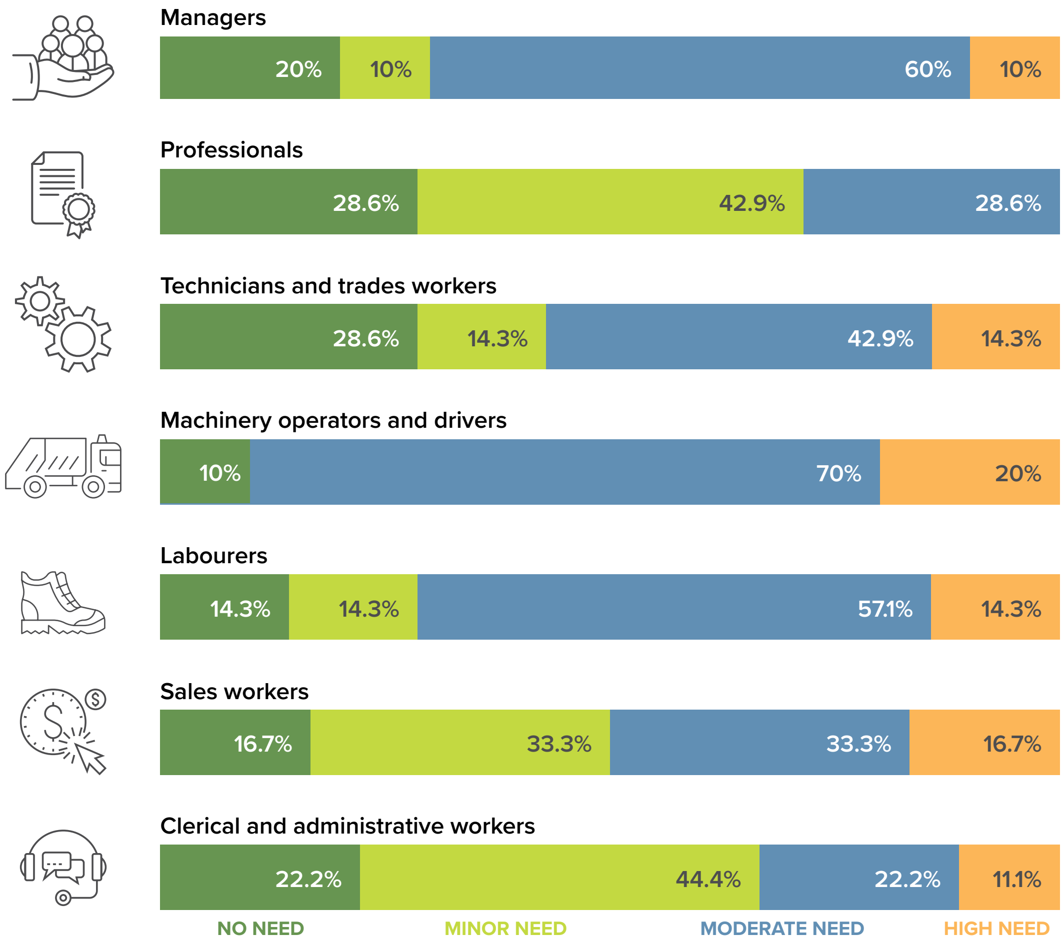
Census results indicate significant difficulty sourcing qualified applicants in several roles:

Regional employer workshop insights reinforced these findings, highlighting persistent recruitment difficulty for specialised operational roles, including side-loader waste collection truck operators, and noting that recruitment in regional areas is particularly constrained where the resources sector offers higher pay and roster conditions.

Figure 17
Level of ease or difficulty in trying to find qualified applicants to fill positions in Queensland

% of businesses

- No need
- Minor need
- Moderate need
- High need
- Urgent need



Drivers of workforce development

Businesses report that workforce development needs are driven by a combination of external and internal factors.

Key external drivers include business growth and new projects, which require employees to be equipped with skills aligned to expanding operations and new infrastructure; technological advancement and mechanisation, which are reshaping operational roles; and regulatory and compliance requirements, which necessitate ongoing training to ensure workforce competence and risk management.

Internal drivers include succession planning for an ageing workforce, the need to maintain operational continuity as experienced staff retire, and a focus on continuous improvement and operational efficiency. Competition for skilled labour also influences workforce development, as employers seek to attract and retain staff through skill development opportunities.

Collectively, these drivers indicate an increasingly dynamic skills environment in which workforce capability requirements are continuing to evolve.

Industry workshop insights on training and capability

Qualitative insights from the Regional Employer Workshop (November 2025) reinforce the census findings and provide additional context on workforce development challenges.

Workshop participants consistently reported that it is rare to recruit workers who are already fully trained for specialised waste and recycling roles, particularly side-lift drivers, landfill operators and machinery operators. Participants noted that many of these roles require skills that differ substantially from comparable roles in civil construction or general transport, and that competence can take years to develop rather than being achieved through short training courses.

Training was described as predominantly internal and competency-based, with employers responsible for verification of competency (VOC) in line with workplace health and safety requirements. While formal qualifications were viewed as useful, participants emphasised that possession of a certificate does not necessarily equate to operational competence in complex waste environments.

Several workshop participants identified limited access to qualified trainers and the challenge of balancing training requirements with operational demands as barriers to workforce development. Training was commonly delivered on an “as-needed” basis, supported by internal training matrices, refresher requirements and cross-training to build workforce flexibility.

Training and development programs currently used

Organisational census responses indicate that most businesses provide some form of training and development, with the most common approaches being internally delivered program.

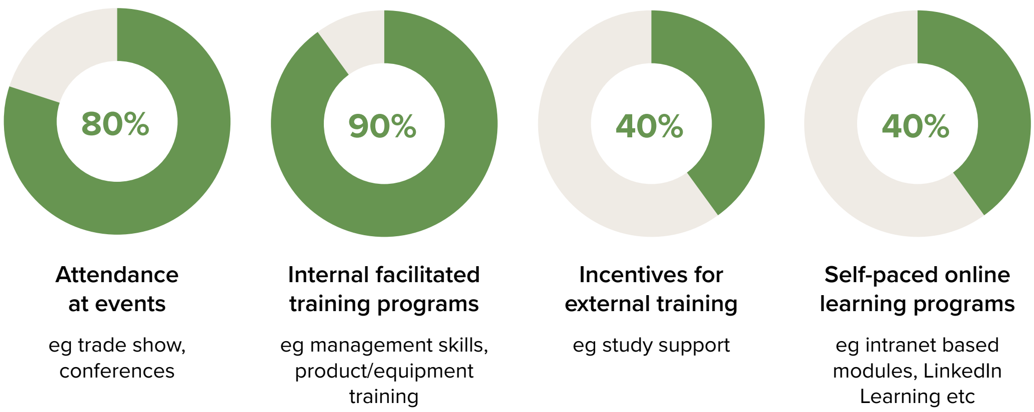
- **Internal facilitated training programs** are offered by 90.0 per cent of businesses, covering areas such as equipment operation, safety induction, management skills and site-specific procedures.
- **Attendance at industry events** (such as conferences and trade shows is supported by 80.0 per cent of businesses.
- **Incentives for external training** (including study support) are offered by 40.0 per cent of businesses
- **Self-paced online learning programs** are offered by 40. per cent of businesses, often linked to contractual or compliance requirements.

Industry-specific vocational training participation has increased significantly over the past five years. In the latest financial year, 282 industry workers were undertaking a Certificate III in Waste Management (Recycling or Rubbish Collector) and 179 industry workers were undertaking a Certificate IV in Waste Management (Program or Project Administrator). This compares with five years ago when there were only 156 Certificate III enrolments and 14 Certificate IV enrolments. The growth confirms industry feedback that greater emphasis is now being placed on industry-specific training to meet workforce needs.

While training activity is widespread, qualitative responses indicate that businesses recognise scope to improve the depth, consistency and portability of training outcomes, particularly for smaller operators with limited internal training capacity.

Figure 18
Which ongoing training and development programs does your business/ organisation offer to Queensland employees?

% of businesses



06

Workforce Retention

Roles experiencing retention difficulty

All companies (100 per cent) reported some level of difficulty in workforce retention. Organisational census data indicates that retention challenges are most pronounced in frontline operational roles, particularly machinery operators, drivers and labourers.

Machinery operators and drivers

55.6 per cent of businesses reported major difficulty retaining staff in these roles, with a further **11.1 per cent** reporting critical difficulty. This combined **66.7 per cent** represents the highest reported retention challenge across all occupational categories.

Labourers

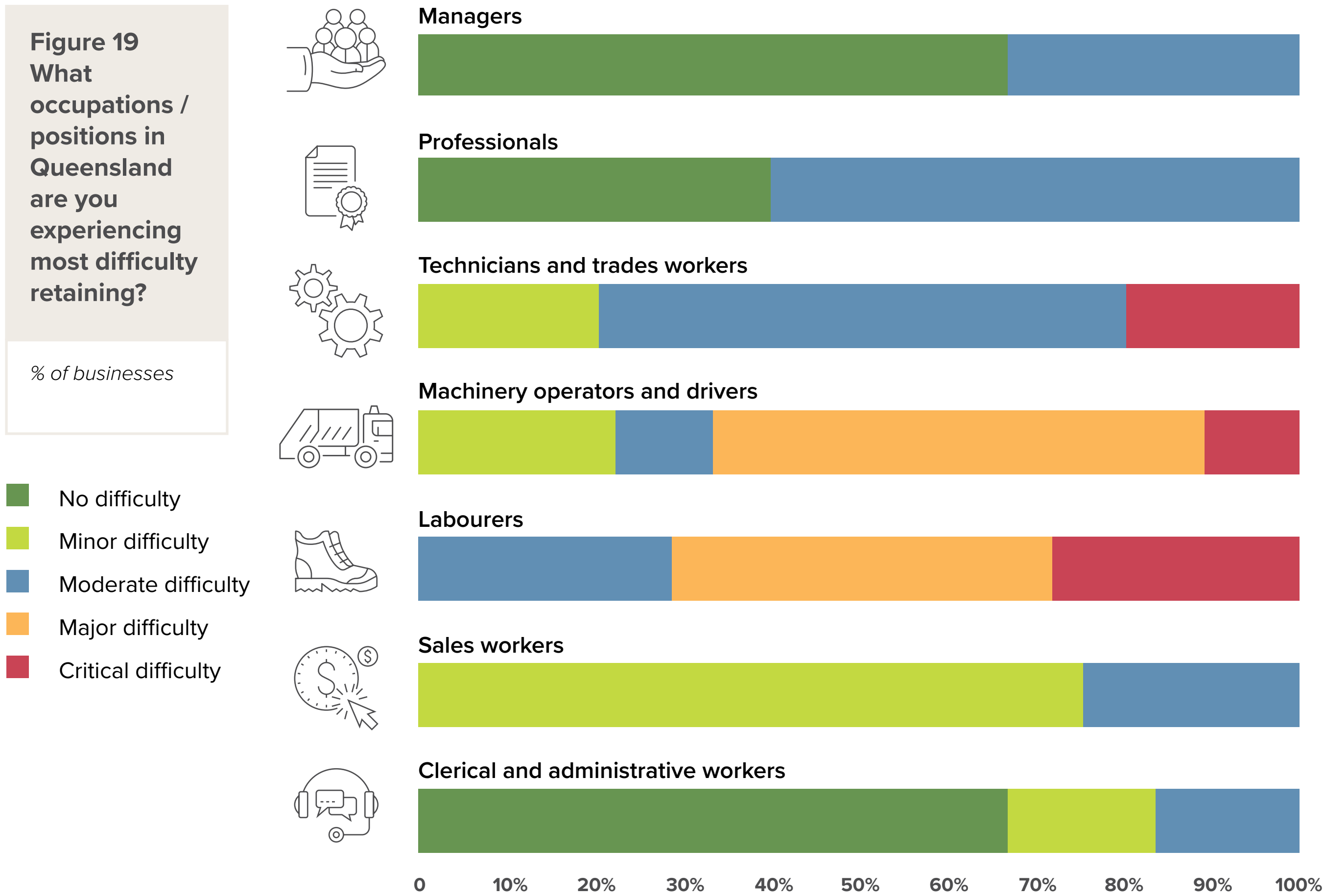
42.9 per cent of businesses reported major difficulty and **28.6 per cent** reported critical difficulty, resulting in a combined **71.5 per cent** experiencing significant retention challenges.

Technicians and trades workers

Retention difficulty is also evident, with **60.0 per cent** reporting moderate difficulty and **20.0 per cent** reporting critical difficulty.

Figure 19 What occupations / positions in Queensland are you experiencing most difficulty retaining?

% of businesses



Retention-related policies and practices

Survey responses indicate that many businesses have implemented baseline employment practices that support retention. Equal pay and conditions and flexible work arrangements are each reported by 80.0 per cent of responding businesses.

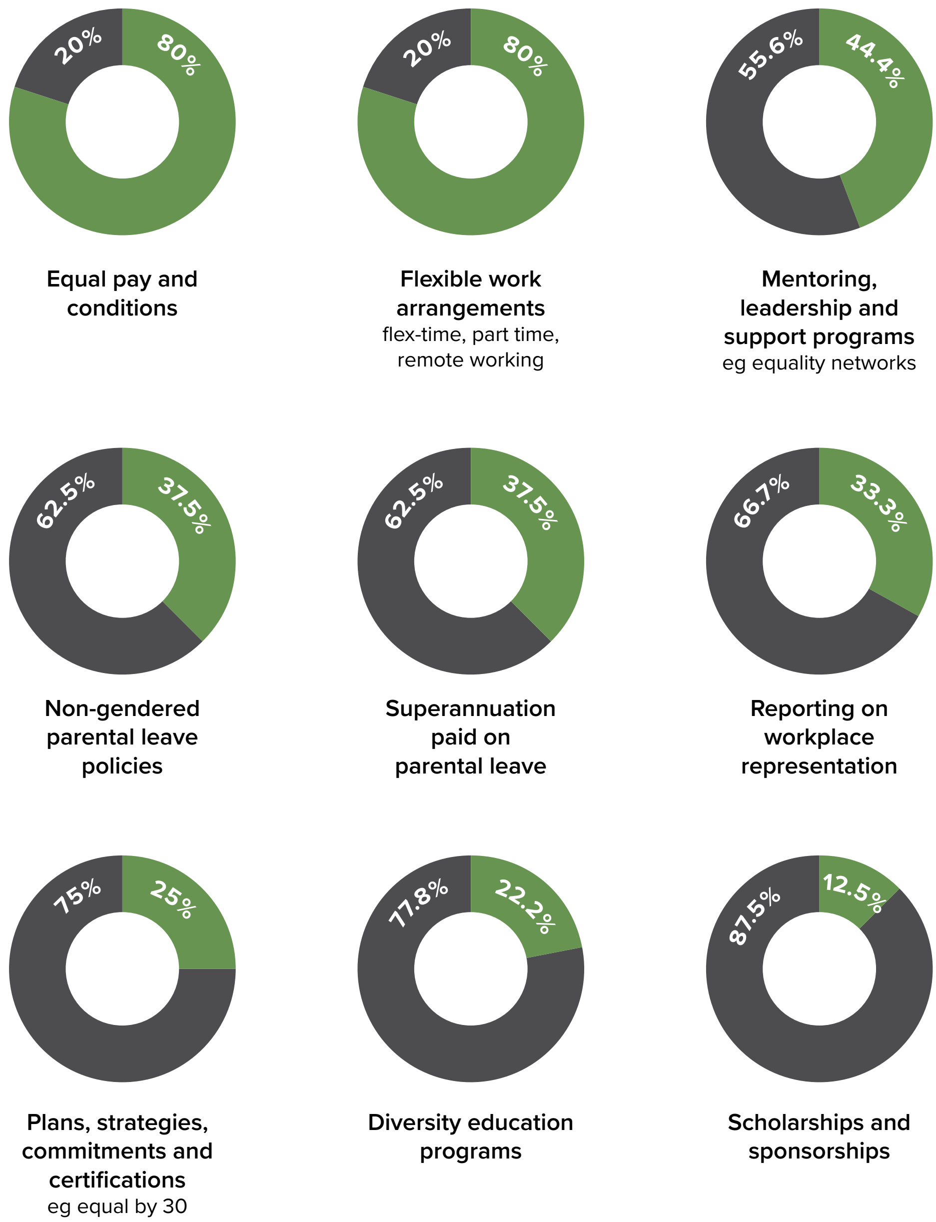
However, the prevalence of more formal or structured retention-related initiatives is lower. Less than half of businesses reported having mentoring, leadership or support programs (44.4 per cent) or non-gendered parental leave policies (37.5 per cent). Fewer businesses reported offering superannuation paid on parental leave (37.5 per cent) or formal reporting on workforce representation (33.3 per cent).

Policies specifically focused on diversity education programs (22.2 per cent) and scholarships or sponsorships (12.5 per cent) were reported by a relatively small proportion of respondents.

Figure 20
Does your business/ organisation have any of the following diversity policies in place for Queensland employees?

% of businesses

Yes
No



Industry workshop insights on retention

Qualitative insights from the Regional Employer Workshop (November 2025) provide additional context on retention practices and challenges.

Workshop participants described retention strategies that focus on lifestyle and workplace culture, including predictable working hours, weekday-only rosters, approachable management practices, and maintaining a supportive and collegial work environment. Participants emphasised the importance of listening to employees, minimising direct commercial pressure on drivers, and fostering strong interpersonal relationships within teams.

Additional strategies reported included the use of bonus incentives, informal professional networking among drivers, and cross-training to increase workforce flexibility.

Participants also highlighted challenges associated with an ageing workforce and the absence of clearly defined pathways for new entrants. At the same time, the longevity and stability of the industry were viewed as strengths, with workshop participants identifying potential for structured entry pathways to support longer-term workforce sustainability.

Alignment between employer and employee priorities

Findings from the organisational census and employee survey indicate differences in how workplace attributes are prioritised by employers and employees.

Employers tend to focus on operational and commercial considerations, while employee survey responses highlight the importance of leadership quality, remuneration, work–life balance and career development in retention decisions. These differences underscore the complexity of retention dynamics within the industry and reinforce the importance of understanding workforce perspectives alongside organisational priorities.

Employee perspectives on retention

Findings from the Employee Survey provide critical insight into the factors influencing retention within the Queensland waste and recycling workforce. Responses highlight a strong alignment between employee motivations, workplace experience, and broader workforce sustainability risks identified through the organisational census and regional employer workshop.

Across all responses, employees consistently prioritised work–life balance, leadership quality, meaningful work, and opportunities for growth as decisive factors in their decision to remain in the industry.

Work–life balance and wellbeing

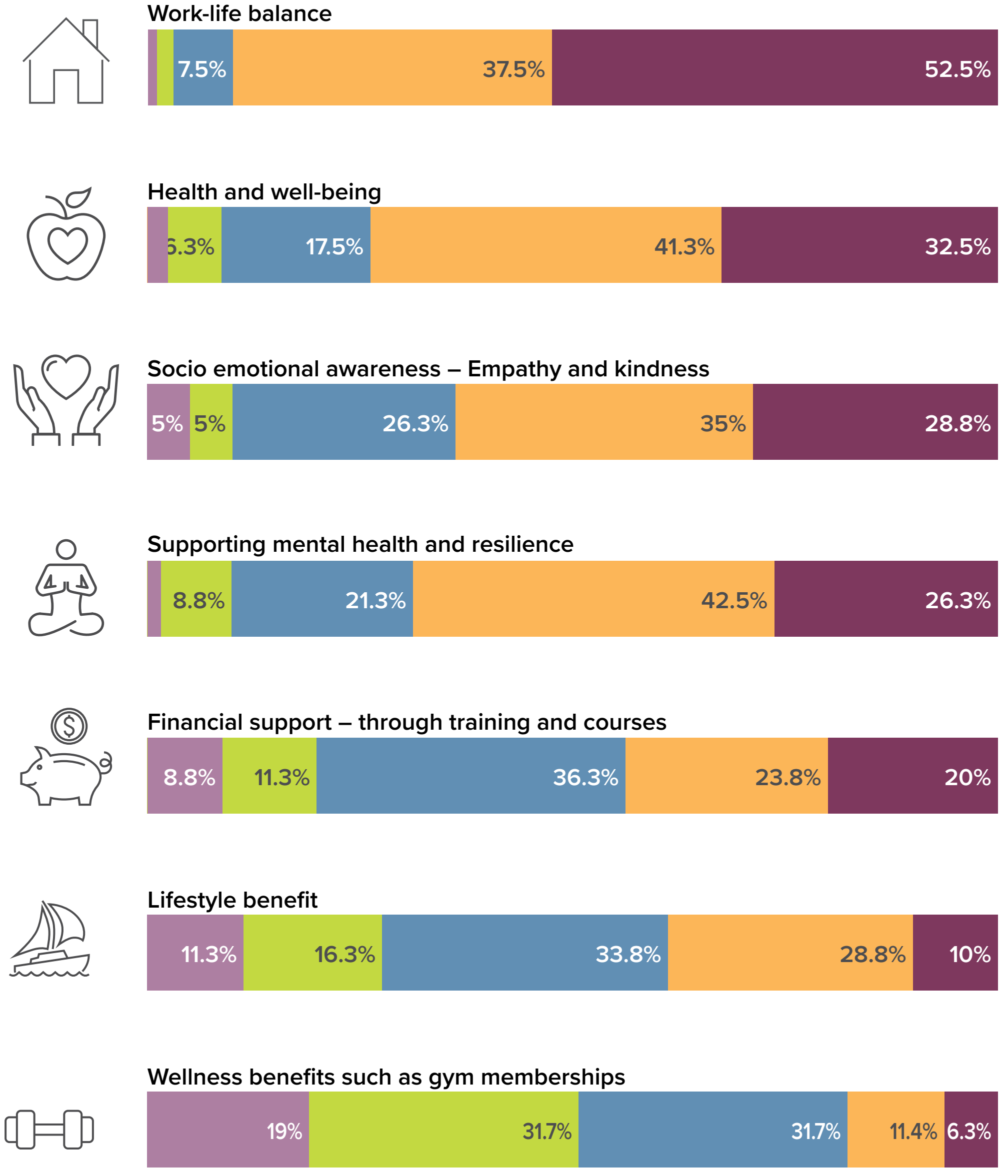
Work–life balance emerged as one of the most critical retention factors, with 90.0% of employees identifying it as very or extremely important. Flexibility, autonomy, and respect for personal time were repeatedly cited as central to sustained engagement.

Despite its importance, work–life balance also represents the largest gap between employee expectations and lived experience. Many respondents reported long hours, workload pressure, and limited flexibility, particularly in office-based and managerial roles. Mental health support and broader wellbeing measures were also highly valued, reinforcing the need for employers to address workload, resourcing, and organisational practices as part of retention strategies.

Figure 21 Importance of wellbeing for employee retention?

% of businesses

Not at all important
Slightly important
Moderately important
Very important
Extremely important



Leadership, culture, and trust

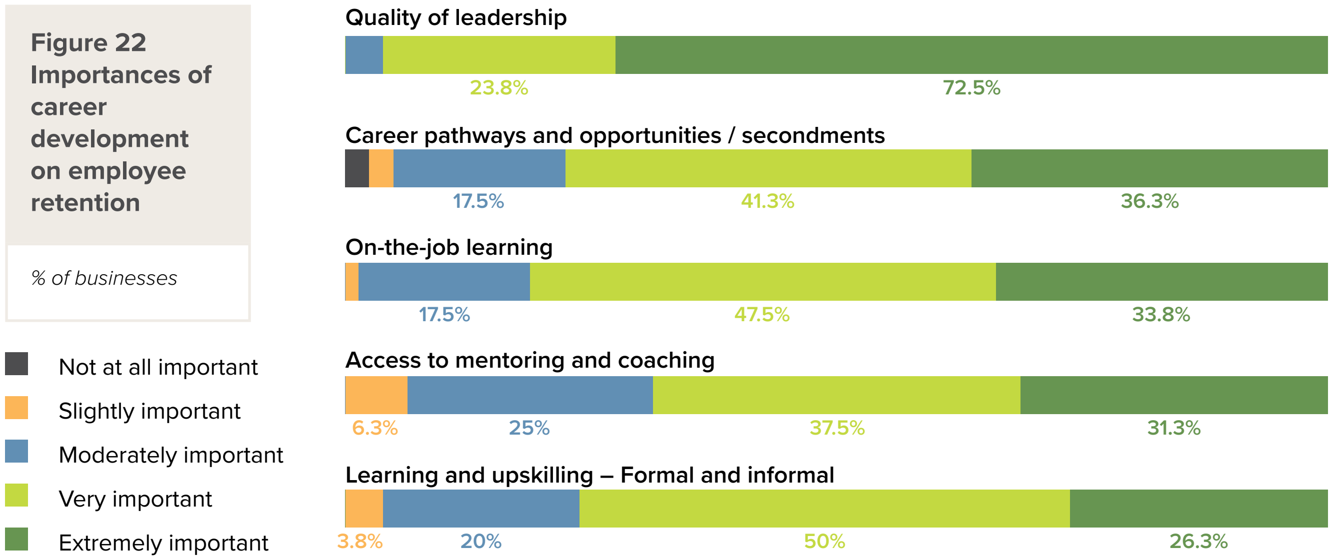
Leadership quality was identified as one of the strongest determinants of retention, with 96.3% of employees rating it as very or extremely important. Employees emphasised the importance of ethical leadership, transparency, communication, and inclusive workplace cultures.

While some respondents reported positive experiences with supportive leaders and strong team environments, others highlighted challenges including poor communication, inconsistent leadership capability, and limited accountability. Concerns relating to gender equity and inclusiveness were also raised, particularly in operational environments perceived as male-dominated.

These findings indicate significant variability in leadership capability across the sector and point to leadership development as a critical lever for workforce retention.

Figure 22 Importances of career development on employee retention

% of businesses



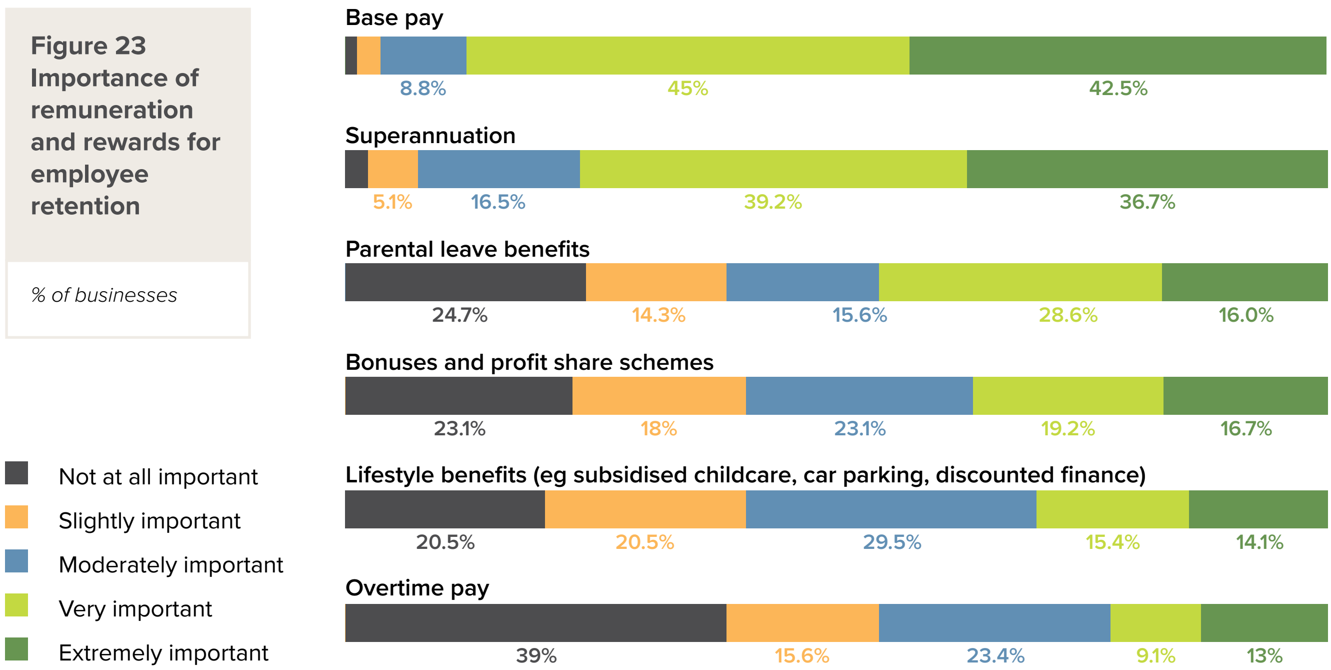
Remuneration and job security

Fair and competitive base pay remains a foundational requirement for retention, with 87.5% of employees identifying it as important. Superannuation and job security were also highly valued, reflecting the importance of financial stability in an industry characterised by physically demanding roles and regulatory complexity.

While employees recognise the sector's inherent stability as an essential service, dissatisfaction was expressed where remuneration did not keep pace with cost-of-living pressures or where workload expectations were perceived to outweigh financial reward.

Figure 23 Importance of remuneration and rewards for employee retention

% of businesses



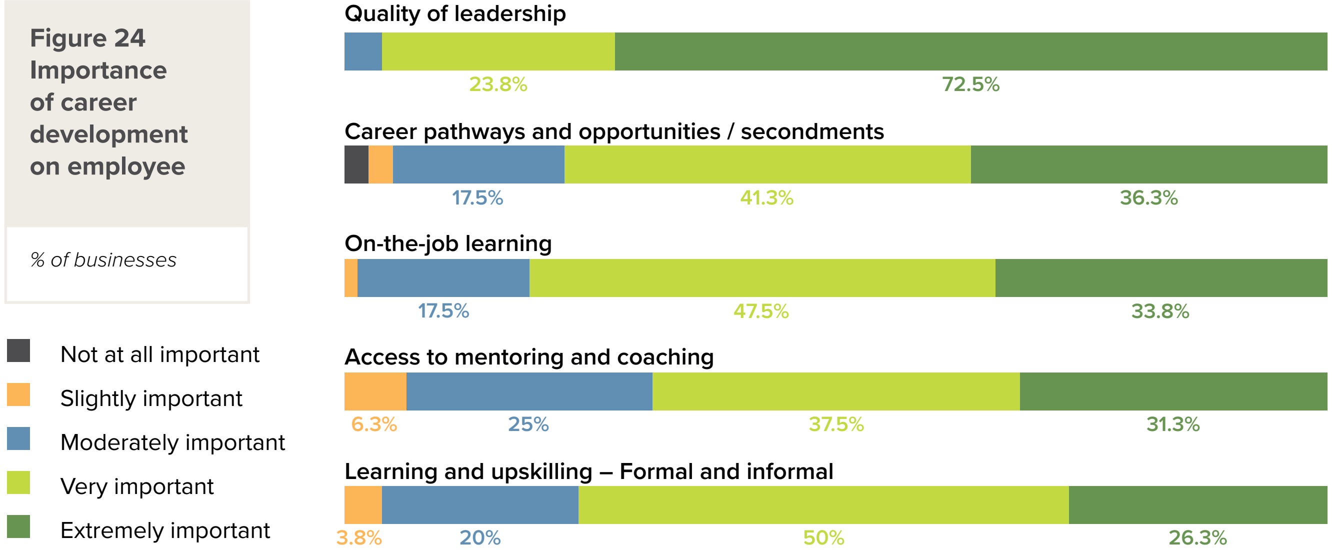
Career development and progression

Opportunities for learning, upskilling, and clear career pathways were consistently identified as key retention drivers. On-the-job learning (81.3%), access to training (76.3%), and visible career pathways (77.6%) were all rated as highly important.

Employees value practical, applied development opportunities and mentoring, particularly where these lead to progression or skill recognition. The absence of structured pathways and inconsistent access to formal training were cited as frustrations, reinforcing the importance of coordinated, industry-led workforce development initiatives.

Figure 24 Importance of career development on employee

% of businesses



Purpose, values, and industry reputation

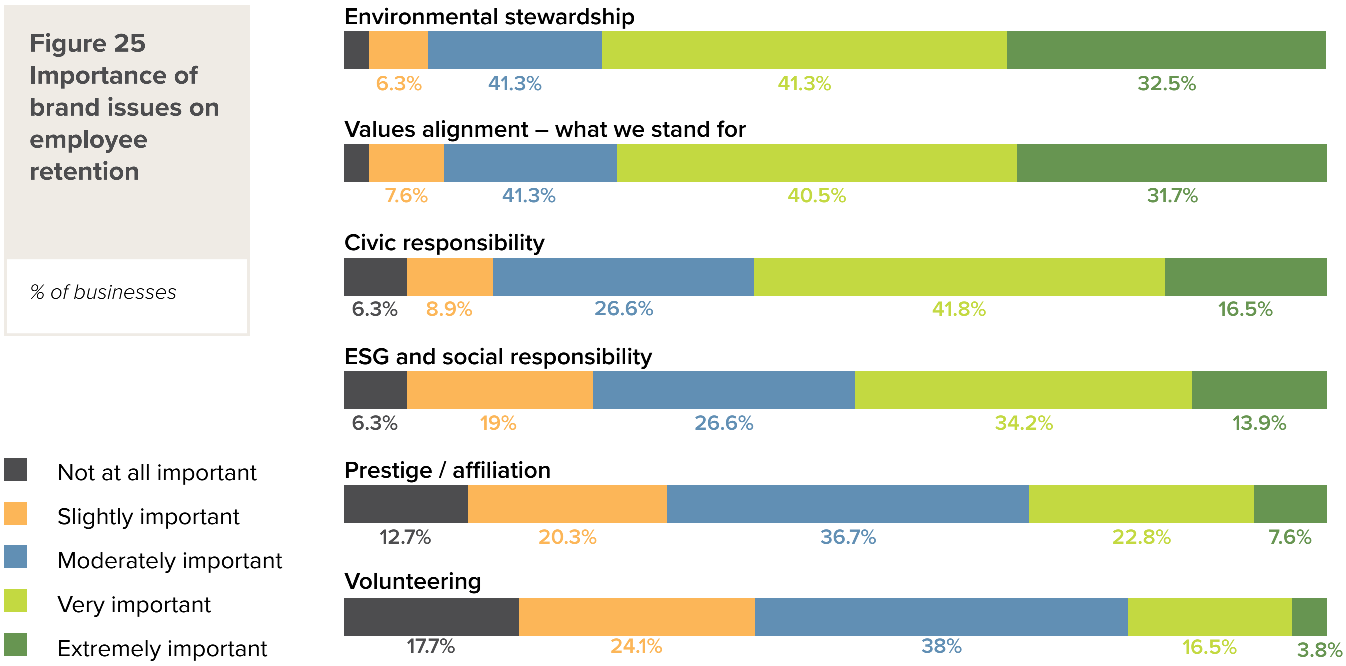
Employees demonstrate a strong connection to the purpose-driven nature of the waste and recycling industry. Environmental stewardship (73.8%) and alignment with organisational values (72.2%) were identified as important factors influencing engagement and retention.

Many respondents described a sense of pride in contributing to environmental outcomes and the circular economy, often noting that the industry proved more complex, innovative, and rewarding than initially expected. This intrinsic motivation represents a significant retention asset for the sector.

However, employees also expressed frustration with negative public perceptions of the industry and inconsistent government policy settings, which can undermine morale and long-term engagement.

Figure 25 Importance of brand issues on employee retention

% of businesses



Workforce retention risk profile

Evidence from the organisational census, employee survey, and regional employer workshop indicates that workforce retention represents a material risk to the stability and capacity of Queensland's waste and recycling industry, particularly in frontline operational roles.

Retention challenges are most acute among Machinery Operators, Drivers, and Labourers, where a combined 66.7 per cent to 71.5 per cent of businesses report major or critical difficulty retaining staff. These roles are foundational to service continuity, safety, and regulatory compliance, and sustained attrition in these occupations directly impacts operational resilience.

Employee survey results corroborate employer-reported challenges and provide insight into the underlying drivers of attrition. Employees place high importance on work–life balance, leadership quality, remuneration, career development, and meaningful work, yet significant gaps exist between expectations and experience in several of these areas.

The most pronounced risk factor identified is work–life balance, which employees rate as critically important but frequently report as falling short in practice. Long hours, workload pressure, and limited flexibility – particularly in office-based and supervisory roles – contribute to fatigue and disengagement, increasing the likelihood of turnover.

Leadership capability and organisational culture represent a second critical risk dimension. While leadership quality is almost universally valued by employees, experiences vary considerably across organisations. Inconsistent leadership practices, limited transparency, and perceived inequities – including gender imbalance in operational environments – undermine retention and workforce cohesion.

Remuneration pressures further compound retention risk. While the industry offers stable employment as an essential service, competition from higher-paying sectors, particularly mining, continues to draw experienced operators away. Employee feedback indicates that while remuneration alone is not sufficient to retain staff, inadequate pay relative to workload and cost-of-living pressures accelerates attrition when combined with other stressors.

Career development and progression pathways also emerge as a key determinant of retention. Employees demonstrate strong demand for on-the-job learning, formal training, mentoring, and visible pathways for advancement. However, employer evidence indicates that access to structured, accredited training remains inconsistent, with many businesses relying on internal or informal competency verification due to cost, availability, or operational constraints.

Notably, employee responses highlight purpose and environmental impact as a significant retention asset for the industry. Many employees report stronger-than-expected engagement due to the complexity, innovation, and societal value of waste and recycling work. This intrinsic motivation provides a critical foundation on which retention strategies can be built, but is insufficient to offset structural challenges without complementary investment in leadership, training, and workforce supports.

The convergence of these factors – operational role shortages, competition for labour, workload pressure, inconsistent leadership capability, and limited access to structured training – indicates that retention challenges are systemic rather than isolated. Without targeted intervention, these risks are likely to intensify as workforce demand grows in line with population growth, infrastructure expansion, and circular economy targets.

This evidence base demonstrates that workforce retention in the Queensland waste and recycling industry cannot be addressed through employer action alone. Coordinated, industry-led initiatives – supported by government funding and policy alignment – are required to stabilise the workforce, reduce attrition in critical roles, and ensure the industry can meet future service, safety, and environmental obligations.

Linking employer and employee evidence

The workforce retention challenges identified by employers are strongly reinforced by employee survey findings. While employers report persistent difficulty retaining frontline operational staff, the employee evidence provides insight into why these pressures are intensifying – highlighting gaps between employee expectations and experience in areas such as leadership quality, work-life balance, workload management, and access to career development. The following section presents the detailed employee survey results that underpin this analysis and inform the evidence-led opportunities outlined later in this report.

Coordinated, industry-led initiatives – supported by government funding and policy alignment – are required to stabilise the workforce, reduce attrition in critical roles, and ensure the industry can meet future service, safety, and environmental obligations.

07

Employee Survey Results (Quantitative Evidence)

This section presents detailed results from the employee survey. Interpretive analysis is addressed in Sections 7 and 9 (Evidence-led Opportunities).

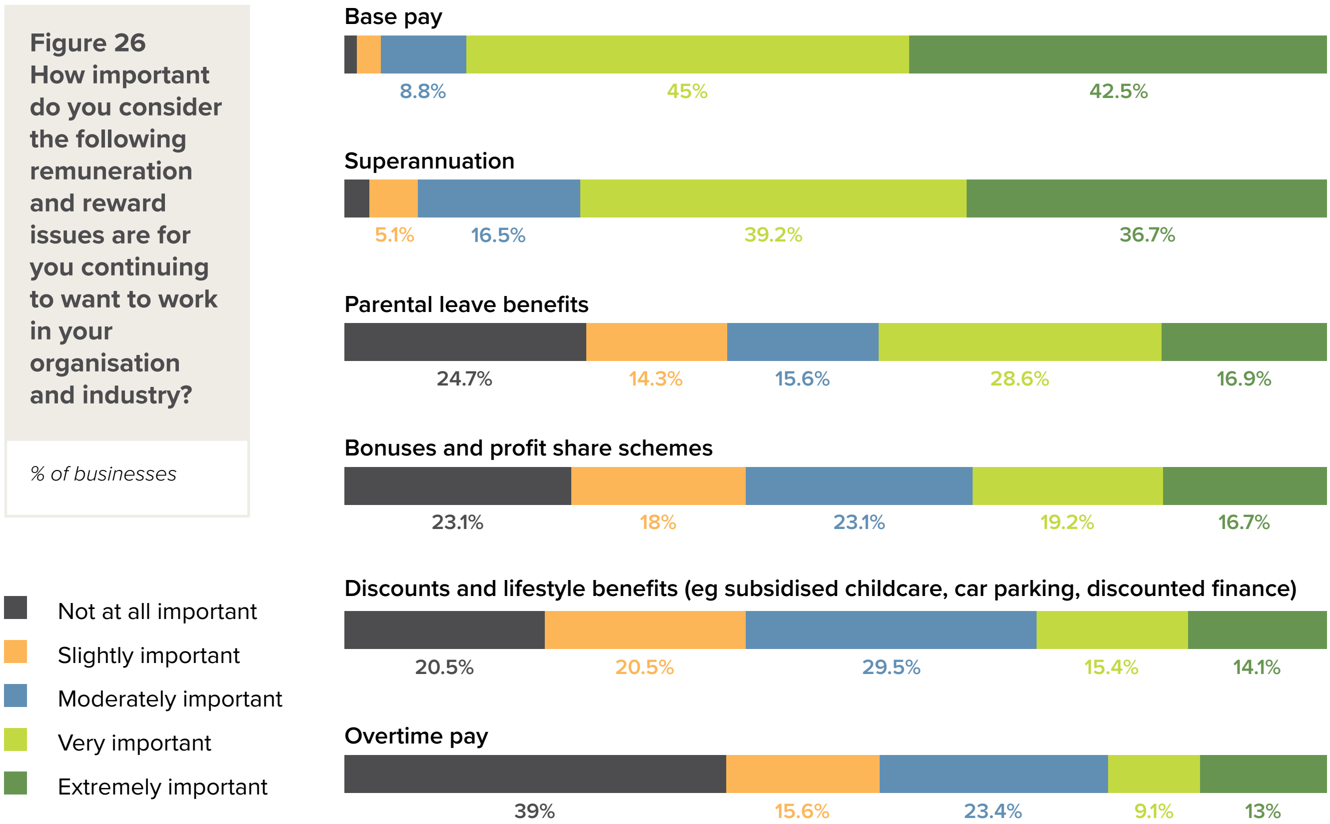
Importance of workplace factors for employee retention

This section summarises employee ratings of the workplace factors most influential to retention within the waste and recycling industry.

Remuneration and reward factors

Figure 26
How important do you consider the following remuneration and reward issues are for you continuing to want to work in your organisation and industry?

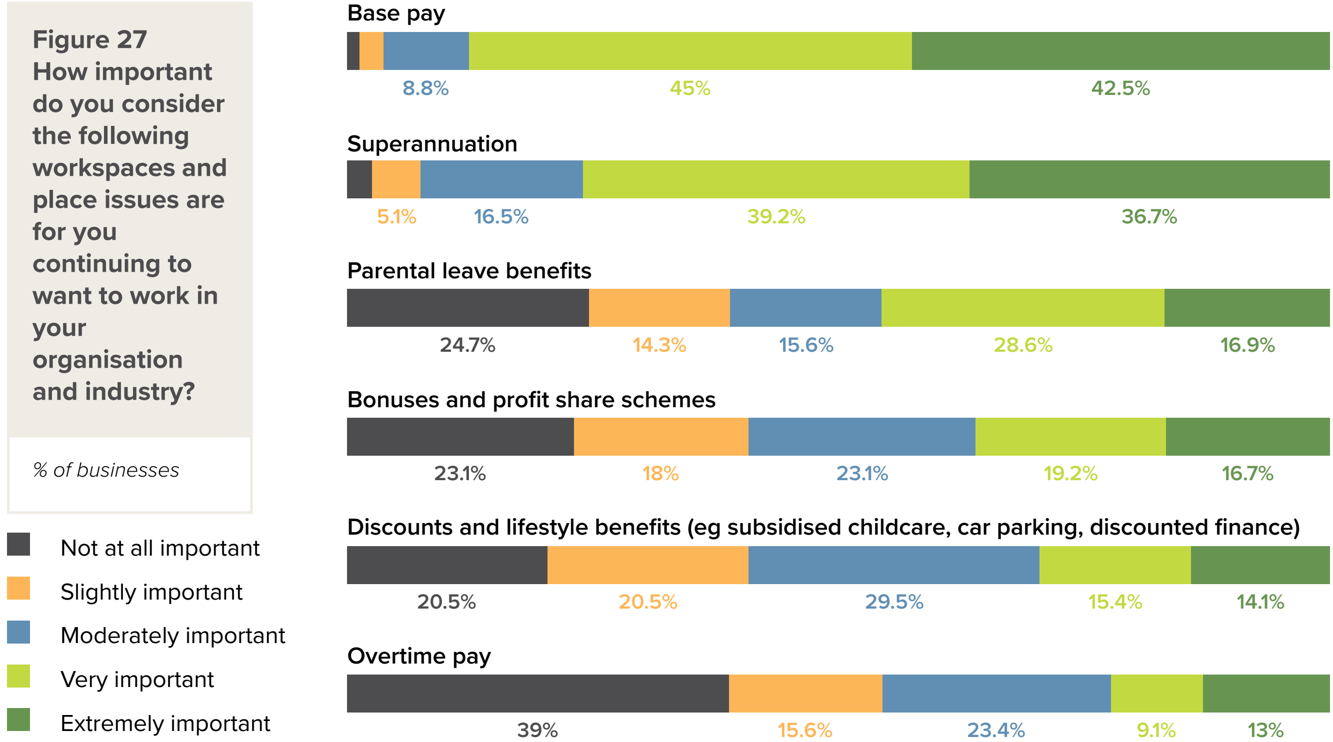
% of businesses



Workspaces and place factors

Figure 27 How important do you consider the following workspaces and place issues are for you continuing to want to work in your organisation and industry?

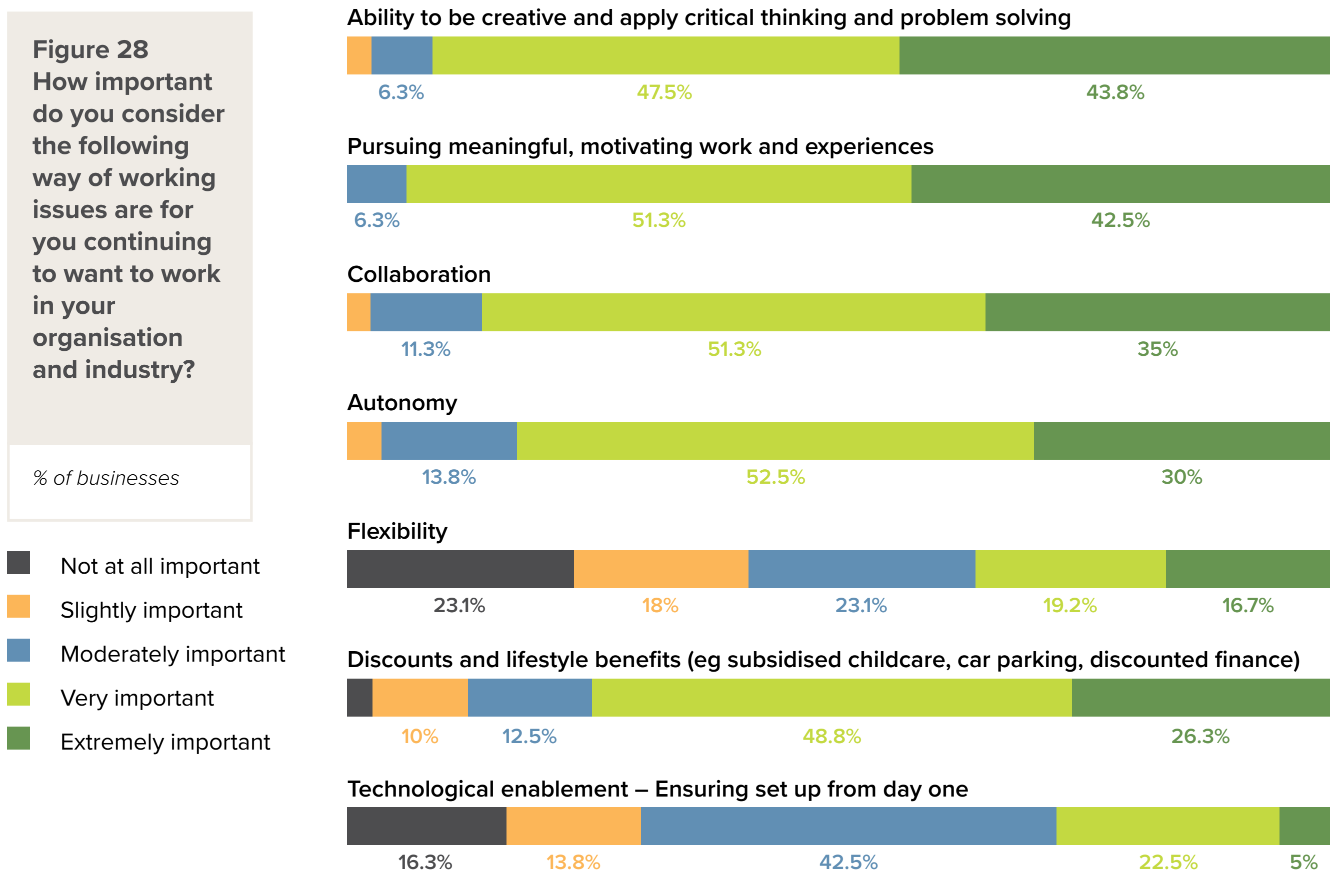
% of businesses



Ways of working and flexibility

Figure 28 How important do you consider the following way of working issues are for you continuing to want to work in your organisation and industry?

% of businesses

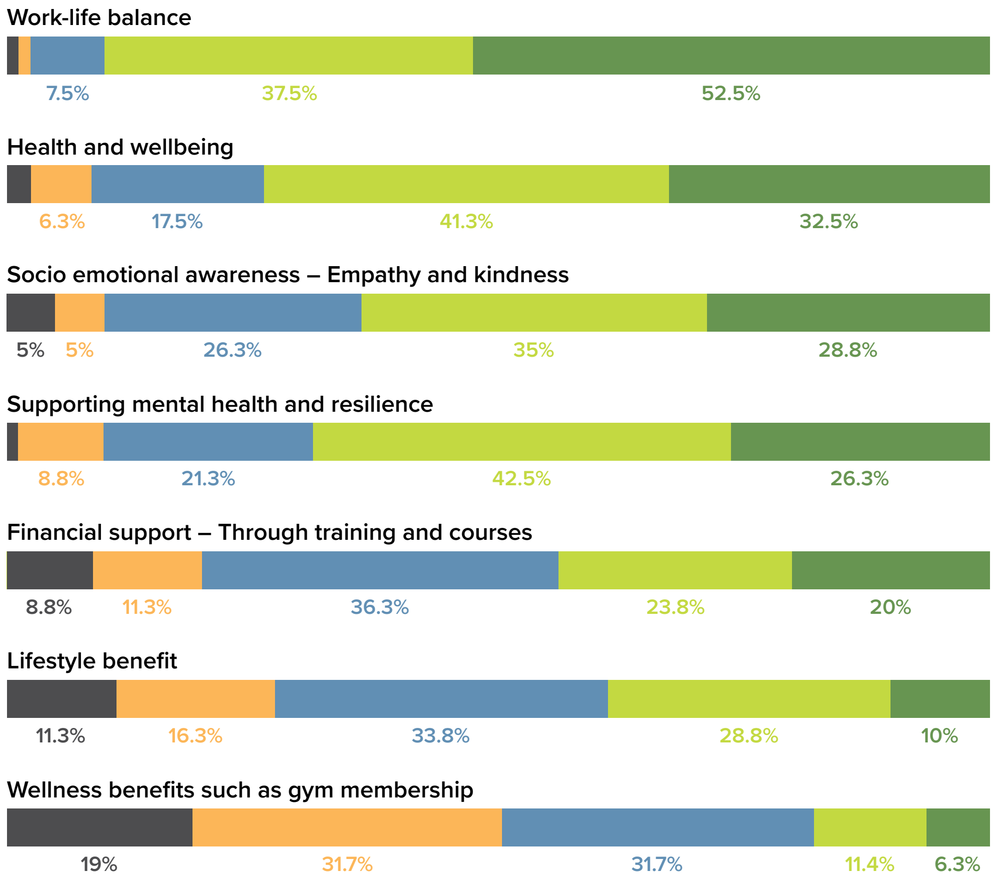


Wellbeing and support factors

Figure 29
How important do you consider the following wellbeing issues are for you continuing to want to work in your organisation and industry?

% of businesses

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important

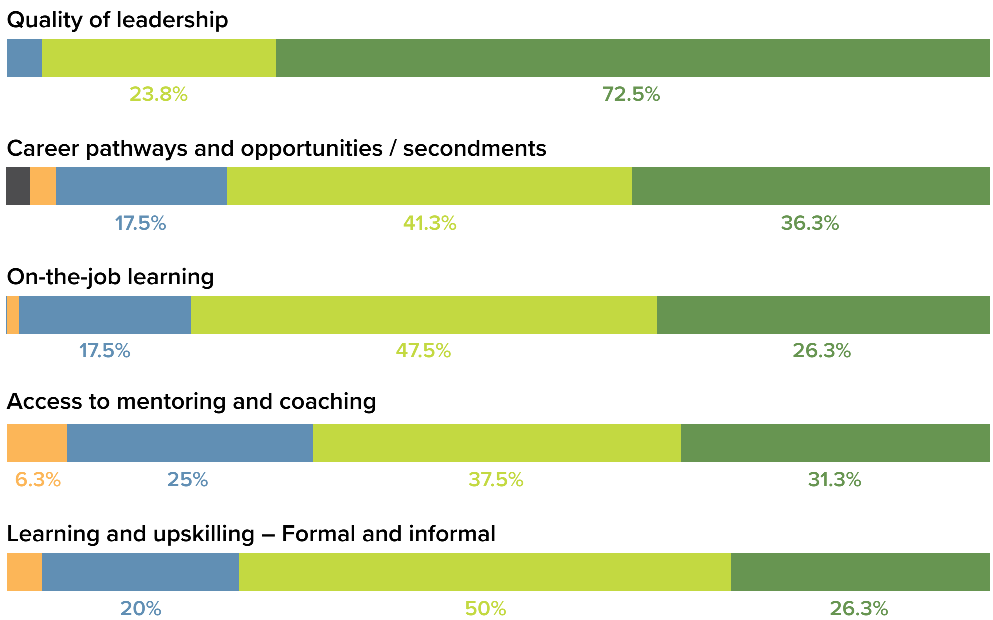


Career development and leadership factors

Figure 30
How important do you consider the following career development issues are for you continuing to want to work in your organisation and industry?

% of businesses

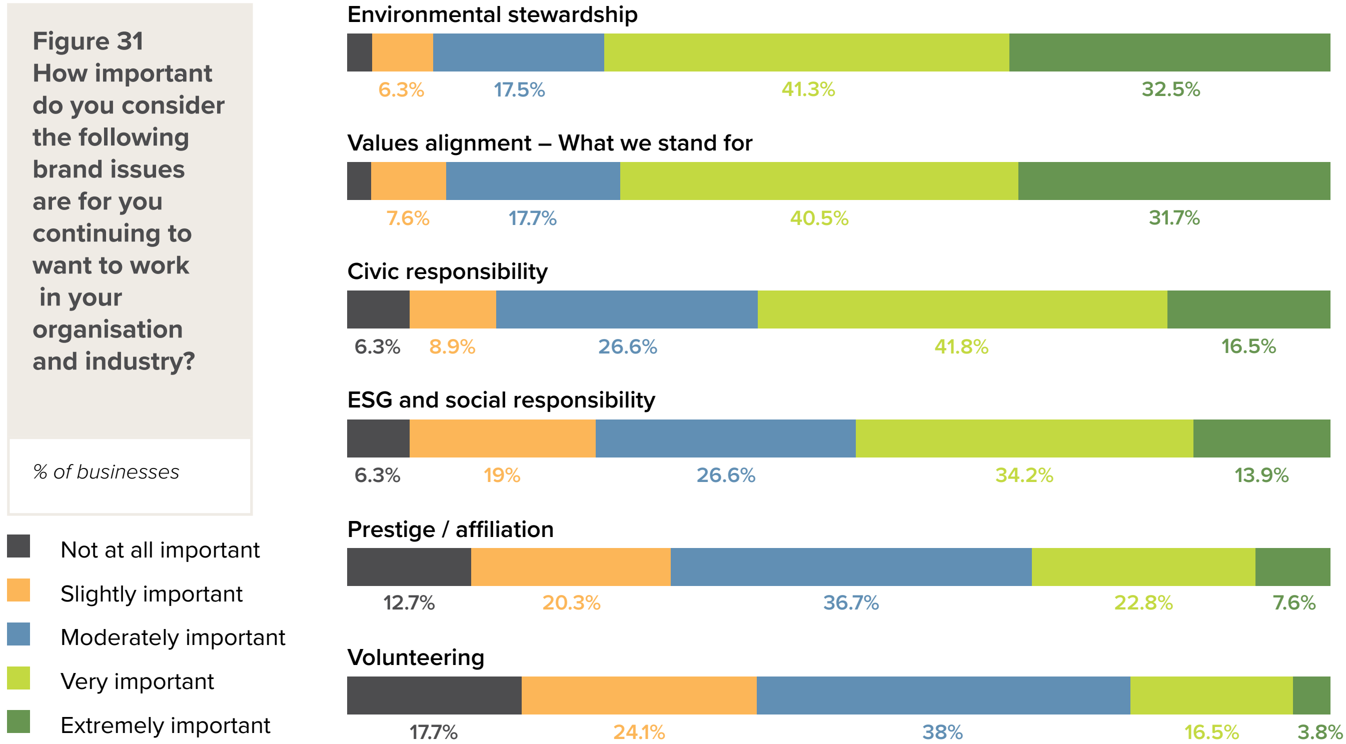
- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important



Organisational brand and values

Figure 31
How important do you consider the following brand issues are for you continuing to want to work in your organisation and industry?

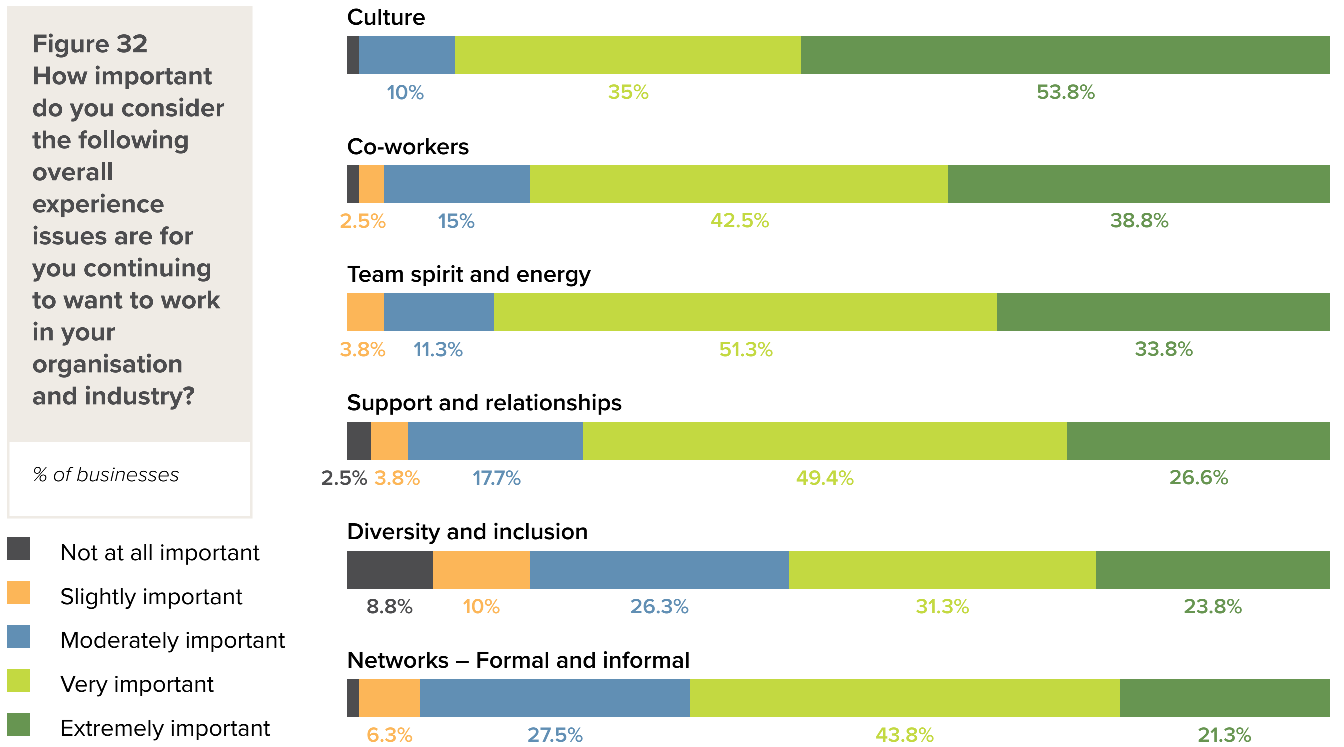
% of businesses



Overall employee experience

Figure 32
How important do you consider the following overall experience issues are for you continuing to want to work in your organisation and industry?

% of businesses



Top employment priorities identified by employees

Table 2
Key employment priorities

ranked by frequency and emphasis

Key priorty	
Work-life balance & flexibility	This is overwhelmingly the most sought-after aspect. Employees explicitly mention "work-life balance" "flexible hours" "WFH (work from home)" "able to take leave without work commitments interrupting" "flexibility" and "respect for personal life" It also ties into concepts like "autonomy" and "conditions."
Leadership quality	"Good leadership" "strong leadership" "great leadership" "quality leadership" "effective leadership" and "inspiring leadership" are cited repeatedly. Employees desire leaders who are decisive, transparent, supportive, empowering, accountable, ethical, and provide clear vision and direction. Competent bosses and guidance from managers also fall into this category.
Positive and inclusive culture	This is a strong contender for second place, often intertwined with leadership. Employees want a "good culture" "positive culture" "inclusive culture" "supportive and inclusive work environment" "team and company culture" and an environment where "values align" and "respect" is present.
Fair and competitive remuneration	"Good pay" "appropriate salary" "competitive salary" "remuneration" "fair pay scale" "above award rate salary" and "fair wage and bonus structure" are consistently mentioned. The desire for "pay increases above CPI" and "superannuation increases not taken from base wage" indicates a focus on genuine financial growth.
Opportunities for growth and development	Employees are looking for "opportunities for growth" "career development" "upskilling" "learning and development" "promotion" "mentorship" and "professional development" This shows a desire for long-term career progression and skill enhancement.
Trust, integrity, and respect:	These values are highly prised. Employees mention "trust, "integrity" "honesty" "honourable conduct" "respect" "fairness" and "equity". This reflects a desire for an ethical and just workplace environment.
Job security and stability	"Stability" "security" and "job security" are important to many, indicating a desire for a reliable and predictable work environment.
Meaningful work & purpose	Concepts like "meaningful work" "purpose of the organisation" "company philosophy aligns with con-sumer values" "ESG responsibility" "working towards a better future," and "social contribution" suggest a desire for work that contributes to something larger than just profit.
Support and resources	Employees want "support" "the resources are available to undertake my job" "right tools and support to succeed" and "competent employees." This highlights the need for an environment where they can per-form their jobs effectively.
Team relationships	"Good team relationships" "team spirit" and "great team environment" are mentioned, indicating the importance of a positive collaborative atmosphere with colleagues.

Key frustrations and challenges affecting employee engagement

Table 3
Key frustrations and challenges

ranked by frequency and emphasis

Key priority	
Government policy, regulation, and red tape	This was overwhelmingly the number one issue **Lack of clear direction/strategic vision (especially from government):** "Lack of clear direction" "volatile strategic environment" "lack of national policy" "lack of strategic vision" "government leadership". **Inconsistent/changing guidelines & legislation:** "Forever changing guidelines, rules, legislation" "inconsistency in regulators" "moving the goal posts" "red tape and continued regulatory changes". **Poorly designed/over-regulation:** "Badly designed Government Policy and Regulation" "over-regulation" "legislative red tape" "one size fits all approach". **Lack of enforcement/Illegal practices:** "Inconsistent compliance and enforcement" "too many activities operating under the Regulatory radar" "Environment Department slow moving on illegal practices". **Piecemeal approach/blaming the consumer:** "Piecemeal approach to national waste and recycling issues" "onus on development of resources".
Operational inefficiencies & resource constraints	**Lack of staffing/workload pressure:** "Lack of resourcing (staff)" "insufficient skilled staff" "difficulty retaining staff" "workload pressures due to insufficient skilled staff" "not enough employees to get the work done". **Outdated technology & infrastructure:** "Old technology" "slow pace of new technology adoption" "inconsistent Site Standards and Infrastructure" "lack of custom tools" "infrastructure not as quick" as industry growth. **Reactive maintenance:** "Reactive Rather Than Preventive Maintenance Culture," "little to no professional engineering," "not knowing the realised Hazards". **Unrealistic expectations/planning:** "Unrealistic timelines" "lack of planning by clients and Local Government" "lack of quality funding options."
Internal culture & leadership Issues	**Lack of transparency & communication:** "Lack of communication to all stakeholders," "no Transparency," "lack of information sharing," "communication." **Sexism/Lack of diversity:** "Dominated by males with few opportunities for women" "genuine gender equity is still lacking" " "feels somewhat like a Boys Club." **Resistance to change/innovation:** "Unwillingness to change" "resistance to innovation" "lack of innovation".
Public perception & education	• "Perception that everyone is a garbo" "low awareness" "not good at telling our story in the community" "public have no idea what goes in their bins" "community entitlement/lack of understanding of impacts". • "The view of the General Public that the Waste Industry is disreputable/ deliberately unfriendly to the environment".
Financial & economic viability	• "Awards and agreements not keeping speed with cost of living" "low pay and no bonus structure" "economic viability and market fluctuations" "financial implications for meeting compliance" "low QLD Waste Levy". • "Cost pressures don't drive best overall outcome, just cheapest".
Recruitment & skill gap	"Constant challenge to find drivers/operators" "recruitment of the right personnel - the waste industry is not the first choice for chemist and engineers " "very limited course or study options".

Motivations for entering the waste and recycling industry

Table 4
Key motivations for joining the industry

ranked by frequency and emphasis

Key priority	
Environmental contribution & sustainability	**Direct Impact:** “Opportunity to make a real difference” “aligns with my own values of recovering and recycling products” “contribute to a better community and environment” “passionate about sustainability and environmental stewardship” “part of something that makes a real, tangible difference,” “playing a role in driving positive change”. **Planetary Well-being:** “Wiser with how we manage the planet” “recycling for future” “doing the right thing for the planet and the future” “keeping the Planet and its occupants safer” “ensuring waste is not harmful to the environment” “reducing landfill,” “circular economy”. **Personal Connection:** “Environmental glow” “sense of purpose and pride” “incredibly rewarding”.
Job opportunity, stability & essential service	**Opportunity Arose:** “I needed a job” “it was adjacent to what I had been doing” “opportunity arose” “fell into it by accident” “it found me” “was asked to join” This suggests many are not initially seeking the industry but find it offers employment. **Stability & Essential Nature:** “Essential service - stability in the industry” “waste and recycling industry provide an essential service for the community” “stable industry, essential work” “recession proof industry” “waste and recycling are not going anywhere”. **Practical Benefits:** “Full time permanent job” “work hours 9-day fortnight” “work-life balance” “paid for weekend event work” “ok money,” “reputable company”.
Dynamic nature & personal/ professional growth	**Ever-Changing Industry:** “Always changing and improving” “constantly evolving” “no two days are ever alike” “dynamic, innovative and full of challenges”. **Diversity & Learning:** “Work diversity” “diverse range of career paths” “explore my creative side, converse with customers and learn a lot” “opportunity for development” “fascinated with waste facility operations and supply chain management”. **Innovation & Technology:** “Using new technology to recycle more and waste less” “practical innovation—using smart, scalable solutions” “new to any industry, actually aligned with my qualification, experience and interest” “wonderful non-stop technological advancement”. **Unexpected Fascination:** Many describe “falling into” it and then becoming “hooked” or “loving it” discovering unexpected “fascinations” with the process and challenges. The story of finding the industry through the burning off of landfill gas is a prime example of this curiosity.

Employee experience compared with expectations

The sentiments expressed by employees in the waste and recycling industry reveal a complex interplay between their initial expectations and their lived experiences. While many enter with positive hopes regarding environmental impact and career growth, the reality often presents a mixed bag of rewarding purpose alongside significant operational, cultural, and political challenges.

The top 5 Ranking of Experience vs. Expectations (Most Significant Gaps/Alignments) included:

1 Work-Life Balance

This is the most pronounced area where negative experience often diverges sharply from expectation or desire.

SIGNIFICANT NEGATIVE GAP

2 Government Policy & Industry Support

Employees expected more supportive and effective regulatory frameworks, but experience widespread frustration with their inadequacy.

SIGNIFICANT NEGATIVE GAP

3 Industry Complexity & Impact

This is a major win for the sector, as the actual work and its tangible impact are far more engaging and rewarding than many initially anticipated.

SIGNIFICANT POSITIVE ALIGNMENT/EXCEEDS EXPECTATION)

4 Culture & Leadership

While some experience positive cultures, a significant portion highlights persistent issues with leadership quality, transparency, and inclusion (especially gender equity).

MIXED, BUT OFTEN NEGATIVE GAP IN SPECIFIC AREAS

5 Operational Efficiency & Technology

Expectations of modern, integrated operations often meet a reality of fragmentation, outdated systems, and under-resourcing.

NEGATIVE GAP

Key Themes of Employee Experience vs. Expectations

Table 5
Key themes of employee experience versus expectations

Expectation	Experience	Discussion
Work-life balance: A major discrepancy (Often Negative)		
Often anticipated or desired, sometimes explicitly "sold" as a benefit.	This is the most frequently cited area of disappointment. Many report poor work-life balance, long hours, heavy workloads, "never a break" "constant pressure" and feeling "stretched for time". The expectation of flexible working arrangements is often slow to materialise. However, some individual experiences do report good work-life balance, indicating significant organisational variation.	The high demand on staff, driven by under-resourcing, regulatory changes, and a "busier and constant" pace, directly impacts work-life balance. This is a critical area for improvement for talent retention particular in the office-based sites within the industry.
Government policy & industry maturity: A source of frustration		
That government policy would support circular economy goals and industry growth effectively.	A widespread frustration is the lack of coherent, supportive, and consistent government legislation and policy. Employees note "all talk, little to no progress" and "red tape" that hinders reuse and recycling. The industry is seen as "slow progress compared to EU & Nth Asia" and "still old school work ethic".	This gap between policy aspiration and practical support creates significant challenges for businesses trying to innovate and operate sustainably, leading to disillusionment among employees committed to environmental outcomes.
Industry complexity & impact: More rewarding and interesting than expected		
Often simplistic, involving "trucks, bins and sorting rubbish," or just "holes in the ground."	This is a strong area where experience exceeds expectations. Employees find the industry "much more complex and innovative" "interesting" "vital" "fascinating" and involving "levels of engineering, science and technology.". The tangible impact on the environment, business, and communities is deeply rewarding.	Despite frustrations, the inherent purpose and intellectual stimulation of the work itself is a major positive. Many "fall into" the industry and are surprised by its depth and dynamism, leading to a long-term commitment.
Culture & leadership: Mixed, often challenging		
A positive, supportive, and inclusive culture is generally desired.	This is highly variable by organisation. Some describe "uninspiring culture" "bullying behaviour not recognised," "micro-management" and a "divide and isolation" between office and operational staff. Concerns about gender inequity (pay, progression, administrative burden, women leaving the sector) are explicitly raised. Others, however, report "very supportive," "great mentors," "positive environment," and "moral and culture is better than I was expecting."	The disparity highlights that while some companies excel in creating a positive environment, systemic issues related to leadership quality, recognition of staff contributions (especially office workers), and diversity/inclusion persist across the industry.
Operational efficiency & technology: Fragmented and challenging		
High efficiency and integrated technology, especially in a sector with high stakes.	Many operations are found to be "fragmented and under-digitised," with "manual processes, legacy systems, and disconnected data." There's "friction to innovation" and a "slow pace of new technology adoption". There's also chronic understaffing and a "lack of maturity in technical knowledge or use of technology".	This mismatch leads to inefficiencies, increased workload, and a barrier to achieving environmental and commercial gains that employees are keen to pursue.

08

Specific issues affecting workforce sustainability

Emerging skills in the Queensland waste and recycling industry

Organisational census responses indicate that the Queensland waste and recycling industry is undergoing a period of significant skills transition, driven by technological change, regulatory complexity, and the shift toward circular economy models. Employers consistently identified the following emerging capability areas as increasingly critical to workforce sustainability.

Table 6
Emerging skills

Emerging skills	
Data and digital technology	Employers report growing demand for data analytics, digital systems integration, and technology-enabled operations. This includes applications such as smart sorting, fleet optimisation, predictive maintenance, and waste tracking systems. Several respondents referenced the need for greater capability in AI and machine learning, particularly within engineering and processing environments, noting that “data and digital technology” and “more IT-skilled employees” will be increasingly important as the industry modernises.
Circular economy knowledge and application	As Queensland’s waste strategy prioritises circular economy outcomes, employers identified a growing need for skills related to life-cycle thinking, material recovery optimisation, market development for recycled products, and sustainable system design. This represents a shift away from traditional disposal-focused roles toward more complex resource recovery and value-creation functions.
Advanced process control and auto-mation	The increasing use of automated material recovery facilities, waste-to-energy infrastructure, and advanced processing technologies has elevated demand for technicians and engineers with expertise in programmable logic controllers (PLCs), robotics, fault diagnostics, and industrial process control. Employers not-ed that the transition to more mechanised systems is reshaping both operational and maintenance skill requirements.
Communication, consultation, and behavioural/ change science	Achieving higher recycling rates and circular economy objectives requires sustained behavioural change across households, businesses and within organisations themselves. Employers identified communication, consultation, and behavioural change skills as increasingly important, particularly in community engagement, education, project delivery, and internal change management.
Hazardous waste compliance and specialised waste stream management	The proliferation of complex and hazardous waste streams — including batteries, e-waste and solar infra-structure — has increased the technical and regulatory burden on the workforce. Employers emphasised the growing importance of specialised compliance knowledge and safe handling expertise to meet evolving regulatory expectations.
Internal and exter-nal educations	Across all emerging skill areas, employers highlighted the importance of education capability — both internally, to support workforce adaptation, and externally, to improve community understanding, compliance and social licence.

Structural strengths and constraints affecting workforce recruitment and retention

Evidence from the organisational census, employee survey and industry workshop indicate that workforce outcomes in the waste and recycling industry are shaped by a combination of inherent sector strengths and persistent structural constraints.

Industry strengths

The waste and recycling industry benefits from several structural strengths that support workforce attraction and retention:

Essential services status employment stability: Waste management is a critical public service, providing consistent employment regardless of economic cycles. Population growth and increasing waste generation ensure ongoing demand for labour,

Purpose-driven and socially valuable work: The industry's role in environmental protection, sustainability and circular economy outcomes aligns strongly with employee motivations for meaningful work, particularly among younger and purpose-driven cohorts

Diverse and expanding occupational portfolio: The sector increasingly encompasses roles across advanced manufacturing, logistics, engineering, data analytics, energy recovery and environmental services, broadening career pathways beyond traditional collection and landfill operations.

Entry-level access and progression potential: Employers identified the availability of entry-level roles as an important pathway into the industry, supporting workforce inflow where progression and training pathways are available.

Increasing automation and technical roles: Technological advancement is creating cleaner, safer and more skilled roles, which has the potential to improve the industry's overall employment proposition.

Structural weaknesses

Despite these strengths, several persistent weaknesses constrain workforce outcomes:

Negative public perception of the industry: Employers consistently identified outdated perceptions of waste work as "dirty" or low-status as a significant barrier to attracting skilled workers, professionals and women, despite substantial operational modernisation.

Gender imbalance and limited gender-responsive policies: The industry remains predominantly male, particularly in operational roles. Employers acknowledged that historical workforce structures have limited the development of gender-sensitive policies, constraining participation from women and other under-represented groups.

Perceived limitations in formal training pathways: Reliance on internal training and verification of competency, combined with limited access to accredited external pathways, has contributed to perceptions of constrained career progression, particularly for technical and professional roles.

Two-tier workforce dynamics: Employers described challenges managing a workforce comprising both highly skilled professionals and entry-level labourers, with distinct recruitment, training and retentions needs across these groups.

System-level challenges

Several broader challenges sit largely outside the direct control of individual employers but materially affect workforce sustainability:

Competition from higher-paying sectors: The Queensland resources sector continues to attract experienced operators and tradespeople through substantially higher remuneration and roster arrangements, placing sustained pressure on retention, particularly in regional areas.

Ageing workforce and replacement demand: An ageing cohort of experienced operators and tradespeople is increasing the urgency of succession planning and skills transfer, particularly where training pipelines are constrained.

Mismatch with evolving work expectations: The physical, site-based nature of many waste and recycling roles limits the applicability of hybrid and remote work models, reducing competitiveness for some professional cohorts.

Regulatory complexity and policy uncertainty: Employers and employees identified inconsistent or poorly aligned policy settings as a source of frustration, uncertainty and reduced confidence in long-term industry development.

09

Evidence-led opportunities

This study demonstrates that workforce challenges in Queensland's waste and recycling industry are systemic, interconnected and intensifying. Recruitment, development and retention pressures do not operate in isolation; rather, they compound one another as demand for services increases, operational complexity grows and labour markets tighten.

The opportunities outlined below are derived directly from the evidence presented in this report, including organisational census data, employee survey findings and validation through the regional employer workshop. Together, they identify where targeted, coordinated intervention would most effectively strengthen workforce sustainability and reduce risk to service delivery, safety and policy outcomes.

Strengthening the supply of frontline operational workers

Evidence across the organisational census and industry workshop confirms persistent shortages and high churn in frontline operational roles, particularly Machinery Operators, Drivers and Labourers. These roles are critical to the industry's ability to deliver safe, reliable and compliant services, yet are consistently reported as the most difficult to recruit and retain.

The data indicates that these shortages are structural rather than cyclical, driven by limited availability of job-ready candidates, strong competition from higher-paying sectors, and role-specific skill requirements that are not readily met through general labour markets.

Opportunity

Workforce initiatives that expand the supply of job-ready operational workers – including structured entry pathways, role-specific capability development and transition mechanisms for new entrants – would directly address the most acute workforce risks identified in the evidence.

Rebuilding training pipelines to match industry transition

The industry is undergoing a clear transition toward more mechanised, automated and regulated operations. Employers report high and growing upskilling needs across operational, technical and managerial roles, particularly in areas such as advanced equipment operation, digital systems, process control, compliance and circular economy practices.

Despite this, training delivery remains heavily reliant on internal, non-accredited systems, with limited access to scalable and portable pathways — especially for smaller and regional businesses. Workshop feedback highlights constraints related to training capacity, trainer availability and the operational burden of releasing staff for external training.

Opportunity

Improving access to structured, industry-aligned and accredited training pathways – delivered in flexible and regionally accessible formats – would strengthen workforce capability, reduce reliance on fragmented internal systems and support consistent skill development across the sector.

Building leadership and supervisory capability as a retention lever

Employee survey findings consistently identify leadership quality as one of the strongest determinants of engagement, retention and overall workforce experience. At the same time, employers report increasing pressure on managers and supervisors to navigate workforce shortages, regulatory complexity, technological change and operational expansion.

The evidence indicates that leadership capability plays a critical role in shaping work-life balance outcomes, workload management, safety culture and the successful adoption of new systems and processes.

Opportunity

Targeted development of leadership and supervisory capability – grounded in the operational realities of the waste and recycling industry – would support workforce stability, improve retention outcomes and enhance organisational resilience during industry transition.

Addressing emerging and future skill requirements

The study identifies a clear set of emerging skills that will be increasingly critical to industry performance, including data and digital capability, advanced process control and automation, circular economy knowledge, hazardous waste management and change management skills.

These capabilities are not yet consistently embedded in existing workforce pipelines, creating a growing gap between infrastructure investment, operational complexity and workforce readiness.

Opportunity

Focused development of emerging technical and professional skills would support the industry's transition toward higher-value resource recovery, automation and circular economy outcomes, while also improving the attractiveness of careers within the sector.

Improving retention through job quality and career pathways

While the industry offers stable employment and purpose-driven work, employee evidence highlights significant gaps between expectations and experience in areas such as work-life balance, workload intensity, leadership consistency and access to career progression.

Retention pressures are most pronounced in operational roles, where physical demands, roster structures and external wage competition combine to increase turnover risk and exacerbate recruitment challenges.

Opportunity

Strengthening job quality through clearer career pathways, visible progression opportunities and better alignment between workforce capacity and workload expectations would support retention across both operational and professional roles.

Enhancing industry awareness and workforce perception

Evidence from both employers and employees confirms that outdated public perceptions of the waste and recycling industry continue to limit workforce attraction, particularly among women, young people and professional cohorts. This persists despite the industry's increasing technical sophistication, environmental importance and employment stability.

Employee feedback also indicates that many individuals enter the industry opportunistically, only later recognising its complexity, purpose and career potential.

Opportunity

Improved awareness of the industry's modern workforce profile, environmental contribution and career diversity would support long-term workforce supply and align with Queensland's broader circular economy objectives.

Supporting regional workforce sustainability

Regional employers face heightened workforce challenges related to housing availability, labour competition from the resources sector, and limited access to training infrastructure. These constraints are structural and cannot be addressed by individual businesses alone.

Opportunity

Place-based workforce approaches that reflect regional labour market conditions would support service continuity and workforce stability in non-metropolitan areas, where demand for waste and recycling services continues to grow.

10

Conclusion

Queensland's waste and recycling industry is entering a period of sustained growth and increasing operational complexity. As an essential service, the sector underpins public health, environmental protection and the delivery of Queensland's circular economy objectives. Its continued performance is therefore directly dependent on the strength, capability and stability of its workforce.

The evidence presented in this study demonstrates that workforce pressures are no longer emerging risks — they are current and material. Persistent shortages in frontline operational roles, escalating competition for skilled labour, rising capability requirements linked to automation and regulation, and increasing retention pressures collectively threaten service continuity, safety outcomes and the achievement of policy targets if left unaddressed.

Employee survey findings reinforce this risk, highlighting growing gaps between workforce expectations and experience, particularly in relation to work–life balance, leadership quality, workload intensity and access to career progression. While the industry's purpose-driven nature and employment stability remain strong assets, these alone are insufficient to offset structural labour market constraints and evolving workforce expectations.

This study confirms that workforce sustainability in the waste and recycling industry requires coordinated, evidence-based responses that extend beyond individual employers. Targeted action to strengthen workforce supply, rebuild training pipelines, support leadership capability, address emerging skills requirements, improve job quality and support regional labour markets will be critical to maintaining industry capacity as demand continues to grow.

Delivered through the Workforce Connect program, this report provides a robust evidence base to inform future workforce planning, policy development and targeted investment. By aligning workforce initiatives with demonstrated industry needs, Queensland is well positioned to support a resilient, capable and future-ready waste and recycling workforce that can meet the State's service, safety and environmental objectives over the long term.

Appendices

Appendix A

Queensland Waste and Recycling Industry Workforce Survey 2025

Organisational Questionnaire

Introduction

WRIQ is seeking to gain a greater understanding of the current demographics and skill needs of the Queensland Waste and Recycling Industry workforce in order to help the sector attract, engage and retain employees in the workforce.

This important project will help ensure a fit for purpose workforce for the industry to continue to deliver high-quality waste and recycling services into the future for Queensland.

In addition, several insurance related questions are provided at the end of the survey which will assist in developing better and tailored insurance solutions for our Industry.

Respected economic consultancy QEAS have signed a non-disclosure agreement with WRIQ and accordingly all survey returns are strictly confidential and results will only be reported on an anonymised industry-wide basis. WRIQ does not have access to individual responses.

We invite your organisation to complete this survey by 25 June 2025. Your participation is incredibly important and we greatly appreciate your valuable feedback.

Workforce Demographics

2. **Which of the following best describes your waste management business activity?** *(please tick the boxes that apply)*
   - ☐ Waste collection/transport/logistics
   - ☐ Waste sorting/separation (eg recycling)
   - ☐ Waste treatment and disposal (eg landfill)
   - ☐ Recycling
   - ☐ Other (please specify)

3. **Please provide the overall total number of Queensland employees (headcount) in your business/organisation:**

4. **Please provide the headcount number of employees within each type of region:**
   - ☐ Greater Brisbane – including Logan Ipswich Redland & Moreton Bay
   - ☐ Gold Coast
   - ☐ Sunshine Coast
   - ☐ Cairns – Far North Queensland
   - ☐ Townsville – North Queensland
   - ☐ Mackay – Isaac – Whitsunday
   - ☐ Central Queensland
   - ☐ Toowoomba – South West Queensland
   - ☐ Wide Bay Burnett
   - ☐ Other

5. **Please provide the headcount number of Queensland employees within each type of employment:**
   - ☐ Full-time
   - ☐ Permanent Part-time
   - ☐ Casual
   - ☐ Contract

6. **Please provide the headcount number of Queensland employees across each type of occupation:**
   - ☐ Managers
   - ☐ Professionals
   - ☐ Technicians and Trades Workers
   - ☐ Machinery Operators and Drivers
   - ☐ Labourers
   - ☐ Sales Workers
   - ☐ Clerical and Admin Workers

7. **Please provide the headcount number of Queensland employees within each age group:**

- [ ] 15-19 years
- [ ] 20-24 years
- [ ] 25-29 years
- [ ] 30-39 years
- [ ] 40-49 years
- [ ] 50-59 years
- [ ] 60 years plus

8. **Please provide the headcount number of Queensland employees by gender:**

- [ ] Male
- [ ] Female
- [ ] Non-binary

9. **Please provide the headcount number of Queensland employees within each base salary band:**

- [ ] 0 - $24k
- [ ] $25k – $49k
- [ ] $50k - $74k
- [ ] $75k - $99k
- [ ] $100k - $124k
- [ ] $125k – $149k
- [ ] $150k - $174k
- [ ] $175k - $200k
- [ ] $200k+

10. **Please provide the headcount number of Queensland employees by years of retention within the business/ organisation:**

- [ ] less than 1 year
- [ ] 1 – 3 years
- [ ] 4-6 years
- [ ] 7 – 10 years
- [ ] 10 years plus

11. **Please provide the headcount number of Queensland employees by highest level of education:**

- [ ] Post Graduate Study
- [ ] Bachelor Degree or Equivalent
- [ ] Diploma/Advanced Diploma
- [ ] Trade Certificate/Cert III/IV
- [ ] Year 12
- [ ] Year 11
- [ ] Year 10

12. **Please provide the headcount number of Queensland employees in or engaged as an apprenticeship or traineeship (either directly or through a third party):**

- [ ] Apprenticeship
- [ ] Traineeship

Recruitment

13. Does the current number of employees meet the existing Queensland operational needs of the business/organisation?

	Yes	No
Managers	☐	☐
Professionals	☐	☐
Technicians and Trades Workers	☐	☐
Machinery Operators and Drivers	☐	☐
Labourers	☐	☐
Sales Workers	☐	☐
Clerical and Admin Workers	☐	☐

Please comment:

____

____

____

14. Is the business/organisation currently or recently searching for new employees in Queensland?

☐ Yes ☐ No

If yes approximately how many and what types of occupations are they?

____

____

____

15. What is driving workforce recruitment within your business/organisation in Queensland?

____

____

____

____

16. Please indicate on the scale below the level of ease or difficulty in trying to find qualified applicants to fill positions in Queensland

	Very easy	Easy	Neutral	Difficult	Very difficult
Managers	☐	☐	☐	☐	☐
Professionals	☐	☐	☐	☐	☐
Technicians and Trades Workers	☐	☐	☐	☐	☐
Machinery Operators and Drivers	☐	☐	☐	☐	☐
Labourers	☐	☐	☐	☐	☐
Sales Workers	☐	☐	☐	☐	☐
Clerical and Admin Workers	☐	☐	☐	☐	☐

Please comment

____

____

____

____

____

16. Over the next 5 years, do you expect the number of employees working for the business/organisation in Queensland to change?

	Increase	Remain the same	Decrease	Unsure
Managers	☐	☐	☐	☐
Professionals	☐	☐	☐	☐
Technicians and Trades Workers	☐	☐	☐	☐
Machinery Operators and Drivers	☐	☐	☐	☐
Labourers	☐	☐	☐	☐
Sales Workers	☐	☐	☐	☐
Clerical and Admin Workers	☐	☐	☐	☐

Please comment

____

____

____

18. If you indicated an increase in Question 17 above, please provide the expected headcount change in Queensland under each occupation over the next 5 years:

☐ Managers

☐ Professionals

☐ Technicians and Trades Workers

☐ Machinery Operators and Drivers

☐ Labourers

☐ Sales Workers

☐ Clerical and Admin Workers

19. Does your business/organisation in Queensland have any of the following recruitment strategies in place?

	Yes	No
Equality targets (e.g. 50% women interviewees)	☐	☐
Recruitment charters	☐	☐
Targeted recruitment programs (e.g. Indigenous cadetships)	☐	☐
Alternate entry programs (e.g. graduate program, traineeships)	☐	☐
Equal representation on recruitment panels	☐	☐
Substitution to contracts where position cannot be filled)	☐	☐
Migrant workers	☐	☐

Please provide comment including any other initiatives provided:

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20. What has been the most successful initiatives/ approaches to recruiting and retention of new talent in Queensland (defined as less than 5 years industry experience) and why?

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21. Which of the following barriers to employing new talent in Queensland has your business/organisation experienced?

- ☐ Cost pressures
- ☐ Complexity of the apprenticeship system
- ☐ Insufficient government incentives
- ☐ Lack of suitable candidates
- ☐ Lack of time
- ☐ Lack of suitable work
- ☐ Lack of suitable training providers/options
- ☐ Lack of resources
- ☐ Lack of company graduate program

Please provide comment including any other barriers:

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Workforce Development

22. What occupations / positions are in most need of up-skilling for your business/organisation in Queensland?

	No need	Minor need	Moderate need	High need	Urgent need
Managers	☐	☐	☐	☐	☐
Professionals	☐	☐	☐	☐	☐
Technicians and Trades Workers	☐	☐	☐	☐	☐
Machinery Operators and Drivers	☐	☐	☐	☐	☐
Labourers	☐	☐	☐	☐	☐
Sales Workers	☐	☐	☐	☐	☐
Clerical and Admin Workers	☐	☐	☐	☐	☐

23. Within your business in Queensland what is driving the need for workforce development (where workforce development is defined as strategies, initiatives, and educational activities that aim to enhance the skills and competencies of employees)?

24. Which of the following barriers to employing new talent in Queensland has your business/organisation experienced?

- ☐ Attendance at events (e.g. trade shows, conferences)
- ☐ Internal facilitated training programs (e.g. Management skills, product/equipment training)
- ☐ Incentives for external training (e.g. study support)
- ☐ Self-paced online learning programs (e.g. intranet based modules, LinkedIn Learning etc.)

Please provide comment including any other programs:

25. What occupations / positions in Queensland are you experiencing most difficulty retaining:

	No difficulty	Minor difficulty	Moderate difficulty	Major difficulty	Critical difficulty
Managers	☐	☐	☐	☐	☐
Professionals	☐	☐	☐	☐	☐
Technicians and Trades Workers	☐	☐	☐	☐	☐
Machinery Operators and Drivers	☐	☐	☐	☐	☐
Labourers	☐	☐	☐	☐	☐
Sales Workers	☐	☐	☐	☐	☐
Clerical and Admin Workers	☐	☐	☐	☐	☐

Please comment

26. Does your business/organisation have any of the following diversity policies in place for Queensland employees?

	Yes	No
Equal pay and conditions	☐	☐
Flexible work arrangements (flex-time, part time, remote working)	☐	☐
Non-gendered parental leave policies	☐	☐
Superannuation paid on parental leave	☐	☐
Mentoring, leadership and support programs e.g. Equality networks	☐	☐
Diversity education programs	☐	☐
Plans, strategies, commitments and certifications (e.g. Equal by 30)	☐	☐
Reporting on workplace representation	☐	☐
Scholarships and sponsorships	☐	☐

Please provide comment including any other initiatives provided:

27. Has an ageing demographic in the business been identified as a challenge that needs addressing?

Please comment:

Specific Issues

28. What do you foresee to be the most important emerging skills in the Queensland Waste and Recycling Industry?

29. What are the key strengths, weaknesses, challenges and opportunities the Industry has in respect to its workforce recruitment/retention in Queensland?

Appendix B

Queensland Waste and Recycling Industry Workforce Survey 2025

Employee Questionnaire

Introduction

WRIQ is seeking to gain a greater understanding of the current demographics of the Queensland Waste and Recycling Industry workforce in order to help the sector attract, engage and retain talents in the workforce, particularly young skilled employees.

This important project will help ensure a fit for purpose workforce for the industry to continue to deliver valuable waste and recycling services into the future for Queensland.

We invite you to complete this survey by 25 June 2025. All survey returns are strictly confidential – survey results will only be reported in aggregated terms for all employees in the Industry sector.

Your participation is incredibly important and we greatly appreciate your valuable feedback.

Your Demographics

1. **Please indicate which region you work in.**
   - ☐ Greater Brisbane including Logan Ipswich Redland and Moreton Bay
   - ☐ Gold Coast
   - ☐ Sunshine Coast
   - ☐ Cairns – Far North Queensland
   - ☐ Townsville – North Queensland
   - ☐ Mackay – Isaac– Whitsunday
   - ☐ Central Queensland
   - ☐ Toowoomba – South West Queensland
   - ☐ Wide Bay Burnett
   - ☐ Other (please specify) ____________________

2. **Please indicate what type of employment you are engaged under:**
   - ☐ Full-time
   - ☐ Permanent Part-time
   - ☐ Casual
   - ☐ Contract

3. **Please indicate what type of occupation you are engaged under:**
   - ☐ Managers
   - ☐ Professionals
   - ☐ Technicians and Trades Workers
   - ☐ Machinery Operators and Drivers
   - ☐ Labourers
   - ☐ Sales Workers
   - ☐ Clerical and Admin Workers

4. **Please indicate your current age group:**
   - ☐ 15-19 years
   - ☐ 20-24 years
   - ☐ 25-29 years
   - ☐ 30-39 years
   - ☐ 40-49 years
   - ☐ 50-59 years
   - ☐ 60 years plus

5. **Please select what type of gender you identify as:**
   - ☐ Male
   - ☐ Female
   - ☐ Non-binary

6. **Please indicate your current annualised base salary band:**
   - ☐ $0 – $24,999
   - ☐ $25,000 – $49,999
   - ☐ $50,000 – $74,999
   - ☐ $75,000 – $99,999
   - ☐ $100,000 – $124,999
   - ☐ $125,000 – $149,999
   - ☐ $150,000 – $174,999
   - ☐ $175,000 – $199,999
   - ☐ $200,000+

7. **Please indicate how many years you have been employed in the waste and recycling industry:**

- ☐ less than 1 year
- ☐ 1 – 3 years
- ☐ 4-6 years
- ☐ 7 – 10 years
- ☐ 10 years plus

8. **Please indicate your highest level of education attained:**

- ☐ Post Graduate Study
- ☐ Bachelor Degree or Equivalent
- ☐ Diploma/Advanced Diploma
- ☐ Trade Certificate/Cert III/IV
- ☐ Year 12
- ☐ Year 11
- ☐ Year 10

9. **Please indicate if you are either an apprentice or trainee:**

- ☐ Apprenticeship
- ☐ Traineeship
- ☐ Neither

Your Employment

10. **How important do you consider the following remuneration and reward issues are for you continuing to want to work in your organisation and industry:**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Base pay	☐	☐	☐	☐	☐
Overtime pay	☐	☐	☐	☐	☐
Bonuses and profit share schemes	☐	☐	☐	☐	☐
Superannuation	☐	☐	☐	☐	☐
Parental leave benefits	☐	☐	☐	☐	☐
Discounts and lifestyle benefits	☐	☐	☐	☐	☐
Clerical and Admin Workers	☐	☐	☐	☐	☐

Other please specify:

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11. **How important do you consider the following workspaces and place issues are for you continuing to want to work in your organisation and industry:**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
The physical office design	☐	☐	☐	☐	☐
Workplace perks (i.e. free coffee, subsidised food etc.)	☐	☐	☐	☐	☐
Location	☐	☐	☐	☐	☐
Work from home	☐	☐	☐	☐	☐
Hybrid work environment	☐	☐	☐	☐	☐
Right technology set up	☐	☐	☐	☐	☐

Other please specify:

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12. **How important do you consider the following way of working issues are for you continuing to want to work in your organisation and industry:**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Technological enablement – Ensuring set up from day one	☐	☐	☐	☐	☐
Flexibility	☐	☐	☐	☐	☐
Travel (i.e. inter-state/overseas)	☐	☐	☐	☐	☐
Autonomy	☐	☐	☐	☐	☐
Ability to be creative and apply critical thinking and problem solving	☐	☐	☐	☐	☐
Collaboration	☐	☐	☐	☐	☐
Pursuing meaningful, motivating work and experiences	☐	☐	☐	☐	☐

Other please specify:

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13. **How important do you consider the following wellbeing issues are for you continuing to want to work in your organisation and industry:**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Supporting mental health and resilience	☐	☐	☐	☐	☐
Wellness benefits such as gym membership	☐	☐	☐	☐	☐
Lifestyle benefit	☐	☐	☐	☐	☐
Work-life balance	☐	☐	☐	☐	☐
Health and wellbeing	☐	☐	☐	☐	☐
Financial support – Through training and courses	☐	☐	☐	☐	☐
Socio emotional awareness – Empathy and kindness	☐	☐	☐	☐	☐

Other please specify:

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14. **How important do you consider the following career development issues are for you continuing to want to work in your organisation and industry:**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Learning and upskilling – Formal and informal	☐	☐	☐	☐	☐
Quality of leadership	☐	☐	☐	☐	☐
Access to mentoring and coaching	☐	☐	☐	☐	☐
Career pathways and opportunities / secondments	☐	☐	☐	☐	☐
On-the-job learning	☐	☐	☐	☐	☐

Other please specify:

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15. **How important do you consider the following overall experience issues are for you continuing to want to work in your organisation and industry:**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Culture	☐	☐	☐	☐	☐
Diversity and inclusion	☐	☐	☐	☐	☐
Support and relationships	☐	☐	☐	☐	☐
Networks – Formal and informal	☐	☐	☐	☐	☐
Team spirit and energy	☐	☐	☐	☐	☐
Co-workers	☐	☐	☐	☐	☐

Other please specify:

16. **How important do you consider the following brand issues are for you continuing to want to work in your organisation and industry:**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Prestige/affiliation	☐	☐	☐	☐	☐
ESG and social responsibility	☐	☐	☐	☐	☐
Volunteering	☐	☐	☐	☐	☐
Values alignment – What we stand for	☐	☐	☐	☐	☐
Civic responsibility	☐	☐	☐	☐	☐
Environmental Stewardship	☐	☐	☐	☐	☐

Other please specify:

17. **What are the top 3 things you are looking for in an organisation?**

Please comment

18. **What are your 3 biggest frustrations/challenges with the waste and recycling industry that impact your engagement?**

Please comment

Your Experience

19. **Why did you decide to pursue a career in the waste and recycling industry?**

20. **What was your experience vs expectations of working in the sector? Potential aspects for you to consider include operational transparency, work-life balance, daily work, company reputation and culture, and work environment.**

Please tell us your story.

Appendix C

Regional Employer Workshop Prompts

Introduction

WRIQ is seeking to gain a greater understanding of the current demographics of the Queensland Waste and Recycling Industry workforce in order to help the sector attract, engage and retain talents in the workforce.

This important project will help ensure a fit for purpose workforce for the industry to continue to deliver quality collection, processing, recycling, recovery and disposal services into the future.

As part of the project WRIQ is hosting a specially designed workshop to gain a deeper understanding on the current recruitment, retention and training of waste and recycling industry workforce specifically plant, machinery and vehicle operators.

Recruitment

Does the current number of machinery and vehicle operators meet the existing operational needs of your business?

What is driving machinery and vehicle operators recruitment within your business and industry?

Please rate the level of ease or difficulty in trying to find qualified applicants to fill machinery and vehicle operators positions in your business and industry?

What challenges and barriers exist for recruiting machinery and vehicle operators?

What recruitment strategies does your business have in place for machinery and vehicle operators?

Workforce Training and Development

What is driving plant, machinery and vehicle operator training and development?

What are the current challenges and barriers to workforce training and development for plant, machinery and vehicle operators?

What ongoing training and development programs does your business offer to plant, machinery and vehicle operators?

Workforce Retention

What challenges exist for the retention of plant, machinery and vehicle operators in your business?

What retention strategies does your business have in place for plant, machinery and vehicle operators?

Appendix D

QEAS Business Information

QEAS Queensland Economic Advocacy Solutions

Queensland Economic Advocacy Solutions (QEAS) delivers services in economic analysis, research and advocacy in Australia and was set up by Nick Behrens following two decades of experience applying these skills in the real world for Australia's business community. More specifically QEAS provides:

- Economic Contribution and Valuation Analysis;
- Data Analysis, Market research and Economic Modelling;
- Stakeholder Consultation; and
- Government Relations and Submissions.

Across 160 plus projects, QEAS has delivered services nationally to exemplary organisations including ACOR, Allgas, AORA, Australian Aluminium Council, Australian Industry Group, Australian Gas Industry Trust, Australian Steel Institute, BASF, Brisbane Airport Corporation, Brisbane Cross River Rail, Brisbane Economic Development Agency, Business Chamber Queensland, Canegrowers, Cairns Airport, Dexus, IOR Petroleum, LifeFlight, Mackay Airport, Maleny Dairies, Master Builders Australia, Manufacturing Skills Queensland, Motor Trades Association, Natroads, NWRIC, Neuron E-Scooters, North Queensland Airports, Port of Brisbane, Property Council of Australia, QFI, Queensland Resources Council, Queensland Major Contractors Association, Queensland Trucking Association, RACQ, Remondis, Suncorp, VTA, Victorian Waste Management Association, WRISA, WRINT, WRIQ, unions, local government authorities, the Commonwealth and State Governments and many others.

We can be engaged for either a special project (for the entire project or just the parts our clients need help with) or on an ongoing basis. We will take the time to understand your unique challenge and create a partnership with you to tailor a solution specific to your budget. We engage with confidentiality and integrity. Choose QEAS for our expertise, professionalism and ability to work with our valued clients to achieve exceptional results.

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Report Author: Nick Behrens

Across his professional career Nick has realised many outstanding outcomes to complex challenges for the business community. He possesses significant experience in gathering and presenting information, and leveraging that information to achieve results across a range of areas including economic, taxation, regulatory environment, workers compensation, employment legislation, population, infrastructure and planning issues. As Director of Queensland Economic Advocacy Solutions (QEAS), Nick provides:

- Exceptional understanding of social, political and economic issues impacting on business and the economy;
- Considerable real-world application of project, business and economic research and analysis;
- Significant expertise in advocacy, including government and stakeholder relations;
- In-depth and firsthand knowledge of the workings of Government;
- Extensive networks in political, government, business and community sectors;
- Previous appointments on a number of high level Government committees; and
- Media commentator and public speaker.

Nick's representations are based on extensive research and his preferred approach to economic analysis, research and advocacy is to achieve results by working with stakeholders behind the scenes to secure positive and lasting outcomes. He places much emphasis on having a thorough and convincing evidence that is readily understood and in turn leads to real world application and solutions.

WRIQ

Essential for community Essential for environment